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The Relation of Strategic Human Resource Practices with Firm Performance: Considering the Mediating Role of Resource Based View

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Abstract: *This paper is a conceptual study exploring the relationship of strategic human resource management (SHRM) practices (those tools used to manage the human capital pool) and firm performance behaving the resource based view (RBV) approach in the firm. In this field, the mediating role of organizational culture is also taken into account (Bowen and Ostroff, 2004). However, the role of resource-based view has not received much attention. SHRM practices classification of this paper is a new development that makes it more convenient for the organizations to evaluate their practices. It elaborates that the non-financial measurements are as important as the financial ones in the process of evaluating firm performance.*

Keywords: *strategic human resource management (SHRM), resource-based view of firm, innovativeness, performance measurements, strategic human resource practices*

Introduction

What makes a firm perform in the contemporary 21st century setting? Literature coined financial factors such as turnover (Mao and Gu, 2008; Chen, Liaw and Chen, 2001), profit, market share as well as ranking in the industry. Nonetheless, with the current evolutionary focus on technology renewal and new sources of growth, there is a critical inclination of firms to view innovativeness and competitiveness as pertinent factors to measure firm performance (Lee and Lee (2007), Darroch (2005); Sawang

and Unsworth, 2006). This study aims at exploring this issue.

The authors posit that both theories of Resource-based View (RBV) and Strategic Human Resource Management (SHRM) as the twin forces that stimulate firms' innovativeness and competitiveness. The investigation of strategic human resource management has shown that SHRM is not born with resource-based view of the firm (Dunford, Snell y Wright, 2001). It has been debated that the human resource function has consistently faced a battle in justifying its position in organizations (Drucker, 1954; Stewart, 1996). Therefore, the questions whether the resource-based view in a firm will justify the importance of SHRM implementation and whether the practice of SHRM will heightened if the human resource managers rationalize the role of human capital in firm performance remain unanswered.

When discussing human capital and firm performance, the resource-based view presents an influential framework for understanding strategic management. Sustained competitive advantage derived from the resources and capabilities a firm controls that are valuable, rare, imperfectly imitable, and not substitutable. These resources and capabilities can be viewed as bundles of tangible and intangible assets, including firms' management skills, its organizational processes and routines alongside the information and knowledge it controls (Barney, 1991).

The emphasis on people as strategically important to a firm's success has contributed to the interaction and convergence of strategy and human resource management issues. Similarly, concepts such as knowledge (Argote and Ingram, 2000; Grant, 1996; Leibeskind, 1996), dynamic capability (Eisenhardt and Martin, 2000; Teece, Pisano and Schuen, 1997), learning organizations (Fiol and Lyles, 1985; Fisher and White, 2000), and leadership (Finkelstein and Hambrick, 1996; Norburn and Birley, 1988; Thomas, 1988), as sources of competitive advantage have captured attention toward the intersection of strategy and HR issues. Specifically, these models of SHRM assume that (a) different business strategies demand a different set of behaviors and attitudes from employees and (b) certain human resource policies produce a unique set of responses from employees.

Wright et al. (1994) distinguished between a firm's human resources (i.e. the human capital pool) and human resource practices (those tools used to manage the human capital pool).

With its emphasis on internal firm resources as sources of sustained competitive advantage (SCA) (Barney, 2001), the popularity of RBV in the SHRM literature is no exception. There has been considerable debate over whether human resource practices can provide SCA. Individual human resource practices may be imitable but human resource systems and routines, which develop over time, may be unique to a particular firm and contribute to the creation of specific human capital skills.

Resource-based view of a firm has shifted the emphasis in the strategy literature away from external factors (such as industry position) toward internal firm resources as sources of competitive advantage (Hoskisson, Hitt, Wan and Yiu, 1999). Internally, the managers can maneuver more as the external elements are beyond their control. Growing acceptance of internal resources as sources of competitive advantage brought legitimacy to the assertion that people are strategically important to firm success. In this way, firms are currently more toward gaining or building those resources that sustain competitive advantage. Much of this literature focuses on the role of dynamic capabilities, that is, specific processes firms use to alter their resource base, as sources of competitive advantage (Eisenhardt and Martin, 2000). Prahalad and Hamel (1990) certainly popularized the core competency concept within the strategy literature. They stated that core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies, and that they involve multi levels of people functions. For example, competencies or capabilities refer to organizational processes, engaged in by people, resulting in superior products, and generally these must endure over time as employees flow in, through and out of the firm. Numerous researchers within the strategy field have focused on firm competencies (e.g, King, Fowler and Zeithaml, 2001; Leonard-Barton, 1992 and 1995).

Extending the concept of resource-based view, strategists who embrace RBV point out that competitive advantage (via core competence) comes from aligning skills, motives, etc. with organizational systems, structures, and processes (Hamel and Prahalad, 1994; Peteraf, 1993; Teece, Pisano and Shuen, 1997). This synchronization should achieve capabilities at the organizational level in order to sustain competitive advantage. In a broader sense, the RBV has influenced the field of human resource management (HRM) in two important ways. First, the RBV's influence has been instrumental in establishing a macro perspective in the field of HRM research (Snell, 1991). This macro view has provided complimentary depth to a historically micro discipline rooted in psychology. A second major contribution of the RBV is the theoretical and contextual grounding that it has provided to a field that has often been criticized for being theoretical and excessively applied in nature (Snell, 1991).

In the field of RBV, two developments that have not been easily predicted have emerged over the past ten years. First, the popularity of the RBV within the SHRM literature as a foundation for both theoretical and empirical examinations has probably far surpassed what anyone expected (McMahan, Virick and Wright, 1999). Second, the applications and implications of the RBV within the strategy literature have led to an increasing convergence between the fields of strategic management and SHRM (Snell, Shadur and Wright, 2001). This study hopes to further contribute. We intend to investigate RBV relationship with firm innovativeness, as a non-financial measurement to evaluate firm performance. This role of RBV has been supported in previous studies to provide the creativity and ambiguity for the intangible resources of a firm (Colbert, 2004). In the similar stream, Penrose (1959, p.85) mentions about the resources capability in bringing a firm to competitive edge and makes it more innovative and that:"the availability of unused productive services within it creates the productive opportunity of a given firm. Unused productive services are, for the enterprising firm, at the same time a challenge to innovate, an incentive to expand, and a source of competitive advantage".

The purpose of this paper is to study the SHRM practices in relation to firm performance. In this study develops a framework by which the RBV is treated as a mediator. It also elaborates on innovativeness as one of the non-financial measurements for measuring firm performance.

Literature Review on RBV

Value of resources, Penrose (1959) argues that firms can create economic value not due to mere possession of resources, but due to effective and innovative management of resources. He also mentioned that there was a causal links between resources and the generation of productive opportunities for growth and innovation.

Later on the resource-based view of the firm was coined by Birger Wernerfelt in 1984 and a hint of the richness that lays in this approach is evident in his description of the article as a "first cut at a huge can of worms" (Wernerfelt 1984). Empirical research examining performance found differences, not only between firms in the same industry (Cubbin 1988; Hansen and Wernerfelt 1989) but also within the narrower confines of strategic groups within industries (Cool and Schendel 1988; Lewis and Thomas 1990). This resulted in increased interest in firm-specific variables and the number of contributions claiming to adopt a "resource-based perspective" mushroomed.

RBV then became firmly grounded in early economic models of monopolistic competition (Chamberlin, 1933) and its focus on firm heterogeneity departs from neo-classical microeconomics and Bain/Mason industrial organization, which characterize the behavior of the representative firm (Hill and Deeds 1996).

In the development of resource-based view, Barney (1991) proposed that advantage-creating resources must meet four conditions, namely, value, rareness, inimitability and non-substitutability. Grant (1991) argues that levels of durability, transparency, transferability and replicability are important determinants. They must meet five criteria namely inimitability, durability, appropriability,

substitutability and competitive superiority (Collis and Montgomery, 1995). Amit and Schoemaker (1993) went even further, producing a list of eight criteria including complementarily, scarcity, low tradability, inimitability, limited substitutability, appropriability, durability and overlap with strategic industry factors. In the interests of parsimony, these various conditions and characteristics are considered under the headings of value, barriers to duplication and appropriability. Therefore, for a resource to be a potential source of competitive advantage, it must be valuable or enable the creation of value. RBV has become by far, the theory most often used within SHRM, both in the development of theory and the rationale for empirical research (McMahan, Virick and Wright, 1999).

Wright et al. (1994) distinguished between the firm's human resources (i.e., the human capital pool) and HR practices (those HR tools used to manage the human capital pool). They mentioned that the organization should not merely focus on the uniqueness of their HR practices because as much as unique they are, they can be copied by other organizations. They have to focus on the motivation of their human capital and effectively manage them. This is the situation, which the companies are now facing, and their effort is more toward the innovativeness.

Lado and Wilson (1994) also mentioned that a firm's HR practices could provide a source of sustainable competitive advantage. Coming from the perspective of exploring the role of HR in influencing the competencies of the firm, they suggested that HR systems (as opposed to individual practices) could be unique, causally ambiguous and synergistic in how they enhance firm competencies, and thus could be inimitable.

The RBV's influence has been instrumental in establishing a macro perspective in the field of HRM research (Snell et al, in press). The current paper contributes to the literature by using RBV as a mediating process in this relationship.

Early Development of SHRM Practices

Human resource practices (HR practices) are the primary means by which firms can influence and shape the

skills, attitudes, and behavior of individuals to do their work and thus achieve organizational goals (Collins and Clark, 2003; Martinsons, 1995). Previous literature have paid attentions to the link of HR practices and organizational outcomes such as productivity, flexibility, and financial performance (e.g. MacDuffie, 1995; Ichniowski, 1997; Youndt et al., 1996; Delery and Doty, 1996; Pfeffer, 1998; Mendelson and Pillai, 1999; Collins and Clark, 2003). Yet, the understanding needs to be extended to encompass innovation performance (Laursen and Foss, 2003). In the recent trend, Chen and Huang (2009) have focused on the SHRM practices and firm's innovation performance by considering the mediating role of knowledge management (KM) capacity. Accordingly, strategic HR practices can be conducive to innovative activities because strategic HR practices may allow firms to discover and utilize knowledge and expertise in the organization (Scarbrough, 2003).

Owing to the increasing importance of HR practices to the competitive advantages of firms in the rapidly changing knowledge- based economy, some scholars have paid attentions to examine the determinants on the adoption of HR practices (e.g. Tannenbaum and Dupuree-Bruno, 1994) and their effects on organizational outcomes, such as productivity and efficiency (e.g. MacDuffie, 1995; Ichniowski, 1997; Youndt, 1996) as well as financial performance (e.g. Delery and Doty, 1996; Pfeffer, 1998; Mendelson and Pillai, 1999; Collins and Clark, 2003). Some other scholars such as Tannenbaum and Dupuree-Bruno (1994) explore the relationships between organizational and environmental factors and the use of "innovative human resource practices".

In the debate of relation of SHRM practices and firm's performance, Youndt et al. (1996) indicate that an HR practices system is directly related to multiple dimensions of operational performance. Subsequent analysis reveals that manufacturing strategies moderate this main effect. In addition, Collins and Clark (2003) explore the black box between "strategic human resource practices", which include training, performance assessment, rewards, and firm performance from a field study with seventy-three high-tech firms. Even though prior research has paid attentions to the

impacts of HR practices on organizational outcomes, few studies explore the impact of HR practices on knowledge management (e.g. Currie and Kerrin, 2003) and on innovation performance (e.g. Laursen and Foss, 2003). These prior research term HR practices differently, such as strategic human resource practices (e.g. Youndt et al., 1996; Collins and Clark, 2003; Currie and Kerrin, 2003; Collins and Clark, 2003), innovative work or human resource practices (e.g. Tannenbaum and Dupuree-Bruno, 1994; MacDuffie, 1995; Ichniowski et al., 1997), new human resource practices (e.g. Laursen and Foss, 2003), and characteristics of information on organizations' age (e.g. Mendelson and Pillai, 1999). The previous studies argue that strategic HR practices would play a critical role in affecting innovation performance (Chen and Huang, 2009).

In the process of developing innovative activities in firms, there is this necessity of creative employees who are flexible, risk taking, and tolerant of uncertainty and ambiguity (Madsen and Ulhoi, 2005). This is because they encounter relatively greater uncertainty and variability in the innovation process (Atuahene-Gima, 1996). Therefore, firms must use creative capabilities and innovative characteristics as hiring and selection criteria. Reasonably, this would lead their employees to develop diversity of ideas and commit to more innovation behaviors (Brockbank, 1999; Atuahene-Gima, 1996). Through effective staffing, employees become important sources of new ideas in the firm's innovative process. With regard to training, it would facilitate employees' exposure to variety of knowledge and openness to innovative ideas (Brockbank, 1999; Beatty and Schneier, 1997; Jaw and Liu, 2003).

In addition, innovation requires a high level of involvement and participation from employees (Damanpour, 1991; Hurley and Hult, 1998). Firms may elicit employees' involvement and participation by granting them to solve problems and to participate in decision-making that affects their work (Damanpour, 1991; Glynn, 1996). A high level of participation would create the conditions to encourage employees to bring new ideas and exchange knowledge in the ongoing innovation process and, in turn, enhance innovative outcomes (Jiménez-Jiménez and Sanz-Valle, 2005; Tsai, 2002).

Performance appraisals and compensation are the primary strategic HR practices that firms can use to reinforce employees' behaviors and induce them to comply with organizational goals (Collins and Clark, 2003; Scarbrough, 2003). In terms of performance appraisal, if firms want to elicit desired behaviors from employees, they must provide feedback and incentives that reinforce the desired behaviors (Collins and Clark, 2003).

Drawing upon previous researches (e.g., Youndt et al., 1996; Collins and Clark, 2003; MacDuffie, 1995; Tannenbaum and Dupuree-Bruno, 1994), the current study adapts three aspects:1) recruitment/selection, training, performance management as administrative, 2) strategic human resource practices and knowledge management, 3) leadership and change agent role of managers as instrumental SHRM practices. This classification is reviewed in the next section of the study.

Classification of SHRM Practices

There are different debates in the classification of SHRM practices. In this section the study investigates the important ones. In the universalistic perspective, (Pfeffer 1994-1995; Pfeffer and Veiga, 1999) a universal set of HRM best practices can be employed to attain and sustain competitive advantage. HR practices cannot by themselves be a source of sustained competitive advantage, as it is virtually impossible for HR practices to be rare, inimitable, and non-substitutable. SHRM authors who ascribe to the universalistic perspective advocate a best practice approach to SHRM and propose that some HR practices are always better than others and that all organizations should adopt these practices (Brockbank, 1995; Fitz-enz, 1997; Geringer, Frayne and Milliman, 2002; Hitt, Hoskisson, Harrison, and Summers, 1994; Huselid, 1995; Martin and Beaumont, 1998; Pfeffer, 1994, 1994b, 1995; Pfeffer and Veiga, 1999; Terpstra, 1994; Truss, 2001). In addition, the necessity of environment and mindset is necessary in the organization that RBV is capable of providing it.

Within the body of HR research, there is significant empirical evidence linking certain HR practices to firm

performance and recent research suggests that bundles, or systems, of HR practices are more influential than individual practices working in isolation (Arthur, 1994; Huselid, 1995; MacDuffie, 1995; Youndt et al., 1996). Arthur (1994), found that HR practices that focused on enhancing employee commitment (e.g., decentralized decision making, comprehensive training, salaried compensation, employee participation) were related to higher performance. In a similar study, Huselid (1995) found that investments in HR activities such as incentive compensation, selective staffing techniques, and employee participation, developed employee skills and motivation resulted in reduced turnover, increased productivity, and increased firm performance (Youndt, 1996). Further empirical studies support the links between HR practices and firm performance (Boselie, Paauwe, and Jansen, 2001; Boxall and Steeneveld, 1999; Fey, Bjorkman, and Pavlovskaya, 2000; Gratton, Hope-Hailey, Stiles, and Truss, 1999; Huang, 2000; Huselid, Jackson, and Schuler, 1997; Richard and Johnson, 2001; Sanz-Valle, 1999; Truss, 2001).

Following the previous studies mentioned in this section, we classify SHRM practices as both instrumental and administrative. Instrumental practices are those that can lead the organization to achieve strategic vision and mission (Lado and Wilson, 1994). We include knowledge management, leadership and change agent role of the managers. The administrative SHRM practices are the tools to achieve SHRM implementation. We focus on recruitment/selection, training, performance and rewards management.

Financial vs. Non-financial Measurement of Business Performance

The goal of performance measurement system is to evaluate whether the allocation of the resources has been in line to achieve the organizational strategic goals. As a response to increasing competition and the changing operating environment, firms extend the range of performance dimensions monitored. For instance, a recent

study on Italian manufacturing firms (Cinquini, Collini, Marelli and Quagli, 1999) evidences an increasing interest in the use of instruments (other than those related to cost accounting) based on a wider set of performance measures, including non-financial ones (Cinquini, Giannetti, and Tenucci , 2008).

Competitive strategy of firms' human capital has significant effects on their financial performance. Additionally, market performance is positively influenced by HRM flexibility and negatively influenced by HRM control (Wright, 1998; Kaplan and Norton, 1996). Way and Johnson (2005) proposed a different framework for examining the impact of SHRM. They asserted that organizational outcomes are a product of the interaction between the actual behaviors of human resources (HR outcomes) and the other functional resources and inputs deployed and used by the organization.

While financial accounting is suited to the tracking of physical assets such as manufacturing equipment and inventory, it is less capable of providing useful reports in environments with a large intangible asset base. As intangible assets constitute an ever-increasing proportion of a company's market value, there is an increase in the need for measures that better report such assets as loyal customers, proprietary, processes and high-skilled staff (Net MBA, 2002-2007).

In the non-financial aspect, the approach has been more toward using the balanced score card, rather than other items that are more vital for the organizations (Ittner and Larcker, 2003). In investigating the effect of SHRM practices, the great plethora of interest goes back to the financial one. There is a shortcoming in the non-financial measurement (Ittner and Larcker, 2003). However, over the past two decades, a great deal of attention has been paid to the development and use of non-financial measure of performance, which can be used to both motivate and report on the performance of business (Otley, 2003).

Via this paper, we posit the use of non-financial performance by which managers can generate mindful forecasts of the business's progress in advance of financial decisions and investment allocation. Employees can receive better information on the specific actions needed to achieve strategic objectives. Investors can also have a better sense of

the company's overall performance, since non- financial indicators usually reflect realms of intangible values, such as research and development productivity, that accounting rules refuse to recognize as assets.

Mediating Effect of RBV

Proactive corporate environmental strategies that go beyond regulatory compliance have a positive effect on firm performance when mediated by valuable organizational capabilities (Galdeano-Gomez et al., 2008; Russo and Fouts, 1997; Sharma and Vredenburg, 1998; Wagner, 2005). Moreover, Judge and Elenkov (2005) indicate that the higher the organization's capacity for change, the more likely its environmental performance is to be high. Therefore, we propose to use firm resources as a mediator variable. A proactive attitude on the part of the firm towards the natural environment will probably favor the development of new resources and capabilities, which may in turn help to achieve competitive advantages (Russo and Fouts, 1997).

Galdeano-Gomez et al. (2008) and Sharma and Vredenburg (1998) studied the mediating role of the resource based view in the relationship between environmental protection (proactive environmental management and environmental performance) and competitive advantage.. They found that investment in proactive pollution practices and environmental performance improvement contributes to the development of valuable capabilities, which increase the competitiveness of the firm.

Moreover, Judge and Elenkov (2005) indicate that the higher the organization's capacity for change, the more likely its environmental performance is to be high. Another study proposes the use of firm resources as a mediator variable. It has proposed to consider firm resources and competitive advantages as mediator variables between proactive environmental management and financial performance (Lopez, Molina and Claver, 2009). In this relationship, firm resources should be considered as a mediator variable (Arago´ n-Correa and Sharma (2003); Christmann (2000), Sharma and Vredenburg (1998) and Wagner (2005) identify the importance of developing superior firm resources based

on the firm's relationship with the natural environment as a source of competitive advantage. Therefore, recent research findings indicate that an increased financial investment in advanced technologies or innovation is, in itself, not sufficient.

Approach Toward Innovation

Innovation is vital for long–term growth and performance of organizations. As markets become increasingly globalized and competitive and the pace of technological change grows, organizations have to compete not only in terms of quality and cost, but also in terms of time-to-market and innovativeness of their products (Dougherty and Hardy, 1996; Mavondo, Chimhanzi and Stewart, 2005). Top management attention was formerly directed toward cost reduction, delivery time reduction and quality in order to become and remain competitive on the market. By extension, new criteria are emerging to successfully face competitors. One of those is innovation. The ability of companies to meet consumer expectations depends deeply on their ability to innovate and deliver new products at competitive prices. Innovation is a key driver to achieve sustainable competitive advantages and, more particularly, becomes one of the key challenges for small and medium enterprises (SMEs) (O'Regan et al., 2006).

In their review of relevant literatures, de Leede and Looise (2005), found that most approaches to innovation and its management in an organizational setting entail an important role for HRM. Further, while there has been a significant amount of attention directed by innovation management scholars to such issues (e.g. human resource development, rewards, career management and team building), HRM researchers have tended to ignore innovation, particularly at the project level. Top executives in business organizations are aware of that. In a recent survey (Manso, 2007), approximately seventy eight percent of the 540 CEOs interviewed said that stimulating innovation, creativity, and enabling entrepreneurship is a top priority of their organizations to gain the competitive advantage for their businesses.

Motivating innovation remains, however, a challenge for most organizations. The difficulty arises because innovation results from the exploration of new untested approaches that are likely to fail. Thus, standard pay–for–performance schemes that punish failures with low wages and termination may have adverse effects on innovation. However, some disciplines can be applied by the organization. For instance, excessive continuation may be optimal to motivate innovation since the threat of termination may prevent the agent from exploring new untested approaches. Finally, commitment to a long–term compensation plan and timely feedback on performance are also essential ingredients to motivate innovation. Empirical research in economics has found a great deal of evidence supporting the thesis that people work harder and are more productive when they are paid for performance (Prendergast, 1999). Restricting the use of incentives may thus have adverse effects on innovation (Manso, 2007).

In this regard, innovation needs accurate measurement. Authors such as Miller and Friesen (1983), Capon et al. (1992), Avlonitis et al. (1994), Guimaraes and Langley (1994), Subramanian and Nilakanta (1996), Hurley and Hult (1998), Lyon et al. (2000) and North and Smallbone (2000), address the concern of measuring organizational innovativeness effectively. Additionally, a prime interest in the existing literature is to investigate innovation activities and their associations, where adoption of one or more innovations is examined as the dependent variable and linked to attributes of the organization, the individual respondent, and the innovation itself (Gallivan, 2001). One important reason of the substantial research in innovation is the presence of valid and reliable measures of key innovation characteristics, such as radical, incremental, or disruptive innovation (Cheng and Shiu, 2008). Table 1 shows the evolution of innovation metrics.

Table 1. Evolution of innovation metrics by generation (Example)

1st Generation Input Indicators (1950-60s)	2nd Generation output Indicators(1970-80s)	3rd Generation Innovation Indicators(1900)	4th Generation Process Indicators (2000+emerging focus)
R&D expenditures	Patents	Innovation surveys	Knowledge
S&T Personnel	Publications	Indexing	Intangibles
Capital	Products	Benchmarking innovation capacity	Networks
Tech intensity	Quality Change		Demand
			Clusters
			Management techniques
			Risk/Return
			System Dynamics

Source: Vonortas National Innovation Initiative 21st Century Innovation Working Group Chair, Nicholas M. Donofrio IBM Corporation

As it shows, the first generation (1950s-60s) of metrics reflected a linear conception of innovation focusing on inputs such as R&D investment, education expenditure, capital expenditure, research personnel, university graduates, technological intensity, and the like. The second generation complemented input indicators by accounting for the intermediate outputs of science and technology (S&T) activities. Typical examples include patent counts, scientific publications, counts of new products and processes, high-tech trade (Milbergs and Vonortas, 2004).

The third generation is focused on a richer set of innovation indicators and indexes based on surveys and integration of publicly available data. The primary focus is on benchmarking and rank ordering a nation's capacity to innovate. A main difficulty now is the validity of international data comparisons and incorporating service sector innovations (where the process is the product) into the surveys. Relevant fourth generation metrics currently at an embryonic stage include: knowledge indicators. It accounts for the knowledge that underlies their creation and the ways it is developed and diffused (Milbergs and Vonortas, 2004).

Composite indicators that may include composite knowledge investment indicators and composite performance indicators, however, can only capture a multi-layered concept like knowledge. Networks are a striking feature of contemporary innovation is that hardly any organization can innovate alone. Most innovations involve a multitude of organizations. This is especially the case for the most knowledge-intensive, complex technologies. Networks are not just regional, but also national and global (Milbergs and Vonortas, 2004).

Conditions for innovation consist of economic demand, public policy environment, infrastructure conditions, social attitudes and cultural factors are critical for successful innovation. What is called for here is building systemic innovation metrics that capture the context in which organizations form and match expectations and capabilities to innovate. Hundreds of such indicators could be imagined, of course, but what is called for primarily are indicators that 'intelligently' (a) describe the main characteristics of the innovation system and its dynamics and (b) look forward in anticipation of likely broad developments (e.g., balanced scorecards, mapping of general purpose technologies, monitoring demand shifts and global innovation patterns, and technology option accounting).

In order to successfully innovate, a firm will combine different innovation activities. These innovative activities need to support the corporate strategies. Therefore, it has to be inserted in strategic decision-making. This innovative strategy has to combine different knowledge sources. To do so, firms typically are engaged in the trading of knowledge on the technology market and cooperate actively in R&D with other firms and research organizations. Most of the literature based on transaction costs concentrates on the choice between internal and external sourcing for individual transactions, as substitute modes for generating innovation (Williamson, 1985; Pisano, 1990). In response to competitive pressure, firms increasingly use R&D alliances to complement in house R&D efforts. As time passes, competition among firms turns on whether firms can create and commercialize knowledge in a timely and cost efficient manner. Although the availability of external technology may substitute for own research investment by receiver firms,

there are also arguments to stress the complementarily between in-house R&D and external know-how (Arora and Gambardella, 1994; Cockburn and Henderson, 1998; Granstrand et al., 1992). Own R&D activities allow the firm to better scan the environment for existing technology. Once a suitable technology is located, the firm with in-house R&D capabilities is better able to evaluate the technology. In terms of external sources, when the firm decides to buy the technology, its own R&D operations allow it to better integrate the technology because external knowledge sources do not automatically find their way into the firm's innovation process.

The notion of 'absorptive capacity' introduced by Cohen and Levinthal (1989), and further developed by Kamien and Zang (2000), stresses the importance of a stock of prior knowledge to effectively absorb external know-how. At the same time, access to external know-how may leverage the productivity of the internal R&D activities, at least when the organization exhibits a willingness to take on external ideas (Veugelers, 1997). An important task in innovation management, therefore, is to optimally integrate internal and external knowledge within the firm's innovation process, to be able to benefit from the positive effects each innovative activity has on the other. The resource-based view of the firm relates the profitability of the firm to resources of the firm that are exploited through the activities of the firm (Ghemawat and Pisano, 1999; Teece 1997). These resources are scarce and hard to replicate. The capability to manage a complex innovation strategy might be such a resource. The existence of such an innovation management capability actually provides an explanation for the observed complementarily between innovation activities because the combination of different innovation activities allows to better capitalize on this capability.

Any attempts to measure innovativeness have been ad hoc at best with the exception of Wang and Ahmed (2004). They conceptualize a multi-dimensional construct of innovation. Another study by Hult et. al. (2004) confirmed innovativeness as an important antecedent of business performance. The vast majority of researchers consider organizational innovativeness as a uni-dimensional subject (Wilson et al., 1999). Multi-dimensional measures are

certainly more consistent with a balanced organizational manifestation of innovation. The prevailing conclusion is that a market-oriented culture seems to underlie organizational innovativeness (Hult et al., 2004). The total trend toward measuring innovation has been to classify the innovation indicators into outputs of innovation and the inputs to the innovation process. Both output and input measures are useful for the different process of quantifying the overall extent of innovation. The key output of innovative activity is the success. The firm success can be proxied by profits, revenue growth, share performance, market capitalization or productivity among others indicators (Roger, 1998). The input measures can be investigated by: the level of R&D, intellectual property statistics, acquisition of technology from other expenditures (e.g., patents, licenses), on tolling up industrial engineering and manufacturing start up associated with new products/processes, intangible assets, marketing expenditure and managerial and organizational change. In similar line as Dobni (2008), Rejab, Guimaraes and Boly (2008), focused their study on measuring innovation best practices. Their study has shown that evaluation approaches help to clarify outstanding activities and allow accurate research for better innovation management practices to be pursued. Boly (2004) also illustrates that innovation processes practices are measurable only if they are expressed in terms of directly observable innovation measurement sub-practices.

The inability to manage these innovations and capture the improvement effectively also contributes to the wide competitive gap between the organizations and their competitors (Davis, 1989). Empirical evidence indicates that using a proper performance measurement system is critical to capture performance (Chiesa, P. Coughlan, 1996. Griffin and A. L.Page, 1993, M. Hudson, A. Smart, and M. Bourne, 2001. A. Verhaeghe and R. Kfir, 2002). In this way, innovativeness is referred as the non-financial measures met for the firm's performance. The framework of the current paper studies the relationship of SHRM practices on innovativeness of a firm with mediating effect of resource based view. The framework investigates one of the non-financial items on the business performance, which is

innovativeness. It helps the organizations to evaluate their SHRM practices in two main categories: instrumental and administrative. As mentioned before in this paper, the instrumental practices include: knowledge management, leadership and change agent role of managers and administrative practices include recruitment/selection, training and performance management.

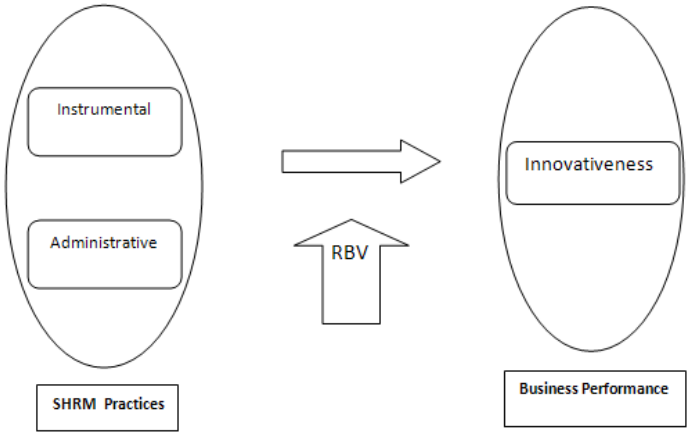

Figure1: Conceptual framework on the relation of SHRM practices and firms performance (with mediating role of RBV)

Conclusion

This paper presents different debates on the relationship of SHRM practices and innovativeness in a firm, as one of the non-financial measure to evaluate firm performance. Basically, it studies the relationship of SHRM practices on the innovativeness of a firm by considering the mediating role of resource based view in a firm. In this evaluation, the financial and in-financial perspective have been taken into account and the study has come to this understanding that non-financial measurement plays important role in SHRM implementation in the firm. Based on the mentioned points we developed a framework to conceptualize the relationship of SHRM practices on innovativeness of a firm by considering the role of RBV as a mediator.

It is recommended that future studies work on the investigation of this framework in different industries. Firms could utilize this framework to develop their implementation of SHRM practices. They can explore and profile an effective set of SHRM practices that support to achieve the desired degree of innovativeness. In addition, the other non-financial measurement factors such as productivity and competitiveness can be used in the place of innovativeness.

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