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LETTER FROM THE EDITOR

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COGNITIVE COMMUNITIES AND LEGITIMACY-BASED GROUPS: THE ROLE OF EXTERNAL CATEGORIZATION ON COGNITIVE SIMILARITY

Dohyeon Kim, Kookmin University

ABSTRACT

This article seeks to explore the role of legitimacy in the formation of the competitive cognition of managers. Legitimacy-based groups and cognitive communities among Korean asset-management companies are independently identified and then compared against each other. The findings show that legitimacy-based groups and cognitive communities are equivalent in this industry. Specifically, the results indicate that managers of Korean asset-management companies share similar competitive cognition with managers of firms within the same group as categorized by a legitimacy provider. The equivalence implies the importance of categorization by a strong external authority such as governmental agents, for such categorization may provoke competitive (mis)cognition among industry participants. In addition, methodological implications for the identification of intra-industry groups in future research are also discussed.

INTRODUCTION

The notion of intra-industry groups has been developed within the strategic-management field to address the fundamental questions of competitor definition and strategic behaviors among competitors (Daems & Thomas, 1994; Hunt, 1972; Ketchen, Snow, & Hoover, 2004; McGee & Thomas, 1986; Short, Ketchen Jr., Palmer, & Hult, 2007; Thomas & Pollock, 1999). The term "strategic group" has been used traditionally in the strategy literature to refer to intra-industry groups comprising firms that "follow the same or similar strategy along strategic dimensions" (Porter, 1980, p. 20).

An alternative conceptualization of intra-industry groups can be found within the cognitive school of strategy. Scholars working in this tradition have shown that when managers' subjective interpretations of the competitive landscape in which they operate are shared, a "cognitive community" arises (Porac & Thomas, 1990, 1995; Porac *et al.*, 1989). For example, cognitive communities have been found in the case of Scottish knitwear manufacturers (Porac, Thomas, & Baden-Fuller, 1989), Chicago banks (Reger, 1990), US hospitals (Nath & Gruca, 1997) and commercial banks (Deephouse, 1999), and the US pharmaceutical industry (Osborne *et al.*, 2001).

Another conceptualization of intra-industry groups is that of “legitimacy-based group” (Barreto & Baden-Fuller, 2006; Deephouse, 1996). Similar to cognitive communities, legitimacy-based groups are also related to managers’ shared cognition. Unlike cognitive communities, however, the formation of shared cognition is not based on managers’ interactions with other firms or among themselves but on the categorization by an external observer with the authority to assess whether firms behave according to the required standards. The notion of legitimacy-based groups posits that the strong normative isomorphic influence provided by a powerful authority renders a certain grouping of firms legitimate. Once built, legitimacy-based groups are used by firms as a reference. Legitimacy-based groups are, in this sense, socially constructed.

The commensurability of these intra-industry groups has recently attracted the attention of scholars; a few studies have reported much overlap between strategic groups and cognitive communities (G. Hodgkinson, 2005; G. P. Hodgkinson, 1997b; Osborne, Stubbart, & Ramaprasad, 2001). However, although earlier implied by Barreto and Baden-Fuller (2006), whether a legitimacy-based group would function as a cognitive community for the managers of firms has not been tested empirically. If this is the case, the role of a legitimacy provider, or an external categorizer, in the strategy formation should be emphasized. Furthermore, the similarity of legitimacy-based groups and cognitive communities justifies deductive cluster analysis in the identification of cognitive communities.

This article tries to compare legitimacy-based groups and cognitive communities, which are identified separately. Taking into account such factors as data availability and comparability to previous studies (Barreto & Baden-Fuller, 2006; Deephouse, 1996), we chose the Korean asset-management industry during the 2001–2007 period as a suitable context for the purposes of our research.

INTRA-INDUSTRY GROUPS

Intra-industry structure and the strategic group

The notion of the strategic group links back to the early works of industrial organization (IO) researchers examining the intra-industry heterogeneity of firms. The original version of S-C-P (Structure-Conduct-Performance) theory posits the existence, within any industry, of a single oligopolistic group of firms with an optimal strategy. The only difference among firms that could be allowed for was the effect of the scale. However, this explanation could not account for the variety of strategies that firms adopt in any industry. Subsequently, some scholars coined the term *strategic group*, and this term has been used traditionally in the strategy literature to refer to intra-industry groups comprising firms that “follow the same or similar strategy along strategic dimensions” (Porter, 1980, p. 20).

With the aid of the strategic group construct, the long-run heterogeneity of firms in an industry becomes compatible with the S-C-P paradigm, for the strategy and resulting profitability can vary across strategic groups. According to the traditional S-C-P paradigm, firms within different strategic groups will display different strategies, which lead to differences in performance across strategic groups; whereas, the performance of firms within a strategic group will be similar due to the similarity of their strategies, as is implied by the definition of a strategic group. To date, however, empirical research has cast doubts on the validity of such an argument.

Some researchers, mainly those from the resource-based view (RBV) vein, have focused more on the similarity of firms in terms of the composition of resources, than on strategic similarity, when clustering firms in an industry. For example, Hatten and Hatten (1987, p. 329) define a *strategic group* as "a grouping of organizations which pursue similar strategies with similar resources." Similarly, Cool and Schendel (1987) consider a strategic group as "a set of firms competing within an industry for the similar combination of scope and resource commitment" (p. 1106).

While the IO approach to the identification of strategic groups is mainly the classification of an industry into groups (Bogner, Pandian, & Thomas, 1994; Bogner & Thomas, 1993), the RBV approach starts at the level of the firm, thus aggregating firms with similar strategies and resources into groups. The emphasis upon the resource similarity of firms within a strategic group implied by the RBV perspective suggests the possibility for substantial intra-group performance differences caused by strong competition among firms with similar resources and intergroup performance differences.

With alternative theoretical perspectives and the mixed empirical results, some scholars have questioned the validity of the strategic group concept as a theoretical construct, while others have argued for the use of more sophisticated methodologies in empirical studies.

Cognitive perspective on the strategic group: cognitive community

Scholars in the cognitive school believe that managers have a very narrow, asymmetric cognition of competition, which in turn affects the development of competitive strategy. Managers pay attention to the activities of firms whose action repertoire includes the types of actions they perceive to be important (from experience and learning), and of course, they pay little attention to firms that use fewer of these actions, according to the managers' perception and valued types of action (Marcel, Barr, & Duhaime, 2005). Therefore, the selection of competitors' action repertoires to be responded to is conducted with reference to managers' mental models (Miller, 1993). Similarly, the selection of competitors to be paid attention to also depends on managers' mental models.

In the seminal study carried out by Porac, Thomas, and Baden-Fuller (1989), it was found that Scottish knitwear manufacturers only consider other Scottish manufacturers as their competitors even though Scottish knitwear manufacturers only account for 3% of the global market share. This narrow focus on competitor identification was certainly one good reason for the late, and poor, response by the American automobile manufactures toward their Japanese counterparts in the 1980s (Yates, 1983). Similar to the organizational identity that members of a firm have developed and shared about their firm, managers may have another type of identity in mind, *group identity*, so to speak (Peteraf & Shanley, 1997), about who their competitors are and are not. The categorization of competitors according to managers' mental models may be inevitable, but it can often lead to blind spots (Zajac & Bazerman, 1991).

Motivated by studies and practical examples, cognitive school researchers argue that managers in a firm focus on a small number of competitors whom they *believe* are similar to their firm. In other words, managers set the reference group for firms and do not search whole firms in their industry when developing strategy (Daniels & Henry, 1998; Fahey & Narayanan, 1989; Marcel, Barr, & Duhaime, 2005; Reger & Huff, 1993). Therefore, group structure becomes a reality as a social construction by industry participants and firms sharing a group identity. Peteraf and Shanley (1997) thus rephrased the definition of the strategic group with this sociocognitive group in mind:

> *We used the term "strategic group" to denote a meaningful substructure of firms within an industry – one that is acknowledged by industry participants and has significance for them. In contrast to some other definitions, we neither define strategic groups on the basis of similar strategies nor distinguish them on this basis. While members of the same strategic group may employ similar strategies, this is not a necessary condition for the groups to have significance. (p.166)*

These sociocognitive groups have been investigated since the early 1990s (Churchman & Woodard, 2004; G. P. Hodgkinson, 1997b; Osborne, Stubbart, & Ramaprasad, 2001; Porac, Thomas, & Baden-Fuller, 1994; Wry, Deephouse, & McNamara, 2006). They are often called "cognitive communities" instead of strategic groups, for firms within each group do not necessarily show similarities in strategies. This cognitive perspective is distinct from economic perspectives on strategic groups in the sense that it regards group structure as resulting not solely from economic reality but from an interweaving of objective reality and subjective beliefs.

How are these groups formed and maintained? It has been argued that there is a process of *competitive enactment* among firms within a cognitive community. Weick (1979) earlier observed that an organization creates its environment through a collective sense making process, and then starts to behave as if the cognitive creation were true. This "reciprocal influence between subjects and objects" (Weick, 1979, p165) is defined as *enactment*. The mental model of strategists in every competitor is reciprocally intertwined with its strategic choices within the market choices formed by other competitors, customers, and suppliers. A cognitive community is formed and maintained through this mutual enactment process among firms; by which, the mental models of their strategists become very similar (Porac, Thomas, & Baden-Fuller, 1994).

Peteraf and Shanley (1997) emphasize the role of identity in the formation and maintenance of a cognitive community. The group identity is a result of social learning and social identification. Firms infer from firms that constitute the most useful reference group when looking for solutions to difficult problems. If the solutions are helpful, the reference group becomes more stable, and thus turns into a cognitive community.

The early efforts led by Porac and Thomas (Porac, Thomas, & Baden-Fuller, 1994; Porac, Thomas, & Baden-Fuller, 1989; Porac & Thomas, 1990; Porac, Thomas, Wilson, Paton, & Kanfer, 1995) have been taken up by various empirical studies. The similarity between the mental models of industry participants found in the study of Scottish knitwear manufacturers (Porac, Thomas, & Baden-Fuller, 1989) was also observed in Chicago banks (Reger, 1990), US grocery retail businesses (Porac & Thomas, 1994), US hospitals (Nath & Gruca, 1997), the US pharmaceutical industry (Osborne, Stubbart, & Ramaprasad, 2001), and US commercial banks (Deephouse, 1999).

It should be noted, however, that there is also a small number of research work that rejects the existence of shared beliefs among firms (Grønhaug & Falkenberg, 1989; P. Johnson, Daniels, & Asch, 1998). In their study of Fortune 500 US industrial firms emphasizing wood products over pulp and paper, Gronhaug and Falkenberg (1989) found large discrepancies between self-perception and outsiders' perceptions of the strategy adopted by a firm. This corresponds to the literature dealing with the cognitive differences between *actor* and *observer* (The Society of Korean Experimental Psychologists, 2008). If this asymmetric perception is indeed inevitable, then group-level identity may not be formed. It also dispute then the notion of competitive enactment, whose existence would create perceptions of close competitors being rather homogeneous, thereby yielding similar interpretation of action repertoires, is disputable.

Legitimacy-based groups

The legitimacy-based group is a relatively new notion of a type of intra-industry group, which was first coined by Barreto and Baden-Fuller (2006). The notion has its roots in institutional theory and is closely linked to the notion of cognitive community.

A legitimacy-based group is not formed through objective conditions (as in strategic groups) or interplay between subjective belief and objective reality (as in a cognitive community). Rather, a legitimacy-based group is created by powerful outside authorities. *Legitimacy*, a generalized assumption that a certain action is desirable or proper in a system, plays a key role in forming group structure in an industry. The notion of legitimacy stems from the institutional theory that admits socially constructed system of norms, values, beliefs, and definitions. The social construction of group identity is also crucial in the formation of cognitive communities. However, the social actors in this case are not the firms themselves, but the *legitimacy providers* who are "observers that have status to assess the conformity of firm behavior to specific socially constructed standards and to do this they need to categorize the firms" (Barreto & Baden-Fuller, 2006, p. 1650): this may be best illustrated by the following example. If firms A and B mutually believe that they share many characteristics and have similar understanding of industry competition, then they belong to the same cognitive community. However, B may be categorized as similar to C by the legitimacy provider, based on other characteristics. Then, B and C belong to the same legitimacy-based group, while A is classified otherwise.

Barreto and Baden-Fuller (2006) assume that the members of a legitimacy-based group may use the group as their reference group in strategic decision-making:

> *Faced with complex and potentially ambiguous information and to assure themselves, they tend to share their intra-industry categorisation among themselves (and also with managers) in a two-way process that parallels the one specified by Reger and Huff (1993) for managerial categorisation. That is, they engage in a process that is based on frequent interaction due to meeting events and personal contacts, and on commonalities in information sources.*
>
> *These categories constructed by legitimacy providers constitute the* legitimacy-based groups*, which act as a reference group since they serve to compare and evaluate firms against their group standards: external constituencies metric the organization's behaviour against these benchmarks to assess conformity and provide legitimacy; in their actions, managers use categorization influenced by external constituencies as long as it serves as a gauge against which their actions are evaluated and justified. (2006, p. 1650)*

These authors argue that firms would follow actions that are signaled as or (in a sense) approved of as legitimate by outside legitimacy providers. According to scholars like Barreto, Baden-Fuller (2006), and Deephouse (1996), regulators and the media often play the role of legitimacy providers. An empirical study of the Portuguese banking industry (Barreto & Baden-Fuller, 2006) shows that banks tend to follow the actions of other banks within their own legitimacy-based group. A potential criticism against legitimacy-based groups may depend on the study by Gronhaug and Falkenberg (1989), which basically asserts the asymmetry of self-perception and the perception among colleagues contrasting the notion of legitimacy-based groups. In their study, they found perceptions over the competitive structure of the industry to contain substantial differences between firms and industry outsiders, which reject the influence of legitimacy providers as well as the existence of legitimacy-based groups.

Yet, the notion of the legitimacy-based group is very valuable to studies in managerial cognition. If legitimacy providers have substantial influence on managers' cognitive categorization of competitors, then the resulting categorization of legitimacy-based groups would certainly have much overlap with cognitive communities, which are again socially constructed structures developed through managers' cognitive categorization. However, to our best knowledge, there has never been a study of the relationship between legitimacy-based groups and cognitive communities after Barreto and Baden-Fuller's published article.

Commensurability of intra-industry group notions

Notions of the three intra-industry groups (legitimacy-based group, cognitive community, and strategic group) have different origins and constructs. The notions of legitimacy-based group and cognitive community emphasize the social construction of group structure. However, legitimacy-based groups are formed by outsiders (legitimacy providers), while the competitive enactment arises within the members of a cognitive community. The notion of a strategic group is clearly different from the other two intra-industry groups, for firms within a strategic group are categorized according to their strategy, observable to anyone, without having to have any belief or cognition in common.

The relationships among these three conceptualizations of intra-industry groups are interesting. As to the frontiers of strategic group research, earlier, Thomas and his colleagues compared various constructs of groupings and their overlaps in the mid-1990s (Thomas & Carroll, 1994; Thomas & Pollock, 1999). They attempted to build a unifying framework addressing the notions of the strategic group and the cognitive community along with interdependence and interaction among firms (Burt, Nohria, & Eccles, 2000; Porac & Thomas, 1995). However, the questions that arise when the overlaps between strategic groups and cognitive communities and between cognitive communities and legitimacy-based groups increase have yet to be answered clearly.

Regarding to the relationship between cognitive communities and strategic groups, some recent researchers have tried to test the relationship between cognitive communities and strategic groups. A few recent studies from a cognitive perspective have identified cognitive communities as being virtually synonymous with strategic groups. They claimed that firms within cognitive communities behave similarly because they share similar mental models and eventually yield similar performance (G. Hodgkinson, 2005; G. P. Hodgkinson, 1997b; Nath & Gruca, 1997; Osborne, Stubbart, & Ramaprasad, 2001). However, the argument requires strong scrutiny, considering the deliberate efforts of differentiation among competitors[1].

The relationship between cognitive communities and legitimacy-based groups, interestingly enough, has not yet been investigated, and, therefore, this is the research question of this article.

Research question: legitimacy-based groups and cognitive communities

Barreto and Baden-Fuller's novel conceptualization of legitimacy-based group (2006) posits that a strong normative isomorphic force from a powerful authority or legitimacy provider could render a certain grouping of firms legitimate. Once built, the legitimacy-based groups are used by firms as references, while the reciprocal interaction of reality and perception or enactment may work. The groups are, in that sense, socially constructed. They are essentially cognitive communities, except for the fact that legitimacy-based groups are formed by outside observers, while the emergence of cognitive communities could result from other factors, such as geographic proximity (Porac, Thomas, & Baden-Fuller, 1989) and historical similarity (Nath & Gruca, 1997).

It is possible, therefore, to conjecture that a legitimacy-based group could function as a cognitive community for the managers of firms. This article questions whether the cognitive communities in an industry overlap with legitimacy-based groups. In this study, to answer the question, legitimacy-based groups are identified by the analysis of documents issued by legitimacy providers and are compared with cognitive communities elicited by the analysis of the competitive cognition of managers.

RESEARCH CONTEXT

Overview of Korean asset-management industry

In this study, the Korean asset-management industry has been chosen as the context for addressing the research question. This industry has been chosen because it provides some tangible benefits for the research. for example:

- Well-maintained industry data is accessible.
- The researcher has personal links with some top-level executives of asset-management companies, which allows for interviews with key informants (e.g., CEOs) to be scheduled, a necessary part of identifying cognitive communities.

Previous studies of legitimacy-based groups have focused on the financial industry (Barreto & Baden-Fuller, 2006; Deephouse, 1996), therefore, choosing this industry as the research context allows for comparative analyses of the findings.

Until 1996, there were only eight asset-management companies (AMCs) in Korea, and all were either owned or controlled by the government. The market share of these three leading companies was around 70% in 1995 (Shin, 2003). Unusually, all collective investment schemes in Korea guaranteed a fixed dividend to investors until 1990, so investors were not fully aware of the differences between collective investment schemes and normal bank deposits. A drastic change of governmental policy was introduced in 1990, which advised AMCs to give performance-based dividends to the trust investors. After the replacement of worried investors with more aggressive and sensitive investors, the asset-management industry started to compete on the performance of their asset-management.

The competition within the asset-management industry became more tangible when the Korean government announced the "Stock Market Renovation Plan" in 1995 and the "Approval Guideline for Investment Trust Companies" in 1996. By these policies, financial institutions, like commercial banks and stock companies, could enter the asset-management industry. From the summer of 1996 onwards, private investment trust companies were founded because the restriction on their establishment was lifted. The Asian financial crisis that swept Korea in 1997 and 1998 brought drastic changes to the Korean financial system. It forced Korea to accept the global standards for asset-management as well as for other financial sectors. The traditional oligopoly of the three state companies was invalidated, while many new AMCs with "star" asset managers have grown, following the financial crisis.

Since late 2000, the financial restructuring of the Korean financial sector lowered the barriers standing between Korean and foreign asset-management industries. First, it enabled foreigners to participate in the Korean financial system, not only as investors but also as owners of financial institutions. Second, Korean AMCs were allowed to sell products and invest in foreign markets. Before the restructuring, it was impossible for individual investors to buy collective investment schemes with underlying assets abroad. After this restructuring, many global AMCs entered Korea by either setting up new offices or buying local companies. Various collective investment schemes investing in foreign assets were introduced and became popular, even to individual investors. To compete with global AMCs, several companies merged to increase assets under management. Motivated by the growth of the market, a few conglomerates jumped on the bandwagon. As a result, there have been frequent changes of names and ownership of AMCs since 2001. **Table 1** illustrates changes for all Korean AMCs from 2001 to 2007. The year 2001 is also notable in the sense that systematic data, including name, type, and performance of collective investment schemes, were for the first time accumulated by fund-evaluation companies.

Table 1 Changes of asset-management companies (2001–2007)

2001	2002	2003	2004	2005	2006	2007	Changes
Cheil	Cheil	Cheil	CJ	CJ	CJ	CJ	changed name into CJ in 2003
Choheung	Choheung	Choheung	Choheung	SH	SH	SH	
Daehan	Daehan	Daehan	Daehan	Daehan	Daehan	HanaUBS	
Daeshin	Daeshin	Daeshin	Daeshin	Daeshin	Daeshin	Daeshin	
Dime	Dime	Dime	Good and Rich	Good and Rich	Good and Rich	Bliss	
Dongbu	Dongbu	Dongbu	Dongbu	Dongbu	Dongbu	Dongbu	
Dongwon	Dongwon	Dongwon	Dongwon	Dongwon			Merged to Hankook in 2006
Dongyang	Dongyang	Dongyang	Dongyang	Dongyang	Dongyang	Dongyang	
Global	Global	Global	Global	Global	Phoenix	Phoenix	
Goodmorning	PCA	PCA	PCA	PCA	PCA	PCA	Sold to PCA group in 2002
Hana	HanaAllian	HanaAllian	HanaAllian	HanaAllian	Allianz	Allianz	Sold to Allianz and

Table 1 Changes of asset-management companies (2001–2007)							
2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Changes**
	z	z	z	z			changed name into HanaAllianz
Hanil	Hanil	Hanil	Hanil	Seoul	Seoul	Eugene	
Hankook	Hankook	Hankook	Hankook	Hankook	Hankook	Hankook	Merged with Dongwon in 2006
Hanvit	Woori	Woori	Woori	Woori	WooriCS	WooriCS	
Hanwha	Hanwha	Hanwha	Hanwha	Hanwha	Hanwha	Hanwha	
Hyundai	Hyundai	Hyundai	Prudential	Prudential	Prudential	Prudential	Sold to Prudential in 2004
I	I	I	I	I	I	I	
Jooeun	Kookmin	Kookmin	KB	KB	KB	KB	
KEB	KEB	KEB	KEB-Commerz	KEB-Commerz			Merged with Landmark in 2006
Kookeun	Landmark	Landmark	Landmark	Landmark	Landmark		Sold to Landmark in 2002, merged with ING in 2007
KTB	KTB	KTB	KTB	KTB	KTB	KTB	
Kyobo	Kyobo	Kyobo	Kyobo	Kyobo	Kyobo	Kyobo	
LG	LG	LG	LG	LG			merged with Woori CS in 2006
McQuarie	McQuarie	McQuarie					
Midas	Midas	Midas	Midas	Midas	Midas	Midas	
Mirae	Mirae	Mirae	Mirae(Asset)	Mirae(Asset)	Mirae(Asset)	Mirae(Asset)	
Miraeasset	Miraeasset	Miraeasset	Miraeasset investment	Miraeasset investment	Miraeasset investment	Miraeasset investment	
My	My	My	My	My	My	My	
New State	New State	New State	Golden Bridge	Golden Bridge	Golden Bridge	Golden Bridge	
Plus	Plus	Plus	Plus	Plus	Plus	Plus	
Samsung	Samsung	Samsung	Samsung	Samsung	Samsung	Samsung	
Schroder	Schroder	Schroder	Schroder	Schroder	Schroder	Schroder	
SEI	SEI	SEI	SEI	SEI	SEI	SEI	Sold to foreign investor in 2004
Sejong	Sejong	Sejong	Mirae-MAPS	Mirae-MAPS	Mirae-MAPS	Mirae-MAPS	
Seoul	Seoul	Seoul	KDB (daewoo sec)	KDB (daewoo sec)	KDB (daewoo sec)	KDB (daewoo sec)	
Shinhan	Shinhan	Shinhan	ShinhanBNP	ShinhanBNP	ShinhanBNP	ShinhanBNP	
Shinyoung	Shinyoung	Shinyoung	Shinyoung	Shinyoung	Shinyoung	Shinyoung	
SK	SK	SK					merged with Mirae-MAPs in 2004
Taekwang	Taekwang	Taekwang	Taekwang	Heungkuk	Heungkuk	Heungkuk	
Templeton	Templeton	Templeton	Templeton	Templeton	Templeton	Templeton	
Wise	Wise	Wise	Wise	Hyundai-wise	Hyundai-wise	Hyundai-wise	
Yuri	Yuri	Yuri	Yuri	Yuri	Yuri	Yuri	
	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	founded 2002
	Deutch	Deutch	Deutch	Deutch	Deutch	Deutch	founded 2002

Table 1 Changes of asset-management companies (2001–2007)

2001	2002	2003	2004	2005	2006	2007	Changes
		NH	NH-CA	NH-CA	NH-CA	NH-CA	founded 2002
			Kansus	Kansus	Kansus	Kansus	founded 2003
			McQuarie-IMM	McQuarie-IMM	McQuarie-IMM	GoldmanSachs	founded 2004, Sold to Goldman Sachs
				DabiHana Infra	DabiHana Infra	DabiHana Infra	founded 2005, Closed 2008
				Fidelity	Fidelity	Fidelity	founded 2005
				IBK-SG	IBK-SG	IBK-SG	Founded 2005
				ING	ING	ING	founded 2005
				McQuarie-Shinhan	McQuarie-Shinhan	McQuarie-Shinhan	founded 2005
					Daol Property	Daol Property	founded 2006. Closed 2009
					Hankook Infra	Hankook Infra	Founded 2006
					Hankook Value	Hankook Value	founded 2006
						JP Morgan	founded 2007

Distribution channels of collective investment schemes in Korea are very centralized. As of 2008, 67% of products were sold by banks, while 31% were sold by securities companies. By contrast, in the UK, 83% of collective investment schemes were sold, either through independent fund sales companies or over the counter of AMCs. A centralized sales channel as in Korea increases the negotiation power of retailers like banks and therefore tends to increase the sales commission. This situation may come from the fact that many AMCs in Korea are owned and controlled by banks or securities companies.

Cognitive similarity and legitimacy among firms

Korean AMCs can be grouped by their origination and time of entry. The first three companies, founded in the late 1970s or early 1980s, were all government owned. Five private companies were added in the late 1980s, but they had very low market share. Companies founded after 1996 can be grouped by their major stockholders: banks, big conglomerates, or foreign. Each group of companies may share some historical and cultural similarities. For example, bank-affiliated AMCs have some notable similarity: Most employees are from banks. Companies have relatively conservative portfolios (focusing in bonds). Despite these apparent similarities, however, the existence and structure of cognitive communities in this industry are not easily predictable, for there have not been any studies that investigate the interaction (or enactment) among AMCs.

In contrast, it is relatively simple to identify legitimacy-provider candidates in this industry. Legitimacy providers are "observers that have status to assess the conformity of firm behavior to specific socially constructed standards and to do this [they] need to categorize the firms" (Barreto & Baden-Fuller, 2006). The Financial Supervisory Service (FSS) of Korea performs this very role for AMCs. FSS is the regulatory and monitoring body of the financial market, and therefore its role includes monitoring and supervising the behavior of AMCs. According to the Financial Investment Services and Capital Market Act, the FSS carefully monitors whether AMCs abide by the guidelines of investment recommendation to investors, which include principles of suitability, adequacy, and responsibility of explanation. The FSS also requires AMCs to hire standing auditors who independently monitor the legal adequacy of product development and sales processes. Other than supervising and monitoring AMCs, the FSS has another very important role. It reports the performance and key changes of AMCs at every quarter. The reports are widely used by the media and researchers, so most secondary research documents are based on FSS quarterly reports on AMCs. FSS quarterly reports categorize the AMCs into four groups, which are discussed in detail later in this article.

There are other organizations that possibly provide legitimacy to AMCs. For example, the Asset Management Association of Korea (AMAK) represents and advocates the interests of AMCs by publishing reports or handling media relations. It also has a self-regulatory role by which it can penalize member companies that may violate self-regulation. Fund-evaluation firms are also important, as they provide fund performance information for investors and the media. Every collective investment scheme is analyzed and ranked by these firms, and is open to potential investors and media as well. In Korea, a local company named ZeroIn has around 90% of the fund-evaluation service market.

Hypothesis

Legitimacy-based groups among Korean AMCs may now be identifiable with the analysis of legitimacy providers' categorization data. We try to test whether this *legitimate* categorization corresponds to the group structure of firms according to their cognitive similarity. If the following hypothesis is accepted, then it supports the argument that a legitimacy-based group plays a role as a reference group for firm managers (Barreto & Baden-Fuller, 2006; Deephouse, 1996; Peteraf & Shanley, 1997) of Korean AMCs.

H1: The cognitive communities in Korean asset management, if identified, are statistically the same as the legitimacy-based groups.

METHODOLOGY

Identification of legitimacy-based groups

Legitimacy is typically awarded through either government or public endorsement. Government endorsement implies the acceptance of an organization by state agencies that formally regulate it; while public endorsement is that awarded by the public. For example, Deephouse (1996) found that regulators and the media are two legitimacy providers in the financial industry. Similarly, in their study of the Portuguese bank sector, Barreto and Baden-Fuller (2006) identified governmental agencies (e.g., the central bank) and economic magazines as legitimacy providers.

As reviewed in the previous section, the FSS, the AMAK, and the collection of fund-evaluation companies have been observed to provide a certain level of legitimacy to the AMCs. Based on this view, a focus group interview with experts, and a survey of AMCs' CEOs were conducted to find the most influential legitimacy provider(s). The FSS of Korea was found to be by the agency with the highest authority, followed by the media.

The identification of legitimacy-based groups is based on the content analysis of the publications of these legitimacy providers. Manual searching of printed documents and keyword searching of electronic ones have been performed for the publications of legitimacy providers while monitoring consistency or discrepancy between categorizations of legitimacy providers. It was also found that, in addition to the content analysis of documents, tracking down the history of each company is required, since there have been frequent changes to company names, and mergers and acquisitions, during the research period.

Identification of cognitive communities

The identification of cognitive communities requires the elicitation managers' competitive cognition. The elicitation of competitive cognition among managers has been a methodological challenge to cognitive researchers. While a simple listing of competitors (de Chernatony, Daniels, & Johnson, 1993) is still widely used, there are a few advanced methods applied among which are the taxonomy map, repertory grid, and content analysis. **Table 2** summarizes elicitation methods used in previous studies.

In this study, the elicitation **Error! Reference source not found.**was performed by means of the pseudo-repertory grid.(McNamara *et al.*, 2003) An interview using this method comprised two steps – identification of key strategic variables, and ranking close competitors by taking into account the identified strategic variables. This method has a few apparent advantages over other methods applied in the elicitation of cognitive communities. First, it is very convenient and yet systematic in adopting features of the repertory grid, such as *topic* and *elements*. It does not require much time of participating informants, due to the structured nature of its questionnaires. From the respondents' point of view, it could even be easier than a simple listing of competitors, for they have references (strategies) with which they can measure their competitors. Second, the method helps to limit potential researcher bias. The data collection can even be performed without physically meeting respondents. In their research, McNamara, Deephouse, Luce, (2003) used postal mail for data collection. Third, it enables a variety of analyses (Borgatti, Everett, & Freeman, 2002; J. Scott, 2006; Wasserman & Faust, 2006) since the collected data can be represented in a dyadic network form (McNamara, Deephouse, & Luce, 2003).

Table 2 Methods used in eliciting perceptions of competition

Study	Topic	Sample	Methodology and Data collection
Calori, Johnson and Sarnin (1994)	CEO's cognitive maps of the structure and dynamics of their industry in terms of complexity in relation to the scope of the organization's business portfolio	26 CEOs (14 English and 12 French) from 4 industries (brewing, car manufacturing, retail banking and book publishing)	Content analysis of semi-structured interview tran-scripts in order to infer the respondents' mental models of the structure and dynamic of their industries
De Chernatony *et al.* (1993) Daniels *et al.* (1993, 1995)	A cognitive perspective on differences of managers' perceptions of competition and how to measure perception of competition	24 senior managers from 5 pump manufacturing companies and 17 customers from 10 companies (purchasing and engineering managers)within the off-shore pumps industry	Free response listing of competitors in con-junction with card sorts and repertory grid
Porac and Thomas (1994)	Subjective rivalry and the explanation for why categorisation process influences perceived competitive boundaries between firms	Three samples of US grocery retail managers (1) N=25, (2) N=25 (3) N=8	Interviews, analyse using coding proceedings
Porac *et al.* (1995)	The development of a taxonomic model of rivalry among Scottish knitwear producers that describe competition by attributes involving size, technology, product style and geographic location	(1) N=20 managing directors (MDs) from 20 Scottish firms, (2) N=3 industry experts from trade associations and technical schools (3) N=89 MDs	(1) Field interviews (2) The industry experts were consulted in order to help verify and interpret interview results (3) A structured questionnaire
Reger and Huff (1993)	A cognitive approach to measure the presence of strategic groups	24 strategists from 6 bank holding companies in the city of Chicago, US	Interviews using the repertory grid method and cluster analysis to form different strategic groups within the industry.
Reger and Palmer (1996)	Study the cognitive inertia hypothesis, i.e strategists mental maps fail to keep pace with the major changes experienced by the industry	Three samples, (1) Reger (1990), (2) Walton (1986), (3) N-25 "upper echelon executives" from 6 banks and 5 "thrift" organizations in Arizona	A retrospective comparison of findings drawn from 3 separate studies each conducted within the US financial services industry, over differing time periods

Table 2 Methods used in eliciting perceptions of competition			
Study	**Topic**	**Sample**	**Methodology and Data collection**
Heijltjes, Van Witteloostuijn and Sorge (1996)	An empirical study of consistent environment-strategy combination in different industries in the Netherlands and Great Britain	24-production companies in Great Britain and 14 in the Netherlands within different industries, with an emphasis on the chemical and food industry.	Structured questionnaire taken into interviews with members of the Board of Directors
Fombach and Zajeo (1987)	The use of managerial perception to explain intra-industry stratification	The 114 largest firms in the financial services industry	Survey and content analysis of annual reports

Based on previous studies (Coates & Hubbard, 2007; Khorana and Servaes, 2004) and focused group interview with industry experts, seven candidates of strategic variables were identified; three are firm specific, while the other four are portfolio related. After this initial selection of candidate variables, forty-two CEOs of AMCs were interviewed. They were asked to select the strategic variables they thought were important among these seven candidates and then to rank close competitors of their firms with the strategic variables in mind. The interview data was coded and then transformed into a network form (McNamara *et al.*, 2003), and cognitive communities were elicited through the application of a cluster analysis (Norusis, 2008) procedure on the network.

It should be noted, however, that any interviews for the elicitation of cognition could involve researcher bias (G. P. Hodgkinson, 1997a). In response to this, interviews were divided into two sections. In the first section, the two-step elicitation of competitive cognition as addressed above is performed via a structured questionnaire. In this section, the researcher only responds to respondents when they want clarification of terms or have any technical problems. After completing the questionnaire, there comes the second section where the researcher asks for some background information and any other required information. There were two cases, where at the end of the second part of the interview, respondents had wanted to add or remove some competitors they had identified in the first section, allowing them to refine their identification.

The elicited competitive cognition should then be constructed into group structure, or cognitive communities. A simple listing or taxonomy-map method does not involve statistical analysis for the identification of cognitive communities. In a recent application of the repertory-grid method, statistical analysis has been applied (Reger, 1990; Reger & Huff, 1993). In this study, a cluster analysis is adopted with the dyadic link resulted from pseudo-repertoire grid interviews.

There are largely two different types of clustering algorithms: hierarchical and nonhierarchical. *Hierarchical algorithms* progress through a series of steps that yield a tree-shape structure that is updated either by adding (agglomerative) or deleting (divisive) elements at each step. The well-known Ward's algorithm (Norusis, 2008) is an example of this type. Nonhierarchical algorithms, often dubbed K-means, partition a data set into a prespecified number of clusters. It is found that this algorithm is more robust to outliers, and it maximizes within-cluster homogeneity and across-cluster heterogeneity (Hair, 1998). Therefore, generally, the nonhierarchical method is more appropriate for intra-industry group studies and is valid with apparent variations (of strategy and performance in strategic group studies and cognition in cognitive communities) across groups and high similarity within groups. However, the nonhierarchical clustering algorithms require that a number of clusters be prescribed (or guessed with solid justification) before the analysis (therefore deductive in nature), which may fall into tautology because researchers do not perfectly know the number of clusters before the analysis. Ketchen and Schook (1996) emphasized that a solid theoretical basis that enables justification of the resulting number of clusters is necessary to increase the validity of the analysis. In this study, the number of legitimacy-based groups can be used to validate the number of clusters (cognitive communities), thus diminishing the risk of tautology.

The density of the links built was analyzed to yield cliques of firms, which were then transformed into a correlation matrix of cluster analysis (Borgatti, Everett, & Freeman, 2002) that groups cognitive communities. This approach is a more robust algorithm than its hierarchical counterparts, and it optimizes both within-cluster homogeneity and across-cluster heterogeneity (Hair, 1998). While most studies used numbers of links as the values in the correlation matrix, and, thus, the value is often binary in nature – the weights on the link is also utilized in this study[2].

Commensurability of cognitive communities and legitimacy-based groups

In most previous studies, the comparison of two intra-industry groups has mostly been undertaken through simple visual comparison of clusters (G. Hodgkinson, 2005; Osborne, 1996; Osborne, Stubbart, & Ramaprasad, 2001). In this research, however, a more systematic comparison of the two group structures was conducted, with a view to increasing the validity and generalizability of the findings.

To investigate statistically the correlation of two group structures, cross-tabulation was used. Cross-tabulation is a correlation analysis for variables with nominal or ordinal scale, which is akin to the Pearson correlation coefficient for ratio scale or Spearman's rank correlation for interval scale. The steps are as follows.

In this study, McNemar-Bowker cross-tabulation method was adopted. The original form of the McNemar test was designed for a 2×2 table, but it has been extended so that the measured variable can have more than two possible outcomes. It is then called the McNemar-Bowker test of symmetry. It tests for any symmetry around the diagonal of the table. In this empirical case, the McNemar-Bowker method generally tests for asymmetry in the distribution of groups to which companies belong.

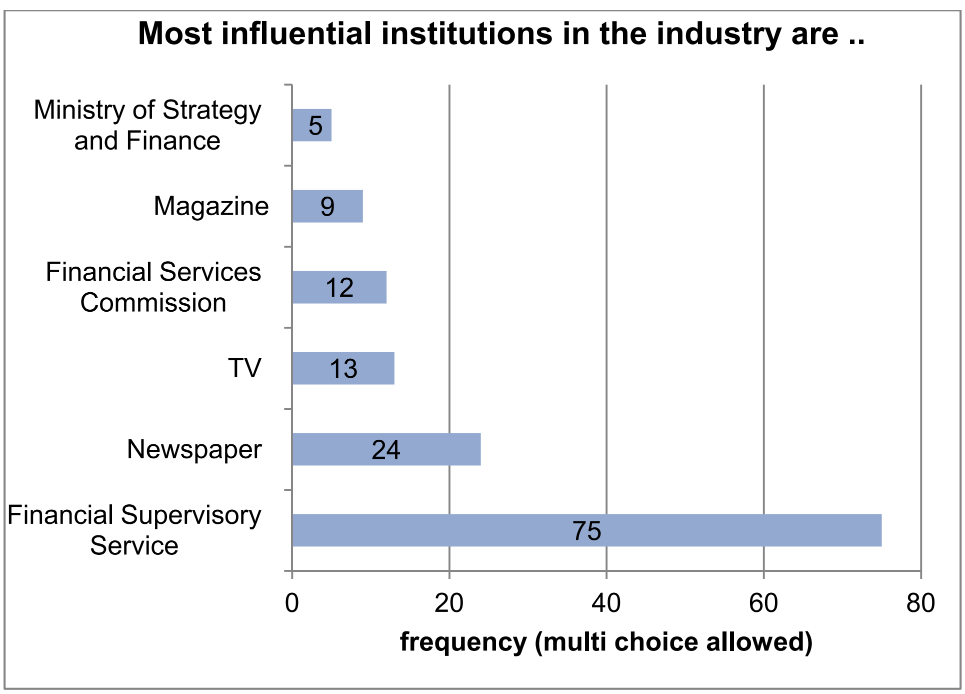
RESULTS AND FINDINGS

Legitimacy-based groups

A panel discussion was organized with experts of the asset-management industry – a finance professor, an industry analyst, and a senior reporter of an industry newspaper – to find legitimacy providers. They unanimously agreed that the FSS is the most important single institution in the asset-management industry. Although the legislation regarding the asset-management industry is the responsibility of the Ministry of Strategy and Finance and the National Congress, employees of the FSS regularly monitor and analyze what happens in the industry. With such data, it has the authority to sanction AMCs. In most cases, the sanction is in monetary form, but in extreme cases, the FSS can order suspension or even closure of AMCs.

The CEOs of AMCs interviewed also agreed that the FSS is the agency they need to be aware of. As illustrated in Figure 1, they regard the FSS as the most influential institution in the industry. Here, the respondents were forty-one CEOs and one Chief Marketing Officer of AMCs, all of whom were allowed to choose multiple institutions. The finding that a regulator such as the FSS is one of the most influential legitimacy providers in a financial industry is consistent with previous studies (Barreto & Baden-Fuller, 2006; Deephouse, 1996).

Figure 1: Most influential institutions (according to CEOs)



In this study, the role of media as a legitimacy provider was also reviewed. To ascertain whether the media have maintained consistency and consensus on the categorization of AMCs, news articles during the research period were researched and analyzed. The categorizations by newspapers and TV networks are found to be identical, because they mostly adopt the FSS's categorization, with only a few exceptions.

It is also worth noting here that there are a few other institutions in the industry that could be potential candidates as legitimacy providers. An industry association such as the Korea Financial Investment Associations[3] (KOFIA) is one example. An industry association can exert isomorphic pressure on its members by setting standards, self-regulation, and diffusion of information. The categorization of KOFIA (and previously AMAK) could therefore be important. By analyzing the documents[4] issued by KOFIA, it is found that KOFIA has adopted the FSS's categorization in grouping their members. Another type of industry participant, potentially influential to AMCs is the fund-evaluation company. There are a few of them in Korea, but ZeroIn Inc. has an almost monopolized position with assumingly 95% market share. The Morningstar Korea, the subsidiary of Morningstar Inc., is the next in line, although it only shares approximately 3–4% of the market. However, these fund-evaluation companies only categorize collective investment schemes, not AMCs alone. Besides, they sometimes use the categorization of the FSS, mostly in news sections of their websites. In an interview, an officer of ZeroIn stated that they do not feel the need to develop their own categorization of AMCs simply because it is not necessary in the evaluation of collective investment schemes. He added that they only need to categorize good and bad performers in the market.

Table 3: FSS categorization of AMCs or, legitimacy based groups among AMCs

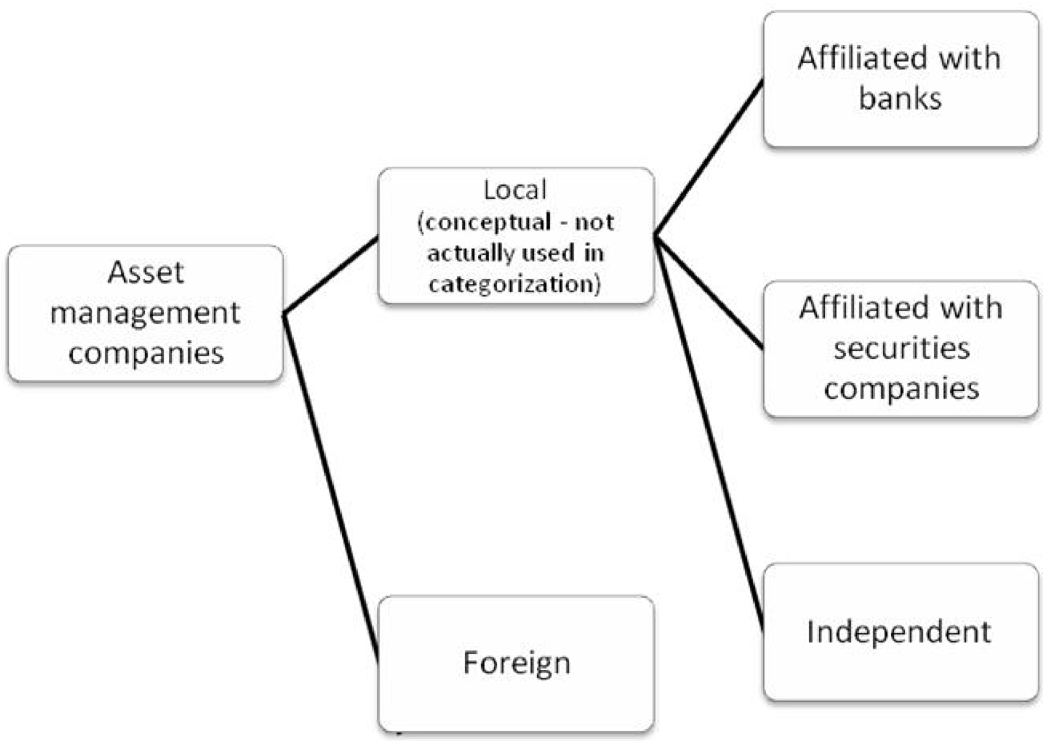
	2001	2002	2003	2004	2005	2006	2007
Bank affiliated							
	Jooeun	Kookmin	Kookmin	KB	KB	KB	KB
			NH	NH-CA	NH-CA	NH-CA	NH-CA
	Choheung	Choheung	Choheung	Choheung	SH	SH	SH
	Shinhan	Shinhan	Shinhan	ShinhanBNP	ShinhanBNP	ShinhanBNP	ShinhanBNP
	Hanvit	Woori	Woori	Woori	Woori	WooriCS	WooriCS
	Cheil	Cheil	Cheil	*CJ*			
	Kookeun	*acquired by Landmark*					
	Hana	*acquired by HanaAllianz*					
	KEB	KEB	KEB	KEB-Commerz	KEB-Commerz	*Landmark merged*	
Securities affiliated							
				CJ	CJ	CJ	CJ
	Daeshin	Daeshin	Daeshin	Daeshin	Daeshin	Daeshin	Daeshin
	Dongbu	Dongbu	Dongbu	Dongbu	Dongbu	Dongbu	Dongbu
	Dongyang	Dongyang	Dongyang	Dongyang	Dongyang	Dongyang	Dongyang
	Hanil	Hanil	Hanil	Hanil	Seoul	Seoul	Eugene
	Daehan	Daehan	Daehan	Daehan	Daehan	Daehan	HanaUBS
	Hankook	Hankook	Hankook	Hankook	Hankook	Hankook	Hankook
	Hanwha	Hanwha	Hanwha	Hanwha	Hanwha	Hanwha	Hanwha

Table 3: FSS categorization of AMCs or, legitimacy based groups among AMCs

	2001	2002	2003	2004	2005	2006	2007
	Taekwang	Taekwang	Taekwang	Taekwang	Heungkuk	Heungkuk	Heungkuk
	Seoul	Seoul	Seoul	KDB (daewoo sec)	KDB (daewoo sec)	KDB (daewoo sec)	KDB (daewoo sec)
	Kyobo	Kyobo	Kyobo	Kyobo	Kyobo	Kyobo	Kyobo
	Miraeasset	Miraeasset	Miraeasset	Miraeasset()	Miraeasset	Miraeasset	Miraeasset
	Sejong	Sejong	Sejong	Mirae-MAPS	Mirae-MAPS	Mirae-MAPS	Mirae-MAPS
	Samsung	Samsung	Samsung	Samsung	Samsung	Samsung	Samsung
	Shinyoung	Shinyoung	Shinyoung	Shinyoung	Shinyoung	Shinyoung	Shinyoung
	Goodmorning	*acquired by PCA*					
	Hyundai	Hyundai	Hyundai	*acquired by Prudential*			
	LG	LG	LG	LG	LG	*merged with Woori CS*	
	Dongwon	Dongwon	Dongwon	Dongwon	Dongwon	*merged with Hankook Merged*	
	SK	SK	SK	*Mirae-MAPS*			
Foreign							
	Hana	HanaAllianz	HanaAllianz	HanaAllianz	HanaAllianz	Allianz	Allianz
					DabiHana Infra	DabiHana Infra	DabiHana Infra
		Deutch	Deutch	Deutch	Deutch	Deutch	Deutch
					Fidelity	Fidelity	Fidelity
				McQuarie-IMM	McQuarie-IMM	McQuarie-IMM	GoldmanSachs
					IBK-SG	IBK-SG	IBK-SG
					ING	ING	ING
	Kookeun	Landmark	Landmark	Landmark	Landmark	Landmark	*merged with ING*
							JP Morgan
					McQuarie-Shinhan	McQuarie-Shinhan	McQuarie-Shinhan
	Goodmorning	PCA	PCA	PCA	PCA	PCA	PCA
	Hyundai			Prudential	Prudential	Prudential	Prudential
	Schroder	Schroder	Schroder	Schroder	Schroder	Schroder	Schroder
	SEI			SEI	SEI	SEI	SEI
	Templeton	Templeton	Templeton	Templeton	Templeton	Templeton	Templeton
	McQuarie	McQuarie	McQuarie				
Independent							
		Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
	Dime	Dime	Dime	Good and Rich	Good and Rich	Good and Rich	Bliss
						Daol Property	Daol Property
	New State	New State	New State	Golden Bridge	Golden Bridge	Golden Bridge	Golden Bridge
						Hankook Infra	Hankook Infra
						Hankook Value	Hankook Value

Table 3: FSS categorization of AMCs or, legitimacy based groups among AMCs							
	2001	2002	2003	2004	2005	2006	2007
	Wise	Wise	Wise	Wise	Hyundai-wise	Hyundai-wise	Hyundai-wise
	I	i	i	i	i	i	i
				Kansus	Kansus	Kansus	Kansus
	KTB	KTB	KTB	KTB	KTB	KTB	KTB
	Midas	Midas	Midas	Midas	Midas	Midas	Midas
	Mirae	Mirae	Mirae	Mirae(A)	Mirae(A)	Mirae(A)	Mirae(A)
	My	My	My	My	My	My	My
	Global	Global	Global	Global	Global	Phoenix	Phoenix
	Plus	Plus	Plus	Plus	Plus	Plus	Plus
	Yuri	Yuri	Yuri	Yuri	Yuri	Yuri	Yuri
	SEI	SEI	SEI	*Categorised into foreign*			

Figure 2: FSS categorization

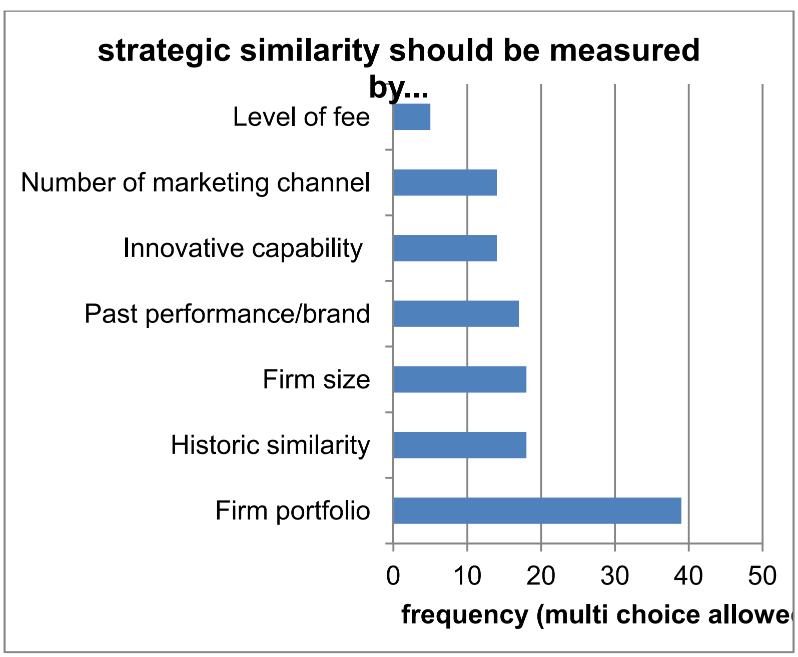


Therefore, it is justifiable to regard the categorization of the FSS as legitimacy-based groups. The FSS has categorized AMCs according to their shareholders, bank affiliations, securities affiliations, and as foreign or independent, as illustrated in **Figure 2** above. This categorization has not changed during the research period, and the entire Korean media have fully followed it in their news articles.

Cognitive communities

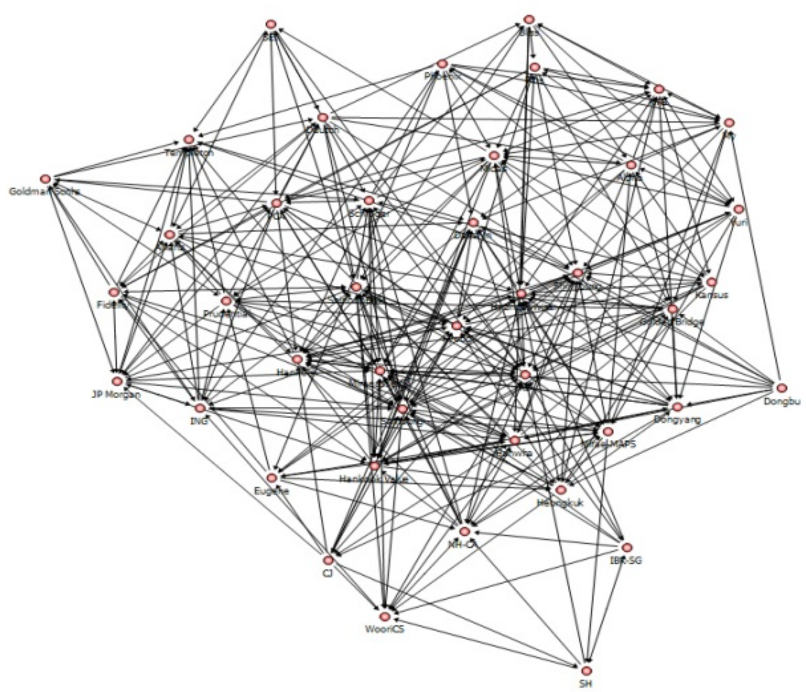
The interviews with CEOs of AMCs were performed from September to November of 2009. Interviews usually lasted 20-30 minutes, in the company offices. A typical interview comprised a short introduction providing explanation of the purpose of the interview and the selection of strategic variables. Interviewees would then rank their competitors and participate in unstructured discussion. The structured part of the interview – selection of strategic variables and ranking competitors – usually took 10-15 minutes, and the unstructured part of the interview took a similar length of time. In most cases, no recording was allowed. However, for three interviews, detailed research notes were made. Without recording, a researcher may be exposed to the distortion or misunderstanding of what an interviewee meant. However, in the study, the interviews are relatively very short, and approximately half of the interview is very structured and therefore does not limit the credibility of the interviews. All interviewees were male, and most had significant experience in the asset-management industry: half of the CEOs (22 out of 42) have more than 20 years' experience in the industry[5]. Interestingly though, their tenures in current positions were not very long, which may imply that moves between firms are rather frequent.

Figure 3: Strategic variables chosen by CEOs



Similar to McNamara, Deephouse, and Luce's study (2003), the interviewees were first asked to choose key strategic variables they found important in the categorization of competitors from the list of seven candidates' variables, which were developed by panel discussion and previous studies. Interviewees could choose as many variables as they wanted for inclusion. To this first interview question, the interviewees indicated that the firm portfolio, historic similarity, firm size, and past performance were all valuable measures for the categorization of companies in the industry, as seen in **Figure 3**. Except for three CEOs, all interviewees chose the firm portfolio – how assets under management of a firm spread over various types of assets – as the most important variable in the categorization of their competitors. It is interesting to note that price strategy, contrary to previous studies (Khorana & Servaes, 2004), was not regarded as important to this sample of interviewees for identifying competitors.

Figure 4: Cognitive links among asset-management companies



Then the interviewees were asked to rank the top ten competitors in their mind, considering the strategic variables they chose. It did not completely exclude the possibility that they might also consider the variables not chosen. However, they were asked to concentrate on their variables, and they confirmed the consideration of the variables chosen by the end of the interviewing process. The result of these rankings was represented in the network form, as illustrated by **Figure 4** below. The network representation of interview results includes forty-two companies interviewed. The links toward the companies not interviewed are removed from the network. By this, the ranking of companies reported by interviewees can be used in clustering companies, while the validity of the resulted clusters can be maintained.

The clustering of the network was performed by the software package Netminer, because of its features and user-friendliness. After coding the interview data into a network form, the cognitive communities were elicited through the cluster analysis procedure. The cognitive communities found are illustrated in Table 4. In this process, Mahalanobis distance (Hair, 1998: Norusis, 2008) has been used, which has recently been recommended to increase the validity of clustering (Ketchen & Shook, 1996).

Table 4 Cognitive communities found

Cognitive community 1 (5)	Cognitive community 2 (15)	Cognitive community 3 (10)	Cognitive community 4 (12)
IBK-SG	CJ	Allianz	Alpha
KB	Daeshin	Deutch	Bliss
NH-CA	Dongbu	Fidelity	Golden Bridge
SH	Dongyang	GoldmanSachs	Hyundai-wise
WooriCS	Eugene	ING	Kansus
	Hankook	JP Morgan	KTB
	Hankook Value	PCA	Midas
	Hanwha	Prudential	My
	Heungkuk	SEI	Phoenix
	Kyobo	Templeton	Plus
	Miraeasset (I)		Schroder
	Mirae-MAPS		Yuri
	Samsung		
	ShinhanBNP		
	Shinyoung		

Comparison of two group structures

The two groupings of legitimacy-based groups and cognitive communities are now to be compared, to test the hypothesis of this study. For this purpose, eight companies not interviewed were removed from the legitimacy-based groups. This is only for comparison purposes, without changing the structure of the identified legitimacy-based group.

- Firms no longer in existence (2)
  Dabi Hana Infra
  Daol Property

- Firms not interviewed (6)
  Hana UBS KDB Daewoo
  McQuarie-Shinhan
  I Investment
  Hankook Infra
  Mirae Asset -A

Therefore, the four legitimacy groups illustrated in Table 3 now have five, thirteen, twelve, and twelve members, respectively. **Table 5** compares membership of each firm in legitimacy-based groups and cognitive communities. Intuitively, it is easy to find that the two groupings have much in common. Only a small number of companies have different memberships in terms of cognitive communities and legitimacy-based groups. Shinhan BNP is categorized as a bank-affiliated group in terms of legitimacy-based groups, but belongs to the second cognitive community, which is mostly comprised of securities-affiliated AMCs. IBK-SG also shows a discrepancy in its memberships. Despite its membership in a "foreign" legitimacy-based group, IBK-SG is categorized as the first cognitive community to which most bank-affiliated AMCs belong. Similarly, Schroder, a member of the foreign legitimacy-based group, is categorized into cognitive community 4, with most independent AMCs, while Hankook Value is categorized with securities-affiliated AMCs, despite its membership in the independent legitimacy-based group.

Table 5 Comparison of membership

Name	legitimacy based group	cognitive community
KB	1	1
NH-CA	1	1
SH	1	1
ShinhanBNP	***1***	***2***
WooriCS	1	1
CJ	2	2
Daeshin	2	2
Dongbu	2	2
Dongyang	2	2
Eugene	2	2
Hankook	2	2
Hanwha	2	2
Heungkuk	2	2
Kyobo	2	2
Miraeasset	2	2
Mirae-MAPS	2	2
Samsung	2	2
Shinyoung	2	2
Allianz	3	3
Deutch	3	3
Fidelity	3	3
GoldmanSachs	3	3
IBK-SG	***3***	***1***
ING	3	3
JP Morgan	3	3
PCA	3	3
Prudential	3	3
Schroder	***3***	***4***
SEI	3	3
(Franklin) Templeton	3	3
Alpha	4	4
Bliss	4	4
Golden Bridge	4	4
Hankook Value	***4***	***2***

Table 5 Comparison of membership		
Name	**legitimacy based group**	**cognitive community**
Hyundai-wise	4	4
Kansus	4	4
KTB	4	4
Midas	4	4
My	4	4
Phoenix	4	4
Plus	4	4
Yuri	4	4

With much overlap, as illustrated in **Table 5**, it can be argued that the hypothesis is supported. However, to test whether the two groups are statistically identical, the cross-tabulation method using the McNemar-Bowker statistic was performed. The results, shown in **Table 6** and **Table 7**, indicate that the null hypothesis (i.e., that the two groups are different) should be rejected. Therefore, it is concluded that there is no statistically significant difference in the membership structure of the two groups.

Table 6 Cross-tabulation comparison						
		g2 (CG)				**total**
		1	**2**	**3**	**4**	
LBG	1	4	1	0	0	5
	2	0	13	0	0	13
	3	1	0	10	1	12
	4	0	1	0	11	12
Total		5	15	10	12	42

Table 7 McNemar-Bowker Test			
Chi-square test			
	value	freedom	p
McNemar-Bowker Test	4.000	4	.406
Number of cases	42		

DISCUSSION

The equivalence of cognitive communities to legitimacy-based groups found in this research highlights the important role of normative isomorphism (DiMaggio & Powell, 1993) in the creation of cognitive similarity among firms. Although competitive enactment (Carroll, Pandian, & Thomas, 1994; Osborne, Stubbart, & Ramaprasad, 2001), mimetic isomorphism (Lant & Baum, 1995; W. R. Scott & Meyer, 1994), and social learning (Peteraf & Shanley, 1997) have been used to explain the processes of creating and maintaining a cognitive community, less attention has been paid to how such processes are initiated. The empirical findings reported here suggest the critical role of a strong authority in the formation of similar cognitions. Firms belong to a cognitive community because they are so *assigned*. Furthermore, the evidence presented also suggests that even managers of relatively new entrants without long experience of enactment (in the cases of Fidelity and CJ, for example) show an apparent cognitive similarity to managers of firms within their legitimacy-based group. Overall, the results demonstrate the strong influence of legitimacy providers in forming competitive cognition.

Our findings also have methodological implications for the identification of cognitive communities. Specifically, the methodological challenge involved in the identification of cognitive communities can be reduced by looking at legitimacy-based groups instead. Put differently, the number of legitimacy-based groups may predict the number of cognitive communities. This would allow for the use of deductive cluster analyses in the identification of cognitive communities, as opposed to the inductive cluster analyses typically used, which has been criticized. (Ketchen & Shook, 1996)

Our results have certain limitations that are worth noting. First, categorization in the Korean asset-management industry has not changed for more than ten years. This stability may have played a key role in the development of a strong correlation between legitimacy-based groups and cognitive communities. Indeed, it is plausible that had there been frequent changes in the categorization of legitimacy providers, (due, for example, to the status of any legitimacy provider being questioned or challenged), the commensurability between legitimacy-based groups and cognitive communities reported here would not have been possible.

Second, in the Korean asset-management industry, the FSS uses the shareholder structure as the categorization variable. However, since the shareholder structure is generally not related to competitive strategy, legitimacy-based groups are formed rather randomly. A wrong categorization can distort the competitive cognition of participants or lead to cognitive inertia that hinders strategic change. Therefore, the categorization variable of a legitimacy provider can influence the extent to which legitimacy-based groups and cognitive communities overlap.

CONCLUSION

This research has demonstrated the existence of intra-industry groups formed by a strong outside authority (legitimacy-based groups) as well as the managerial cognition of the participants themselves (cognitive community), and the commensurability of the two groups. It confirms the role of a legitimacy-based group as a reference group – or indeed as a cognitive community. Our empirical findings bear one important implication to policy makers. Since the categorization by a legitimacy provider may play a key role in forming competitive cognition among industry participants – especially where the legitimacy provider has strong power within the industry (such as regulation) and the categorization has not been changed for a while –

wrong categorization and policy-making may lead to misperception among managers, and hence to ineffective strategic decision-making, especially in turbulent situations.

ENDNOTES

[1] Porter (1980) has suggested, "competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value."

[2] In this study, rankings of recognized competitors are coded into weight of the link with the formula (11-ranking), which gives a weight of 10 to the closest competitor chosen.

[3] The former Korean Association of Asset Management Companies have merged into the KOFIA.

[4] All reports issued by KOFIA are downloadable from its website. The number of reports from 2001 to 2007 that include categorization is twenty-seven. All of those reports cited the FSS's categorization.

[5] Average of 17.8 years.

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IS THERE A REAL PIONEER´S ADVANTAGE? LESSONS LEARNED AFTER ALMOST THIRTY YEARS OF RESEARCH

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ABSTRACT

Previous studies examining the effects of pioneer market entrance effects have shown that favorable results come from being a first entrant: others find mixed evidence and some even find disadvantages to being first in the market. After more than two decades of research, what are the advances in this field of knowledge? What are the main theoretical and empirical contributions? What lines of investigation appear for the future? This article is intended to answer these questions.

Keywords: Pioneer Advantage; First Mover Advantage; Order of Market Entry Effect.

Purpose: The purpose of this article is to present a model that presents the findings of benefits of first mover strategy as a result of 27 years of empirical research.

Design/results: This meta-analysis indicates that, after years of study about the pros and cons of pioneer advantage, the balance favors empirical evidence that supports the benefits of entry order.The results help to reinforce the view that first movers have advantages over follower firms.

Practical implications: This study highlights interesting implications for managers regarding the importance of launching new products effectively and on time.

Originality/value: Three empirical generalizations can be established after the analysis:
1) For industrial or consumer goods in mature industries, there is a negative relationship between order of market entry and market share.
2) For frequently-purchased consumer goods, the relative market share of entrants following the pioneer is equal to one divided by the square root of the order of entry.
3) In mature industrial and consumer goods markets, early entrants see advantages in market share declining slowly over time that reflect the initial market share.

INTRODUCTION

Previous research has shown that early entry of companies into new markets promotes competitive advantages or influences benefits exceeding the cost of the capital required when compared to competitors who have entered later (Lieberman and Montgomery, 1988). This concept has been called: *pioneer´s advantage* (Robinson and Fornell, 1985), *first-mover advantage* (Lieberman and Montgomery, 1988) and *order of market entry effect* (Lambkin, 1988).

The theoretical foundation for this idea comes from the economics of industrial organization, specifically the concept of entry barriers (Porter, 1980), where one of the forces of the Competition Model refers to the threat of new entrants. The likelihood of a firm entering an industry is a combination of two factors: barriers to entry and the retaliation expected from industry participants.

Since the seminal studies on the subject were undertaken, advantages associated with economies of scale or learning curves for the pioneers in the market have been found (Glazer, 1985). For Robinson and Fornell (1985) and Robinson (1988), there are pioneers who have maintained successful market leadership for decades, like Campbell, Coca-Cola, Dupont, and Kleenex. However, they also identify pioneers who have not had the success expected, such as Advent (large-screen TVs), Royal Crown Cola (caffeine-free-low-calorie cola) and Osborne (laptops).

Although extensive empirical evidence in favor of the advantages of pioneer strategy in consumer and industrial markets has developed in growth sectors such as maturity (Robinson and Fornell, 1985; Urban et al. 1986; Lambkin, 1988; Parry and Bass, 1990), supported by the development of consumer preferences for the pioneers (Carpenter and Nakamoto, 1989; Kardes and Gurumurthy, 1992; Kardes et al. 1993), we found studies where the results show combined effects for and against pioneering market entry (Robinson et al. 1992, Christensen and Bower, 1996; Bohlmann et al., 2002). Research also discovered instances where the results for early market entrants have not been successful (Golder and Tellis, 1993).

The strategy of entering the market first has advantages for companies in terms of patent development, higher product quality, and broader product lines. In addition they enjoy cost savings in the supply chain and consumer preference in markets with imperfect information about the product (Robinson and Fornell, 1985).

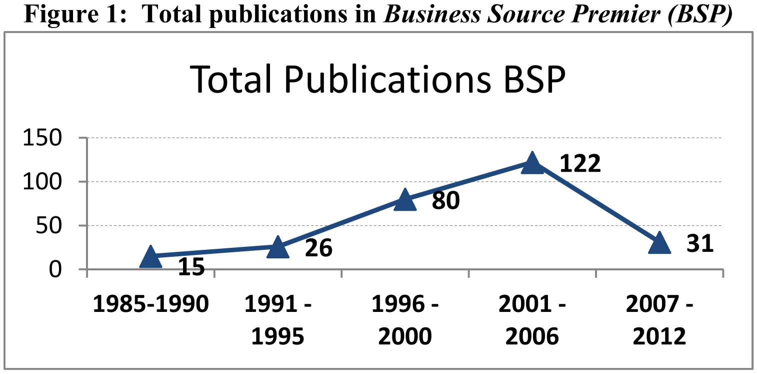
However, it can be risky and high costly to be a pioneer. The costs of product development and marketing are often too high to make the consumer interested in the product and decide to buy. The risk of failure is high because the demand potential is not known with certainty (Urban et al. 1986).

In this context, with advantages and disadvantages for first movers in a new market, the initial aim of our study is to do a literature review of almost 30 years of research in this field of knowledge, starting in 1985. We will subsequently present the methodology used, then the main theories and discuss the empirical evidence we found. We will present some considerations about the characteristics of the sample, the definition and evaluation-measured results, then present our proposed integrative model for the development of sustainable competitive advantage for pioneering companies in order of market entry, and finally we offer conclusions and lines of future research.

METHODOLOGY

The methodology targets a descriptive exploratory analysis, with which we can evaluate the current status of the issue in question. The data collection consisted of researching the most relevant research on this topic as well as consulting the databases Business Source Premier and Host EPSCO ABI Inform. From these databases were collected articles related to the topic of the first mover advantage, (using the following concepts as key words: "pioneer advantage", "first mover" and "order of entry") spanning a period of twenty seven years from 1985 to 2012 inclusive. In the search we found that a total of 274 published articles are dealing with the subject of pioneers solely in prestige journals (See figure 1): a few years ago Lanzolla and Suárez (2007) found 839 articles also using the Business Source Premier. However, for this study 68 articles published in scientific journals listed in the ISI Web of Knowledge have been considered including journals with rigorous quality standards and items with substantial references in the knowledge area (See figure 2).

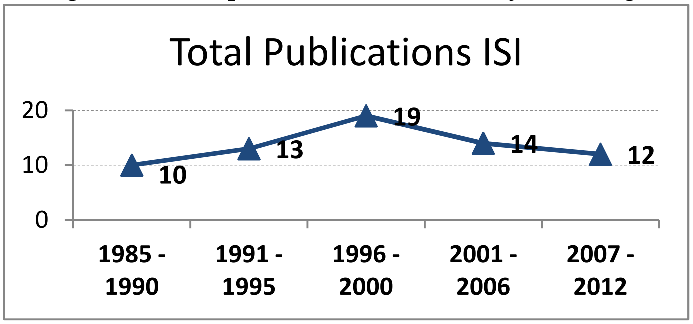
Figure 1: Total publications in *Business Source Premier (BSP)*



Source: Author's own

Both the database Business Source Premier and the reports collected from the ISI Web Knowledge database show that in the last ten years there was a decrease in the particular articles we sought in the most prestigious journals. We judge this to be because there are increasingly fewer relevant and original contributions in this field of knowledge.

Figure 2: Total publications in *ISI Web of Knowledge*



Source: Author's own

The highest quality academic and research journals which have published the greatest amount in this area are: Strategic Management Journal, Journal of Marketing Research and Management Science (see Table 1).

Table 1: Absolute and relative frequency of publications in journals

Journal	Number of publications by Journal	
	No.	*%*
Strategic Management Journal	14	20.6%
Journal of Marketing Research	10	14.7%
Management Science	9	13.2%
Journal of Marketing	8	11.8%
Marketing Science	5	7.4%
Journal of Business Research	5	7.4%
Journal of The Academy Of Marketing Science	4	5.9%
Academy of Management Journal	2	2.9%
Academy of Management Review	2	2.9%
Journal of Product Innovation Management	2	2.9%
Advances in Consumer Research	1	1.5%
Journal of Business Venturing	1	1.5%
Journal of Management Studies	1	1.5%
The American Economic Review	1	1.5%
International Economic Review	1	1.5%
Journal of Consumer Research	1	1.5%
Academy of Management Executive	1	1.5%
Total	68	100%
Source: Author's own		

LITERATURE REVIEW

In this section we present the main theoretical contributions to first mover advantage, the empirical evidence in favor of early market entry, evidence with mixed results, empirical studies with evidence against the effect of being first in the order of market entry, and some considerations on sample characteristics and outcome evaluation measures.

Theoretical Contributions to first mover advantage.

The first-mover advantage concept is self-explanatory because it establishes that the first entrant into a market may acquire certain advantages over subsequent entrants, resulting in a sustainable competitive advantage for the former (Frawley and Fahy, 2006).

The origins of First Mover Advantage Theory begin in the 1940’s and can be traced to the 1960´s. Although there are references to such advantage, there was only limited empirical research about the concept prior to Bain´s study. It was Bain (1956) who established the foundation for this topic, thanks to his rigorous empirical investigation. Bain studied the barriers to new competition and the conditions of market entry of twenty American manufacturing industries; the author examined economies of large scale, product differentiation, cost advantages and capital requirements as possible sources of economic barriers to entry.

First-mover literature really came to the fore in the late 1970´s and 1980´s. The first significant contributor was Gal-Or (1985), where the author shows that if two identical players move sequentially in a game, the player who moves first (the leader) has greater benefits than the player who moves second (the follower), if the market leader can avoid imitation. On the other hand, if the follower does mimic the characteristics of the original product and devotes a significant budget to R & D to obtain a new patent, the greater benefits are for the player who moves second.

Lieberman and Montgomery (1988) propose a model for the generation of pioneer advantages. They start with asymmetries caused by changes in the environment for a firm that has the capacity or ability to take advantage of them or simply because of luck (for example, P&G in the disposable diaper industry; that success was jump-started by the increase in the birth rate in the U.S.). Once the asymmetry is generated, a variety of mechanisms allow the company to use its position to raise the magnitude and / or durability of the benefits of being a pioneer. These authors also identify the risks of early market entry by presenting the disadvantages pioneers face:

- *"Free riding" effects*. Imitation costs are lower than innovation in many industries, so the follower benefits from pioneering investments in R & D, customer education and infrastructure development.
- *Technological and market uncertainty*. Breaking into a new market can be a very risky, by not knowing their customers or technological requirements (ex. VW’s early entry in to the compact car market gave Toyota the opportunity to overcome and after the market since it has already been studied)
- *Changes in technology and customer needs*. Technologies and customer needs are constantly changing, since they are dynamic forces: pioneers, unless they have the skills needed to maintain leadership, are sometimes overwhelmed by followers who detect these changes because they are not developing technology or satisfying existing identified needs.

- *Inertia's first occupant*. Inertia can occur due to complacency, arrogance or lack of attention to changes in technology and customer needs. The company can be absorbed in a specific market or specialize in areas that restrict flexibility. It also can become organizationally inflexible with routines, standards or internal policies that prevent change (ex. Timex with innovation in distribution by pharmacies or supermarkets vs. Swiss brands with traditional distribution strategy by jewelers).

For Carpenter and Nakamoto (1989), winners of the Journal of Marketing Research award for their article (Carpenter and Nakamoto, 1994), the formation of consumer preferences produces a powerful competitive advantage for pioneers in two dimensions:

1) A pioneering company develops the best position for influencing the weight of attributes used to evaluate buyer brands. This change in preference results in higher market participation for the pioneer and a lower market share for followers. The client's learning mechanisms focus on the product characteristics of the pioneers.

2) The pioneer becomes the prototype of the brands in its category; it defines the structure of preferences which protects the pioneer from competition while simultaneously encouraging imitation. For followers, succeeding in the new market means seeking differentiating attributes that modify the structure of the pioneer product.

Fershtman et al. (1990), examine the effects of order of entry into an industry. The pioneer company initially enjoys advantages in reputation, lower procurement costs by manufacturing or learning curve effects, brand loyalty and lower costs for advertising, etc. However, despite having a monopoly and regardless of how long this lasts, due to the diffusion of information (publication of technical reports, turnover, plant tours, etc.) and technological changes, market share between the pioneer and early followers in the long term (unspecified time horizon, only a future date) is matched. The speed and pattern of pioneer-advantage disappearance on market share depends on the specifics of the industry. Therefore, the importance of being first to enter a new market by developing R&D is reduced.

According to Moore et al. (1991), all previous empirical studies considered the effects on the entry of the pioneer on the performance of the company as an exogenous variable: first to enter the market was a bonus "per se". The authors developed a theoretical model that confirms that the decision to enter the market could be an endogenous variable. It matches Lieberman and Montgomery’s (1998) treatment of the competitive edge of the pioneer as a consequence that was mainly attributable to company skills and capabilities.

The contribution of Kerin and Varadarajan (1992) consists of a typology with four categories or prevention mechanisms of first mover advantage:

- *Economic mechanisms*. Related cost advantages such as economies of scale or experience or learning curves and asymmetries in marketing costs.
- *Mechanisms of input factor*. Related prevention features in asymmetries of supply costs of inputs such as purchase contracts that secure raw materials at lower prices than late entrants. Pevention-related spatial barrier to entry for new competitors ensuring a specific geographical area or an exclusive distribution channel. It matches Lieberman and Montgomery's (1998) treatment of the competitive edge of the pioneer as a consequence that was mainly attributable to company skills and capabilities.
- *Technological mechanisms*. Related innovations in product development, manufacturing process improvements and innovations in organizational routines and processes that result in better management practices.
- *Mechanisms of conduct*. Related differentiation advantages through exchange costs or benefits provide specific consumer preferences that favor reputation or pioneer brand loyalty.

For Carpenter and Nakamoto (1994), the resulting structure of preferences in favor of the pioneering attributes (prototype market) creates a competitive advantage not explained by traditional entry barriers. (e. g. Jeep is the prototype of the category of sport-utility vehicles). When you have a strong pioneer brand the two alternatives for late starters are: First, differentiation of product attributes, as buyers are willing to pay more for a different attribute even if this feature is irrelevant to the customer. Also, if the competitor enters the market late they can promote an attribute in the product that is far from the position of the pioneer: it cannot expand its product line as it causes confusion with the client (e. g. cinnamon brown 7Up affected the image of a "clear, refreshing" transparent color). If the pioneer launches a new brand it loses its brand name advantage and the new entrant has the opportunity to become the new "pioneer" for at least a portion of the market. Second, you can use market segmentation or niche to satisfy special needs while covering the market globally.

For Zahara et al. (1995), the pioneer requires the development of technology and its successful commercialization. It is not enough in today's markets to achieve technology, it is necessary to succeed in the commercialization of innovation. For example, Xerox (did not take advantage of technological developments) vs. Microsoft (they capitalized on their innovations). So it is important that the first company to enter the market has new technology to take advantage of the temporary-monopoly market-entry before a competitor arrives. Being a successful pioneer does not automatically guarantee future success in a particular technology or the introduction of a different technology. The pioneer must remember that success in one industry does not guarantee success in another. Examining their assumptions about technology, markets and competitors, technological pioneers protect themselves against the negative effects of inertia. Administrators must create a corporate culture that is willing to experiment, learn and support all new ideas even if they seem radical.

The theoretical contribution of Shankar (1997) states that conceptually, pioneers can respond to new entrants in three different ways: hosting (accommodation to make room for a new entrant), retaliation (to discourage the entry of new firms) or no change (no reaction in their strategies). Reactions in factors of marketing mix are particularly important in markets that do not involve a price-based competition, i.e. where the price elasticity of demand is low, as with pharmaceuticals, tobacco and luxury goods. In these markets, the reallocation of resources in advertising (considered a pull-type strategy) or sales force (a push strategy) are also strategically important for administrators. The authors suggest the hosting decision in static or mature markets where elasticity of demand decreases after entry. The retaliation decision is suggested for dynamic or growing markets, where the elasticity of demand increases after the entry of new competitors.

Lieberman and Montgomery (1998) propose uniting the research field of First Mover Advantages (FMA) which offers empirical knowledge, in order to support the deficit theory of the Resource Based View (RBV): the framework of RBV can help refine studies examining design entry time to market. When making the decision on when to enter a new market, the optimal time often depends on the strengths and weaknesses in the resources and capabilities of the enterprise and on the relevance of tangible and intangible assets to the success of the company (e. g. pioneer skills associated with the capabilities of the R&D function, and capabilities of followers associated with manufacturing and marketing capabilities).

Kuester et al. (1999), discussed in their model defensive strategies for participants in a market that is threatened by the entry of new competitors: the authors suggest that under these circumstances the firm must follow product responses (design, quality, breadth of line, etc), because price responses are not effective.

For Frynas et al. (2006) the main contribution is the proposal of a fifth prevention mechanism in pioneering advantages, especially when it comes to establishing international business in emerging economies where free market competition has not developed completely. The article aims to measure the impact of an item that had not been taken into account in the literature to determine possible advantages of pioneering, such as political resources for businesses.

Political Capital, Political Resources or Political Competences refer to the impact on the performance of the firm in its competitive position by government intervention that favors information asymmetries that benefit the pioneer, improving their efficiency and profitability through access to information in a special market environment. For example, Shell-BP in Nigeria (beginning in 1938 it remains the leader in 2001 with 39% market share, followed by Exxon which entered the market in 1955 with 23%); Volkswagen in China (beginning in 1982 it continued as market leader in 2002 with a 40.2% market share followed by Shanghai GM which entered the market in 1997 with 9.4%), and Lockheed Martin in Russia, who manufacture satellites (beginning in 1993 up to 2003 they continued as the market leader with a 50% market share, followed by Boing, entering in 1995, with 8%).

Recent papers are focused on switching costs and their relationship with entry timing (Gómez and Macías, 2011; Molina Castillo et al., 2012) and the ramifications on the performance of early market entrants (Poletti et al., 2011); examples in the marketing area are: research on the reference price and value perceptions (Lowe, 2010), the role of the consumer goal (Wanebo and Lanseng, 2010) and network effects (Wang et al., 2010). In the international strategy area we found studies about differences between leaders and followers in industry mergers (Haleblian, et al., 2012); between mature and emerging market consumer attitudes (Mady, 2011), and the effects of international entry-order strategy on foreign subsidiaries (Young et al., 2011). Finally, we can find research about pioneering in specific industries like mobile communications (Jakopin and Klein, 2012) or with Chinese entrepreneurs (Zhao et al, 2012).

Evidence in favor of first mover advantage.

Robinson and Fornell (1985), in their study of 371 strategic business units (SBU) of consumer goods industries in the mature stage conclude that order of entry is a major determinant of market share and explains 10% participation. Pioneer companies retain a market share of 29%, the companies in the category of early followers have16%, and finally for the last movers the market share is 11%. The pioneers have higher quality and breadth of product line, but similar prices to firms entering later. Deterioration in the quality of the product and the product line has a negative impact over time in the market share of the pioneers. In industries with distribution requirements pioneering firms have greater market share and advertising-intensive sectors show no significant differences in participation with the latest entrants.

Urban et al. (1986) in their analysis of more than 300 interviews with advertising companies concerning the consulting costs of 47 categories of different brands of frequently purchased consumer goods, found a significant penalty in the relative market share: the pioneer is 100%, the second mover 71%, the third 58%, fourth 51%, fifth 45% and the sixth41%. The effect of the order of market entry on market share is 32%, product positioning 30% and advertising 14%. There was no significant impact of time between entries. With these three variables it can be deduced that R^2 is 76% of the market share.

Lambkin (1988) concludes in her analysis of 316 companies in the growth stage of market introduction that pioneer companies tend to have broader product lines, more extensive market distribution and higher production capacity than follower companies. They also have advantages in terms of product quality and higher levels of customer service quality. Early followers are related to variable price competition, efficiency and productivity efforts however that are more related to the middle position (Porter, 1980) that explains the polymorphism of population ecology. Last entrants have an unclear profile except they have lower production scales and less specialist strategy for covering market segments with intensive promotion.

Robinson (1988), in his study with 1209 SBU in mature industrial sectors, concludes that market pioneers have an average market share of 29.3%, the early followers of 21.35% and 15.03% the last entrants. The effect of the order of market entry taken into account individually explained 8.9% of the variation in market share.

Parry and Bass (1990) hypothesize that pioneers outperform other competitors in the mature stage of concentrated industries. In a sample of concentrated industry (437 commercial BSU and 994 industrial BSU), and other samples of fragmented industry (156 consumer goods and 293 industrial goods), they concluded that concentrated industries actually favor market share to the pioneering companies in both consumer goods and industrial goods. Significant advantages for pioneering industrial companies in fragmented sectors have not been observed related to market maturity.

Kardes and Gurumurthy (1992) according to the results of two experiments involving approximately 40 people in each session, concluded that information about the first mover in a new category of product is perceived as new and interesting by the customer. This innovation in information captures consumer attention and promotes retention in the long-term memory on pioneer product features. Much of the second incoming information is perceived as redundant and not surprising if it delayed the entry of the second and presents a sequential model of market entry. This process of learning about the pioneering attributes influences the evaluations and conduct of the consumer: they consider redundant such attributes in followers, establishing a higher-quality view of the pioneer who earns customer trust which strengthens over time, favoring the long-term advantages.

Kardes et al. (1993), studied a group of 115 people in an experiment of four weekly sessions, and conducted a simulation of the process of customer preferences with hypothetical brands and markets. It concluded that a pioneer brand is more likely to be included in the overall recovery in the memory of a client of all brands in the market, instead of a follower brand. A brand is more likely to be selected and recovered by the client if it is a pioneer brand rather than a follower.

Lattin and Brown (1994), using the same sample of Urban et al. (1986) and another sample from a regional US market, concludes that time accumulation of the first entrant in the market is a source of competitive advantage, since as the pioneer has a unique position in the market and competitors take longer to appear, consumer preference for learning done increases and gains are achieved in market share. It is concluded that it is advisable for late entrants to enter the market as soon as possible to avoid this disadvantage.

Huff Robinson (1994), in a study of 95 brands in 34 market categories of frequently-purchased consumer products (Urban et data. Al, 1986), confirms that the impact of time between pioneer entry and the inputs of each of the following competitors is an important factor, because if this time (lead time) grows, the benefits associated with pioneering consumer preferences and competitive advantages in the market share, also increase. They conclude that increasing the years of competitive rivalry between early and late entrants reduces the advantages in the market share of the first movers: after more than two decades in the market, the second movers have an almost equal advantage in market shares of the pioneer; third and fourth market entrants have significantly lower market shares than the first mover.

Alpert Kamins (1995), in his research with 560 people in the US, concludes that the positive attitude of consumers towards the pioneers is reinforced by two characteristics:

1. Preference for consumption by learning about and confidence in the pioneer features.
2. Interaction between pioneer brand image and the ideal self-image of each person. This suggests that the association or desire of consistency between the two images is another possible explanation for the positive attitude and positive purchase intentions of consumers to the pioneers.

Mixed evidence (for and against) the advantages of the pioneer.

Glazer (1985) in an analysis of 18 US local newspaper markets, found evidence for the advantage of the first mover in the survival rate of firms if the market was in the growth stage. Moreover, in mature markets there is no perceived difference in the performance of companies based on the order of entry.

Robinson et al. (1992) studied 171 SBU's in manufacturing industries. This study confirms the relationship between marketing skills and last market entrants. It neither confirmed the relationship between manufacturing capabilities and early followers nor confirmed the significance of R&D skills to pioneers. Financial skills are related to pioneers as market-entry security requires financial support to cover the costs of market development. Empirical evidence indicates that market pioneers, early followers and late entrants have different skills and resources. This supports the hypothesis of comparative advantage: market evolution changes the requirements for the successful operation of the firm. The study rejects the hypothesis of absolute advantage: pioneers are inherently stronger than the followers. Pioneers have different resources and skills but are not superior to the rest. Keeping a sustainable competitive advantage in the long term depends on management decisions.

The research of De Castro and Chrisman (1995) examines the relationship between order of market entry and the competitive strategy of enterprises. With 599 SBU maturity-stage industries highly-concentrated in domestic manufacturing sector markets, they conclude that pioneers have greater results if the strategy of cost leadership or differentiation is used, these companies avoid the risk of using strategy that seeks both differentiation and cost leadership, because of the uncertainty of success and becoming stuck-in-the-middle. The most profitable follower companies were those that used cost strategy and their own manufacturing and marketing skills and who presented limited innovation.

For Christensen and Bower (1996) findings are made through the analysis of the report Disk / Trend, an analysis of articles from Electronic Business and interviews with over 70 manufacturing company executives. It is suggested that technological change occurs in situations with sustained tracking of consumer needs, however, to ensure the future success of the leading companies, these companies should invest resources in monitoring internal technological factors and promoting new ideas in emerging technology markets. Although in the short term these measures are not attractive for established firms, it is precisely through the rugged type of technological change that businesses retain a leadership position. Historically the benefit is two times higher turnover for companies that have taken this strategic position, so the challenge for authors of technological development is not the lack of resources and capacity for technological change itself, but taking the necessary change in strategy.

Bowman and Gatignon (1996), in their study of the US automotive industry covering 26 brands of sport utility vehicles and 15 minivans, conclude that the main effect of order of market entry is minimal market share. However, some asymmetry in the effectiveness of the marketing mix for pioneer brand products occurs: this should be considered for late entrants. It is suggested investing in product quality and promotion to be more effective, since the effects of price and advertising were not very significant between pioneers and followers.

The study by Shankar et al. (1998), a market analysis of 13 pharmaceutical brands concludes that a late entrant innovator (one that restarts the learning and training process changing the preferences of the market in their favor) can create a sustainable competitive advantage if they.

1. Enjoy a larger potential market and a higher rate of repeat purchase than pioneering firms or other non-innovative competitors.
2. Grow faster than the pioneer.
3. Undervalue the pioneer brand.
4. Reduce the effectiveness of the marketing mix of the pioneer.

The last market entrants who’s products had these innovative features enjoyed superior competitive advantages over pioneers, however, if late entrants were not innovative then they had lower potential markets and repeat purchases and less retail marketing effectiveness when compared to the pioneer. As Wanasika (2011) said, innovation is not always the best strategy, it depends on the market.

The Bohlmann et al. (2002) model considers the barriers to entry as an advantage for the pioneer, early market entry, and considered as a disadvantage the "effect of harvesting technology", implying that any change in technology is too expensive for the pioneer but not for the follower, which translates into better quality for the second and technological stagnation for the pioneer. For example, Sony insisted on Beta format when customer preferences pointed to VHS or IBM and rejection designing smaller computer workstations. They also considered the two key variables: consumer evaluation of quality and consumer evaluation of product variety.

In their analysis of 36 product categories, Golder and Tellis (1993) found that pioneer benefits can be eliminated in markets where consumers value the development of product quality. The effects of “harvesting technology” favor the follower through the achievement of higher market shares. For example, disposable diapers: Johnson & Johnson's "Chux" lost its leadership to Procter & Gamble's "Pampers". This product also failed and Kimberly-Clark's "Huggies" are the current market leaders. Pioneers maintain their initial advantages in markets where customers prefer product variety and the pioneer has developed a broad product line where the effect of harvesting technology has been of less benefit to the followers. For example, in the laundry detergent market Procter & Gamble's, "Tide" (whiteness), expanded its line with "Cheer" (Colors), "Bold" (stain removal), and "Ivory" (delicate).

The effect of harvesting technology that benefits the follower is greater in industries (for example, fax machines: Xerox lost its leadership to Sharp and in video cameras Kodak/Panasonic to Sony) than in consumption sectors (Coke remains a market leader, and in cereals Kellogg's retains leadership).

Empirical evidence against the advantages of the pioneer.

The first study to reflect adverse results for pioneers is that published by Golder and Tellis (1993). They identify three types of pioneering: a) the inventor (first in developing the patent or technology), b) the pioneer product (first in developing the product that works for marketing) and c) market pioneer (first to sell the product on the market). These are considered in the investigation, but they are sometimes confused with the inventor and pioneer product. For example Xerox (market pioneer) and 3M Thermofax (inventor and pioneer product). To remedy this the researchers proposed the use of a historical analysis of approximately 500 brands in 50 product categories. They concluded that:

1. 47% of the market pioneers failed. In previous studies this situation was not considered a serious problem.
2. The market leaders with the greatest success and market leadership rate entered the market on average 13 years after the pioneers.

With the sudden bursting of the dotcom bubble and the high failure rate of online business in the late 1990´s, a lot of questions over the validity of first mover advantage and its applicability to internet and high tech industry arose. Many authors like Porter (2001), Tellis and Golder (2002), and Rangan and Adner (2001) published contradictory points of view on whether internet first mover advantage actually exists.

First mover advantage literature is abundant in descriptive and explanatory studies, of which many have concentrated on the existence of this advantage and lacked theoretical contribution (Kalyanaram, Robinson and Urban, 1995). This literature lacks a deeper understanding of the first mover phenomenon and "why" and "how" first movers have sustained a competitive advantage and others failed to do so.

Sample selection, concept definition and results measurement.

Before expressing our conclusions about the research on pioneer advantage from 1985 to 2012, it is appropriate to consider some aspects of the sample selection and the definition of pioneers and followers, as well as alternative measures to determine the pioneer advantages.

Possible bias in the sample selection.

Both pioneers and followers who were unsuccessful in the market can be quickly removed and discarded from the samples. The commonly used database Profit Impact Marketing Strategies (PIMS) considers pioneers those who survive immediate followers and last movers; for this reason we can logically expect to have above average yields. This dataset comprises only large businesses in mature markets, where survivor bias and large firm bias are likely to exaggerate both the magnitude and the sustainability of pioneer advantage. In addition, the term "first mover" is not defined precisely in the PIMS questionnaire, which suggests the possibility of misclassification and inconsistency with the terms used by researchers (Frawley and Fahy, 2006).

It is important to consider the probability of failure of firms in the market, which occurs in 47% of cases (Golder and Tellis, 1993). According to the Vander Werf and Mahon (1997) study results: 72% of the studies did not consider the failures of pioneers in the market, only survivors. Another problem is whether the sample took into account a specific industry or several industries, or if they considered the capabilities or competitive factors of the entrants (Vander Werf and Mahon, 1997).

Definition of pioneers and followers.

Should firms entering an established market, but exploiting a technological discontinuity or a segment with a new demand also be considered pioneers? Or just unique companies in new markets? Followers have been classified by: 1) their numeric order in the input sequence, 2) time since entry of the pioneer or 3) general categories as early follower or late follower. These categories are not consistent or comparable across markets. For example, a firm that is third in the order of entry, may be an early follower in a market with 20 companies but the last follower in a market with four (Lieberman and Montgomery, 1988). The main independent variable is the order of entry (first entrant, pioneer, early entrants, late entrants, early followers, first mover, second mover, etc..).

In the articles we reviewed, about 40% of the authors use other independent variables in addition to order entry, such characteristics of the entrant as their marketing mix, relative quality of the product or line width (Vander Werf and Mahon, 1997).

Alternative measures to determine the pioneer advantages:

Benefits. The most suitable for measuring the impact of pioneering entry is, however, rarely used in the empirical evidence. Other measures correlated with benefits as good approximations (market share and survival rate), have been used but sometimes the correlation is not always strong 9% - and causality is often ambiguous (Lieberman and Montgomery, 1988).

Market share. This can be manipulated to affect the benefits, drastically lowering the price or significantly increasing promotional activities. Benefits can also vary greatly depending on market shares if the market is defined broadly or narrowly (Ibid.).

Survival rate. This presents similar bias; it is difficult to determine whether the pioneers have higher survival rates because of entering the market first or whether they reflect the result of other basic characteristics of the company (ibid.).

The dominant dependent variable was market share, with 58%; after that a measure of financial performance (ROI, ROE) with 28%, survival with 10%, and the rest of the papers used other indicators. The statistical methods used most often were: linear or logarithmic regression, ANOVA, logit analysis, mean difference and chi-square (Vander Werf and Mahon, 1997).

Several studies, using a form of market share as the dependent variable, have a positive significance more frequently than those using tests including other dependent variables.

The probability of finding a positive relationship between business pioneers and performance or profitability is only 8%. When none of the three common research methods were used (PIMS database, starters and followers as a category of entry effect and market share as the dependent variable), this probability increases to 99% when all three methods were used (Ibid.).

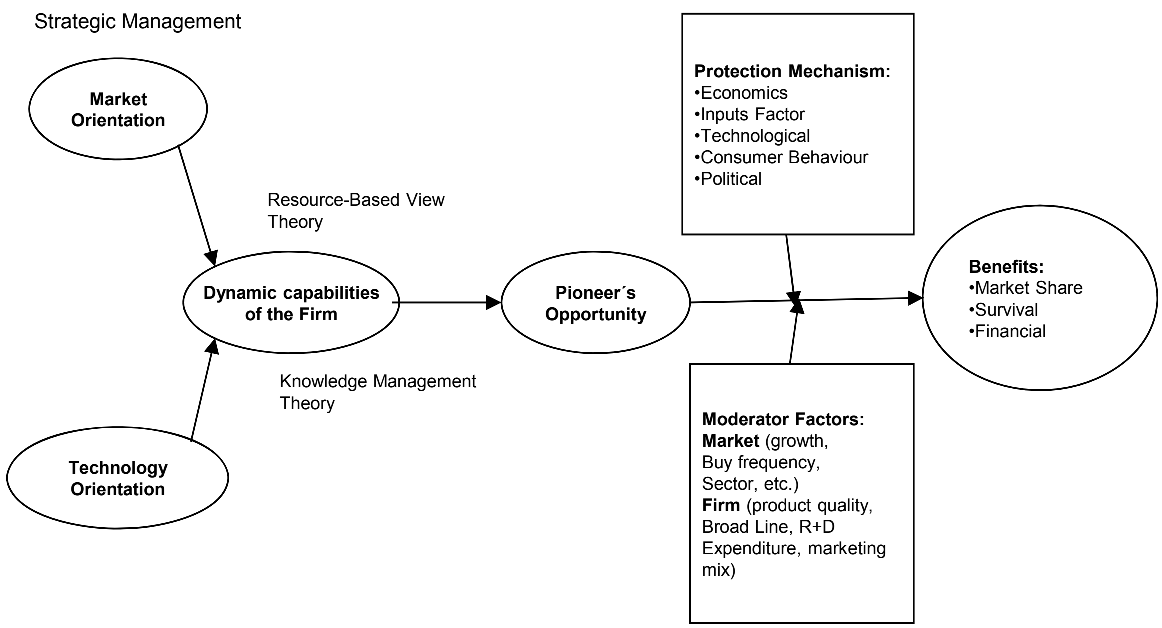
COMPREHENSIVE MODEL.

Integrating the concepts on the theory of the first mover advantage, we propose the following model based on the initial model of Lieberman and Montgomery (1988) and Szymanski et al. (1995), which consider as background to the pioneer´s advantage the capacity of the company (from the point of view of the generation of endogenous advantages) to create a breakthrough product to launch in a new market. This is on based the resources and capabilities theory and on the knowledge management theory; the concept of innovation is determined through market orientation (Kohli and Jaworski, 1990, Narver and Slater, 1990) and external factors of innovation and orientation to technology (Zahara et al. 1995) as internal source of new product development, based on strategic management theory.

Thus, the first mover advantage benefits (market share, or survival rate or financial returns), are maintained over time through five protection mechanisms: moderating the results of the company market factors such as the industry growth rate; consumer purchase frequency; type of industry; market instability and technological turbulence.

The factors of strategic management and marketing mix decisions are product quality, breadth of line, price, distribution channels, R&D, promotion and advertising expenditure. The model is presented in Figure 3.

Figure 3: Comprehensive model of pioneer advantages



Source: Author's own, based on Lieberman and Montgomery (1988); Szymanski *et al.* (1995).

CONCLUSIONS AND LINES FOR FUTURE RESEARCH

It is possible, after almost three decades of research, to establish some generalizations about the results of studies of the advantages and disadvantages of the pioneer; it is clear that the balance goes in favor of the empirical evidence that supports the benefits of the order of entry.

Three empirical generalizations can be established after the analysis of research studies published in the most important journals:

- For industrial or consumer goods in mature industries, there is a negative relationship between order of market entry and market share. (Urban et al. 1986; Robinson 1988; Parry and Bass, 1990; Lambkin 1988; Golder and Tellis, 1993; Gurumurthy et al.,1995).
- For frequently-purchased consumer goods, the relative market share of entrants following the pioneer is equal to one divided by the square root of the order of entry. The second entrant is 1/sqrt (2) = 71%, third entrant is 1/sqrt (3) = 58%, fourth is 1/sqrt (4) = 50% (Urban et al. 1986; Kalyanaram and Urban, 1992).
- In mature industrial and consumer goods markets, early entrants have advantages in market share. These decline slowly over time and define the initial market share 43% - 32% -25% for the first, second and third incomers respectively. Over the years this can be expressed as 36% -33% -31% proportionally (Robinson and Fornell, 1985; Huff and Robinson, 1994 and Brown and Lattin, 1994).

Market pioneers tend to have broader product lines than late entrants. This impacts positively on market share and competitive advantages in the short and medium term for the pioneer. It is also important to consider the benefits of early entry into the marketing mix: early entry allows secure advantages in the design and prototype development of the industry, which influences preferences in the consumer buying process. By savings in manufacturing supply costs, and the positive impact of economies of scale, flexibility is achieved in establishing prices and profits in the distribution channels and promotional and advertising campaigns.

It is very important to consider the impact of company strategy, and resources and the capacity of a firm to take a timely decision to enter the market: the strategy of early market entry is not for businesses who are risk-averse or without financial support. A firm should try to be a pioneer only if it has the appropriate skills and resources and is willing to pursue a strategy of high-risk high-return.

The advantages for companies who enter a market first are kept permanently over the followers. For a company, deciding whether to go early or late to a market depends on the specific characteristics of the firm. If the firm has an R&D capability pioneer entry (e.g., Sony). If it is suggested the company has skills in marketing or manufacturing we suggest late entry (e.g., Matsushita Panasonic, known in Japan as “Maneshita denki” meaning electronics that have been copied); companies will not be successful if they alter the order of entry to the contrary (Lieberman and Montgomery, 1988).

Overall, the empirical evidence shows the balance in favor of the advantages of the pioneer, however, initial success does not automatically influence the achievement of permanent competitive advantage. Attention is required to avoid possible disadvantages and to prevent follower companies gaining advantage; despite this however follower companies depend on what the pioneer does or does not do.

Interesting questions remain to be resolved: under what conditions are the duration of the advantages of pioneering ephemeral or long term? How do the mechanisms of advantage in different industries (industrial, consumer and services) vary? We agree with Lieberman and Montgomery (1998), who highlight the following challenges:

1. We need to increase understanding of the determinants of market entry order and the time between the entry of the pioneer and each of the followers.
2. Increasing empirical studies that use financial performance as the dependent variable, with no need to measure the market share (there is enough evidence on this).
3. The studies focus on the advantages for the pioneer, however, it is important to develop empirical studies of the followers. Other theoretical models in the field of marketing suggest that companies entering the market late in innovative ways can be more profitable than the pioneers (Shankar et al. 1998).

Finally, a large percentage of existing studies on the advantages for the company that makes the first move are based on experiences and data from U.S. companies. International Research and comparative studies between countries or cultures are necessary to determine if the factors of pioneer success or failure remain constant in different environments.

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THE EFFECT OF CORPORATE INVESTMENT IN HUMAN CAPITAL ON EMPLOYEE'S PERFORMANCE: MAJOR KOREAN FINANCIAL CORPORATION EXAMINED

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ABSTRACT

The purpose of this study is to analyze the effect of Korean firms' human capital investment on their employees' performance, and to seek ways to strategically utilize it. A major Korean financial corporation was selected and its data related to personnel affairs and education was analyzed to determine the effects of school education, job training, job experience, language ability, and certification on employee's performance. According to the result, school education generally has a positive effect. Job training has showed different effect on employees' performance and in particular it had little effect on employees' performance in job families requiring an advanced academic degree.

Key words: education; human capital investment; job performance; Korean firms; training

INTRODUCTION

The importance of investment in human capital by nations, businesses, and individuals for economic growth has been emphasized since Schultz (1961) and Becker (1975) invented the concept of human capital. Thus far, a number of studies were conducted on examining the impact of human resource development and education level on wage difference.

In the meantime, Korean businesses have focused on education level and language ability when they hire new employees. After recruitment, they have made strenuous efforts to develop human capital by building employees' capacity through the use of education and training, OJT, degree programs, and support for certification acquisition.

Despite the above, the level of investment in education and training in Korean companies is still found to be significantly lower than that of foreign companies. In the case of large companies from the U.S, they invest on average 2-3% of their revenues in employees' training (American Society for Training and Development 2010). However, in the case of large corporations in Korea, the cost of employees' training accounts for only 1.34% of the entire labour cost (Korean Ministry of Labour 2009). In addition, according to the Korea Chamber of Commerce and Industry (2008), the participation rate of Korean adult workers in work-related training was the lowest among OECD members. Consequently, the productivity level of the Korean workforce is 40% of that of advanced countries such as, the U.S. and the U.K.

This clearly demonstrates that Korean companies, from a strategic perspective, have not fully comprehended the concept of human capital, and that there is insufficient research as to the effect of corporate investment in human capital of their employees. In other words, there is a substantial importance for research on the question as to whether or not companies' investment in human capital of their employees has actually had a positive effect on employees' performance, and on the issue as to whether or not work-related investment by companies in their employees is made strategically by considering job performance. The reason why there is lack of research on the strategic enhancement of human capital investment is, first, it is difficult for the academia that come up with academic theories to gain access to corporate data, especially in Korea. It is challenging for corporations to produce and record the results of fair evaluation on employees' performance. There are limits that have acted as stumbling blocks for practical research.

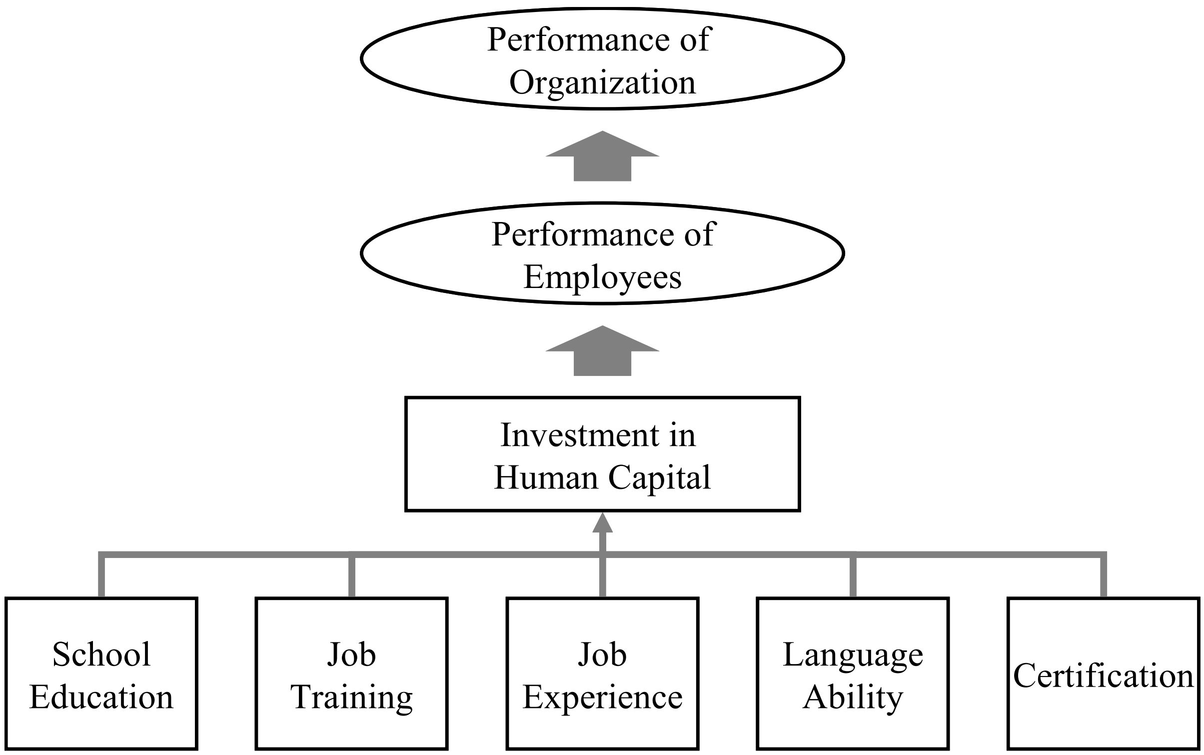
To overcome the problems and limitations of previous studies, this study focuses on the evaluation of the effectiveness of Korean companies' human capital investment from the perspective of employees' performance, and, for improvements in employees' performance, on how to invest strategically in human capital to make it an efficient investment in a more practical way. Through this, this study tries to identify the effect of important components of human capital by focusing on the level of school education, job training, job experience, language ability, and certification on employees' performance. Furthermore, this study tries to build on academic knowledge by providing suggestive points for strategic employee HRD (human resource development) that Korean companies will consider in the future.

LITERATURE REVIEW

The previous body of research defined the concept of human capital as different depending upon times and academic background, but essentially there are common grounds as to the definition of human capital; it is essentially internalized within humans, it enhances productivity, it can be acquired through investment in education and training. To sum up concepts discussed so far, human capital within a business is a productive component that is internalized in humans and is formed by investment in diverse factors including school education, job training, job experience, etc.

Thus, such common grounds mentioned above show that human capital would be defined as knowledge, skills, capacity, etc. owned by an employee, and that human capital could be measured by school education, job training, job experience, language ability and the possession of certification, etc. The relationship between the elements of human capital, and performance of individuals and an organisation is shown in the below diagram (see Figure 1).

Figure 1. Concept of relationship between the components of human capital, and performance of individuals and an organization



Effect of human capital

Earlier studies on the impacts of human capital components on the performance of individuals and an organisation as follows. So far, the human capital theory of Becker and Schultz argues that school education contributes to the enhancement of employees' performance. This theory proved that there is a structural process where employees' performance enhancement leads to an increase in corporate productivity, which in turn results in an increase in compensation for individual employees. Hence, the higher the employees' education level, the greater wage they could earn (Martin & Torres 2000, Card 2000; Blundell *et al*. 2003; Chevalier *et al*. 2004). However, this theory is over-generalized, and is an approach that does not take into account, from the perspective of companies, employees' work or duties. In other words, the mismatch between employees' level of education and their current official duties can be regarded as a problem (Kim 2005). This phenomenon is called over-education, where this problem occurs when the education level of a worker exceeds that which is required for a job (Alba-Ramirez & Blazques 2003). Employees with "over-education," when compared with those without a similar level of education, have low job satisfaction and poor productivity

(Verhaest & Omey 2004). They cause a higher turnover rate due to the discrepancy between their level of education and their duties (Alba-Ramirez & Blazques 2003).

Previous studies mainly focused on the effect of school education on human capital. Recently, however, there has been increasing efforts to accounting for the influence of training, experience, language ability, and certification on human capital. First, among earlier studies on the effect of job training on human capital, a number of studies generated considerable evidence linking job training and an increase in the productivity of employees and their company, and the company's profitability (Black & Lynch 1995, Bishop 1996, Bartel 2000, Barrett & O'Connell 2001, Sels *et al.* 2006).

On the contrary, there are some empirical studies in Korea demonstrating the effect of job training did not produce the supporting results as mentioned above (Ryu 1995, Ryu 1997, Cheon 1998, Ryu 2003), while other researchers (Jung 2009, Lee 2006, Kim 2001) reported that education and training have a positive effect on productivity and profitability. Lee (2000) reported that even though the Korean Government adopted several policies including financial incentives to motivate private enterprises, specifically SMEs, to conduct training of their employees voluntarily, the results did not have a significant impact on SMEs; only the large corporations acquired any benefit from these polices. These findings suggest that in the case of Korean businesses, the results of empirical studies on the effect of job training on productivity and profitability are still inconsistent.

Many existing studies indicate that job experience has a positive effect on individual employees' performance (DuBois & McKee 1994, Van Scotter & Motowildlo 1996, Tesluk & Jacobs 1998). Additionally, job experience being regarded as the length of service is used as a criterion for personnel affairs such as, selection (Ash & Levine 1985), promotion (Olsen & Berger 1983), career management (Campion *et al.* 1994, McCauley *et al.* 1994), compensation (Medoff & Abraham 1981), and training (Ford *et al*. 1992).

Language ability is found to have a positive effect on the performance of a company (Kim, 2001). In the case of duties, where English skills are important, language ability is closely linked to the performance enhancement of employees and their company (Hagen 1990, Reeves 1990).

Research examining the influence of certification on wages provided some evidence that certifications do have a positive effect on wages (Lee & Kim 2001, Chang & Kim 2000). Conversely, more recent studies found that certifications do not have a positive effect on wage (Kim & Kim 2004). And, it is noted that certifications are acquired in order to make up for one's shortcomings, apart from education. Some previous studies showed that if employees have a high level of education, then they do not seek for a certification. Furthermore, acquiring a certificate, unlike the level of school education, could lead to a problem of adverse selection (Leland 1979, Wimmer & Chezum 2003). Given that previous findings are inconsistent in this issue, there is still a need to explore more how certifications affect employees' performance.

Contribution to knowledge

The current study intends to examine the impact of human capital elements on performance, since considerably little is known about this relationship in the existing body of literature. This attempt could contribute to close a gap existing in previous studies and moreover provide practical suggestions and recommendations from the perspective of companies' human capital and performance management.

THEORY

The concept of human capital was coined by Theodore Schultz, a Nobel Prize laureate in economics, as "skills, knowledge, and attributes similar to these that affect the enhancement of certain human capacity for productive activities" (Schultz 1961). However, the concept of human capital was expanded by a variety of methods and criteria and by a number of scholars for the past fifty years.

According to the traditional concept of human capital by Schultz, Thurow, and Becker, it can be utilized to its fullest due to intellectual and cognitive factors. Recently, however, the scope has been extended to employees' individuality and behaviour based on theoretical models and empirical studies. For example, Smart (1998) defined human capital from an economics' point of view as a means to achieve goals that are made by organizations as values. In other words, he described human capital as employees' acts and characteristics that generate business values. Other scholars define it as not only knowledge and experiences but also motivation and social interaction (Welpe *et al.* 2007). Recently, businesses define human capital as the aggregate of an employee's characteristics, experiences, knowledge, creativity, passion, etc. More specifically, they have extended the notion of human capital by taking into account several important components including education, training, work-related certification, professional certification, work-related know-how, and work-related capacity (Weatherly 2003).

As such, the concept of human capital has been defined in many diverse ways depending on time periods and academic background. Moreover, it is essentially internalized in humans, enhances productivity, and can be acquired through investment in education and training. To sum up the concept of human capital explained above, it can be regarded as a productive element internalized by humans and something that was formed through investment in various factors such as school education, training, job experience, etc. (see Table 1). Table 1 provides several representative definitions of human capital.

Rastogi (2000) distinguished the concept of human capital from human resources. While human resources is the concept which mainly focuses on developing and fine-tuning employees' skills, human capital is the concept that goes one step further and focuses on building employees' capacity to achieve a sustained competitive advantage within an organisation. That is to say, human resource can be the integral part of human capital but human resources alone cannot guarantee the success or the survival of business. He also stresses that the essential feature of human capital is employees' ability to ceaselessly create values by understanding the dynamic environment of their company and to think strategically, creatively, and innovatively.

Table 1. Definition of human capital	
	Definition of human capital
Schultz (1961)	Human capital is defined as knowledge, skills, capacity contained in employees and companies that are used to produce goods, ideas, services in market via internalized knowledge in humans and technology stock. Human capital, that is, employees' knowledge, and capacity enhancement contribute to the enhancement of corporate productivity and welfare.
Becker (1975)	Human's ability is composed of skills, experiences and knowledge enhances skills, productivity and income through investment in personal and social education. Presented schooling and OJT are shown as forms of human capital
Parnes (1984)	Defined as people's know-how and abilities acquired through investment. Due to its value in labour market, human capital useful in production process has transferability
Snell and Dean (1992)	Defined as skills, experience and knowledge owned by the people who give economic value to corporations. Human capital can be enhanced by human resources management programs.
Youndt et al. (2004)	Defined as knowledge, skills, and abilities owned by employees that produce economic value of a corporation. Investment in human resources, such as education and training, recruitment, high wage, etc., influences human capital enhancement, and contributes to enhancement in corporate financial performance.

Not only are theoretical and empirical studies on human capital contributing to the success of an organisation still few in numbers but also an agreement on economics terms embodying human capital has not been reached (Becker *et al.* 2001). Nonetheless, the concept of human capital offers countless methods to actively cope with an uncertain future (Bhattacharya & Wright 2005).

HYPOTHESES

Based on the results of earlier studies, factors that can be analyzed by the object corporation and that can influence the performance of individuals and companies such as, school education, job training, job experience, language ability, and certification, were identified as variables. Investment in these variables can enhance an individual's human capital. Moreover, this increased human capital for an individual could lead to an improvement in employees' performance. Against this backdrop, this study hypothesizes the following.

H1: Human capital enhancement of individual employees can positively contribute to the productivity, performance and competitiveness of their companies.

H2: The investment in each component of human capital variable leads to an increase in employees' work performance.

METHODOLOGY

Population of study

For the analysis of data on investment in employee human capital by a corporation and on performance, employees working for a Korean financial corporation were selected. The reason why the financial corporation was selected due to the fact that it is the largest Korean financial corporation with 100 trillion won in assets, 25 trillion won in total annual sales, and 10 billion won (largest amount) as an annual investment in employee education. It is a major Korean financial corporation, running three in-house training centers. More importantly, since this financial corporation has systematically managed data on employee education as part of its personnel affairs system, it is possible to acquire data for human capital input and its results.

The employees of the object corporation were categorized by five job families and six job grades. Five job families consist of office job family (female employees/ office assistant category), sales job family (finance sales category), finance job family (finance support category), management support job family (business management/staff category), and professional job family (investment, evaluation/ professional category). Six job grades (excluding executive directors) include high school graduates, college graduates, sub-section chief, section chief, deputy general manager, and general manager.

The study was carried out on the entire employees' population sampling frame (n=5,842), of the financial corporation except for irregular workers. Education-related data analyzed included the level of education for its employees, job training (number of programs), job experience, grade in language ability, certificates and licenses, and position.

Variables

Table 1 provides the definition of independent and dependent variables needed for analysis for this study. Under the school education category, all employees with a high school diploma are graduates from girls' commercial high schools. They carry out their work of duty at the customer service window of the corporation or work as office assistants. Recently, there was a change in the recruitment process for these positions, which are now mostly being filled by junior college graduates with business-related majors or other majors. Similarly, positions for employees with college diplomas are mainly filled by those candidates with business or economic majors and sometimes by other majors such as, humanities, sociology, etc.

Job training is composed of basic education (the value of the corporation, organisation culture, promotion/raise, etc) offered by the corporation, job education according to job category, leadership education, and foreign language education. All official education records, since joining the corporation, are kept and managed. For new employees, the job training course is offered as mandatory education, and as one's position increases, job training becomes an option. Currently, many job training programs are offered online. General guidelines encourage employees to complete 80 training hours per year.

Table 2. Definition of variables		
Variables		Definition
Independent variables	School education	Total number of years of education an employee received to date, high school (12 years), junior college (14 years), bachelor's (16 years), master's (18 years), PhD (21 years)
	Job training	Number of job training sessions provided by employer, and regular programs made in the form of personnel data
	Job experience	Total number of years in a company at the current level of job experience
	Language ability	The level of English ability in the form of graded of test scores in a standardized test, here TOEIC score is graded
	Certification	Number of job-related certificates (core number of certificates)
	Job grade	Current job grade of an employee in 6 classes: employees with high school diploma, ones with bachelor's, deputy section chief, section chief, deputy head of department, and head of department,
	Job family	5 job families an employee belongs to, - Office job family: female employee with high school diploma/ office assistant job category - Sales job family: finance sales related job category - Finance job family: finance support related job category - Management support job family: business management and staff job category - Professional job family: investment and examination related job category
Dependent variable	Job performance	The result of performance evaluation of the last year in a given period (forced distribution from A to D)

Analysis method

Analyses for this study proceeded in three stages. In the first stage, descriptive statistics were examined, such as, the mean, the standard deviation, the maximum value, and the minimum value, etc. In the second stage, ANOVA was used to examine significance of mean differences among groups. In the third stage, Ordinary Least Square (OLS) regression was conducted to measure the relationship between the factors of human capital (the independent variables) and performance (the dependent variable). All statistical analyses were done with SPSS 12.0, which is widely used in statistical analysis of social science.

Hypothesize:

Human Capital = f (School Education + Job Training + Job Experience + Language Ability + Certification + ...)
Employee's Performance = ∑ (BiXi +εi) B = vector of estimated coefficient
X = variables expected to affect human capital (school education, training, job experience, language ability)
ε = random error term
Subscript i = individual employees

The data analyses were performed in the order of school education, job training, job experience, language ability, and certification, the components of human capital. And, the effect of such components on performance was analyzed. Considering the conceptual model presented earlier, it can be also inferred that the effect each component has on human capital is not the same. Therefore, the value of β, which is a weight, can be examined according to the importance or influence of components of human capital.

This study uses the data from a Korean company to verify the relationship between the components of each education training session and performance. By doing so, it could provide the foundation for strategic training programs carried out by companies. In other words, this study identifies the components that have a stronger impact on performance than others. Based on this result, a company could strategically optimize training investment for the maximum impact.

DATA ANALYSIS

Descriptive statistics

Means and standard deviations for study variables

Means, standard deviations, the maximum value and the minimum value of human capital components are presented in Table 3. The length of the entire employees' school education is 14.23 years, meaning employees, on average, have junior college or higher than a high school education attainment. The level of school education varied greatly from the lowest level being a high school diploma to the highest being a PhD degree.

Regarding the status of number of training courses completed, employees have been taking an average of 19.20 training courses provided by their company since they joined the company. Employees with a short length of service completed one course. There was one employee who completed as many as 74 training courses. The longest job experience with the company was 27.9 years. The average length of job experience was approximately 9.63 years. The grade of English ability was put in reverse order with the highest value being 1 and the lowest given no grade at all. The grade was coded to produce a score: the score for the highest grade is 4 and the score for the lowest grade is 0. Employees' average score is 0.77, falling short of grade 4.

The analysis of the number of certification was conducted on employees who have at least one certificate. The result showed that an employee has on average 2.36 certificates with a minimum of 1 to a maximum of 11. The average number of professional certification was 0.10 with the minimum of 0 to maximum of 4. A professional certification refers to a type of certification with a necessity in work, marketability and difficulty in obtaining such as a type of certification, for example, a doctor, a lawyer, or an accountant.

The average of entire employees' performance evaluation is the arithmetic mean of an employee's performance for seven years before 2006 and the result was 3.41 out of 5. Here, performance evaluation was coded to give a score of A (5 points), B (4 points), C+ (3 points), C (2 points), and D (1 point). The result of performance evaluation through forced distribution is composed roughly of A (15%), B (30%), C+ (40%), C (10%), and D (5%).

Table 3. Descriptive statistics of variables

	Mean	SD	Min	Max	n
School education (year)	14.19	2.07	12	22	5,842
Job training (no.)	18.11	7.92	1	74	5,842
Job experience (year)	9.25	4.57	0.9	27.9	5,842
English ability (grade)	0.78	1.39	0 (no grade)	4 (grade 1)	5,842
Certification (no.)	1.83	1.59	1	11	5,842
Performance evaluation	3.41	0.49	1.33	5.00	5,842

Frequency analysis and ANOVA

(1) Relationship between school education level and performance

The distribution of school education level from <Table 4> shows that college graduates (those with a bachelor's degree) are the largest in number (n=2,229, 49.3%) followed by high school graduates (n=1,961, 43.4%). These two groups account for 92.7% of the entire employees' population. Those with the highest level of school education (employees with a Master's and a PhD degree) take up 2.6% (n=117) and employees with a junior college degree account for 7% (n=212).

To ascertain the effect of school education on individual employees' performance in detail, performance average based on the level of school education was analyzed. A trend in individual employees' performance by school education level in Table 4 shows that as the level of school education increases, performance improves. Generally, it was shown that the higher the level of education, the better the performance. Employees with 18 years of education (Master's) and employees with 22 years of education (PhD) had the best job performance. Therefore, it is proven that investment in graduate school education is likely to have the most significant impact on the performance of individual employees.

ANOVA analysis (Table 4) was carried out to see if the difference in individual employees' performance shown among groups of different school education level is actually statistically significant. The result shows that the difference in employees' performance is statistically significant ($F=3.500$, $p<0.001$). Groups by school education level are the ones that produce performance. One can infer there is a tendency that, as the level of school education increases, employees' performance improves.

Table 4. Mean of job performance by human capital components					
		Mean	SD	N	ANOVA
By school education level	High school	3.32	0.48	2,611	F=68.526 P=0.000
	Junior college	3.33	0.50	304	
	Bachelor's	3.48	0.46	2,733	
	Master's	3.77	0.65	178	
	PhD	3.81	0.69	16	
By job training level	1 (1-5)	3.23	0.56	993	F=37.456 P=0.000
	2 (6-10)	3.42	0.48	2.835	
	3 (11-15)	3.47	0.45	1,568	
	4 (16-20)	3.51	0.41	424	
	5 (more than 20 years)	3.55	0.49	22	
By job experience level	1 (5 years or less)	3.23	0.46	1,633	F=109.240 P=0.000
	2 (5-10 years)	3.42	0.45	2,608	
	3 (11-15 years)	3.55	0.53	1,131	
	4 (16-20 years)	3.64	0.54	425	
	5 (20 years or more)	3.54	0.47	45	
By language ability level	No grade	3.38	0.49	4,280	F=25.114 P=0.000
	Grade 4	3.62	0.58	201	
	Grade 3	3.58	0.52	311	
	Grade 2	3.45	0.44	486	
	Grade 1	3.45	0.43	564	
By certification level	0	3.39	0.56	1,323	F=0.822 P=0.618
	1	3.43	0.49	1,685	
	2	3.42	0.46	1,046	
	3	3.41	0.47	819	
	4	3.41	0.47	596	
	5	3.36	0.44	245	
	6	3.36	0.42	85	
	7	3.41	0.43	3.3	
	8 or more	3.65	0.38	10	
By job family	Office job	3.31	0.48	2,444	F=135.186 P=0.000
	Finance	3.42	0.40	344	
	Support	3.87	0.58	396	
	Sales	3.42	0.44	2,365	
	Professional	3.58	0.55	293	
By job grade	Employee with high school diploma	3.31	0.48	2,444	F=159.673 P=0.000
	Employee with bachelor's	3.26	0.43	425	
	Deputy section chief	3.33	0.39	1,252	
	Section chief	3.56	0.44	1,106	
	Deputy head of department	3.81	0.56	491	
	Head of department	3.85	0.56	124	

(2) Relationship between job training and performance

The number of training courses completed by the entire employees' population is as follows: 47.6% of entire employees completed six to ten training sessions; 30.1% finished eleven to fifteen training sessions; 12.9% completed one to five training sessions; and 9.4% finished more than sixteen training sessions.

Table 4 indicates the specific difference in performance by job training level. As the overall job training level increases, average performance improves. To determine if the difference in performance made by the degree of job training completed is statistically significant, groups were divided by considering the degree of job training completed and then the consequent difference in performance was analyzed. It was found that the difference in performance among groups that completed job training is statistically significant ($F=3.583$, $p<0.001$).

(3) Relationship between job experience and performance

Table 4 shows the length of job experience. Roughly, 46.7% of the entire employees' population has five to ten years of job experience. 24% have less than five years of job experience. 20.5% have eleven to fifteen years of job experience. 8.0% have sixteen to twenty years of job experience.

To examine how job experience influences employees' performance, the degree of job experience was considered and the difference in performance was analyzed. The difference in perform

The difference in performance by job experience level turned out to be statistically significant ($F=5.209$, $p<0.001$). That is, groups divided by job experience level are disparate groups

(4) Relationship between language ability and performance

Regarding language ability, employees without any English ability (no grade) accounted for 74.2%, the largest proportion, followed by grade 4 (10.1%), grade 3 (7.9%), grade 2 (4.8%), and grade 1 (3.0%).

As for the relationship between English language ability and performance, there is a general tendency that the higher the level of an employees' English ability, the better their performance. There is a trend that the lower the English ability, the smaller the performance gap between employees' with the same position. However, the higher the English ability, the larger their performance gap becomes.

The relationship between English ability and employees' performance was analyzed to specifically identify performance gap made by the difference in employees' English ability gap. The result confirmed that performance gap created by difference in English ability was statistically significant ($F=1.537$, $p<0.001$). That is to say, it was verified that employees' performance differs according to their English ability.

(5) Relationship between certification and performance

Regarding the number of certificates, 37.1% of employees have one certificate, 23.1% of employees have two certificates, and 18.1% of employees have three or more certificates.
Regarding the average performance of employees according to the number of certificates, the overall tendency is that performance is the highest when an employee has one certificate. As

the number of certificates increase, their performance slightly decreases; an interesting finding given the strong emphasis on learning English in Korea due to the possibility of better employment opportunities and career advancement within Korean firms.
The result of the verification to ascertain if this trend is statistically significant indicates that it is ($F=1.278$, $p<0.05$). In other words, performance does differ according to the number of certificates an employee acquires.

(6) Relationship between professional certification and performance

Table 4 shows that the vast majority of the employees' (91.4%) do not have professional certification, and the rest 9% do possess some form of professional certification. Regarding average performance of employees by the number of certificates based on an academic major, employees with one type of certification tend to perform their best. This tendency is similar to that with certification (see above). When employees have one type of professional certification, their performance improves. However, more than one type of certification does not seem to enhance employees' performance significantly. When analyzed, the performance difference made by the number of certificates based on a major was not statistically significant. ($F=0.943$, $p>0.05$).

(7) Relationship between job family and performance

With the employees' performance by job family, support job family scored the highest (3.84) while office job family scored the lowest (3.34). Professional job family scored relatively high. The scores of finance job family (3.45) and sales job family (3.41) ranged in the middle. Performance difference by job family was analyzed to be statistically significant. ($F=4.561$, $p<0.001$).

Table 5. Mean of human capital components by job family

	Office job		Sales		Finance		Support		Professional	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
School education (year)	12.23	0.75	15.33	1.53	15.98	0.72	16.10	1.20	16.59	1.47
Job training (no.)	13.65	4.72	23.32	7.55	18.87	6.07	16.84	8.25	13.99	8.08
Job experience (year)	8.23	3.63	10.50	5.06	9.08	4.09	9.84	4.79	7.00	4.80
Language ability (grade)	0.01	0.23	1.11	1.61	2.12	1.57	1.54	1.49	1.85	1.21
Certification (no.)	2.16	1.92	1.84	1.22	0.79	0.95	0.88	1.00	1.39	1.46

(8) Relationship between job grade and performance

Regarding performance difference by job grade, employees with a bachelor's degree had the lowest performance level (3.26) whereas the head of a department had the highest performance level (3.82). The reason why the performance of employees with a high school diploma was higher than that of those with a bachelor's degree seems that employees with a high school diploma have the longer average years of job experience (length of service).
Generally, it appears that as a job grade increases, employees' performance improves. Performance difference by job grade was analyzed to be statistically significant ($F=5.531$, $p<0.000$).

Table 6. Mean of human capital components by job grade

	Employee with high school diploma		Employee with bachelor's		Deputy section chief		Section chief		Deputy head of department		Head of department	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
School education (year)	12.23	0.75	14.86	1.79	15.44	1.47	15.70	1.28	16.21	1.43	16.35	0.99
Job training (no.)	13.65	4.72	13.80	5.92	20.28	6.84	23.63	7.73	24.08	9.54	25.73	7.54
Job experience (year)	8.23	3.63	5.02	3.98	7.86	3.65	11.26	3.36	14.46	4.57	19.14	3.17
Language ability (grade)	0.01	0.23	1.44	1.61	1.81	1.68	1.02	1.50	0.93	1.38	0.26	0.77
Certification(no.)	2.16	1.92	1.95	1.63	1.50	1.23	1.61	1.14	1.52	1.25	1.29	0.94

REGRESSION ANALYSIS

School Education

School education is an important component having a positive impact on productivity and job performance of employees. In this study (Table 7), as in the earlier studies, it was verified that education has a positive effect on performance (models 1 and 2). However, the effect of it is reduced based on job training and job family (model 3).

The analysis result of the dummy variable by job family indicates that school education has a different effect on job performance depending on the job family (model 4). When compared with the benchmark job family (office work, which is composed of duties for which a high school diploma is a requirement), job families requiring a bachelor's degree or higher such as, sales, finance, support and professional job families, have a higher positive correlation with the employees' performance. In other words, an increase in investment into employees' school education has a positive influence on job performance. In the case of office job family requiring a high school diploma, an increase in the investment into employees' school education does not influence job performance that significantly in relative terms.

Job Training

Table 7 shows the effect of job training on job performance. Unlike earlier studies, job training turned out to have a negative effect on job performance (models 1 and 2). This means that when job training is considered as a human capital input factor, such as school education, conventional job training carried out by a Korean company does not contribute to job performance that significantly. Even when the interaction between school education and job training is taken into account, job training has a negative effect on job performance. Given this, it is questionable that job training produces a positive investment effect in terms of performance in this Korean company.

Furthermore, when it comes to the effect of job training by job family, the effect of job training on performance is different according to the job families. That is, when compared with job training in the benchmark job family (requiring a high school diploma), in sales, finance, support, and professional job families (requiring a bachelor's degree or higher), there is a negative effect (models 3 and 4). In the job families where the quality of school education is more important (sales, finance, support and professional jobs), school education has a more positive effect, but job training has a negative effect on job performance. However, in the benchmark job family, office job, job training has a positive effect.

Job Experience

The entire model in Table 7 shows that, like in earlier studies, the effect of job experience on performance is positive and statistically significant. That is, the more job experience an employee acquires, the higher the level of job performance is. Even when school education and job training are taken into account, job experience has a positive impact on employees' performance in all job families (models 3 and 4).

Language Ability

The relationship between language ability (English ability) and job performance in <Table 6> indicates that the entire firm's population of employees' English ability has a positive effect (statistically significant) on performance. In other words, the higher the level of the English ability of employees, the better the employees' job performance at work.
However, when viewed by job family, the effect of language ability on performance is different. That is to say, English ability has a positive (+) effect on performance only in the support job family, when compared against the benchmark job family, which is office job family. In the other job families, the effect of English ability on performance is not statistically significant. On the premise that English ability influences job performance, Korean companies use English ability as a criterion for hiring new employees. However, model 5 shows that depending on job family (type of job); English ability may not have any significant effect on performance.

Certification

Table 7 shows the effect of the number of certificates on performance. Generally, the number of certificates has a positive (+) effect on job performance. However, the degree of the effect of certification on job performance is smaller than other variables.

Job Grade and Job Family

Job grade, which is a control variable in each model of Table 7, has a positive (+) effect on job performance as it increases. The fact that job performance improves as job grade increases could mean that the evaluation of employee's job performance becomes more generous as their job grade increases. However, it is verified that, even when the effect of job grade is controlled for this reason, other factors of human resource development, such as school education, job training, job experience, language ability, and certification, have a positive effect on job performance.

It is shown that in a job family, where expertise is an important component when compared with the benchmark job family (office job family), other human resource development components, such as school education, job experience, language ability, etc., play more of an important role than with job training in enhancing job performance.

Table 7. Effect of human capital components on performance

Variables	Model 1 N=5,842	Model 2 N=5,842	Model 3 N=5,842	Model 4 N=5,842	Model 5 N=5,842
	Estimated coefficient (standard)	Estimated coefficient (standard)	Estimated coefficient (standard)	Estimated coefficient (standard)	Estimated coefficient (standard)
School education	0.016** (0.068)	0.021** (0.086)	0.015* (0.064)	-0.005 (-0.021)	0.17** (0.070)
Job training	-0.008*** (-0.136)	-0.006* (-0.088)	0.017*** (0.278)	0.022*** (0.356)	-0.005* (0.078)
Job experience	0.028*** (0.257)	0.028*** (0.257)	0.014*** (0.134)	0.014*** (0.132)	0.027*** (0.253)
Language ability	0.015** (0.043)	0.015** (0.042)	0.024*** (0.067)	0.020*** (0.058)	-0.019 (-0.054)
Certification	0.010* (0.032)	0.010* (0.032)	0.013*** (0.040)	0.012** (0.040)	0.012** (0.038)
School education x Job training		-0.002 (0.058)	0.0000 (0.003)	0.001 (0.027)	-0.001 (-0.043)
Sales job family x Job training			-0.027*** (0.682)	-0.034*** (-0.845)	
Finance job family x Job training			-0.027*** (-0.258)	-0.026*** (-0.250)	
Support job family x Job			-0.010*** (-0.096)	-0.031*** (-0.302)	

Table 7. Effect of human capital components on performance					
Variables	Model 1 N=5,842	Model 2 N=5,842	Model 3 N=5,842	Model 4 N=5,842	Model 5 N=5,842
	Estimated coefficient (standard)	Estimated coefficient (standard)	Estimated coefficient (standard)	Estimated coefficient (standard)	Estimated coefficient (standard)
training					
Professional job family x Job training			-0.028*** (-0.202)	-0.030*** (-0.213)	
Sales job family x School education				0.013*** (0.205)	
Finance job family x School education				0.004 (0.030)	
Support job family x School education				0.033*** (0.273)	
Professional job family x School education				0.009* (0.063)	
Sales job family x language ability					0.024 (0.056)
Finance job family x language ability					0.010 (0.013)
Support job family x language ability					0.134** (0.149)
Professional job family x language ability					0.051 (0.051)
Job grade	0.069*** (0.209)	0.069*** (0.208)	0.181*** (0.549)	0.167*** (0.505)	0.063*** (0.191)
Constant	2.875	2.826	2.565	2.735	2.80
F Adj R^2	147.308 0.130	126.580 0.130	130.721 0.196	101.719 0.205	87.696 0.140
※ *** is 0.1%, ** is 1%, * is 5% of significance level					

DISCUSSION

This study has explored whether Korean financial companies invest in their human capital strategically and affect a positive effect on their employees' performance. The factors, that Korean financial companies commonly invest in human capital investment, such as school education, job training, job experience, language ability, and certification, were tested. It was found that Korean financial companies' human capital investment can influence to enhance their employees' human capital in general. Moreover, these increased human capitals could lead to an improvement in employees' performance in general.

In the analysis of the relationship between employees' level of school education and job performance, school education has a positive effect on employees' job performance in general terms. However, the effect of school education differs because, in reality, different job families require different levels of school education. Based on this, the human resource development department of a corporation needs to understand that over-education can occur in certain job families, and to make an appropriate level of investment in school education befitting each duty. Korean companies try to build upon their employees' capacity through job training but the consequent improvement in employees' performance in general is not sufficient. That is, it is possible that companies do understand that there is a limit as to the effectiveness of job training, especially for their employees with a bachelor's degree or higher, and they believe that, in increasing their employees' education level by providing them with a graduate school education, is more effective. Depending on job family, the effect of job training is different. It turned out that in the case of the office job family, for which a high school diploma is adequate to carry out one's duties, job training on employees' conduct of their duties can positively (+) improves job performance.

However, an analysis comparison of school education and job training shows that professional job family requires a high level of education to carry out one's work or duties and, for that reason, school education has a stronger influence on job performance than any other job family. Conversely, online and offline job training offered by companies has a limited effect on job performance. This indicates that to enhance employees' job performance, companies need to differentiate their human resource development strategies by job family. In other words, the focus of human resource development for professional job family needs to be placed on school education in the recruitment stage and on providing school education, for example, graduate school. On the contrary, in the simple office job family requiring a high school education, employees' job performance needs to be enhanced through job training after the employees are hired, rather than through school education.

More importantly, through the analyses of employees' human capital investment in Korean financial companies, this study can present a suggestive point to assist companies to make better investment decisions in human capital for example by considering employee's job family. Therefore, this study can suggest which factors should employers consider to optimize training investment for the maximum impact. Those suggestive points and implications will be discussed further in the following section.

IMPLICATIONS FOR HR PRACTICES

First, companies may better understand that components that are put into human resource development need to be carefully differentiated depending on the jobs (family), and that they need to maximize the investment effect through differentiated investment approach in human resource development based on jobs (family). In other words, a prudent discussion on how to strategically manage the investment effect on the human resource development factor and to make any investment in the factor may come before any investment is done. In this regard, this study puts forward the relevance of an effective tool to consider when recruit employees by job family and make decisions on human resource development for performance improvement.

Second, from the perspective of companies, for employees' performance management and career development, it could be more prudent to recruit and foster professional employees, such as ones in professional job family and finance job family, by focusing on their school education. In the case of professionals, making an investment in school education, such as specialized graduate schools or night-time graduate schools to build employees' capacity, is an effective method to boost employees' performance and organizational performance at the same time.

Third, in the case of office assistant job family (i.e., high school equivalent and low skilled), however, the level of job training affecting job proficiency could contribute more to performance than school education could. By considering this factor, this job family is a group whose performance can be managed continuously through timely job training rather than college education, which cause the issue of over-investment. However, it is judged that as job family places more importance on expertise (i.e., high skilled and knowledge based), the effect of job training tends to decrease. In this regard, companies have to ascertain if their job training positively contributes to the enhancement of employees' performance. Those in charge of developing human resources in companies may need to design their job training to have an effect on individual performance and intensively manage it to enhance their employees' performance accordingly.

This may indicates that differentiated policies need to be set and implemented. For example, the focus should be placed on the level of school education and qualitative aspects in the case of professional jobs, while job training plan for human resource development needs to be applied to simple office jobs.

Fourth, it is not surprising that many scholars (DuBois & McKee 1994, Van Scotter & Motowildlo 1996, Tesluk & Jacobs 1998) support the results that job experience and job grade are major contributing factors to employees' performance. However, employees with a high job grade and significant job experience are thought to be the ones who are under the strongest pressure to be dismissed in corporate in Korea and other Asian countries. It is important for those who are in charge of human resources department, to come up with more effective, systematic ways to transfer their knowledge and know-how to lower job graders. In addition, there needs a strategic approach to discharge firm's employees in a high level position, so that the human resources of a company are better utilized and managed.

Fifth, Korean companies have overly emphasized developing their employees' foreign language ability with an assumption this will contribute to perform the jobs better. However, the effect of language ability on employees' performance is not significant. This suggests that language ability does not significantly influence employees' ability and capacity enhancement. Still many Korean companies support the legitimacy of using language ability improvement as a huddle to promotion and provide a variety of language programs, but these kinds of approaches and policies need to be changed by considering the results of the current study.

Sixth, we have found that in Korean financial companies certification generally does not have a significant effect on employees' performance. However, certification has a positive effect on certain jobs (family). For example, in the office assistant job family with a low degree of difficulty and skills, a certificate, that has a strong relationship and signal to the work or duties, seems to have a positive influence on job performance. Based on this, human resources department may have an insight that investment decision on certification can be closely related with employees' level of works or duties and their performance increase. Therefore, given that there is a possibility that a company's support for certification for their entire employees' population can be ineffective; companies would do well to stay away from indiscriminate support for certification in maximizing companies' performance for the future.

CONCLUSION

This paper has examined the effect of Korean financial companies' human capital investment on employee's performance. This study supports the general human capital theories (Schultz 1961, Becker 1975), the more investment on human capital is occurred, the more performance and productivity on the job can be enjoyed. Moreover, this study sheds a light for how companies invest more effectively and efficiently for developing their employees, not all of employees but employees by their jobs (family). The study shows human capital investment can have a positive effect on employees' performance, but it may vary among employees' jobs (family) and have a different impact on their performance. Therefore, companies need to consider more strategically about their human capital investment, which component of human capital investment (i.e., school education, job training, language training, certification, etc) outputs most employees' performance.

T his study also has a few limitations that data used is from one Korean financial corporation, one specific business sector; therefore, it is difficult to generalize the findings and apply them to other companies. Since it was especially difficult to obtain personnel data from the financial corporation, qualitative measurement of school education and job training was not performed; only a quantitative measurement was taken. A large number of researchers need to improve the validity of this area of study in the future by obtaining more personnel data on individual companies and analyzing them. Nonetheless, this study is significant in that it offers suggestive points on the employee's performance issues, how human resource development/management departments can increase ROI of human capital investment and improve their employees' performance, strategically invested in based on employees' jobs.

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PROPOSED FACTORS INFLUENCING STRATEGIC INERTIA/STRATEGIC RENEWAL IN ORGANIZATIONS

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ABSTRACT

The conceptual model presented in this paper is composed of factors that we propose influence strategic inertia/strategic renewal in organizations. Managers at the top- and middle-levels of organizations have been associated with strategic inertia/strategic renewal. While middle managers' commitment to achieving organizational goals is proposed in our model to have a direct influence on strategic inertia/strategic renewal, the empowerment they perceive themselves as having to affect these goals is proposed to antecede this commitment. In addition to having a direct influence on strategic inertia/strategic renewal, the mindset of top management is also proposed to directly influence middle managers' perceptions of the empowerment they have to affect organizational goals. The role of competition is also captured in the model. This is done by proposing that its intensity moderates the influence of top management's mindset on strategic inertia/strategic renewal and middle managers' perceptions of the empowerment they have to affect organizational goals.

Following the lead of Huff, Huff and Thomas (1992, p.55), the concept of strategic inertia is defined in this paper as the tendency for organizations to remain with the status quo and their resistance to strategic renewal outside the frame of their current strategy. A comprehensive, yet parsimonious, definition of strategic renewal that we use in this paper is provided by Floyd and Lane (2000). They define this concept as "an evolutionary process associated with promoting, accommodating, and utilizing new knowledge and innovative behavior in order to bring about change in an organization's core competencies and/or change in its product market domain" (p. 155). A clear conclusion to be drawn from the strategic management literature is that implicitly common to these definitions is the notion of change, both organizational and environmental, and the magnitude of that change. It has been suggested (cf. Hannan & Freeman, 1977/1984), for instance, that strategic inertia exists when the rate of organizational change is much lower than the rate at which environmental conditions change. The huge imbalance of these rates of change means that a larger expenditure of resources, a longer time horizon, and a greater departure from the status quo will be required for organizations to emerge (i.e., strategic renewal) from a state of strategic inertia (cf. Dutton & Duncan, 1987).

Also implicitly common to both definitions is the notion that organizations either adapt (strategic renewal) or fail to adapt (strategic inertia) to the changes that take place in their competitive environment. With respect to these options, top management's interface with the organization's competitive environment is viewed as a source of strategic inertia (cf. Burgelman, 1996) and an impetus for strategic renewal (cf. Floyd & Wooldridge, 2000). It has been suggested, for instance, that the organizational-environmental rates of change imbalance leading to strategic inertia is a result of top management's failure to do two things. The first is failure to observe and interpret cues from the environment in time to determine and adjust organizational behavior to meet environmental demands for change, and the second is failure to respond to environmental activity in a timely fashion (cf. Hedberg & Wolff, 2003; Kieser, Beck & Tainio, 2003). In terms of strategic renewal, this interface is manifested when top management responds to changes occurring in the competitive environment of organizations (cf.; Huff et al. 1992; Strebel, 1992).

Although not necessarily a source of strategic inertia or strategic renewal, middle managers' interface with top management is viewed in this paper as having a major influence on both. For example, it has been suggested that because these managers are in touch with the latest market and technical developments they are crucial to the goal of strategic renewal (Floyd & Lane, 2000). However, if middle managers perceive that they are not empowered by top management to affect the strategic renewal goal they will not be committed to achieving the goal; they may even choose to engage in the types of behaviors that promote strategic inertia (cf. Fenton-O'Creevy, 2000). Thus, middle manager's perception of the empowerment they have to affect this goal stem from their interface with top management. Parenthetically, while several studies have focused on the potential benefits of strategic inertia (cf. Amburgey & Miner, 1992; Hannan & Freeman, 1984; Nelson & Winter, 1982) more recent studies (cf. Ahmandian, Ma'atoofi, Shirzadi, & Noruzi, 2011; Rusetski & Lim, 2011; Yokota & Mitsuhashi, 2008) suggest that successful strategic renewal and (thus) diminished strategic inertia is a goal that organizations desire to achieve; especially those organizations with an entrepreneurial culture (cf. Kuratko, Ireland, Covin, & Hornsby, 2005).

Our ultimate objective in this paper is to present a conceptual model comprised of factors that we propose influence strategic inertia/strategic renewal in organizations. Within the context of this model, we explore the interface of top management with the competitive environment of organizations as well as the interface of middle managers with top management. Specifically, we focus on the intensity of competition that exists in the environment of organizations and discuss its proposed moderating effects on the mindset of top management. We also focus on how the mindset of top management affects middle manager's influence on strategic inertia/strategic renewal in organizations. After providing background theory and definitions of key concepts, we set forth propositions about how the product of these interfaces influence successful strategic renewal/diminished strategic inertia in organizations.

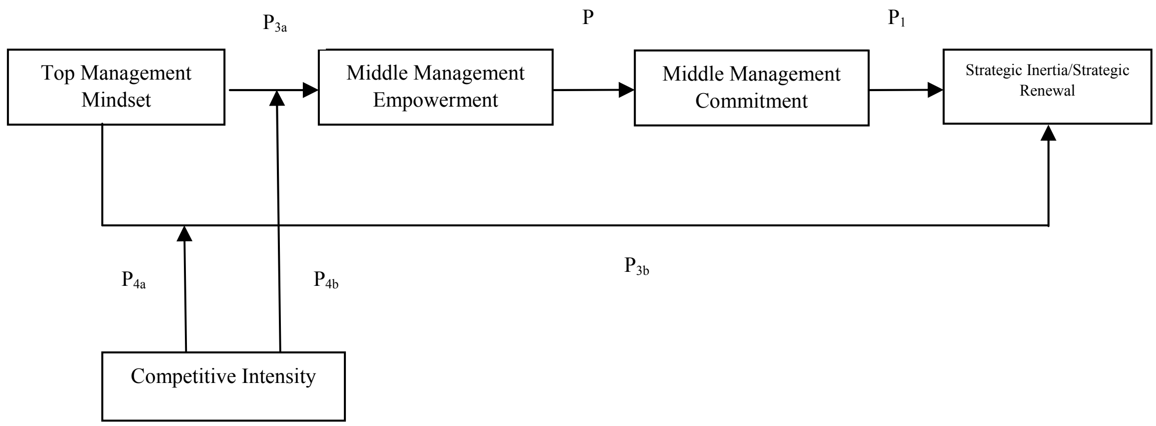
A contribution our paper makes to the body of strategic inertia/strategic renewal research is bringing an entrepreneurial perspective to the conversation. For example, an issue we address is whether top managers with an *entrepreneurial mindset* are more disposed than top managers with a *managerial mindset* to afford middle managers the empowerment they perceive is required to garner the level of commitment needed from them to affect organizations' goal of successful strategic renewal/diminished strategic inertia. This particular perspective will fill a gap that currently exists in the extant literature.

As noted earlier, changes in the competitive environment of organizations is common, albeit implied, to the definition of both concepts; organizations either adapt (strategic renewal) or fail to adapt (strategic inertia) to changes in their environment. It has been argued that if organizations fail to adapt, their very existence is threatened (Baum, 1990; Hannan & Freeman, 1989). Considering this potential threat to organizations, the importance of research dedicated to the study of strategic inertia/strategic renewal cannot be overstated. Despite the implications for organizational survival, factors that influence these phenomena have not been thoroughly explored in the extant strategy-related literature. Specifically, factors such as the mindset of top management have not been explored within the context of its influence on middle managers and the effect of environmental factors (e.g., competitive intensity) on the top management-middle management interface. Thus enhancing our knowledge of these relationships, such that they might be better managed in organizations, is another contribution our exploration makes.

CONCEPTUAL MODEL AND PROPOSITIONS

The model containing factors that we propose influence strategic inertia/strategic renewal in organizations is presented in Figure 1. In the next several sections of this paper, we define the concepts comprising the model and discuss theory associated with each. We then set forth propositions derived from the discussions. As indicated by P_1 in the model, the relationship between the organizational goal of successful strategic renewal/diminished strategic inertia and middle management's commitment to this goal is our lead discussion. To facilitate this lead-in discussion, we define middle management as those positioned two or three levels below the CEO (Dutton & Ashford, 1993) and one level above the operating level (Huy, 2001). We define top management as the individual(s) whose actions and behaviors are the ultimate source of strategic inertia or strategic renewal in organizations (cf. Hambrick & Mason, 1984). We also note that the goal of successful strategic renewal is achieved when organizations have recombined their resources in such a way that they are in an improved position vis-à-vis their competitors (Burgleman, 1991; Ramirez & Wallin, 2000), and the goal of diminished strategic inertia is achieved when the rate of organizational change is in balance with the rate of environmental change (cf. Blettner, 2008; Hodgkinson & Wright, 2002; Gresov, Haveman & Oliva, 1993; Huff, et al. 1992).

FIGURE 1: STRATEGIC INERTIA/STRATEGIC RENEWAL INFLUENCE FACTORS



Commitment Factor

Exchange theory (March & Simon, 1958; Homans, 1958; Gouldner, 1960) is used in this paper as the theoretical foundation for middle management commitment. Within the context of organizations, a conclusion one might draw from this theory is that middle management's commitment to organizations depend on their perceived balance of reward utilities over input utilities. In other words, if middle managers perceive that there is a balance between their job performance and the rewards they receive for their job performance, the greater should be their commitment to the organization (cf. Hrebiniak & Alutto, 1972). Job satisfaction is concerned with the *current balance* of reward and input utilities, and is viewed as a main exchange variable (cf. Amernic & Aranya, 1983). Job challenge, as a component of job satisfaction, has been used to assess the *current balance* of reward and input utilities. The component of job challenge that is most relevant to our exploration is creating change, with individuals having a clear goal to change a situation, but a loosely defined role that gives them the freedom to determine how to accomplish the goal (cf. McCall, Lombardo & Morrison, 1988; McCauley, Ohlott & Ruderman, 1994; McCauley, Ruderman, Ohlott & Morrow, 1999).

Over the years, various definitions of commitment have derived from exchange theory. For example, managerial commitment has been defined as "engaging in and maintaining behaviors that help others achieve a goal" (Cooper, 2006). Similarly, organizational commitment has been defined as a strong belief in and acceptance of organizational goals (Porter, Steers & Mowday (1974). A component of this definition that is relevant to our exploration views a committed individual as one who also possesses a willingness to exert considerable effort on behalf of the organization and engages in and maintains the type of behaviors that help organizations achieve their goals. Drawing on these definitions, and for purposes of this paper, we define *middle management commitment* as a willingness to engage in and maintain the types of behaviors that help organizations to achieve the desired goal of successful strategic renewal/diminished strategic inertia.

Achieving the goal of diminished strategic inertia may require organizations to undergo significant change to achieve the goal of strategic renewal (Floyd & Lane, 2000), and change management is viewed as being an integral, inescapable part of middle management's role in organizations (Floyd & Wooldridge, 1994). Supporting this view, several other studies (cf. Burgelman, 1991; Burgelman, 1983; Miner, 1994; Nonaka, 1988; Van Cauwenbergh & Cool, 1982) suggest that middle managers can play a key role during the change process by championing change efforts. It has also been argued that a committed layer of middle managers is essential for successful change (Nonaka, 1991). However, exchange theory would suggest that if middle managers perceive that the balance of reward utilities over input utilities is not in their favor, particularly with respect to the *challenging* component of job satisfaction (i.e., creating change, with individuals having a clear goal to change a situation, but a loosely defined role that gives them the freedom to determine how to accomplish the goal), their commitment to helping organizations achieve the successful strategic renewal/diminished strategic inertia goal is likely to be low.

P$_1$ *The higher middle management's commitment is to the organizational goal of successful strategic renewal/diminished strategic inertia the higher the likelihood that this goal will be achieved, and vice-versa*

Empowerment Factor

Self-determination is argued to form the theoretical foundation for empowerment (Fetterman, 1996), and is considered to be the single and most critical component of this concept (Sprague & Hayes, 2000). Four dimensions of self-determination have been identified in the extant literature: (1) consistency and perseverance in activities, (2) the courage to take risks, (3) initiative and proactivity, and (4) the ability to voice one's opinion (cf. Hur, 2006). Within the context of organizations, self-determination has been defined as the belief that one has autonomy or control over how one does his or her own work (Deci & Ryan, 1985; Wagner, 1995). Consistent with this definition, Quinn and Spritzer (1999) opine that empowered people have a sense that they are free to choose how to do their work and are not micro-managed. An empirical study conducted by Antonioni (1999) confirms the opinions advocated in prior research.

In his study, containing a sample of more than a thousand mid-level managers, Antonioni found that these managers felt most empowered when top management delegated decision-making tasks without requiring them to report back after tasks were completed. He also reported that they experienced autonomy, were able to influence the work they did, and felt confident in their abilities to do the work. What these findings suggest is that when middle managers feel empowered, they perceive that the balance of reward utilities over input utilities is in their favor, with respect to the *challenging* component of job satisfaction – i.e., creating change, having a clear goal to change a situation, and having a loosely defined role that gives them the freedom to determine how to accomplish the goal). The relationship between exchange theory and self-determination (as the theoretical foundation for empowerment) in organizations is also surfaced. That is, studies are in agreement that perceived empowerment is an antecedent to employee commitment to organizational goals (cf. Bordin, Bartram & Casimir, 2006; Seibert, Wang & Courtright, 2011; Liu, Fellows, & Chiu, 2006). With respect to the organizational goal of successful strategic renewal/diminished strategic inertia, the following proposition seems appropriate:

> ***P*$_2$** *Middle managers who perceive that they are empowered to affect the organizational goal of successful strategic renewal/diminished strategic inertia will be more committed to that goal than middle managers who perceive that they are not so empowered*

Mindset Factor

Originally developed within the domain of problem solving (Külpe, 1904), mindset theory (Gollwitzer, 1990) postulates that the unique tasks associated with one's pursuit of a goal lead to the activation of cognitive procedures, and the sum total of the activated cognitive procedures is referred to as mindset (cf. Bargh & Chartrand, 2000; Heckhausen & Gollwitzer, 1987; Smith & Branscombe, 1987).Within the context of decision-making theory, mindset has been described as a set of assumptions which is so established in the minds of people that it creates a powerful incentive within them to continue to adopt or accept prior choices (cf. Blackburn, 1998; Einhorn & Hogarth, 1981; Pitz & Sachs, 1984). Gollwitzer, Heckhausen, and Steller (1990) contend that the type of information people are attuned to in their environments, how they interpret this information, and the thoughts and actions produced as a result of this process are all influenced by their mindset.

A person's mindset is also argued to serve as a bias by limiting the information they retrieve from their environment, how it is perceived, and the actions taken from it (Taylor & Gollwitzer, 1995). Other decision theory research (e.g., Kahneman & Tversky, 1979) contends that mindset also shape people's predisposition towards risk. As noted earlier in this paper, the actions taken by top management are the ultimate source of strategic inertia/strategic renewal in organizations (cf. Hambrick & Mason, 1984). An inference we draw from the foregoing descriptions of mindset is that top managers with a mindset that is risk oriented are predisposed to take the types of strategic actions that result in strategic renewal, and those with a mindset that is less risk oriented are not so disposed.

In this paper, we consider two types of top management mindsets that reflect these dichotomous risk predispositions. The *entrepreneurial* mindset (Ireland, Hitt, & Sirmon, 2003; McGrath & MacMillan, 2000) is the first type, and the *managerial* mindset (Busenitz & Barney, 1997; Manimala, 1992; Miller, 1993) is the second type. The entrepreneurial mindset refers to the extensive use of rules of thumb and individual beliefs in the decisions involved in strategic innovations, where rules of thumb represent simplifying strategies or decision heuristics based on such things as prior experiences, individual beliefs, and perceptions. The managerial mindset refers to the use of more systematic decision making based on established algorithms, practices, and procedures (Bazerman, 1990).

Research (e.g., McGrath & MacMillan, 2000) suggests that top managers with an entrepreneurial mindset, as opposed to those with a managerial mindset, are constantly on the alert for opportunities to exploit; even those that may be highly uncertain. Other research (cf. Gupta, Macmillan, & Surie, 2004) suggests that top managers with an entrepreneurial mindset assemble and mobilize a supporting group (e.g., middle managers) in the organization that is not only committed to opportunity discovery and exploitation, but also takes personal pride in helping the organization achieve its goals (cf. Baum & Locke, 2004; Cardon, Wincent, Singh, & Drnovsek, 2009; Cassar & Freidman, 2009). In addition, top managers with an entrepreneurial mindset create an entrepreneurial culture that empowers the supporting group to engage in the types of behaviors that leads to strategic renewal (cf. Hitt, Ireland, Sirmon & Trahms, 2011); where an entrepreneurial culture is described as one in which "…new ideas and creativity are expected, risk taking is encouraged, failure is tolerated, learning is promoted, product, process and administrative innovations are championed, and continuous change is viewed as a conveyor of opportunities" (Ireland, Hitt & Sirmon, 2003, p. 970). This description suggests that middle managers in organizations that subscribe to an entrepreneurial culture are likely to perceive that they are empowered to affect the organizational goal of successful strategic renewal/diminished strategic inertia. Thus,

***P*$_{3a}$** *Middle managers in organizations where the mindset of top management is entrepreneurial will perceive that they are more empowered to affect the organizational goal of successful strategic renewal/diminished strategic inertia than middle managers in organizations where the mindset of top management is managerial*

It has been suggested that top managers with an entrepreneurial mindset seek opportunities to take strategic action (Gaglio & Katz, 2001), resulting in strategic renewal, and are able to deal with the uncertainty of dynamic environments due to their inherent risk taking propensity (cf. Baum & Locke, 2004). The more systematic decision making framework used by top managers with a managerial mindset is viewed as being reluctant to initiate strategic actions that require more risk than they are willing to take. Implied by this line of research is that while top management with a managerial mindset may eventually take the type of strategic actions that lead to strategic renewal, such actions are viewed as reactive (Strebel, 1992). Conversely, strategic actions leading to strategic renewal are likely to be proactive in organizations where top management's mindset is entrepreneurial (cf. Barton, 1992; Prahalad & Hamel, 1994).

The foregoing discussions suggest that both types of mindsets have a direct influence on strategic inertia/strategic renewal; top managers with an entrepreneurial mindset are inclined to take strategic actions that lead to strategic renewal, thus diminishing strategic inertia, and top managers with a managerial mindset are not so inclined to take such strategic actions (thus prolonging strategic inertia). Observations that top managers with an entrepreneurial mindset are more conscious of and proactive to environmental change than top managers with a managerial mindset, suggest that the goal of successful strategic renewal/diminished strategic inertia is likely to be achieved faster in organizations where the mindset of top managers is entrepreneurial and slower in organizations where the mindset of top managers is managerial. Formally:

P_{3b} *The organizational goal of successful strategic renewal/diminished strategic inertia is likely to be achieved faster in organizations where the mindset of top management is entrepreneurial and slower in organizations where the mindset top management's is managerial*

Competitive Intensity Factor

According to Barnett (1997) the concept of competitive intensity refers to the competitive strength of an organization within its industry. That is, an organization that is a weak competitor within its industry is one that harms its rivals' life chances only slightly and an organization that is a strong competitor within its industry reduces its rivals' life chances dramatically. Following the lead of Barnett, competitive intensity is defined in this paper as the magnitude of effect that an organization has on its rival's life chances. It has been suggested that in highly intense competitive environments organizations are likely to undergo significant change, leading to strategic renewal, in order to enhance its own life chances (cf. Aragon-Correa & Sharma, 2003; Barnett, 1997; Benner & Tushman, 2003; Bloom, Sadun, & Van Reenen, 2010; Brittain & Freeman, 1980; Cockburn, Henderson & Stern, 2000; Eisenhardt & Martin, 2000; McKendrick & Wade, 2010; Miller & Friesen, 1983). Implicit in this argument is the notion that strategic renewal will occur and strategic inertia will diminish in organizations as competition intensifies.

Although this line of inquiry provides both empirical and conceptual evidence that competitive intensity is a primary driving force behind successful strategic renewal/diminished strategic inertia, what is lacking in this line of inquiry is the influence of top management in this relationship. For example, there is agreement in the literature that any significant change (e.g., strategic renewal) in organizations is initiated by top management based on their perceptions of the intensity of competition that exists in the environment (cf. Barrales-Molina, Benitez-Amado, & Perez-Arostegui, 2010; Casamatta & Guembel, 2010; Srivastava, & Frankwick, 2011; Tushman, Smith, & Binns, 2011). Parenthetically, Spreitzer (1996, p. 485) suggests that top managers are influenced by their perceptions of the competitive environment rather than by some objective reality. However, the intensity of competitive changes taking place in organizations' environment has not been considered within the context of top management mindset.

It has been suggested that top managers with an entrepreneurial mindset are more conscious of and proactive to environmental change than top managers with a managerial mindset (cf. McGrath & MacMillan, 2000). The issue that has not been addressed in the extant research is the response of top managers with a managerial mindset to increasing magnitudes of competitive intensity. With respect to top management with this type of mindset, Canales and Vila Vilar (2004) suggest that highly intense competition occurring in organizations' competitive environment is likely to be a strong inducement for them to adopt the goal of successful strategic renewal/diminished strategic inertia and engage in the type of behaviors that result in this goal being achieved. This logic suggests that the following proposition is appropriate:

> ***P$_{4a}$*** *When top management's mindset is characterized as managerial the organizational goal of successful strategic renewal/diminished strategic inertia is likely to be achieved faster when the intensity of competition in the organization's external environment is high rather than when it is low*

Drawing from several research studies (cf. Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997; Eisenhardt, 1989; Perlow, Okhuy & Repenning, 2002), one would conclude that in competitively intense environments there is pressure for both a rapid and high-quality decision-making process. Bourgeois and Eisenhardt (1998) contend that organizations in such environments can benefit (e.g., keep pace with change) from a fast decision-making process. Other studies (cf. Dutton & Duncan, 1987; Kahneman & Tversky, 1979) suggest that strong competitive pressures may serve to heighten a sense of urgency within organizations, which may drive them to actively search for ways to maintain their competitive position (Nohria & Gulati, 1996), which usually means engaging in strategic renewal activities (cf. Aragon-Correa & Sharma, 2003; Barnett, 1997; Benner & Tushman, 2003; Bloom, Sadun, & Van Reenen, 2010; Brittain & Freeman, 1980; Cockburn, Henderson & Stern, 2000; Eisenhardt & Martin, 2000; McKendrick & Wade, 2010; Miller & Friesen, 1983).

As noted earlier in this paper, achieving the goal of diminished strategic inertia may require organizations to undergo significant change to achieve the goal of strategic renewal

(Floyd & Lane, 2000), and change management is viewed as being an integral, inescapable part of middle management's role in organizations (Floyd & Wooldridge, 1994). It has been suggested that it is often middle managers, rather than top managers, who have their hands on the *pulse of the firm* and who are more closely attuned to the organization's external environment (Dutton et al., 1997; Floyd & Lane, 2000; Ikavalko & Aaltonen, 2001). It has also been suggested that when middle managers are empowered by top management to deal autonomously with environmental demands for change, organizations will be more responsive to changes precipitated by competitive pressures in their external environment (Ofner, 1985; Schlit, 1987; Williams, 2000). In other words, because they are empowered to make on-the-spot decisions, and are in the best position to know what needs to be done and how to do it, organizations are more flexible and amenable to such changes.

We also noted earlier that middle managers in organizations that subscribe to an entrepreneurial culture are likely to perceive that they are empowered to affect the organizational goal of successful strategic renewal/diminished strategic inertia. This is not likely the case in organizations that do not subscribe to an entrepreneurial culture. In such organizations, the mindset of top management is likely to be characterized as being managerial. Characterized as such, their more systematic decision making framework is viewed as being reluctant to initiate strategic actions to deal with changes in the organizations competitive environment (Busenitz & Barney, 1997; Manimala, 1992; Miller, 1993). Subsequently, there is little motivation for them to empower middle managers to deal with these changes. However, intense competitive pressures in the organizations' environment may provide strong motivation for top managers with a managerial mindset to empower middle managers with the autonomy they need to effectively deal with these changes. The following proposition reflect this rationale

P_{4b} *When top management's mindset is managerial middle managers will perceive that they are more empowered to affect the organizational goal of successful strategic renewal/diminished strategic inertia when the intensity of competition in the organization's external environment is high rather than when it is low*

DISCUSSION AND IMPLICATIONS

Our purpose for writing this paper was to extend existing knowledge about the influential role of several factors as they relate to strategic inertia/ and strategic renewal in organizations. There are a number of conclusions that we can draw from this presentation. First, at an elementary level, it is clear from the amount of attention that strategic inertia and strategic renewal have received in prior studies that they are important topics for both researchers and practitioners. Second, given that strategic inertia is a potential fatal defect for organizations in today's rapidly changing competitive environment, any research which offers insight to management about ways to overcome this inertia through strategic renewal is potentially useful. As such, an understanding of the factors that have the potential to either inhibit strategic renewal or promote strategic inertia is both timely and important. Third, although prior research has attempted to bring some clarity to these phenomena its focus has largely been on the impact of a limited number of factors on strategic inertia/strategic renewal. This narrow focus has resulted in theoretical and practical gaps in our understanding of these concepts. The results of our research have narrowed some of the gaps in the extant literatures by exploring these concepts from a different perspective.

Fourth, and most notably, we introduced into the strategic inertia/strategic renewal conversation the notion of top management mindset. Studies examining the strategic inertia/strategic renewal topic from a top management perspective have focused on factors such as the leadership style(s) of top management (cf. Fairhurst, Green & Courtright, 1995), the homogeneity of their beliefs (cf. Abrahamson & Fombrun, 1994), their ability to reach consensus (cf. Dess & Priem, 1995; Floyd & Wooldridge, 1992) and, more recently, the changes that occur in top management groups (cf. Ahmadian, Ma'atoofi, Shirzadi & Noruzi, 2011). However, the extant literature has not explicitly explored strategic inertia/strategic renewal topic from the perspective of top management mindset.

As suggested by discussions provided in this paper, the top management-middle management interface is critical to achieving the successful strategic renewal/diminished strategic inertia goal. Discussions also suggest that the mindset of top management plays a major role in determining whether or not the product of this interface is goal attainment. Considering the importance of middle managers' role in ensuring that this goal is achieved as desired, it is crucial that the mindset of top management is supportively aligned with this role. Of particular importance to this conversation is the extent to which this role is supported by top managers with a managerial mindset. As alluded to earlier in this paper, top managers with this type of mindset are not inclined to engage the organization's competitive environment proactively. This inclination, in turn, provides little motivation for top management to develop an organizational culture that is entrepreneurial; one where the top management–environment interface is constant and middle management support reflect this interface. A relevant issue raised here is whether a managerial mindset can be transformed into an entrepreneurial mindset.

Research (cf. Hamilton, Vohs, Sellier & Meyvis, 2011) suggests that people can, and often do, change their mindsets. Other studies (cf. Gupta & Govindarajan, 2002; Zyphur, 2009) also suggest that mindsets form out of people's previous experiences and what they have learned in the past. If it can be assumed that top management has past experiences where there has been an imbalance in organizational- environmental rates of change, and attendant threats to the organization's existence, one would expect a mindset change to occur at some point. If a mindset change does not occur, the implication is that perceived threats to the organization's existence are not strong enough, the organization does not have the capacity to renew itself strategically, or the managerial mindset of top management is so entrenched that a mindset change is virtually impossible. In situations of intensive change in the competitive environment, organizations must renew themselves strategically on a constant basis or face the risk having their life chances harmed (d' Aveni, 1994). Moreover, since strategic renewal has been put forward as one of the most challenging and critical activities for top management (Hamel & Prahalad, 1996, Mintzberg, 1994; Prahalad & Hamel, 1994; Baden Fuller & Volberda, 1997), the process or possibility of changing top management's mindset from managerial to one that is more entrepreneurial is are factors that should be examined more closely.

Research Implications

To fully understand the strategic inertia and strategic renewal concepts, researchers need to utilize a relatively fine-grained approach to examining organizations. In organizational research, common tendency is to view organizations at a macro level – as an indivisible whole, and discuss outcomes (in this case successful strategic renewal/diminished strategic inertia) as if the legal entity (the organization) actually analyzed situations and chose courses of action. With respect to understanding these concepts, this approach misses the mark. In reality, organizations are composed of many individuals. Organizations don't perceive things, individuals within organizations perceive things and it is probable that each individual perceives things uniquely. As discussed in this paper, the mindset of top management uniquely influences their perception of and how they interact with the environment.

While a balance between the rates of organizational and environmental change might be a desirable goal, the existence of a dichotomous mindset among top management in different organizations makes this goal difficult to achieve. Moreover, with respect to organizations where the mindset of top management is characterized as managerial, the unique perceptions of middle managers can be viewed as a key factor influencing whether or not this goal is achieved. If achieving this goal is desirable in such organizations, then the issue becomes how to transform the mindset of top management in support of this goal. This is a task that future research might explore. Specifically, questions such as the following would be appropriate: Is it possible for a deeply entrenched, managerial mindset to be transformed into a mindset that is entrepreneurial? If so, how might this transformation be accomplished? What factors might be involved in the transformation process? How long might the process take?

We formally proposed in this paper that competitive intensity triggers an adaptive (i.e., strategic renewal) response from top management whose mindset is characterized as being managerial. Are there other factors that "trigger" adaptive responses? While past studies have noted triggering factors such as a perceived crisis facing the organization, the wish to grow, or vanishing industry boundaries in competence destroying competition (cf. Pettigrew, 1985; Hamel, 1996; Quinn, 1980; Tushman & Romanelli, 1985), future studies might search for other factors. These studies might also assess the nature of the adaptive response. That is, to what extent does each triggering factor bring the organizational-environmental rates of change into balance? Finally, future research might explore the moderating effect of competitive intensity on the middle management dimensions presented in our framework across multiple industries. It is reasonable to assume that industry idiosyncratic competitive conditions exist and that these unique features would affect how top management perceive and respond to the competition.

Implications for Practice

From a practitioner standpoint, an important contribution of our paper is that it adds a new and useful framework that top managers might use to inform the strategic inertia/strategic renewal conversation. For example, the mindset of top management has been shown to affect the way middle managers perceive the contexts within which they operate. And, while it is beyond top management's ability to affect all of the factors that shape how middle managers view their world, there are some other areas over which they can exert influence. Specifically, for middle managers to effectively help organizations to achieve the successful strategic renewal/diminished strategic inertia goal they must not only be empowered. They must also understand important environmental dimensions (both internal and external) and organizational priorities, be able to devise actions and develop realistic estimates of the outcomes associated with those actions, understand the scope and timing of the actions, and be incentivized in a way that provides meaningful rewards for attempting the adaptive response and achieving desired results. It is within the purview of top management to ensure that middle managers have this understanding and the tools they need to effectively achieve this goal.

Concluding Remarks

The discussion of whether strategic inertia is good or bad is perhaps less important than when and to what extent different adaptations, leading to strategic renewal, produce desirable results. As such, this paper suggests a useful framework from which strategic inertia/ strategic renewal research might proceed. The propositions we present are testable and findings would contribute to both the theoretical and empirical literatures. Successful strategic renewal/ diminished strategic inertia in organizations is a topic worthy of additional research attention because appropriate adaptive response is widely viewed as a cornerstone of competitive success. The suggestions for future research we provide should serve as natural extensions of the framework discussed herein. A central question in strategic management centers on why some firms perform better than others. An understanding of how some firms adapt well to changing circumstances while others do not may provide a partial answer.

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QUALITY IMPROVEMENT AND ORGANIZATIONAL CHANGE INITIATIVES: AN ANALYSIS OF THE U.S. ARMY'S WARRIOR TRANSITION UNIT (WTU)

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ABSTRACT

Quality improvement and organizational change initiatives can serve as enablers for organizations to sustain and maintain in a changing business world; provided such initiatives are well planned and successfully implemented. The purpose of this paper is to further understand how the use of a quality management method can be implemented to improve the delivery of medical care and administrative services to the nations wounded, ill, or injured. A historical overview of the U.S. Army's Warrior Transition Unit (WTU) and the key challenges faced by this this phenomenon since its establishment will be discussed. Also, the WTU's vision, goal, and intent; a review of literature relating to organizational climate and culture with emphasis on the WTU culture and climate; and organizational change will be discussed. Moreover, an overview of the theoretical basis for quality improvement and organizational change initiatives will be outlined because as a part of the quality improvement and organizational change initiative process, leadership will be required to create a culture and climate which will allow wounded warriors with the ability to successfully rehabilitate and seamlessly transition from the military or return to duty. Then, the attention will turn to highlighting some of the key challenges facing leadership and identify the appropriate quality management method to use in order to successfully implement quality improvements and organizational change initiatives in the WTU. The paper will conclude by outlining an assessment strategy to be employed by the leadership to track the progress of the quality improvement and organizational change initiatives in the WTU.

Keywords: *Total Quality, Quality Management, Organizational Change, Change Initiatives, Quality Improvement, Organizational Culture, and Organizational Climate*

INTRODUCTION: THE U.S. ARMY'S WARRIOR TRANSITION UNIT (WTU)

In April 2007, the transformation of the U.S. Army Warrior Care began with the development of the Army Medical Action Plan (AMAP), which outlined an organizational and cultural shift in how the Army cares for its wounded, ill or injured service members ("Improving Care for," 2009). Two years later, the AMAP evolved in to what is now referred to as the Army Warrior Care and Transition Program (WCTP). At the heart of that program, the

Department of the Army (DA) established 36 Warrior Transition Units (WTUs) and nine Community Based WTUs geographically dispersed throughout the United States five years ago. Between the established WTUs, there are over 10,000 service members assigned or attached for medical treatment ("About the Warrior Transition Battalion," 2010). Although the WTUs were established to render quality medical care and administrative services to wounded warriors, the establishment did not come without challenges.

Since the WTUs establishment, various articles have been published regarding this phenomenon. In one of those articles, a senior fellow of the Center for a New American Security (CNAS) think-tank in Washington stated:

> Given the inadequacy of government efforts to address the needs of today's service members to date, particularly the daunting issues of mental health and suicide, it is essential that Department of Defense (DOD) and the Veteran Administration (VA) engage private-sector players and leverage their value and impact. (Berglass, 2010, p. 2)

The Government Accountability Office (GAO) (2009) also reported:

> The Army's feedback mechanisms, which include a telephone hotline and a satisfaction survey, provide a way for service members and their families to raise concerns about WTU-related issues. However, while this feedback mechanism may be helpful and important information to Army leadership, the concerns raised through these mechanisms were not necessarily representative of the concerns of all WTU service members and their families. (p. 14)

WTU's Vision, Goal, and Intent

The U.S. Army's WTU vision, goal, and intent are as follows:

Vision: To create an institutionalized, soldier-centered WTU program that ensures standardization, quality outcomes, and consistency with seamless transitions of the soldier's medical and duty status from points of entry to disposition.

Goal: Expeditiously and effectively, evaluate, treat, return to duty, and/or administratively process out of the Army, and refer to the appropriate follow-on health care system, soldiers with medical conditions.

Intent: To provide soldiers with optimal medical benefit, expeditious and comprehensive personnel, and administrative processing while receiving medical care. The Army will take care of its soldiers through high quality, expert medical care. For those who will leave the Army, the

> Army will administratively process them with speed and compassion. The Army will assist with transitioning soldiers' medical needs to the Department of Veterans Affairs (DVA) for follow-on care. (Warrior Transition Unit Consolidated Guidance, 2009, p. 10)

To ensure the vision, goal, and intent of the organization is being met, there are two groups of people who oversee the rehabilitation and transition of wounded warriors: the Triad of Leadership and Triad of Care.

The Triad of Leadership (Senior Commander/Command Sergeant Majors (CSMs); Medical Treatment Facility (MFTs) Commanders/CSMs; and WTU Commanders/CSMs/First Sergeants) execute refinements to the WTU entry, management, and exit policy in order to develop a balanced WTU structure and capability that is enduring, expandable, collapsible and responsive to the medical needs of every Warrior in Transition (Warrior Transition Unit Consolidated Guidance, 2009). The Triad of Care consists of a Primary Care Manager (e.g., Physician), Nurse Case Manager (e.g., registered nurse), and a Platoon Sergeant/Squad Leader (e.g., both are noncommissioned officers (NCOs)) who work together to collect soldier data and information, and develop a plan of care specific to each soldier that addresses medical treatment, administrative, support needs and disposition. All work together to ensure advocacy for Warriors, continuity of care, and a seamless transition into the force or return to a productive civilian life (Warrior Transition Unit Consolidated Guidance, 2009).

ORGANIZATIONAL CULTURE AND CLIMATE

Hofstede (2000) stated "one can only define culture for a group of people…organizational culture is that which distinguishes the members of one organization from other people (p. 135). Lin (1999) defined organizational culture as the shared assumptions and values by group members and climate as shared perceptions about organizational conditions. According to Evans and Lindsay (2008), culture is an organization's value system, its collection of guiding principles and is driven by leadership. Schein (1992) defined culture as the following:

> A pattern of shared basic assumptions that the group learn as it solved its problems of external adaptation and internal integration, that has work well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 12)

Organizational culture also consists of shared values and assumptions of how its members will behave (Lussier, 2010). Marcoulides and Heck (1993) introduced organizational culture as "consisting of three interrelated dimensions: a socio-cultural system of the perceived functioning of the organization's strategies and practices, and organizational value system and the collective beliefs of the individuals working in the organization" (p. 209). Although organizational culture and climate is used interchangeably, there is a difference between the two. "Culture is based on shared values and assumptions of 'how' things should be done (ideal environment), while climate is based on shared perceptions of the "way" things are done (intangibles of the negative climate)" (Lussier, 2010, p. 505). Schneider, Brief and Guzzo (1996) defined the concept of organizational climate as "employees' perceptions of events, practices, and procedures as well as their perceptions of behaviors that are rewarded, supported, and expected" (p. 705).

There is never an easy way to truly define the culture and climate of an organization without an in-depth analysis of the artifacts, espoused values, and basic underlying assumptions of the organization. Artifacts are the visible organizational structures and processes, which include the manners of address, emotional displays, myths and stories about the organization, observable rituals, and ceremonies (Schein, 1992). Espoused values are the strategies, goals, and philosophies. And, Basic Underlying Assumptions are the unconscious, taken-for-granted beliefs, perceptions, thoughts, and feelings (Schein, 1992). According to Taguiri and Litwin (1968) climate is "the relatively enduring quality of the total environment that (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of the values of a particular set of characteristics or attributes of the organization" (p. 25).

An initial challenge for the WTU Triad of Leadership will be to create an organizational culture and climate that is conducive to the rehabilitation and healing of wounded warriors. According to Griffin and Mathieu (1997), the actions and perceptions of individuals within an organization can influence the actions and perceptions of other individuals within the organization. Indeed, the WTU Triad of Leadership is at the edge of a slippery slope, but they will be required to find a way to carefully navigate through a culture and climate that has been defined by many as dysfunctional. In the military, climate refers to the environment of units and organizations, primarily shaped by organizational and direct leaders (Army Leadership, 2006). An organization such as the WTU will require changes that focus beyond the institutional culture and climate of the Army. To some extent, urgency exists and open discussion of the Army's institutionalized culture and climate, and its implications for WTUs has begun. The WTU's organizational culture and climate is different—different in the sense that each service member arrives with a different injury; some injuries are more serious than others. Wounded warriors also arrive with their own beliefs, perceptions, thoughts, and feelings. As a result, many of the wounded warriors experience difficulty in adjusting to the environment. Due to the difficulty and added frustration, some wounded warriors have taken drastic measures to ease the pain and hurt of being unable to perform their military occupational specialty as a result of their injuries.

Another challenge for the WTU Triad of Leadership will be in their ability to gain the trust of the wounded warriors. Trust among organizational members increases the likelihood of successful change. That is, trust increases the likelihood that people will abandon past practices in favor of new approaches (Shaw, 1997). Leadership plays a pivotal role in the overall health, welfare and morale of the wounded warriors. John Sculley stated:

> Leadership is often confused with other things, specifically management. But management requires an entirely different set of skills. As I see it, leadership revolves around vision, ideas, direction, and has more to do with inspiring people as to direction and goals than with day-to-day implementation….One can't lead

> unless he can leverage more than his own capabilities…You have to be capable of inspiring other people to do things without actually sitting on top of them with a checklist—which is management, not leadership. (as cited in Bennis, 2009, p. 132)

Shaw (1997) also stated:

> People within the organization need to feel that they are more than a means to an end. Without demonstrated concern on the part of leadership, people may believe that leadership cares only about the profit and will do whatever is required to make its quarterly targets. (p. 112)

In the Army, strategic leaders are important catalysts for change and formation (Army Leadership, 2006). The Army's transformation is more flexible, more rapidly deployable, and more lethal unit configurations. It is a complex undertaking that will require continuous adjustments to shifting political, budgetary, and technical realities (Army Leadership, 2006). Because the WTU is seen as a special needs military organization, a leadership style that not only respects the capabilities and requirements of WTU employees, but most importantly the stakeholders—wounded warriors will need to be adopted in order to ensure quality improvement and organizational change initiatives are successfully planned and implemented. Organizations that fail to adapt their institutionalized culture or strategic plan rapidly enough will not be effective in their new environment (Sullivan, 1995).

QUALITY IMPROVEMENT AND ORGANIZATIONAL CHANGE INITITATIVES

Quality improvement is "an organized approach to planning and implementing continuous improvement in performance; it emphasizes continuous examination and improvement or work processes by teams of organizational members trained in basic statistical techniques and problem solving" (Alexander, Weiner, Shortell, Becker, and Baker, 2006, p. 11). Although quality improvement is an organized approach, it takes the voice of leadership to make change happen.

Leading by example, through voice, and inspiring others through trust and empathy, does more than get people on your side. It can change the climate as to allow people room to develop and do what is right (Bennis, 2009). In fact, leaders and organizational members should not view change as the enemy—instead; it should be viewed as the source of both personal growth and organizational salvation (Bennis, 2009). Change is inevitable, especially in military organizations. Change within the military dates as far back to the Post-cold War Era and Vietnam Era. However, "instituting change in military organizations is both difficult and potentially very important; it is important because given the nature of war itself, military organizations must adapt to remain effective in a dynamic environment" (Nielsen, 2010, p. 4). The United States Army has been a part of America since 1775 and the military force today is being employed in social, political, and technological environments that are significantly different and diverse from the environments that dominated our thinking during the Cold war

(Sullivan, 1995). Although many changes have taken place within big Army, many of those changes cannot be effectively applied to the WTU phenomenon. The ability of an organization o change from a traditional organization to a learning organization will require change in the way people, and especially leaders think strategically and collectively (Gerras, 2002)—which will be important to ensuring wounded warriors are able to successfully rehabilitate and transition.

The WTU have implemented various supporting systems and procedures to assist in the quality improvement and organizational change initiatives. One such initiative is the hosting of quarterly town hall meetings, which serves the purpose of allowing wounded warriors and their families to voice their concerns about the quality of medical care and administrative services rendered. Other systems and procedures such as the Ombudsman allows wounded warriors to also voice their medical concerns, and the implementation of weekly risk assessments and Comprehensive Transition Plans (CTPs) are being used to track and monitor the progress of wounded warriors. All these supporting systems and procedures have been established in an effort to improve the quality of life for wounded warriors and their families.

Although there are various systems and procedures in place, the systems and procedures have not proven to be successful or beneficial. Whelan-Berry, Gordon and Hinings (2003) stated:

> Organizations continue to change in response to major shifts in the environmental and as a result of internal, planned efforts to achieve greater profitability, quality, and effectiveness. Yet many organizational change efforts fail or do not fully meet stated goals or objectives (Kotter, 1996) resulting in a variety of negative outcomes, including sunk costs, organizational ineffectiveness, customer dissatisfaction, low morale, high turnover, and wasted resources. (p. 187)

Wounded warriors' beliefs and perceptions about the WTU program has resulted in these systems and procedures not being taken seriously. Take the area of the CTPs self-assessments. Wounded warriors are required to complete self-assessments on a weekly basis as a means to keep their Triad of Leadership and Triad of Care informed of their medical status as well as any concerns/issues they may be experiencing. This self-assessment, along with the weekly visits with a nurse case manager, will need to be updated, if not completely revised. When cumbersome, wounded warriors are not correctly completing or failing to answer the questions on the self-assessments for fear of being questioned later as to why they answered a question in a certain way. Recently, a wounded warrior stated "these self-assessments they have us do; I have to lie on my self-assessment every single time it comes out. These self-assessments are garbage because every week you have to answer the thing just right or the chain of command will come blowing up your phone; every level of the chain of command will be calling you saying why did you answer this question this way?" (Anonymous, Personal Communication, August 20, 2012). As such, something should be in place to provide wounded warriors with the assurance that they will not be berated regarding any information annotated in their self-assessments. When leadership partner with the nurse case managers and the wounded warriors to improve the weekly self-assessment processes, everyone will be pleased.

Additional quality improvement and organizational change initiatives are needed in order to enhance the WTUs' operational performance as well as improve the overall morale, welfare and health of wounded warriors. Compounding these concerns/issues is the belief that the WTU is not seen as a productive organization, especially for wounded warriors who have been wounded, ill, or injured in the current wars or while serving.

THEORETICAL BASIS FOR QUALITY IMPROVEMENT AND CHANGE INITIATIVES

According to Hill (as cited in Chong, Ooi, Chong & Tan, 2009), Total Quality Management (TQM) is a management philosophy which focuses on continuous business improvement through company-wide employee participation and involvement with the fundamental objective of satisfying customers. Based on research, a quality improvement and change initiatives method such as the Deming cycle can be used for continuous business improvement and the overall concept of reviving performance excellence in organizations. This method was originally called the Shewhart cycle and was renamed the Deming cycle by the Japanese in 1950 (Evans & Lindsay, 2008). This process management framework is referred to as the Plan, Do, Study Act (PDSA) or as the Plan, Do, Check, Act (PDCA), which was later changed to reflect the former in 1990. The Deming cycle serves as a catalyst for the practice of scientific management in an organization. Scientific management is a term that refers to management that plans, makes decisions and acts from data instead of emotions and gut feelings (Bushell, 1992). It consists of the following four stages:

> *Plan*— this stage consists of studying the current situation and describing the process: its inputs, outputs, customers, and suppliers; understanding customer expectations; gather data; identifying problems; testing theories of cause; and developing solutions and action plans. *Do*—the plan is implemented on a trial basis. *Study*—this stage determines whether the trial plan is working correctly by evaluating the results, recording the learning, and determining whether any further issues or opportunities need to be address. *Act*—at this stage, the improvements become standardized and the final plan is implemented as a "current best practice" and communicated throughout the organization. (Evans & Lindsay, 2008, p. 333)

To demonstrate how the Deming cycle can be applied in the WTU, a decision can be made to do something about the process currently being used to schedule appointments for wounded warriors to meet with their primary care managers or physicians. Recently, a wounded warrior stated:

> It takes too long to see the primary care manager or physician because there is only one primary care manager or physician for 100 plus wounded warriors per company and there are five companies. It could take weeks if not longer to get an

appointment to see a specialty doctor. (Anonymous, Personal Communication, September 4, 2012)

To measure the improvement from any changes made can only be done through the collection of data as it relates to the actual number of days it takes before wounded warriors are scheduled for an appointment by their nurse case managers to see primary care managers or physicians.

In the Plan stage, a few of the changes implemented can be tested. Let's say the following changes have been decided upon:

1. Provide a way for wounded warriors to see their primary care managers or physicians immediately (hire additional primary care managers or physicians for each company on a one year contract).
2. Devote an individual to track the number of days that have passed for wounded warriors to see primary care managers or physicians once the appointments have been made by nurse case managers.

Both the number of wounded warriors seen by primary care managers or physicians on a daily basis as well as the length of time it takes to see primary care managers or physicians can be measured every month or quarterly.

In the Do phase, observation of the two measures for six months or longer if necessary will take place. In the study phase, improvements should be detected such as wounded warriors being able to see their primary care managers or physicians in a timely manner and the length of time to see primary care managers or physicians reduced tremendously. In the Act phase, a meeting will be held to discuss the results and decide whether to hire the additional primary care managers or physicians on a permanent basis.

IMPLEMENTING QUALITY IMPROVEMENT AND ORGANIZATIONAL CHANGE INITIATIVES

Improving the quality of processes and maintaining acceptable levels of performance quality are critical factors in the success of any organization (Gershon, 2010). Following and building upon the comments made in many popular press articles as well as personal communication comments regarding the quality of care wounded warriors are being rendered, many have suggested that a more understanding leadership is needed to fully guide the rehabilitation and transition process. This will mean forging partnerships with everyone that can help the organization take advantage of the opportunities for wounded warriors to successfully rehabilitate and seamlessly transition. Further, it will be reasonable to conclude the Deming cycle can be used as a process management framework to successfully plan and implement additional quality improvement and organizational change initiatives in the WTU. To successfully implement this method, the following resources will be needed: (1) a total of five teams with an adequate number of primary care managers or physicians at each WTU to oversee the quality of medical care rendered to wounded warriors and (2) an increase in the current budget to improve the overall quality of life for wounded warriors. In addition, the following pillars will also need to be analyzed as they serve as the foundation to the successful implementation of the Deming cycle.

Customers

The customer is the principal judge of quality. To meet or exceed customer expectations, organizations must fully understand all product and service attributes that contribute to customer value and lead to satisfaction and loyalty (Evans & Lindsay, 2008). The wounded warriors assigned or attached to the WTU are the customers. However, some wounded warriors have shared their experiences with outside entities stating that the WTU phenomenon only looks good on paper but in actuality, it causes more harm than help. Maurer (2009) stated "Instead of gingerly nursing them back to health, commanders at Fort Bragg's transition unit readily acknowledge holding them to the same standards as able-bodied soldiers in combat units, often assigning chores as punishment for minor infractions" (p. 1). Barnes (2012) stated "They say that some soldiers in the programs have developed suicidal tendencies because medications are routinely overprescribed. They also stated that many soldiers aren't getting the rehabilitative treatment they need. Instead, they say some are wrongly being kicked out of the Army with other-than-honorable discharges" (p. 2). According to a most recent inspection at the Fort Drum's WTU, the Inspector General's Office found the following:

> There were multiple factors that contributed to the overall negative command climate within the WTB. Those factors included inadequate communication within the unit; poor treatment of soldiers by WTB staff; the stigma of the WTB being a dumping ground; and warrior attitudes toward the WTB.
>
> While the battalion's leadership said it had conducted a deliberate and thorough process of selecting squad leaders, "we observed and were told that many of the selected leaders exhibited leadership qualities suited for an infantry unit, and that the type of leadership focus did not work effectively with the unique populations of warriors."
>
> "Staff training was deficient. Some squad leaders indicated they had only two weeks training when they arrived at the battalion, while others took only an online course. Staff members agreed that more training was needed to care for a large number of soldiers suffering from post-traumatic stress disorder or traumatic brain injury." (Barnes, 2012, p. 3)

Based on the report findings, the following five principal dimensions are not being met within the WTUs:

> *Reliability*—the ability to provide what was promised, dependably and accurately. *Assurance*—the knowledge and courtesy of employees and their ability to convey trust and confidence. *Tangible*—the physical facilities and equipment and the appearance of personnel. *Empathy*—the degree of caring and individual attention provided to customers. *Responsiveness*—the willingness to help customers and provide prompt service. (Evans & Lindsay, 2008, p. 199)

The wounded warriors assigned or attached are the customers and a relationship will need to be established between them, the Triad of Leadership and Triad of Care. Efforts must be made to bring these five dimensions up to standards, not only for the sake of the organization, but for the sake of the wounded warriors if the goal is to ensure they are productive citizens after transitioning from the military. Deming (1986) and Taguchi (1986) argue that continuous improvement depends on managements and employees better meeting customers' expectations and systematically reducing variability in doing so (as cited in Langbert & Friedman, 2002). Failure to establish a relationship will result in continued customer dissatisfaction and resistance during the implementation of any quality improvement and organizational change initiatives.

Leadership

Strategic leadership is "a person's ability to anticipate, envision, maintain flexibility, think strategically, and work with others to initiate changes that will create a viable future for the organization" (Evans & Lindsay, 2008, p. 157). Kouzes and Posner (2007) stated:

> Constituents look for leaders who demonstrate an enthusiastic and genuine belief in the capacity of others, who strengthen people's will, who supply the means to achieve, and who express optimism for the future. Constituents want leaders who remain passionate despite obstacles and setbacks. (p. 349)

A vision of the future will need to be created and communicated, an effective culture sustained, strategic decisions made, key competencies and responsibilities developed, multiple constituencies managed, the next generation of leaders selected and developed, and ethical values systems infused (Evans & Lindsay, 2008)—into the Warrior Transition Unit (WTU) organizational culture and climate. The Triad of Leadership and Triad of Care will also be required to place themselves in the shoes of the wounded warriors in order to implement quality improvement and organizational change initiatives that will not only create a win-win situation for the wounded warriors, but also for the WTU. Revised processes will allow the right employees for the job to be hired as well as the right service members selected to assist wounded warriors in their rehabilitation and transition. Failure to hire the right personnel to manage as well as monitor the progress of wounded warriors will definitely affect the wounded warriors' ability to rehabilitate and transition. It will also affect the overall successful implementation of additional quality improvement and organizational change initiatives.

Human Resource Management (HRM)

HRM consists of those activities designed to provide for and coordinate the people of an organization. Human resource professionals will be required to foster competence and commitment among employees, develop the capabilities that allow managers to execute on strategy, help build relationships with customers, and create confidence among investors in the future value of the organization (Evans & Lindsay, 2008). The right personnel must be selected and hired to assist in the rendering of quality services to the wounded warriors. A review and analysis of all the WTU's operational goals and strategies will need to be done in order to determine if adequate resources exist to meet the vision, goal, and intent set forth. The review and analysis of resources will identify shortcomings in the areas of training, selection, and the levels at which personnel are involved in providing quality services to wounded warriors. Any shortcomings identified in the area of training will immediately allow the Triad of Leadership to focus on the resources needed to align training requirements with the overall vision, goal, and intent of the organization. It will be through the most effective training that personnel selected to assist wounded warriors will add value to the goal of ensuring wounded warriors are able to successfully rehabilitate and seamlessly transition from the military to civilian life.

Process Management

Process management involves planning and administering the activities necessary to achieve a high level of performance in key business processes, and identifying opportunities for improving quality and operational performance, and ultimately, customer satisfaction (Evans & Lindsay, 2008). Management by process implies orienting all the activities and efforts towards common tasks, which must be reached by closely integrating and coordinating all the activities (Psomas, Fotopoulos, & Kafetzopoulos, 2011). Process management consists of the following:

> *Design*—focuses on ensuring that the inputs to the process, such as materials, technology, work methods, and people are adequate, and that the process steps are well-defined, mistake-proofed, sequenced properly, leans, and understood for consistent and effective execution. *Control*—focuses on assessing whether the process performed as planned and the process output is on target. *Improvement*—focuses on continually seeking to achieve higher levels of performance in the process, such as reduced variation, higher yields, fewer defects and errors and so on. (Evans & Lindsay, 2008, p. 311)

Accountability is a must in terms of the success or failure of the implementation of quality improvement and organizational change initiatives. If accountability does not exist, then the vision, goal, and intent of the organization will suffer. It will take a team to ensure all quality improvement and change initiatives are successfully implemented.

Systems/Statistical Thinking

Statistical thinking is a philosophy of learning and action based on the following fundamental principles: (1) all work occurs in a system of interconnected processes; (2) variation exists in all processes; and (3) understanding and reducing variation are keys to success (Britz, Emerling, Hare, Hoerl & Shade, 1997). Statistical thinking will be required in order to identify the most serious concerns/issues within the WTU. Although statistical thinking will prove beneficial, it will not be effective until the organization's vision, goal, and intent are realigned. To do so, key issues within the WTU will need to be identified. Some of those key issues are the true purpose of the organization, the amount of time spent administering disciplinary actions to wounded warriors who miss medical appointments, and the amount of healing time needed for wounded warriors as to prevent premature Return To Duty (RTD) or separations. Afterwards, a sense of urgency will need to be made in order to understand the perceived experiences, satisfaction levels, and needs of wounded warriors. As the number of wounded warriors continues to increase, the Army will continue to be judged on how they care for the nations' wounded, ill, or injured. The public will be looking for a more efficient, continuously improving WTU, especially in terms of the quality of medical care and administrative services being rendered. As such, a measurement system can be used to assess whether wounded warriors assigned or attached to the WTUs are satisfied with the quality of medical care and administrative services rendered.

Strategic Measurement

Measurement of engagement and satisfaction are useful to determine the effectiveness of work systems in contributing to an organization's strategic objectives and also to provide a foundation for improvement (Evans & Lindsay, 2008). According to Hammer (2007), there is a widespread consensus that many organizations measure too much or too little, or the wrong things, and they don't use their metrics effectively due to the following reasons:

> *Vanity*—use measures that will inevitably make the organization, its people and especially its managers look good. *Provincialism*—allowing organization boundaries and concerns dictate performance metrics. *Narcissism*—the offense of measuring from ones' own point of view, rather than from the customer's perspective. *Laziness*—assuming one knows what is important to measure without giving it adequate thought or effort. *Pettiness*—measuring only a small component of what really matters. *Inanity*—implement metrics without giving any thought to the consequences of these metrics on human behavior and ultimately on enterprise performance. *Frivolity*—not being serious about the measurement in the first place. (pp. 20-23)

Sustained Deployment

In an effort to ensure a commitment to the sustained implementation of quality improvement and organizational change initiatives in the WTU, emphasis will be placed on areas such as communication, medical care, and administrative services that have been of great concern for many of the wounded warriors and their families. In short, wounded warriors and their families will expect implementation of quality improvements and organizational change initiatives that will make the WTU operate "faster and better" and will hold the Triad of Leadership and Triad of Care accountable for their quality management methods and results.

Thus, the challenge is present for the Army to effectively include the seven pillars in any quality improvement and organizational change initiatives in order to meet the needs of both the wounded warriors and the organization. In an effort to ensure the needs of both entities are met, an implementation schedule will need to be devised in order to track the progress of milestones developed after change initiatives implementation.

Throughout the implementation of quality improvement and organizational change initiatives, various milestones will be outlined to convey the idea that progress will or has been made. However, the journey to this end will be long term and not short lived. The milestones will confer to the wounded warriors and their families that a sound base of operational performance exists within the organization. Based on the activities outlined in the schedule, performance goals will need to be measured and met, compare the performance goals to other WTUs, and make the necessary changes based on the feedback received from both the wounded warriors and other WTU personnel on performance measurements. Each milestone accomplished will be an important marker in the WTU's quest to successfully implement quality improvement and organizational change initiatives. All milestones will need to be described based on the following: (a) how the milestone will help or has helped the wounded warriors, (b) identify components that have already been completed and/or considered ongoing, (c) identify components that will need to be implemented, (d) outline additional strategies and/or methods needed in order to achieve milestones, and (e) identify methods for measuring performance after all milestones have been achieved.

The following are milestones that can assist the Triad of Leadership and Triad of Care in conveying to others the progress of quality improvement and organizational change initiatives.

Milestone 1: Selection Process and Training. This milestone will provide details on the selection process used to hire and/or select personnel to assist in the rehabilitation and transition of wounded warriors. This milestone is very important for the WTU in terms of how the selection process will be revamped to hire the right personnel to be a part of the team responsible for managing and providing quality medical care and administrative services to wounded warriors. This milestone will also describe the resources needed to sustain the Triad of Leadership and measure its effectiveness.

Milestone 2: WTU's Systems. This milestone will outline the expected growth, current financial and HR resources, which support the WTU's provision of quality medical care and administrative services rendered to wounded warriors and their families. This milestone will also provide an overview as to how the Triad of Leadership is replaced, but will only assess the Triad of Care based on contractual terms.

Milestone 3: System Management Structures. This milestone will examine the leadership and administrative structures within the WTU. These structures include the squad leaders and platoon sergeants who work to ensure wounded warriors are taken care of. This milestone will also address the efficiency of communication in regards to wounded warriors being kept informed of any concerns addressed in a timely manner.

Milestone 4: WTU Trend Data Analysis. This milestone will review the WTU's efforts in developing indicators to show progress in the areas of quality medical care and administrative services rendered. Other entities will need to contribute to the development of trend indicators that will reflect the direction of discussion and/or concerns from wounded warriors as it relates to the quality of medical care and administrative services.

Milestone 5: WTU Quality Improvement Committees. This milestone will describe the Standard Operating Procedure (SOP) for the quality improvement committee. The committee will be responsible for using the data obtained from the above milestones to guide the implementation of quality improvement and organizational change initiatives.

Although the above milestones have been outlined, the appropriate actions will need to be taken in order to implement measurements to track the effectiveness of the quality improvement and organizational change initiatives. Based on the current state of the WTU as outlined in previous sections in this paper, it will also be feasible to use the Baldrige Criteria, which was established by DA as the primary guide to assess quality.

ASSESSING QUALITY IMPROVEMENT AND ORGANIZATIONAL CHANGE INITIATIVES

For an organization to perform effectively, its business strategy must be aligned with its environment, its organizational capabilities with its strategy, its organizational design and culture with its capabilities, and its leadership behavior with its organization design. The alignment and synergy of these elements is crucial for organizational success. An organization may have the 'right' strategy (content) but without the appropriate organizational structure and capabilities in place, will not be able to implement its strategy successfully (Beer, Voelpel, Leibold, & Tekie, 2005). According to Evans and Lindsay (2008), organizations need good measures for three reasons: (1) to lead the entire organization in a particular direction; that is, to drive strategies and organizational change, (2) to manage the resources needed to travel in the direction by evaluating the effectiveness of action plans, and (3) to operate the processes that make the organization work and continuously improve.

In an effort to track the effectiveness of the quality improvement and organizational change initiatives in the WTU, the Baldrige Criteria can be applied. The Baldrige criteria consist of the following seven categories:

> *Leadership*—this category examines how an organization's senior leaders personal actions guide and sustain the organization. *Strategic Planning*—this category examines how an organization develops strategic objectives and action plans. *Customer Focus*—this category examines how an organization engages its customers for long-term marketplace success and builds a customer-focused culture. *Measurement, Analysis, and Knowledge Management*—this category examines how an organization selects, gathers, analyzes, manages, and improve its data, information, and knowledge assets, and how it manages its information technology. *Workforce Focus*—this category examines how an organization engages, manages, and develops its workforce to utilize its full potential in

> alignment with the organization's overall mission, strategy, and action plans. *Process Management*—this category examines how an organization designs its work systems, and how it designs, manages, and improves its key processes for implementing those work systems to deliver customer value and achieve organizational success and sustainability. *Results*—this category examines an organization's performance and improvement in key business areas—product outcomes, customer-focused outcomes, financial and market outcomes, workforce-focused outcomes, process-effectiveness outcomes, and leadership outcomes. ("Total Army Quality," 2002, pp. 3-5)

Although necessary steps are needed to assess and track the effectiveness of the quality improvement and organizational change initiatives in the WTU, potential adverse consequences and risks associated with the quality improvement and organizational change initiatives will also need to be identified.

ADVERSE CONSEQUENCES AND RISK MANAGEMENT

Risk is often associated with the chance of something happening, which often results in the probability of a potential disaster. When organizations implement quality improvement and organizational change initiatives, the necessary steps will need to be taken to identify the potential risks associated with the implementation. As such, the following six risks have been identified as having the greatest impact on the WTU's quality improvement and organizational change initiatives: (1) personnel selected and/or hired may not be a good fit for the organization, (2) insufficient training being administered at the WTU's required two week training course; thus resulting in a misalignment between what is being taught and the end state—WTU personnel performance and attitude, (3) the expected increase in the number of wounded warriors could lead to suboptimal medical care and administrative services (e.g., too many wounded warriors and not enough medical and administrative personnel to provide quality medical care and administrative services), (4) difficulty with the implementation of a quality review committee, (5) communication failure (e.g., wounded warriors being misinformed on events taking place within the WTU, and (6) the risk of some wounded warriors being returned to duty (RTD) or separated prematurely from the military.

The risks above are only a few of the potential risks that could serve as challenges during the implementation of quality improvement and organizational change initiatives. Therefore, every attempt must be made to prevent the potential risks from occurring through the design of a risk reduction plan. The risk reduction plan can be designed to provide details on a mitigation and contingency plan to reduce the exposure of potential risks.

CONCLUSION

Quality improvement and organizational change initiatives can be used as a systematic approach to improve the WTU's operational performance and performance excellence. On the basis of this paper, it is apparent that the WTU organizational culture and climate warrants the implementation of such initiatives. As with any quality improvement and organizational change initiatives, customer satisfaction is the key. The ability of leaders to generate creativity in the implementation phase will depend on the involvement of the wounded warriors assigned or attached to the organization. The information outlined in this paper definitely has implications for future research as it relates to quality improvement and organizational change initiatives to better enhance the overall quality of medical care and administrative services rendered to the nations' wounded, ill, or injured while assigned or attached to WTUs.

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SUSTAINING WORK SCHEDULES: BALANCING LEISURE AND WORK

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ABSTRACT

Employees are increasingly working more to keep up with their peers, promotions, and job commitments. The increase in hours worked has slowly increased over the last four decades. The Bureau of Labor Statistics (2012) reports that the number of hours per week spent at work has risen from an average of 40.6 hours in 1973 to a current 47.2 hours, a 15% rise in the work week. This increase is believed to attributable to the move from a producer to a service economy, as the numbers of salaried professional and executive types have grown. With increased hours worked, there is a decrease in hours for leisure down to 16.5 hours a week, after job and household commitments have been accomplished. Time is a most valuable commodity as more families include two working adults, either through economic need or the increased desire of women to work. This paper analyzes the trends in working schedules and their impact on organizations and their employees.

INTRODUCTION

The quest to balance leisure and work, including how to do it and maintain standards of excellence continues to be a topic of interest. With changing lifestyles and work commitments associated with current economic factors, people seem to have forgotten the idea of leisure as part of their day-to-day schedules. Today people may seem to think that they are fortunate to have jobs in this economic situation, and this may make them work longer hours and forget leisure time. Leisure time is important for the human body because it re-energizes both the body and the mind. According to the 2010 American Time Use for Leisure Market Research Handbook survey, individuals aged 15 and over engaged in some sort of leisure activity, such as watching TV, socializing, or exercising. The survey reported that men spent 5.8 hours whereas women spend 5.1 hours a day in leisure activities (Bureau of Labor Statistics, 2012). Leisure is defined as, "non-work that nourishes the health, happiness, and fulfillment of the whole human person. It is time and activity that is not driven by duty, accomplishment, or productivity, time and activity that celebrate being human rather than having and consuming material things" (Stockhausen, 1998 as cited in O'Boyle, 2011, pg. 12). This includes quality time with family and friends, and doing things you love to do. The concept of commitment has been introduced to the leisure literature (Haworth, 1984). Social scientists believe that solutions to major employment-related problems can be found in the leisure sphere (Shamir, 1988). It is also noted that leisure quests have the potential to provide status recognition, self-development, and opportunities presented at the workplace (Shepard, 1974). Commitment and leisure are considered important components of employees' jobs because commitment denotes obligation, duty, restriction, and routine whereas leisure includes elements like freedom, individuality, spontaneity, variety, and pleasure (Shamir, 1988). The concepts of commitment and leisure contradict each other. Therefore, any application of the commitment concept to the leisure sphere requires careful attention to its implications.

Consumption is a part of total economic activity which involves production to distribution of goods and services in the organization (Goodwin, Nelson, Ackerman, and Weisskopf, 2008). The dilemma is that leisure time and work are not mutually exclusive. Rather, they are inter-dependent. In fact, individuals achieve their wants and needs through consumption, work, and leisure.

WORK IS LEISURE AND LEISURE IS WORK

Work-leisure conflicts exist because of the intense competition in organizations which has led "to more demand and complex roles of knowledge workers" (Zhao & Rashid, 2010, p. 25). Various scholars such as: Li & Shani (1991); Ford , Heinen & Langkamer (2007), Slatery, Selvarajan & Anderson (2009) pointed out that work- leisure conflict is a significant factor in determining the employee's decision to continue working in their existing organization or to leave an organization. Further, Zhao & Rashid (2010) noted that work-leisure conflict is a result of improper allocations of employee workloads. They also suggested that "Organizations should tackle role ambiguity with highest priority and relieve work-leisure conflict to effectively retain employees under job stress" (Zhao & Rashid, 2010, p. 25).

Tait, Padgett & Baldwin (1989) discussed what they consider to be a most accurate means of characterizing the relationship between work and non-work satisfaction. The basis of it lies in the spillover model which states that "the nature of one's work experiences will carry over in to the non- work domain and affect attitudes and behaviors there (Willensky, 1960 as cited in Snir & Harpaz, 2002, p. 3). According to Personalist economists view, economic activities like consumption, work and leisure are inter-dependent and intertwined with one another because employees achieve their objectives and needs through these three activities (O'Boyle, 2011). First, these three activities—consumption, work, and leisure—are the means to achieve ends. The ends could be in the form of needs and wants which are derived from human beings' respective motivations to work. Such motives and needs prompt people to take an action, e.g., work to achieve individual goals. These needs could be to achieve (1) basic physiological needs such as food, clothing and shelter; (2) safety needs such as protection and security; (3) social needs such as from work groups, relationships, networking, belongingness, family, and social groups; (4) esteem needs such as to maintain status quo, responsibility, reputation, and achievement; and (5) self-actualization needs such as the need to achieve personal and professional growth and fulfillment (Maslow, 1948; Maslow, 1954; Robbins & Judge, 2012). Second, these three inter-dependent activities are performed by individuals or employees based on their respective capabilities and limits or levels of energy which are exclusive to every employee and individual based on their needs and wants. Third, these elements of economic activities—consumption, work, and leisure—can be explained differently in theory but, at the workplace, they are mutually dependent on each other. They are inextricably intertwined with other aspects of life (Watkins & Subich, 1995). For example, the working lunch combines work and consumption. The three-day holiday weekend includes leisure and consumption. Working after hours at home and at the same time watching a professional tennis match includes working and re-energizing for the work. The working vacation, presenting at the conferences, networking with people and enjoying in the evenings with colleagues, friends, and family brings consumption, work and leisure all three together (O'Boyle, 2011). However, we human beings get so involved and passionate about fulfilling our needs that we forget the concept of leisure that is so important for our body and mind to do something other than work to rejuvenate which makes us better for performance at work. Leisure-oriented employees' work motivation and organizational-commitment can be increased by matching their needs such as extended vacation time and subsidized recreation (Snir & Harpaz, 2002). An important complaint among workers was the lack of leisure time in the nineteenth century, and this is further elucidated in the next section.

HISTORICAL PERSPECTIVE

In 1780, the first documented strike to reduce the workday down to ten-hours had proven to be a struggle for the male artisans and craftsmen. The groups were granted the request, but it was not until 1845 that women petitioned for a similar reduction. Women were working from thirteen to fourteen hours per day and confined in unhealthy conditions. Unfortunately, it wasn't until after the Civil War when women were granted a ten-hour work day. In the nineteenth century, it is estimated that the average hours worked per year by people was 3,000, which equates to a 60-hour workweek. The most frequent worker complaint was the lack of leisure time (Commons, 1966). It was suggested that employees need more time for family and cultural activities, and this supported the move to an eight-hour day by President Woodrow Wilson and Henry Ford (Commons, 1966).

Business leaders were not happy with the decreased work hours. They translated the shorter hours to decreased profits, slower productivity, and threat to prosperity (Hunnicutt, 1990). Women in factories were considered as lazy and those who demanded reduced schedules were criticized as inefficient workers. This is old era thinking, but it still exists to this day. Hunnicutt (1990) translated this protest into the realization that common people had to be kept at their desks and machines, lest they rise against their "betters." The common people won the battle, and prior to the 1930's, the standard became a thirty-hour week. The premise behind the thirty-hour work week was to increase employment and put more people back to work. Employers were supposed to hire back the workers they had laid off, thus covering the 25% loss from the forty-to thirty-hour work week. However, businesses were intensely opposed to the legislation which supported 30-hour work weeks in order to hire more workers by reducing the weekly work hours. There was eventually a gradual decrease in unions and groups protesting the reduction of hours worked to the extent that by 1970 the requests halted (Nyland, 1988). Tait, Padgett & Baldwin (1989) suggested what they believe to be the most accurate means of characterizing the relationship between work and non-work satisfaction. The basis of it lies in the spillover model which states that "the nature of one's work experiences will carry over into the non-work domain and affect attitudes and behaviors there (Willensky, 1960 as cited in Snir & Harpaz, 2002, p. 3). The quest to balance leisure and work has long since been a topic of interest, but with changing lifestyles and work commitments associated economic factors Americans seem to have forgotten the idea of leisure as part of their day-to-day schedules.

COMPARISONS INTERNATIONALLY

Developed countries have a culture of working long hours and, as a result, leaving a bigger footprint on the environment. Sustainable cultures and economies are more appealing as the economic downturn has caused many to rethink their way of life and adjust their budgets for a slower and more humane pace of life. Studies have proven that an adjustment in our lifestyle can bring social benefits to family, community and individual well-being (Schor, 1991).

When we compare the average work hours from the OECD (Organization of Economic Co-operation and Development and Labor Market Statistics (2011) to explain differences in hours worked among OECD countries over the years, annual hours worked for Korea has dropped from 2424 hours in 2003 to 2193 working hours in 2011 or a decline of 9.5% in 8 years. This decline in hours worked is due to the overall decrease in the working hours in the countries in an attempt to follow the standard 40-hour work week. Japan is part of group of OECD countries that had a significant decline in work hours over the past decades. Annual work hours for Japan have dropped at least 15% since 1970, and it dropped below that of the US at the end of 2011. This large decline in work hours is due to several things, including the amendment of Japan's work week regulations in the late 1980s, the prolonged recession in the 1990s (Japan's lost decade) and the recent earthquake in Japan (Kuroda, 2010; Otsuma & Shimodoi, 2012)

Compared to people in United States, West Europeans have a very different outlook on productivity and wealth. People in Western Europe have longer vacations, holidays off, and daily work schedules that allow for more time with family, leisure activities and community involvement. Europeans have low working hours compared to Unites States because their preference for free time over income (Blanchard, 2004). These types of lifestyles have less of a negative footprint on the planet because as studies have shown, as hours worked rise, so does the negative environmental impact. Rosnick and Weisbrot (2006) argue that if Americans chose to take advantage of higher levels of productivity by shortening the workweek or taking longer vacations, there would be many benefits, including the following: direct quote? P. no. needed?

1. Employed workers would find themselves with seven additional weeks of time off.
2. The United States would consume about 20 percent less energy.
3. If a 20 percent energy savings had been directly translated into lower carbon emissions, the U.S. would have emitted three percent less carbon dioxide in 2002 than it did in 1990.

In Germany, it was found that there is decrease in work centrality and an increase in leisure importance. Employees who have high intrinsic motivation levels value leisure behaviors and ensure to have leisure time in their everyday lives (Weissinger & Bandalos, 1995). According to Artus, Cahuc & Zylberberg (2007), "French employees work less than North-American colleagues, (and the) reduction is reflected in their average income" (p. 336). A survey conducted by the University of Texas at Dallas found that, "American who work longer hours are slightly happier than those who work shorter hours, and Europeans are happier if they work less and have more leisure time" (Weisul, 2011, p.8). Therefore, the study implies that at least some Americans are satisfied with working long days.

IMPACT OF LONGER WORKING HOURS ON LIFESTYLES

As people work longer hours they tend to make lifestyle choices that require more energy resources. For example, they tend to eat out more and have larger houses, both of which require more carbon burning and resources. They seem to be 'time-stressed' which prevents them from doing more eco-friendly projects, or being involved in do-it-yourself projects at home. Also, people who work longer hours are more prone to physical and emotional illnesses, higher stress levels, and to be demoralized in terms of family and social connectedness. Increased hours of work also reduce the amount of time for sleep and exercise that, in turn, tends to erode one's health. According to a 1990 leisure study on the trends in America's leisure time and activities, four billion square feet of our total land area had already been converted into shopping centers, or about 16 square feet for every American man, woman and child. Shopping has become an epidemic in the American lifestyle and some would classify as a "national passion" (Schor, 1991). Increasingly, technology has made it possible to shop from home with the use of cable shopping channels, the Internet, mail-order catalogues, and wireless cell-phone applications. With this passion to shop, people are experiencing the dreaded credit card debt syndrome that now requires extra hours of work to pay off.

BUSINESS PERSPECTIVES AND STRATEGIC THINKING

It is difficult to argue that the reduced hours can increase a business's outcome, but studies suggest that it is possible. Long periods of declining hours of work, coupled with robust economic performance and profits occurred in Western Europe and the United States during a couple of periods of time (Rosnick & Weisbrot, 2006).

1. Beginning in 1970, productivity growth went to giving people more leisure time.
2. After the Industrial Revolution began the ten and eight hour workday movements and the launch of Sunday, then Saturday as a day of rest. Subsequently, the idea of the modern vacation became a household commitment and expectation (Hunnicutt, 1970).

Hunnicutt (1970) believed that shorter hours were an integral part of creating strong and profitable economies with a healthy middle class. However, today's high-energy, stressful work environments revolve around the competitive advantage over peers and competitors, and business leaders are more strapped to the status quo of keeping up with the competition. Over the years, many organizations facing budget cuts have opted for more humane practices by instituting company-wide cutbacks in schedules, furloughs, and other work reduction measures (Schor, 1991). According to Greenwood & Vandenbroucke (2008), leisure has increased dramatically over the last century. As a matter of fact, the average weekly hours in the private economy have fallen by nearly an hour (Bureau of Labor Statistics, 2012).

Strategic thinking is required for the strategic and tactical management of working schedules. "The goal of strategic thinking is same as the goal of organizational leadership" (Fairholm & Card, 2009, p. 7). Strategic thinking is required to analyze the schedules of employees working in the organization from the employee perspective, develop schedules based on the organization's long-term mission and vision, and formulate effective strategies. Strategic thinking fills the gaps and overcomes the limitations that organizational leaders experience with working schedules of employees because it takes into account the organizational goals and employees professional goals (Fairholm & Card, 2009). Strategic management of working schedule includes:

1. Taking an expansive look around at what's going on outside the organization and how it might affect the organization (an environmental scan) and measuring the extent and possible impact of existing or potential disruptive complexities;
2. Assessing the internal environment of the organization for the causes of existing or potential turbulence caused by working schedules;

3. Aligning the strategic management of working schedule with the organization's mission, vision, core values, and goals in order to strategically manage the existing organization environment and/or to invent the organization's future; and
4. Establishing performance excellence based on potential of the employees inside the organization.

Changing the lifestyle of employees can be difficult and at certain levels impossible. However, managers can assist in facilitating the push for fewer hours worked in the workplace and less structure in rigid 8:00-5:00 schedules by thinking strategically and tactically about various options that could increase productivity, decrease the need for office space, decrease commuting times and increase individual options for leisure time activities.

CREATING THE FUTURE

Today's workplace has tapped into this trend of virtual worlds and has developed cyber-offices. As a result of technological advancements, we have become more and more reliant on the internet. Its versatility enables us to communicate with individuals, teams, and/or large groups. It serves as a virtual community where people meet, become friends, fall in love, and extends relationships that are developed in physical communities. Because this is a relatively new concept, managers must develop new management styles and approaches to handle unique situations. To manage the work schedules and balance leisure and work, a model is suggested n a figure 1.

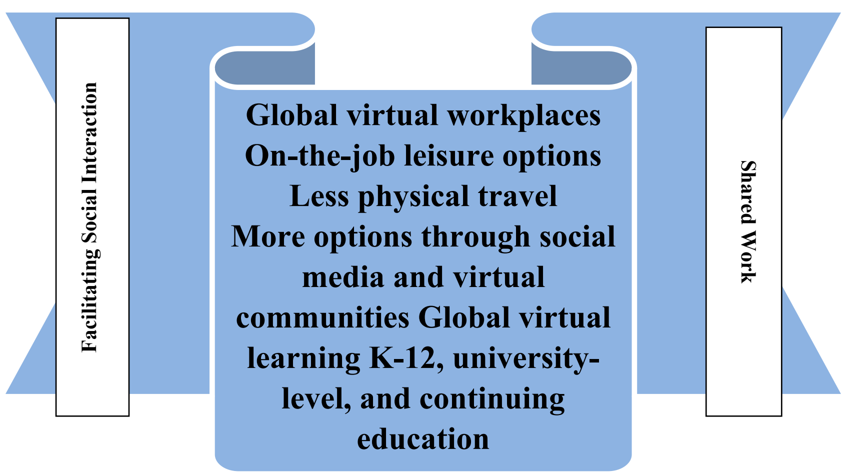

Figure 1: Work Schedules: Balance Work and Leisure

Organizational leaders need to manage the work schedules by creating the global virtual workplaces. In a same way organization leaders manage employees located in their physical offices – with an emphasis on “real space” interaction – are creating a detached version of traditional office relationships. Organizations can use different strategies to balance work and leisure:

1. Facilitating social interaction- Most socializing still takes place at the office, and very few companies create opportunities for casual on-line communication.
2. Shared work- Team projects are still carried out in conference room meetings, while employees are given more individual assignments. Organizations use different mediums such as Skype, Adobe Connect, etc. to simulate a real environment in the virtual world.

Finally, the managers must learn to effectively supervise employees, and to recognize and reward employees for their contributions. Organizations should establish clear policies stating that social interaction between employees will not be recorded or examined by senior management. It is also noted that on-line communities work best when community members are self-monitoring compared to being monitored through external agencies (Kollock, 1996). Organizations should encourage self-governance among employees. Alternatively, Challenger (2004) suggests that social programs can escape the stigma of management-sponsored social events if they are developed through a separate office, that of the “director of socialization, who will be responsible for helping workers connect with each other” (p.16). Clearly, social interaction is an important component of all work arrangements and helps in creating the balance between leisure and work.

CONCLUSION

Sustaining work schedules to balance work and leisure is at the very heart of organizational responsibilities. It follows that in order to balance work and leisure it is very important to manage the current work schedules in the organization because of the interdependence of the concept ‘work is leisure and leisure is work’.

Balancing work and leisure not only helps in managing the work schedules but it also develops a sense of belongingness at the workplace with shared aims and enhanced creative talents and energies. First, it represents what employees contribute in the accomplishment of organizational objectives, and secondly, it represents what the work itself does to the employee when they enjoy what they do. Virtually, no work can be accomplished just by working longer hours. Rather passion and enjoyment are linked to the human spirit when work and leisure are balanced. Employees, even those with good paying, challenging jobs, know the difference between a good day at work and a bad day, and the difference is often reflected in their performance and physical appearance. Organizations grow and become successful when their employees are working and sharing in the organization. This is only possible when employees balance work and leisure in order to contribute efficiently and effectively in the organization. It is important for organizational leaders to manage work schedules to balance work and leisure where employees' social faculties are appreciated and developed to increase productivity and create the future of work.

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