Competencies and human resource management: implications for organizational competitive advantage

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Abstract

Purpose - The paper seeks to analyze in depth the organizational requirements for the exploitation of human resource management towards increased organizational performance, and to provide a conceptual framework for the analysis of human resource management in learning organizations.

Design/methodology/approach – The paper takes the form of an extensive literature review on human resource management (HRM), organizational learning and human capital.

Findings - The major contribution is the Requirements Framework for the Adoption of Technology Enhanced Learning and Semantic Web Technologies, which can guide strategies of effective competencies management in modern organizations. This framework initiates an interesting discussion of technological issues that go beyond the scope of this paper.

Research limitations/implications - The Requirements Framework provides the basis for an extensive specification of knowledge management strategies. A follow-up publication will present the practical implications of the "theoretical" abstraction of framework and empirical evidence.

Practical implications - The paper is a very useful source of information and impartial advice for strategists, HRM managers, knowledge management officers and people interesting in exploiting human resource management systems in a knowledge-intensive organization.

Originality/value - This paper fulfills an identified need to outline methods and technologies for integrated knowledge and learning and competencies management support in organizations.

Keywords Competences, Human resource management, Human capital, Competitive strategy Paper type Viewpoint

1. Introduction

There is no doubt that part of an organization's knowledge resides in the people who form it. The employee's knowledge value depends on their potential to contribute to the achievement of an organizational competitive advantage. Recent research suggests that human capital attributes (including training, experience and skills) - and in particular the executives' human capital - have a clear impact on organizational results (Barney, 1991; Finkelstein and Hambrick, 1996; Huselid, 1995; Pennings et al., 1998; Pfeffer, 1998; Wright et al., 1995).

Although the use of this knowledge is an important factor in the actual competitive environment, it is not enough to use the actual employees' knowledge basis. Thus, Wright et al. (1995) consider that "despite the firm's resources and capacities have added some value in the past, changes in customers' demands, in the industry's structure or in technology may turn them into less valuable in the future" (p. 51). Therefore it is important to manage employees, their knowledge and competences in such a way that the organization can build a long-term competitive advantage.

This paper is structured in two sections. The first describes the importance of human resource management as a key strategic resource in today's competitive environment. The second section analyzes how SHRM can shape the human resource systems and practices "It is important to manage employees, their knowledge and competences is such a way that the organization can build a long-term competitive advantage."

> to develop a dynamic capacity to respond to the market's competitive challenges, both in steady and dynamic environments. Finally, the paper summarizes conclusions and implications for human resource management in organizations.

2. Human capital and individual competences: a resource-based analysis

More than any other theoretical perspective in the field of strategic management, the resource-based theory has drawn the attention of scholars and practitioners alike. This is particularly evident if variants of the theory, such as dynamic capabilities (Teece et al., 1997), the knowledge-based view (Kogut and Zander, 1992) and the relational view (Dyer and Singh, 1998) are included. While the attention includes that of critics (e.g. Priem and Butler, 2001; Bromiley and Fleming, 2002) as well as adherents, it is undoubtedly one of the most influential theories in the field. As testimony to this, consider the distribution of the Strategic Management Society best paper prize over the 12 years that it has been awarded. This prize is awarded annually to a paper, published at least five years earlier, for its deep influence on the field. Seven out of the 13 such prizes that have been awarded so far have gone to papers advancing the resource-based view. Moreover, according to a recent study of article impact, the two most highly cited articles published in the Strategic Management Journal during the 1990s were conceptual resource-based articles (Peteraf, 1993; Teece et al., 1997). The citation count of Barney's (1991) classic resource-based article is even higher, exceeding 5,224 as of January 2007 (Ordóñez de Pablos et al., 2007).

The influence of resource-based theory can be attributed to a number of factors. It concerns what is arguably the most central topic in the field of strategic management - why some firms outperform others. In addition, it addresses a number of other core topics, such as firm heterogeneity, growth, and diversification. It resonates with scholars of strategy due to its connection to familiar strategy concepts, such as distinctive competence. Yet it brings an unprecedented degree of rigor to these concepts by grounding them in economic approaches that have more recently gained acceptance in the field.

The resource-based view of the firm (RBV) receives great attention in the strategic management literature. Its orientation towards internal analysis of the firm offers to human resource strategic management a valuable conceptual framework, through which to analyze the ways in which firms try to develop their human resources with the aim of transforming them in a sustained competitive advantage (Wright and McMahan, 1992).

The idea that human resources can become a source of competitive advantage for the organization is not new (Huselid, 1995; Ordóñez de Pablos, 2004; Pfeffer, 1998; Schuler and Jackson, 1987; Wright et al., 1995). It is generally accepted that firms can create a competitive advantage from human resources and their management practices. Effective human resource management will generate a higher capacity to attract and hold employees who are qualified and motivated for good performance, and also the benefits from having adequate and qualified employees are numerous. Some examples are higher profitability, less rotation, higher product quality, lower costs in manufacturing and a faster acceptation and implementation of the organizational strategy.

Organizational resources lead to a sustained competitive advantage when they are valuable, rare, inimitable and have no substitute (see Table I; Barney, 1991). The first four criteria create a potential for competitive advantage, but if the firm wants to obtain this advantage over its rivals, then it will have to be organized to use these resources (Ulrich and Lake, 1990). Next, if we start from the assumption that individual skills are normally distributed, these criteria will be analyzed.

In order to be a source of competitive advantage, human resources must create organizational value. Resources are valuable if they allow the organization to develop strategies that improve efficiency and efficacy (Barney, 1991). This criterion demands that both job demand and offer are heterogeneous - that is to say, organizations offer jobs that need different types of skills and individuals show differences in their skill types and levels. Thus, there is a variance in the value that individual contributions have for the firm, and therefore human resources can give value to the firm (Wright et al., 1995).

Second, resources must be rare in order to form a source of competitive advantage. In the human resource management context, this characteristic depends on the job pool's heterogeneity (Wright et al., 1995). If types and levels of skills are not distributed in a normal way, then some firms will be able to get the talent they need, while others will not, whereby, ceteris paribus, this form of human capital means a source of sustained competitive advantage. Moreover, the rareness criterion is also connected with the concept of resource specificity and labor mobility (Williamson, 1985).

Third, if a resource is to become a source of sustained competitive advantage, it must be inimitable. Firms can obtain human capital in the market, or by developing it internally. In the human resource management context, if a resource can be duplicated or imitated by another firm, then it is not a source of sustainable competitive advantage. Finally, for a resource to become a source of sustained competitive advantage, it must not have any substitutes. Human resources are one of the few organizational resources with the potential not to become obsolete and to be transferable to a variety of technologies, products and markets.

3. Human-based competences and human resource management: some keys for the long term organizational competitive advantage

3.1 Introduction

By means of simultaneously combining two strategic goals through human resource management (HRM), the organization can develop a long-term competitive advantage. These simultaneous goals are organizational flexibility and strategic fit.

A strategic human resource management system (HRMS) must allow the adaptation of human resource management practices and the knowledge and behavior of the employees as regards the immediate needs of the organization, which are shown in its organizational strategy. On the other hand, a human resource management system must promote the development of a dynamic organizational capability that generates agile responses to the needs of current organizational strategy. In brief, the SHRMS must facilitate strategic flexibility with the goal of reaching a dynamic fit and adequately answering the requests of the strategy and the environment.

Human resource management must explore how the integration and complementarities of resources, practices and organizational capacities facilitate the achievement of the

Table I	Estimatio	on of the income-ge	nerating potential of	forganizational resources	
Valuable	Rare	Is the resource Difficult to imitate	Non-substitutable	Competitive implications	
No	_	_	_	Competitive disadvantage	
Yes	No	_	_	Competitive parity	
Yes	Yes	No	_	Temporal competitive advantage	
Yes	Yes	Yes	No	Competitive advantage	
Yes	Yes	Yes	Yes	Sustained competitive advantage	
Source: Barney (1991)					

"The relation between strategic fit and organizational flexibility needs more research."

competitive advantage for the organization. Then we must analyze how human resource architecture can shape human resource systems and practices towards the development of organizational competitive capacity. Here the concepts of internal fit and external fit are really useful.

3.2 Knowledge, human competences and the concept of fit

Let's start with definitions. "Internal fit" refers to the degree to which human resource constituents are linked in a logical way and support themselves. External fit focuses on the extent human resource systems are integrated with the process and content of the organizational strategy (Lengnick-Hall and Lengnick-Hall, 1988; Milliman et al., 1991).

Human resource strategic management has shown the importance of the concept of flexibility because organizations with a complex and dynamic environment need flexibility to adapt to diverse and changing requisites (Snow and Snell, 1993). In particular, they highlight the importance of the need to "reshape the structure of the firm's resources and make the necessary internal and external transformations" (p. 520) for those firms that operate in dynamic environments. In particular, Snow and Snell (1993) state that firms with high flexibility are those that have a capacity to "examine the environment, evaluate markets and competitors, and rapidly make a reconfiguration and transformation that permits them to position before their competitors" (p. 520).

The relation between strategic fit and organizational flexibility needs more research. They develop a framework for the analysis of the dual roles to achieve, on the one hand, the fit of the human resource system with the organizational strategic needs and, on the other hand, to develop this human resource system, so that it facilitates the flexible answer to a range of strategic requisites over time. A human resource strategic management pattern should involve the goals of fit and flexibility. The top of the pattern shows the forms in which the firm searches for the human resource practices fit, employees' skills and behaviors along with their immediate competitive necessities established by strategy (Wright and Snell, 1998).

3.2.1 Internal fit, human resource management, and human-based competences. The study of the internal fit among human resource practices tends to be directed towards the identification of strategic human resource management configurations. The analysis of these configurations is very useful in understanding how human resource systems and people create competitive advantage for the firm. Human resource practice systems do present social complexity and causal ambiguity, and also help value creation, being able to form a source of competitive advantage for the firm. It might be easy to copy a firm's compensation program, but it might proved more difficult to imitate a complete system that combines compensation, evaluation, feedback, careers development, etc. (Delery and Doty, 1996).

3.2.2 Human-based competences, external fit and human resource management. External fit focuses on the analysis of theoretical and empirical connections between the organization's strategic orientation and its human resources (MacDuffie, 1995; Miles and Snow, 1984; Teece et al., 1997; Tichy et al., 1982). Human resource strategic management must not design practices that only fit with a particular competitive capacity, but ones that facilitate the creation of a human infrastructure that makes capacities that support multiple strategic dimensions. Inasmuch as actual organizations frequently chase multiple strategic orientations - for example, differentiation or leadership in costs - it is necessary to develop configurations that help to better understand the external fit in the human resource strategic management context.

3.3 Human knowledge, competences and organizational flexibility

Human resource strategic management clearly needs to develop flexibility in the firm (MacDuffie, 1995). Flexibility in the human resource strategic management context, according to Snell et al. (1996), represents "the degree in which the human resources of the organisation have the skills and behaviour repertoires that may provide some options to look for strategic alternatives in the competitive environment of the firm, as well as the degree in which the necessary human resource management practices can be rapidly identified, developed and improved, in order to maximize flexibility inherent to those human resources" (p. 214).

The flexibility of the employee's behavior is a signal of the firm's flexibility. Thus, employees that have a variety of behaviors at their disposal, and are also encouraged to use them in appropriate situations instead of always following standard operative procedures, increase the probability that the firm identifies new competitive situations and answers them adequately. Along with resource flexibility, the firm can also achieve flexibility through the coordination of behaviors between individuals and groups (see Table II). As behaviors are more homogeneous, the variety of the firm's prospects is reduced, thus diminishing the potential to develop a conflict. In so much as individuals share the same patterns, according to answers to certain perceived situations, these patterns also act as coordination mechanisms.

Finally, the development of the capacity to achieve flexibility and fit with strategic needs that change continuously represents a very important resource, especially for firms that work in dynamic competitive environments. This sort of capacity is, at least, a component of the dynamic capacities (Lytras et al., 2005; Lytras and Ordóñez de Pablos, 2009; Prahalad, 1983).

Main conclusions and implications for strategic management

Human resource systems can favor the development and/or use of organizational competences, and simultaneously these systems may destroy organizational competences and/or constrain their development and display. However, the use of human resource systems that develop competences, although necessary for a firm to reach a competitive position, might not be enough to reach long-term sustained competitive advantage. Thus it is necessary that the human resource system is relatively difficult to transfer to other firms, causally ambiguous, or both.

On the other hand, the specific features of certain human resource practices configurations, which are unique and ease the creation, transfer, and institutionalization of knowledge, must be researched. The use of configurational analysis - focused on advanced interactions among human resource practices, as well as in the non-linear effects that may appear among them - can contribute to the advancement of the field.

Strategic management in general and human resource strategic management in particular are aware of the necessity to know how they can configure human resource management systems and practices, with the aim of developing a competitive advantage for the firm. This

Table II Resource flexibility and coordination flexibility indicators						
Strategic HRM component	Resource flexibility	Coordination flexibility				
Practices Employee skills	Applicability of practices across jobs, etc. Individual skill breadth Ability to acquire new skills	Malleability of practices Speed of feedback on practice impact Variety of skills in the workforce Ability to acquire diverse skills from contingent workers				
Employee behavior	Rigidity of script application	Complementarity/conflict between scripts of different groups				
Source: Wright and Snell (1998	s, p. 221)					

issue can be analyzed with the help of concepts such as internal fit, external fit, and organizational flexibility

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