



**HUMAN RESOURCES STRATEGIC PRACTICES, INNOVATION
PERFORMANCE & KNOWLEDGE MANAGEMENT: PROPOSAL
FOR BRAZILIAN ORGANIZATIONS**

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ABSTRACT

Technology and innovation development presented new challenges for the twenty-first century manager. Besides, aspects of organizational culture and knowledge management are equally important for corporate success. All the above areas have a growing number of studies that seek to deepen reflections providing a greater understanding of their environmental relationship. Brazilian human resource management has shown years of late progress, especially due to the prevailing macroeconomic conditions, with no transformation evidences This current study with a theoretical-descriptive qualitative approach through literature analysis, study the integration model proposed by Chen and Huang (2009). The mediating role of knowledge management to strategic human resource practices and innovation performance presented by these authors are compared with national and international literature. The integration conceptual model proposed to apply in the Brazilian context, consider three pillars presented by the Eastern authors, enhanced by cross-checks prospects with intellectual capital approaches, representing the Western authors' contributions. Henceforth, we aim to provide a suitable proposal for this model in the Brazilian organizational context.



Keywords: Strategic Human Resources Management; Innovation Management; Knowledge Management

1. INTRODUCTION

There is a growing trend and rapid incorporation of new forms of industrial organization to the corporate culture, in response to new market challenges (TALAMO; CARVALHO, 2004). To answer these transformations is necessary for organizations to constantly innovate while maintaining an efficient management of knowledge associated with strategic people management.

The importance of strategic people management, innovation management and knowledge management as themes associated with the lack of their interdependently literature shows the relevance of this study. Results of previous research (LIN; LIU CHENG 2011; ANDRADE; GALINA, 2013) showed that the higher the degree of internationalization, the lower tends to be the commitment performance of multinational firms. In this sense, how should companies keep their focus in the national context in order to achieve their goals?

Chen and Huang (2009) developed a survey of approximately 146 companies in Taiwan, presenting statistical evidence that corroborate the association of these relations, considering the ability of knowledge management as a mediator between strategic human resource practices and innovation performance. Thus, our research question arises: How Chen and Huang theory can be applied to the Brazilian context?

Thus, this research aims to identify elements of Chen and Huang theory that can be used in the Brazilian scenario. To achieve this result, appear as specific objectives:

- Search in the literature evidence to support or oppose the assumptions of Chen and Huang;
- Identify the main points of this theory;
- Analyze theory elements that can be applied in Brazil;
- Develop conceptual model proposed for use in the Brazilian context.

Furthermore, the research developed by Chen and Huang in 2009 is presented, integrating strategic areas of human resources (HR), knowledge



management (KM) and innovation. Finally, a conceptual proposal will be presented using these elements to facilitate the variables understanding and their subsequent implementation in the Brazilian organizational context.

2. STRATEGIC HUMAN RESOURCES PRACTICES

Brazilian human resource management has faced years of late progress, especially due to the prevailing macroeconomic conditions, with no transformation evidences (LACOMBE; TONELLI, 2001). The aforementioned authors conducted research with 100 companies, verifying models of human resource management companies, divided in two groups: HR strategic model (53 % of the sample) and a HR competitive model (19 %). Although these companies can be configured within the same pattern, those practices have presented wide heterogeneity (LACOMBE; TONELLI, 2001, p. 172).

According to Schuler (1992), strategic human resource management (SHRM) focuses on the relationship between individual motivations and performance and business development strategy. While Silva et al (2008) advocate an approach where human resource management (HRM) should not stick to organizational practices objective dimension, or either reject it. It is necessary to deal with the subjective dimension, as two different poles, complementary and inseparable. This is a challenge for HRM scientific knowledge (SILVA et al., 2008, p. 16).

Analyzing strategic approach in the broad sense, only a small number of companies use actual strategic planning (ANSOFF, 1990). Strategic planning, rather than a static process, should be seen as a dynamic management tool, containing emerging events and anticipating decisions on the line of action to be followed by the organization in fulfilling its mission (ALDAY, 2000). Thus, it is noticed that dynamism and flexibility become a recurring challenge to organizations.

HRM is not free of these obstacles, which require much effort by their managers in order to maintain your competitive edge. Once "people do not work in isolation" (ROCK; BARONE, 2011), the manager must be aware of expectations each professional brings to the workplace.



In literature, possessing competitive advantage means having the ability to provide the best products, services or financial return than its competitors. Therefore, HR should help companies to create value. Thus, some categories of HR practices can create greater competitive advantage than others. Brockbank (1999) presents his theory, proposing that:

[...] strategic dimension versus operational dimension suggests that HR builds competitive advantage when it creates greater long-term value than competitors HR activities and focuses on issues which are critical to success. Proactive versus reactive dimension suggests that in order to create value, HR activities must be made before their competitors. Thus, an HR department increases its potential to create a competitive advantage, since it moves from being operationally reactive to be strategically proactive (BROCKBANK, 1999 p.340).

Theoretical studies in business strategy have driven the Human Resources area as a competitive advantage generator (BECKER; GERHARD, 1996). However, imitate human resource strategies that are deeply embedded in organizations is no easy task, especially due to the existence of process causal ambiguity and dependency (BARNEY, 1991; COLLIS; MONTGOMERY, 1995).

HR planning should be developed as part of companies strategies. Setting needs to be periodically revised adapting to new environmental conditions (LACOMBE, 2005). In this study, SHRM use human capital approach, as well as organizational behavior and culture with strategic alignment.

2.1. Behavior, organizational climate and culture

Organizational behavior is seen as human behavior study in corporate environments (GRIFFIN; MOORHEAD, 2006), whether is in the relationship amongst professionals, whether is in the organization itself. For Davis and Newstrom (2002), the organizational behavior key elements are people, structure, technology and environment in which the organization operates.

Rock and Barone (2011) present three categories involving organizational behavior fundamental concepts:

- Individual Processes: there is greater concern for organizational microenvironment, focusing on the motivational theories.



- Interpersonal Processes: assesses the dynamics of group work and communication processes, including leadership, negotiation and decision making.
- Organizational processes: analyzes systemic relationships, such as structure, culture, change and development.

The behavior emerges from one's commitment or apathy within organization which can be jointly translated by organizational climate. Accordingly, "an organizational commitment is usually conceived as a psychological connection with the organization, including an involvement sense, loyalty and belief in the organization value" (O'REILLY, 1995). On the other hand, organizational culture can be interpreted as a mediator between Human Resource Management (HRM) and organizational performance, once HRM practices lay the groundwork for culture, which in turn facilitates contributors participation to organization overall goals, increasing its performance (RIBEIRO, 2009).

But what is organizational culture? How is it interpreted and perceived by its main authors and organizations? Schein (2009, p. 8) makes a good analogy: "culture is to a group like character or personality is to an individual." Although the concept of culture has a certain degree of 'abstraction', meanwhile represents real and profound behavioral and attitudinal consequences within the organization.

Rock and Barone (2011, p.99) states that culture "is the underlying set of value, beliefs, knowledge and essential norms shared by employees." On the other hand, O'Reilly (1995) warns that failing on a clearer specification of what is culture can result in confusion, disagreement and conflict over its basic function and importance.

When a group forms its culture, assumes that the components of this culture will be expressed, processed and transmitted to new generations of group members (LOUIS, 1980). Certo et al. (2010, p.117) presents organizational culture as "a set of shared value and beliefs that influence effectiveness of strategy formulation and implementation."



By analyzing organizational culture, it can be said that every culture has at least three levels in its composition: artifacts, shared value and basic assumptions. These components are the key elements to understand the culture of organization (CHIAVENATO, 2009):

- **Artifacts:** Products, services and organization members' standards of behavior. They are all things or events that may indicate through our senses as the organization culture, such as symbols, stories, heroes, slogans, annual ceremonies.
- **Shared value:** Critical value that become important to people and define the motivations to do what they do. They function as justifications accepted by all members. In many organizations they are originally created by the organization founding fathers.
- **Basic Assumptions:** Unconscious beliefs, perceptions, feelings and dominant assumptions that organizational members have. The culture prescribes 'the right way to do' adopted by and within organization, often through these unwritten presuppositions and sometimes even unspoken.

Lacombe (2005) defines that company culture is a precious resource management and can be used to achieve strategic objectives by aligning technology, production inputs, equipment, financial and human resources through its symbols, codes and value. However, the biggest challenge for any organization is changing its culture. Whereas culture "is the stabilizing force, conservative, a way to make things significant and predictable" (SCHEIN, 2009, p. 367), an organization that has a 'strong culture', by definition, to be stable, would be difficult to modify itself, once distinguishes itself from the market dynamics, requiring flexibility and continuous learning.

Organizational culture is the organization foundation: it is the summary of common beliefs reflecting traditions and habits, as well as more tangible manifestations - stories, symbols, or even buildings and products (MINTZBERG, et al., 2000).



A concept which links organizational culture, SHRM and knowledge management was presented by Peter Senge as 'learning organizations'. The 'learning organizations' are those in which people continually enhance their skills in order to create the future they really want to see in organization and might be known by its characteristics: personal mastery, mental models, shared vision, team learning and systems thinking.

However, Senge (2000) shows no models or learning organizations models because, according to the author, "is not the way that innovation happens: it cannot be copied". Once learning and change cannot be imposed on people, it is necessary to reflect the extent to which perceptions, thoughts and feelings are culturally determined to modify amidst these organizational transformations. In this sense, human capital becomes a catalyst for boosting these changes.

2.2. Human Capital

The human capital term was first coined in 1954 by the economist and Nobel laureate Arthur Lewis along with Theodore Shultz in *Economic Development with Unlimited Supplies of Labour*, considered an influential paper developed in its age. However, the most widespread concept in the economic field of 'human capital' was developed by Mincer and Becker, members of the Chicago School. The book human (1964) has become a reference standard, where human capital is presented as 'production means'.

Thus, it could be inferred that human capital investment through education, training, medical treatment would depend partially on ROI (return over investment). Therefore, human capital was considered as an input, a means of production in a given additional investment that would in turn produce additional outputs. Following this logic, human capital would be replaceable, easily attainable, but could not be transferred as land, labor or capital assets.

Similarly, another meaning of the term human capital is attributed to skills used to finish some work adding economic value. Economic theories refer to it as simply workforce, considering a fungible resource - homogeneous and easily interchangeable.



However, the contemporary view used in management presents different approaches: people generate capital for companies through their skills, their attitudes and their capacity to innovate. Skills include ability and education, and attitude refers to behavior and assertiveness. As a matter of the fact, it is ultimately the ability to innovate, which can generate more value to organizations: this is the human capital framework (SANTOS, 2009).

Considering as an intangible asset, human capital assigns a value to each individual, and this value is used for the company's growth within pragmatic policies and measures for each business management guidelines. According to Oliveira & Oliveira (2011) in their 194 records meta-analysis and original studies in the period between years 1985-2007, there is a positive relationship between HRM and organizational performance. In order to seal this relationship a key element is required: people.

3. INNOVATION PERFORMANCE

Products offered by companies need to be rethought, because organizations expend too much effort, time and resources to attend costumers needs. Similarly, business administration theory has been adapting itself to such organizational reality (JUSSANI, et al., 2011). Not all types of innovation are equally important in all environments (DAMANPOUR; GOPALAKRISHNAN, 1998). Understanding how the company operates in this context creates opportunities and competitive advantage.

Kim and Mauborgne (2005) present an approach called 'Blue Ocean Strategy' which emerges from the analysis of the red ocean, for instance, the chaotic and aggressive organization routine. Henceforth, instead of a bloody battle to compete, the differential blue ocean strategy search unexplored market spaces, where competition has not arrived yet and the company can expand its market share. This strategic move is directed to a value innovation, which results in a strong asset to the organization and to products and services clients (JUSSANI, et al., 2011).

Schumpeter emphasizes that innovation is not invention synonymous, once an invention does not necessarily induce innovation. The invention itself produces no significant economic effect (TIGRE, 2006). "Owning creative minds is not enough to



innovate in companies"(SERAFIM, 2011, p.25). How about the creativity and the creative process? What is its relationship with technological innovation?

Creative ideas can only be considered an innovation, if the next moment that they have been deployed, they are able to obtain some return or added value. Accordingly, one of the accepted definitions assigned to the innovation is to be an invention that has reached the market introduction phase in the case of a new product or the first use of a production process, in the case of an innovation process (UTTERBACK, 1971).

3.1. Research & Development (R&D)

In order to achieve organizational goals, managers must evaluate "options and information available and choose the most attractive choices. Thus, the strategies formulation should be based on aggregated, incomplete and uncertain information over alternative levels"(HITT, et al., 2003).

Russell (1990) raises the question: what do we know about innovation? Innovation is influenced by individual, organizational and environmental variables. In this sense, one can find several not related to Research and Development (R & D) activities but considered them prior to conducting innovative activities of higher levels conditions.

In developing countries, technology transfer began with technology acquisition and application to accelerate economic development (DAYS; MARINA, 2013). This process is known by starting with simple activities application (e.g. copying and imitation), encouraging continuous improvement and experimentation, as activities become more complex up to reaching a degree where there is investment in research infrastructure and development with constant feedback.

3.2. Structural capital development

Structural capital is known for a set of elements that compounds administrative systems, concepts, models, patterns, brands, patents and computer systems providing effectiveness to organization. Its composition is attributed to organization elements represented by its explicit intangible assets. Therefore, when an employee



tacit knowledge (human capital) is captured and stored it becomes part of the structural capital.

Thus, this capital is formed by technology, inventions, data, files, knowledge repositories, publications, processes and programs that record the knowledge of the organization. It also can be considered that systems enterprise value ensure consistency and enable human capital enhancement (as explained before). The focus on each of these 'capitals' must be suited to its peculiarities and temporal needs.

3.3. Technological capacity

Presenting the accumulation of technological capacity issues is perceived the intra-organizational factors and learning mechanisms which are influenced by leadership, as well as macro-environment influences:

[...] Far from being a linear and continuous, the trajectories of technological capabilities accumulation - particularly in the context of emerging companies - are characterized by high variability, among companies of the same and different industrial segment - both in terms of the way (direction) and speed they accumulate their technological capabilities (FIGUEIREDO, 2011, p 5).

The technological accumulation process also suffers influences from the nature of industrialization models adopted in each country. Even though this technology accumulation process occurs within companies, there is a significant role in government policies on their development, especially if developed countries and developing countries are compared one to another.

Even during crisis, opportunities may arise in unexplored areas from creative and innovative capacities encouragement. Considered from Brazilian organizations viewpoint, the current scenario is quite challenging, intricate and full of transformations. Roberts (1988) argued that there are four guiding dimensions for organizational success: people, structure, strategy and support systems. Such dimensions are central to innovation success. They ensure companies have the right people to effectively manage critical organizational development issues.

Analyzing under this point of view, observing the "people dimension", multidisciplinary teams are able to work efficiently and effectively in solving these complex situations. Increasingly, more professionals with generalist background



presence are required: they can engage with other specialties professionals, contributing effectively in those teams works (LACOMBE, 2005). When dealing with such issues, the organization technological capabilities system interacts amongst intellectual capital elements (structural capital, human capital and social capital) as well as with organizational culture, in continuous feedback (e.g. there is a continuous updating and interaction with the system).

The capacity for innovation accumulation can represent not only performance and competitive advantage, but also national and international leadership, economic superiority and influence on political alliances among companies, countries and geographical regions. In this sense, "the more complex and profound is technological capacity, the harder is to be imitated and copied by other competitors" (FIGUEIREDO, 2011). Innovative activities are based on a process of innovation and this in turn presents some typical characteristics (DOSI, 1988), such as:

- Uncertainty is inherent in the innovation process;
- Increasing reliance on scientific knowledge (for more advanced levels);
- Organizational formality of the innovation process;
- Technological capability.

On the other hand, to FGV professor Paulo Figueiredo (2011) other characteristics should be observed in the assessment of technological capabilities:

- Companies from different industries have differentiated innovation processes and characteristics;
- Sectors have specific issues in their businesses and therefore cannot be compared with different companies. For instance, produce commodities cannot be compared with high-tech companies;
- These aforementioned differences produce effects originated by the nature of its innovation process within organizations.

Whereas the accumulation of technological capabilities has its effects on organizations performance, technological learning indirectly influences the enterprises competitiveness. In this sense, another challenge for companies is how to manage knowledge and foster organizational learning.



4. KNOWLEDGE MANAGEMENT CAPACITY

In this new economy age, the so-called Age of Knowledge, Knowledge Management (KM) is suggested to be the core strategy for competitiveness in organizations (BEM, et al., 2013). This is due to the subject being in several areas of knowledge borderline. Recognized as being multidisciplinary *par excellence*, the degree of knowledge considers a skill set from many areas it originates (FRANCINI, 2002).

Knowledge management can be applied in whole or part of the company, in order to improve its internal processes and become more efficient (CANDIDO; ARAÚJO, 2003). According to Scholl, et al. (2004), KM is a "relatively diffuse and characterized by different concepts, perspectives and approaches", while Spender (2001) claims to be "difficult to conceptualize knowledge because it is a fluid term and difficult to define it". Nonaka and Takeuchi, the renowned Japanese authors (2008) consider knowledge an internal process within the individual person and then, externalized. Inasmuch, through this socialization, knowledge is shared and enhanced. Considering this premise:

When organizations innovate, they do not just process information from outside to inside aiming to solve existing problems and adapting to the changing environment. They actually create new knowledge and information, from the inside out, aiming to redefine both problems and solutions in the process, recreating its environment. [...] Information is a flow of messages, while knowledge is created by the same flow of information, anchored by the beliefs and commitment of its bearer. This understanding emphasizes that knowledge is essentially related to human action (NONAKA; TAKEUCHI, 2008, p. 55- 56).

Emotions regulate learning and memory formation. In this way, learning can be considered as a process of change, triggered by various stimuli, mediated by emotions, which may or may not come to manifest themselves in the person change of behavior. Thus, organizational knowledge creation is a continuous and dynamic interaction between tacit and explicit knowledge. The interaction process is composed between different models of knowledge conversion which are induced by various triggers.

Davenport and Vopel (2001) assert organizations must learn to employ knowledge workers from their attitudes and motivation in relation to knowledge. Thus,



developing activities in accordance with those rules create a culture in which staff internalizes knowledge management as part of their own work. However, the institutionalization of KM suggests a favorable cultural environment, and if the organization has not acquired this environment, it will have to build or reform it. Knowledge Management policies are useless if they do not leave the paper (BEM, et al., 2013).

4.1. Corporate University

Corporate university is considered the concept inspired in universities and sheltered by corporate environment in order to develop people in organizations as well as their stakeholders (ARAÚJO; GARCIA, 2009). Eboli (2006) presents the rationale for integration and implementation of Corporate Education:

In full corporate education, for example, education promoted by university-business partnership, the central issue is not to let people in the organization deviate from the independent educational processes. The corporate university cannot be compared to the training and development (T&D) area because it is directed to specific programs to meet the organization's strategy, while the T&D is directed to develop skills, abilities and attitudes related issues presented in the organization.

As stated by Vergara and Davel (2001), corporate universities have doctrinal character. Despite the speech, which is developed the ability to think differently, to innovate, break paradigms, like the core competence required nowadays and therefore privileged in education and business training.

4.2. Competencies Management

McClelland after publishing his article *Testing for Competence rather than Intelligence* in 1973, initiated the debate on competence among psychologists and administrators in the United States (FLEURY; FLEURY, 2001). The competence concept is currently thought of as:

[...] set of knowledge, skills and attitudes (i.e., set of human capabilities) that justify a high performance, believing that the best performances are grounded in the intelligence and personality of the people (FLEURY; FLEURY, 2001, p.185).

Competence is seen by Le Boterf (1995) as the integration of three axes formed by the individual (his biography, socialization), by their educational



background and their professional experience. Competence thus becomes a set of social and communicative learning nourished by the upstream and downstream learning by the ratings system. Prahalad (2001, p. 45) reviewing the core competencies portfolio, where management becomes complex, identified at least five distinct tasks:

- Gaining access to knowledge and acquire new knowledge;
- Linking knowledge flows;
- Sharing culture and shorten distances;
- Learning to forget;
- Bringing competencies beyond business unit boundaries.

Competencies development focuses on learning at three levels: individual, group and organizational. The learning focus should include, in addition to analytical skills, learning processes, behaviors and value. Thus, a new competence is developed, individual role is examined, teams across organization pursuit excellence, scientific knowledge, creativity transforming into expertise and innovation capacity.

The main advantages from framework and processes consolidation in the organizational competencies development are (BITTENCOURT, et al., 2013):

- More simple, flexible and sustainable management models;
- Easier identification of skills and competencies;
- Results-oriented structures;
- Adequacy of support activities;
- Lean structures.

Thus, according to the authors, the dynamic capabilities refer to organizational ability to develop new skills, integrating and regenerating old and new features rapidly through their processes in a constant process of change. However, it should be noted that the organization dynamic capabilities depend on its specific allocation of resources, whether they are physical, material, financial, human or organizational.



5. RESEARCH METHODOLOGY

This study is classified as qualitative, considering the need to understand in depth the researched phenomenon (RICHARDSON, 1999). While as an approach, it was classified as descriptive, aiming to explicit the issue, allowing ideas enhancement and the characteristics description of a particular phenomenon (GIL, 2002). The bibliographical research was used to support deepening national and international literature comprehension (GRAY, 2009; SILVERMAN, 2009).

6. CHEN & HUANG MODEL AND PROPOSITION TO BRAZILIAN CONTEXT

Chen and Huang work aimed to examine the strategic impact of HR practices on the performance of innovation through its mediating effect on the ability to manage knowledge. The strategic HR practices (SHRP) arise as pillars to support the path organizations will model their skills, attitudes and employees behavior in order reaching their goals in innovatively.



Figure 1: Chen and Huang Model (2009)

Source: Authors

How do companies as Intel, Hewlett-Packard, Cray Research, 3M and Johnson & Johnson develop successful products and create new ways of doing things? How can culture help or hinder these processes? The answer lies in the rules



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if widely shared and accepted by organizations members could actively promote new ideas generation and implement different approaches (O'REILLY, 1995, p. 319). Notwithstanding, innovation arise in the corporate environment, as human capital are leveled in organizational expertise creating new products and services.

In addition to accessing employees' knowledge, skills and expertise, it is necessary to have good ability to manage knowledge management tools ensuring human capital effective use in organization expertise development towards innovation. Knowledge management is an approach that will add value by balancing know -how (practical or tacit knowledge) and expertise (know-why) facilitated by explicit knowledge in the organization.

By using these four management practices dimensions: selection, training, recognition and reward proposed by Youndt, et al. (1996) associated with participation dimension, complete the construct used by Cheng and Huang (2009) to analyze organizations. The Taiwanese research conducted selected the 5000 companies in the China Credit Information Service Incorporation, divided this sample into five levels of 1,000 companies. Out of this classification, 150 questionnaires were sent to each level totaling 750 questionnaires, which finally 146 were considered valid forms.

The quantitative research results indicated that HR practices relate positively with knowledge management capacity, which in turn is positively related to innovation performance. Thus, a better level of knowledge management capacity can stimulate creativity and innovative thoughts leading to better innovation performance. Therefore, to counterbalance the link between people management practices and promote innovation performance, managers need to first recognize the importance of knowledge management.

6.1. Integrated conceptual model proposed

The current technological revolution is not characterized by knowledge and information, but by a cumulative feedback loop between innovation and its use (CASTELLS, 1999). To complement the work of Chen and Huang (2009) as proposed in this study, national and international literature were analyzed, whereas similar studies merged to corroborate within the theoretical framework.



Considering Chen and Huang proposed model (2009) and evaluating how it could be applied to Brazilian context, we elaborated a new structure where three pillars - Strategic Human Resources Practices, Knowledge Management and Innovation Performance - were organized in three intellectual capital directories (thematic axis or approaches):

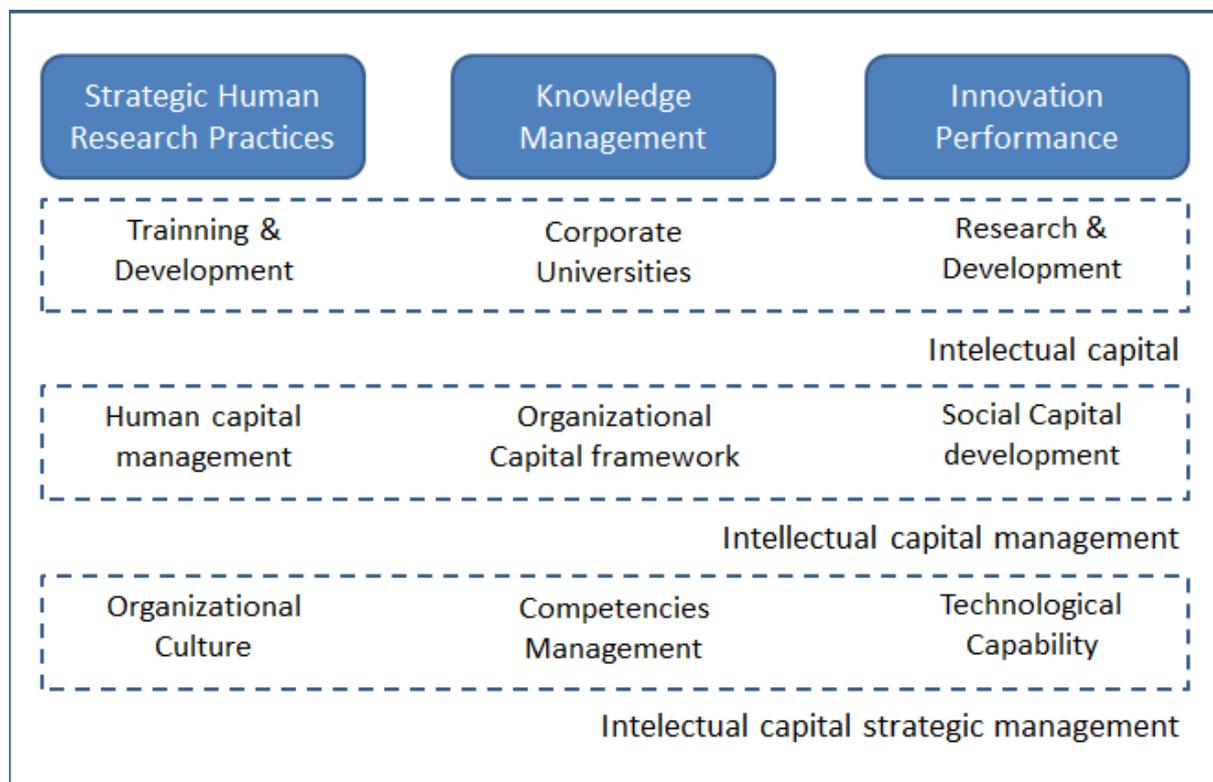


Figure 2: Proposed model for integration in the Brazilian context
Source: Authors

In consonance with Bem, et al. (2013), with regard to knowledge management success is necessary to have a steadfast cultural environment. Raw intellectual capital would be found in the three organization secondary axis as Training & Development (T&D) in Strategic Human Resources Practices pillar, as well as Corporate University (CU) in Knowledge Management pillar and Research & Development (R&D) axis to Innovation Performance pillar.

Yet, the second axis or focus approach, represented by this intellectual capital management would be recognized in the form of raising human capital in Strategic HR Practices pillar, whereas the manager is able to attract new talent to organization. On the other hand, organizational capital alignment would be allocated on Knowledge Management pillar, which means management tools and systems are able to organize knowledge. The last represented factor by social capital



(stakeholders) development would be assigned to Innovation Performance pillar, due to the positive influences in diversity to foster creativity and innovation.

Finally, the focus of intellectual capital strategic management finds Strategic Human Resources Practices pillar by Organizational Culture axis, mainly by recognizing organizations value and basic assumptions influencing their choices and strategic decisions. In Knowledge Management pillar is presented Competencies Management concerning its improvement on essential skills as a result its competitiveness.

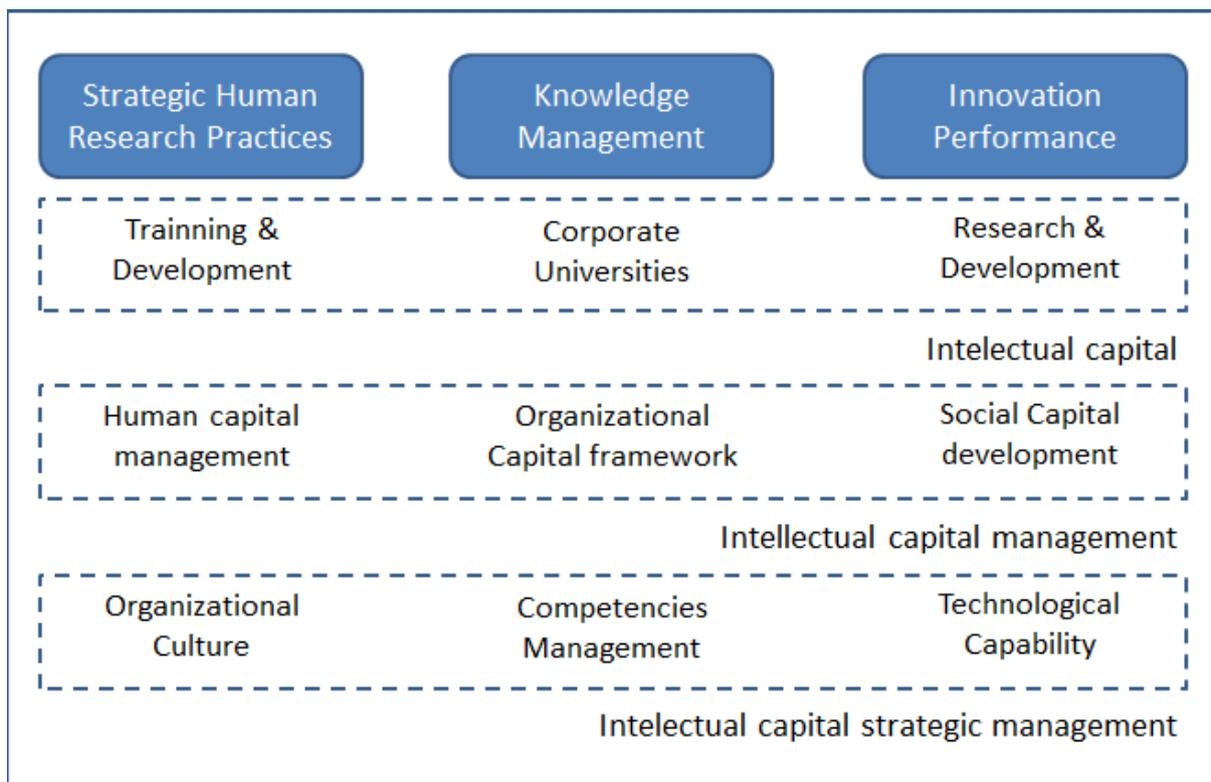


Figure 3: Organizational management process focusing on intellectual capital for R&D

Source: Authors

Last, but not least, Innovation Performance pillar, embedded the dynamic and technological capabilities concept, so that the organization has the necessary elements for innovative sustainability. An integration scheme in a logical sequence of events is shown on figure 3.

By using this conceptual model, companies maintain its structure linked to human resources and innovation management. When there is integration, rework is eliminated; both human and temporal, as well as financial resources and efforts are



saved. It is recommended that this structure is viewed from the project management perspective in order to continually provide feedback.

Knowledge management, as presented by Chen and Huang (2009) in the East, can become an ally integrating internal organizational resources (human and organizational capital), as well as better allocation of external resources (stakeholders and their capital) in the Western organizational context and more specifically in Brazil. Therefore, it is necessary a multidirectional communication where culture is open to change and innovation.

7. FINAL CONSIDERATIONS

Knowledge management ability emerges as mediator between strategic human resource practices and innovation performance. The performances of these three pillars are important foundations for the creation of competitive advantage in organizations. Whereas Chen and Huang (2009) demonstrate through its quantitative research the relationships amongst these variables, this theoretical-descriptive essay presented concepts in the literature corroborating to adapt the proposed model nationally.

Throughout this study, behavior and culture organization research concepts and theories were introduced along with human capital development to assemble Strategic Human Resources Practices. Without these elements, organization does not maintain its sustainability, losing its identity responsible for generating value and competitive advantage.

Before it reached the R&D stage, companies initiate a process from reverse engineering, copying or imitation. These processes evolve as structural capital develops together with organizational learning, forming a mature foundation for technological capacity. Thus, Innovation Performance originates from complementary levels, enhancing a continuous feedback loop focused on innovation.

Corporate university goes beyond training because it shows a broader systemic and strategic approach. Moreover competencies management helps in identifying and retaining more appropriate talents to organization needs. Using these



supportive tools, intellectual capital arises: structural capital, social capital and human capital are integrated, so the knowledge management ability.

Presenting its components, Chen and Huang (2009) work was introduced to contextualize the purpose of this study. The integration conceptual model proposed to apply in the Brazilian context, consider the three pillars presented by the Eastern authors, enhanced by cross-checks prospects with axes, approaches or intellectual capital directories, representing the Western authors contributions.

In summary, all three pillars: strategic human resource practices, knowledge management and innovation performance are combined with three axis (approaches): intellectual capital, intellectual capital management and intellectual capital strategic management. The presented structure facilitates the configuration of all organizational levels strategies and simplifies knowledge management optimizing the available resources.

There are some limitations in the presented study: its methodology did not empirically apply the aforementioned issues. Nonetheless, organizational practices compliance can provide opportunities to develop further projects concerning this subject matter. Another limiting aspect lies on the lack of longitudinal and cross-sectional analysis so that comparative studies may corroborate with the developed topic as well.

In conclusion, this research corroborated to draw structural aspects of this theme which did not have many written studies integrating them. Interdisciplinary approaches and its relationship with organizational strategy are recommended. It is desired this study contributes bringing about alternatives to expand these isolated subjects into new perspectives on innovation and knowledge management in Brazil.

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