



Enhancing performance through best HRM practices, organizational learning and knowledge management

A conceptual framework

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Abstract

Purpose – The purpose of this paper is to explore the relationships between best human resource management (HRM) practices, knowledge management (KM), organization learning and organizational capabilities (OC) and their impact on organizational performance. The proposed framework intends to add to the understanding of the specific processes that mediate between best HRM practices and organizational performance.

Design/methodology/approach – A range of relevant literature is explored and a conceptual model is proposed and discussed.

Findings – This paper proposes an answer to “how” best HRM practices can influence performance. It is suggested that KM and organizational learning (OL) play their own unique role in creating OC, which lead to superior performance.

Practical implications – The paper can help human resource managers to understand better the importance of OL and KM processes and the way best HRM practices, through the integration of these two processes, lead to superior and sustainable performance.

Originality/value – This paper attempts to shed some light on the processes through which HRM practices influence performance. The proposed conceptual framework is an original, complete model that will hopefully contribute towards the enrichment of the relevant literature. Moreover, it clarifies relevant terms and their relationship that seem to be surrounded by ambiguity.

Keywords Human resource management, Learning organizations, Knowledge management, Organizational effectiveness

Paper type Conceptual paper

Introduction

The increasing interest around human resource management (HRM) has caused a significant body of empirical research to emerge, examining the impact of different HRM practices on organizational performance. However, minimum attention has been given to the conception or understanding of the specific mechanisms through which HRM practices influence performance. Despite the fact that this line of research plays

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a major role in that it points to the importance of human resources, limited research has been conducted that can provide real insights for organizations wishing to gain a competitive advantage through people.

Reviewing the literature which examines the whole theoretical spectrum of HRM practices, one can notice that the researchers' approaches seem to be more descriptive and confined within the limits of linking directly the HRM practices with performance. Most of them mainly, describe what HRM practices do and their impact on performance (at various levels of the company). There is a limited amount of research which attempts to explore how HRM practices essentially work and, hence, to realize the processes through which these practices can lead to competitive advantage.

The purpose of this paper is to examine the mediating processes between the existence and application of HRM practices and the creation of competitive advantage and increased performance. The authors make an effort to create a conceptual framework which captures this process, by examining the relationships of:

- knowledge management (KM) and organizational learning (OL) with HRM practices; and
- HRM practices with organizational capabilities (OC) and performance.

Overview of HRM-performance link

A significant body of research has suggested specific HRM practices that can improve employee motivation and commitment. As argued, these practices are expected to promote such inimitable attributes in human resources that can help an organization to obtain a competitive advantage and enhance its performance (Huselid, 1995; MacDuffie, 1995; Delaney and Huselid, 1996; Frits and MacDuffie, 1996; Guest, 1997; Hoque, 1999; Michie and Sheehan, 2001; Ahmad and Schroeder, 2002; Guest *et al.*, 2003).

During the years, all these practices that lead to superior performance were given various names by different authors: "best HRM practices" (Pfeffer, 1994), "high performance work systems or practices" (Appelbaum and Batt, 1994; Appelbaum *et al.*, 2000), "high-involvement practices" (Lawler, 1986), "high commitment practices" (Wood, 1996) and finally, "higher productivity and product quality practices" (Ichniowski *et al.*, 1996). What is worth noting is that irrespective of the definition given to these HR practices, positive relation with competitive advantage is reported in most of the cases (Guest *et al.*, 2003). Within this paper the term "best HRM practices" will be preferred, referring to all those HRM practices and policies that have been identified as effective in improving performance.

The basic idea around best HRM practices is that a particular set of those practices has the potential to bring about improved organizational performance for all organisations (Marchinton and Wilkinson, 2003), and therefore all firms should identify and implement best practice HRM in their effort to improve their performance. While there are enough evidences that certain types of HRM practices are associated with performance, the list of effective practices varies in each research. Practices typically mentioned in best practice models include:

- high levels of teamwork;
- performance-related pay;
- decentralised decision making;
- comprehensive employee recruitment and selection procedures;

- limited status differences;
- extensive training;
- employee involvement and internal communication arrangements;
- internal career opportunities; and
- broadly defined job descriptions (Jones and Wright, 1992; Arthur, 1994; Pfeffer, 1994; Jackson and Schuler, 1995; MacDuffie, 1995; Marchinton, 1995; Milgrom and Roberts, 1995; Delery and Doty, 1996; Becker and Huselid, 1998; Pfeffer, 1998; Wiesner and McDonald, 2001; Bowen *et al.*, 2002; Guest *et al.*, 2003; Michie and Sheehan, 2005; de Kok *et al.*, 2006).

Generally, best practice models emphasise three factors. Firstly, they usually put emphasis on enhancing employee abilities or knowledge and skills through effective recruitment and strong training. Secondly, best practice models contain an emphasis on motivating desired behaviour through strong incentives. Finally, best practice models promote opportunities for better trained and motivated workers to contribute to their knowledge and skills through work redesign and indirect forms of employee participation (Boxal and Purcel, 2003).

The resource-based view (RBV) of the firm (Weber *et al.*, 1990; Barney, 1991), advanced the arguments of the best HRM practices-performance link, by noting that tacit knowledge, infused in firm specific human resources, is hard to imitate because of social complexity (Barney, 1991; Dierickx and Cool, 1989), path dependency (Porter, 1980; Lipman and Rumelt, 1982; Dierickx and Cool, 1989; Barney, 1991) and causal ambiguity (Reed and DeFillippi, 1990; Barney, 1991). As Spender and Grant (1996) point out, tacit knowledge is embodied in individual and organizational practices and cannot be readily articulated. HRM practices proposed by various authors (Delery and Doty, 1996; Youndt *et al.*, 1996; Pfeffer, 1998) are expected to promote such inimitable attributes in human resources and lead an organization towards competitive advantage.

Therefore, establishing that HRM practices are linked with firm effectiveness is an important first step in this line of research which underlines the importance of human resources.

However, major contributors in the field believe that there is still little understanding of the mechanisms through which HRM practices influence effectiveness (Delaney and Huselid, 1996; Delery, 1998; Hislop, 2003; Jackson *et al.*, 2004). The existing empirical research has produced poor results that are unable to support organizations wishing to gain competitive advantage through human resources. Therefore, the question of “how” best HRM practices lead to organizational performance needs to be answered and the exact mechanics that play an important role must be identified. Those mechanics, through which HRM practices affect organizational performance, comprise the focus of our proposed framework.

Table I aims at:

- strengthening all the arguments made about the HRM-performance link;
- presenting some of the contributions on the relationship between HRM and other constructs that will be further discussed; and
- highlighting the suggestions by various authors for more contributions on those relationships.

Relationships	Significant contributions	Key themes
HRM practices and performance	Terpstra and Rozell (1993), Ichniowski <i>et al.</i> (1997), Roberts (1995), Betcherman <i>et al.</i> (1994), Arthur (1994), Huselid (1995), Delery and Doty (1996), Redman and Wilkinson (2001), Ahmad and Schroeder (2002), Michie and Sheehan (2005), Guest <i>et al.</i> (2003), Sels <i>et al.</i> (2006) and Youndt <i>et al.</i> (1996)	HRM practices proposed by various authors (Pfeffer, 1998; Delery and Doty, 1996; Youndt <i>et al.</i> , 1996) are expected to promote such inimitable attributes in human resources and lead an organization towards a competitive advantage Delery (1998) and Delaney and Huselid (1996) argue that there is still little understanding of the mechanisms through which HRM practices influence effectiveness For Redman and Wilkinson (2001), the subtleties of the HR value creation process, are extremely difficult for competitors to imitate. The complexities and ambiguities associated with how HRM practices are related to culture are considerable and cannot be easily comprehended by would-be imitators
HRM practices and KM	Clarke and Staunton (1989), Hansen <i>et al.</i> (1999), Robertson and Hammersley (2000), Soliman and Spooner (2000), Hislop (2003), Shih and Chiang (2005), Oltra (2005), Scarbrough (2003), Storey and Quintas (2001) and Khandekar and Sharma (2005)	HR practices play an important role in facilitating employees' absorption, transfer, sharing and creation of knowledge (Soliman and Spooner, 2000) Many KM initiatives tend to neglect human issues (Oltra, 2005) While the importance of these issues has been widely articulated, people management perspectives have yet to be fully developed and the KM literature has made only partial and limited use of HRM concepts and frameworks (Hislop, 2003)
HRM practices and OL capability	Jaw and Liu (2003), Gomez (2004), Khandekar and Sharma (2005) and Jackson <i>et al.</i> (2004)	Invisible assets as knowledge, are embodied in people, therefore policies regarding HR are critical to OL (Jaw and Liu, 2003) If organizations are seeking competitive advantage through HR, they should design HR systems in ways that allow it to leverage and exploit knowledge-based resources and enable employees to use the knowledge for competitive edge (Khandekar and Sharma, 2005)
HRM practices and OC	Roehling <i>et al.</i> (2005) and Ulrich <i>et al.</i> (1995)	Since OC are deeply rooted in HR capabilities (e.g. employee attitudes and social networks), HR is best positioned to deliver these outcomes (Roehling <i>et al.</i> , 2005) We have a poor understanding of how the HR function must be shaped to deliver OC (Roehling <i>et al.</i> , 2005)

Table I.
Significant contributions on the relationship between HRM practices and performance, KM, OL capability and OC

Proposed framework

Considering today's corporate environment, the conceptual framework shown in Figure 1, views performance primarily as a product of strategic HRM through the exercise of best HRM practices at both strategic and operational levels of any company (with one or multiple business). Best HRM practices are expected to enhance organizational performance (Arthur, 1994; Osterman, 1994; Huselid, 1995; Youndt *et al.* 1996; Delery and Doty, 1996; Guest and Conway, 1998; Pfeffer, 1998; Wood and de Menezes, 1998; Appelbaum *et al.*, 2000; Guest *et al.*, 2003) by promoting inimitable attributes in human resources (Barney, 1991; Pfeffer, 1998; Redman and Wilkinson, 2001).

Those inimitable attributes are mainly the end products (outcomes) of the KM and OL processes (Hislop, 2003; Jaw and Liu, 2003; Khandekar and Sharma, 2005) which are very closely related (Pemberton and Stonehouse, 2000; Loermans, 2002; Gorelick and Tantawy-Monsou, 2005; Dimitriades, 2005). Our view is that OL constitutes the infrastructure of the organizational knowledge base creation, while KM is concerned with all needed strategies to maintain and leverage it (Loermans, 2002).

Those two processes lead to knowledge-based assets which develop OC (Nonaka and Takeuchi, 1995; Wang and Lo, 2003; Real *et al.*, 2006; Nielsen, 2006) that could drive a company to superior sustainable performance (Williamson, 1999; Caloghirou *et al.*, 2004; Regan and Ghobadian, 2004).

The proposed HR system does not intend to simply, explore, the direct relationship between best HRM practices and organizational performance. This relationship has been already examined, very thoroughly, in the past. Its purpose is to highlight all those important processes that best HRM practices should "activate" for long-term competitive advantage and increased performance. In the next sections, a detailed theoretical support for each specific construct of the proposed framework as well as their accompanied relationships will be presented.

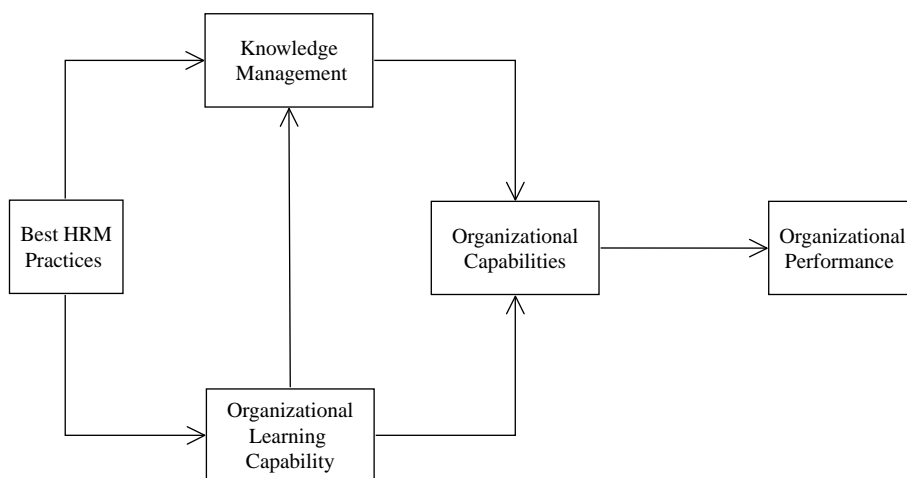


Figure 1.
Proposed "best HR
practices" system

Theoretical support of the proposed model

Learning organization and OL capability

Few topics in the business area have received more attention over the last decade than that of the “learning organization” (LO) (Bennett, 1998; Goh and Ryan, 2002) as evidenced by the volume of literature devoted to this topic (Argyris and Schon, 1978; Senge, 1990; Argyris and Schon, 1996; Goh and Richards, 1997; de Geus, 1988).

Summarizing the definitions adopted by different academics (Senge, 1990; Mills and Friesen, 1992) the LO is an organization which adopts specific strategies, mechanisms, and practices that encourage its members to learn continuously so that they can adapt to the changing business environment.

Goh (1998) defined these strategies, mechanisms and practices as the “learning capability” of the organization. Ulrich *et al.* (1993) also use the term “Learning Capability” in referring to “building and diffusing learning capability” and DiBella *et al.* (1996) as “developing organizational learning capability”.

At this point, the difference between the terms “organizational learning” and “LO” should be clarified. The difference, as Tsang (1997, pp. 74-5) argues, is that:

[...] organizational learning is a concept used to describe certain types of activity that take place in an organization while the LO refers to a particular type of organization in and of itself. Nevertheless, there is a simple relationship between the two. A LO is one, which is good at organizational learning.

So, as Burnes *et al.* (2003) point out, the difference appears to be between “becoming” and “being” This is another way of saying that learning is the process which leads to the outcome of the LO. Therefore, the term “organizational learning capability”, which is used in our framework, refers to those processes necessary to make a company a LO.

The literature around the LO is vast and takes various forms but, as Argyris (1999) argues, the central idea behind the LO is broadly shared. The idea includes notions of adaptability, flexibility, avoidance of stability traps, experimentation, rethinking means and ends, realization of human potential for learning in the service of business purposes and creation of human development.

These same central ideas are adopted by this paper. The LO is conceptualized as the creation of the needed infrastructure that can accommodate the acquisition and use of knowledge and the processes towards this end are described as the OL capability. This knowledge could be the prerequisite for the creation of sustainable competitive (and thus corporate) advantage.

The relationship between OL and HRM is also discussed by various authors but specific linkages between best HRM practices and the OL capability have not been clearly made. The philosophy of the principles of HRM during the last decades has led to the acceptance of the idea that people add to the competitive edge. According to Garvin (1993), this can be accomplished by building a LO. More academics add to this view (Mills and Friesen, 1992; Drucker, 1993; Pearn *et al.*, 1995; Bennett, 1998; Reynolds and Ablett, 1998; Lennon and Wollin, 2001; Marchinton and Wilkinson, 2003; Jaw and Liu, 2003; Khandekar and Sharma, 2005).

Organizations learn through their individual members (Kim, 1993), thus OL seems to be tied to individual level behaviours (Nonaka, 1994), such as experimenting with new approaches and processes (Garvin, 1993). Therefore, learning strategies rely heavily on employee involvement in everyday decisions and experimentation.

The use of teams and other forms of employee involvement are typical means of emphasizing a LO (Gomez, 2004). Moreover, LO attract and retain best talent by entering into a psychological contract with their employees that motivates them to generate and share knowledge in return for nurturing and nourishing their professional skills (Thite, 2004). According to Lado and Wilson (1994), since HRM primarily takes the task of dealing with employees and their working environment, it is fair to say that HRM plays an important role in enhancing employees' learning behaviour. For Dertouzos *et al.* (1989) and Pettigrew and Whipp (1991), competitive advantage will occur to organization, which develops HR policies that promote continuous learning, teamwork, participation and flexibility; attributes that clearly exist within the best HRM practice spectrum. As Khandekar and Sharma (2006) point out in their study, the more specific HRM practices, like strategic HR planning, recruitment and selection and improved reward systems, exist in the organizations, the stronger the learning capability of the organization.

One could argue that it is quite obvious from the literature presented, that best HRM practices used by an organization have the potential to influence people's attitude towards learning. As it is demonstrated, OL capability is strongly "bonded" on human factors which can, as already shown, be strongly shaped or manipulated by those HRM practices that are usually described as "best HRM practices".

As Khandekar and Sharma (2005) point out if organizations are seeking competitive advantage through HR, they should design HR systems in ways that allow them to leverage and exploit knowledge-based resources and enable employees to use the knowledge for competitive edge.

Knowledge management

The term KM is used to refer generally to all efforts to enhance and increase the value of the generation, sharing and application of knowledge (Dawson, 2000). The complexity behind the definition of KM is partially due to the difficulties in identifying knowledge itself. Many varying definitions of KM appear in the literature. One of the well-known definitions is provided by Davenport and Prusak (1998): KM is concerned with the exploitation and development of the knowledge assets of an organization with a view to furthering the organization's objectives. The knowledge to be managed includes both explicit, documented knowledge, and tacit, subjective knowledge.

Many writers (Blackler, 2000; Soliman and Spooner, 2000; Thite, 2004; Oltra, 2005; Lengnick-Hall and Lengnick-Hall, 2006) highlight the importance of HR in implementing KM and the fact that people issues need to be moved to the centre stage of thinking about knowledge. Lately, best HRM practices are also considered by some authors (Scarborough and Carter, 2000; Robertson and Hammersley, 2000) to constitute the basic factors of KM success.

An important point here is the idea that the success of any KM initiative is likely to be critically dependent on having suitably motivated people taking an active role in the process (Reynolds and Ablett, 1998; Storey and Quintas, 2001). The most important element here includes the personal nature of tacit knowledge which requires willingness on the part of those workers who possess it to share and communicate it (Flood *et al.*, 2001; Empson, 2001; Willman *et al.*, 2001). As Hislop (2003) argues, there are specific factors within organisations that have been found to affect people's willingness to share knowledge, including the type of HRM policies and practices that are adopted.

Currie and Kerrin (2003) also highlight that the contribution human resource practices make to managing knowledge is determined by the employees' unwillingness to share knowledge with others.

For Soliman and Spooner (2000), HRM practices play an important role in facilitating employees' absorption, transfer, sharing and creation of knowledge. More specific, compensation, training and performance management programs are significantly affect employees' motives and behaviours in participating in KM activities (Greengard, 1998). Similarly, Scarbrough (2003, p. 502) identified that HRM practices as selection methods, compensation strategies and career systems seem to "have an influence on the flows of knowledge which KM is seeking to maximize".

Moreover, Soliman and Spooner (2000) pinpoint the importance that HRM plays in identifying where the tacit knowledge resides, and how best it may be utilised, negotiating with employees on selecting an appropriate KM programme, harnessing a know-how strategy, creating a supportive environment for KM programmes, enabling technologies for a KM programme and creating a KM team.

Oltra (2005) adds to this discussion by arguing that individual human beings are the ultimate knowledge creators and bearers. Accordingly, great care has to be taken so as to increase their capability as organizational knowledge enhancers and, as a result, the rigorous and strategic management of people must act as a trigger toward effective knowledge-leveraging processes.

Paradoxically, however, while the importance of these issues has been widely articulated, human factors have yet to be fully examined and the KM literature has made only partial and limited use of HRM concepts and frameworks (Soliman and Spooner, 2000; Hislop, 2003). Storey and Quintas (2001) argue that the weakness of the linkages between HRM and KM is, to some extent, due to the fact that HRM academics have been unwilling to enter this debate.

Organizational learning capability and KM

The increasing interest in knowledge in recent years has been accompanied by a renewed discussion on OL and KM and, more specifically, the potential for an organization to generate competitive advantage on the basis of its knowledge assets (Pemberton and Stonehouse, 2000).

According to the knowledge-based view (KBV) of the firm, competitive success is governed by the capability of organizations to develop new knowledge-based assets that create core competencies (Pemberton and Stonehouse, 2000). While these knowledge-based assets exist in many forms, Dimitriades (2005) argues that OL is an integral feature of any LO that effectively utilises its knowledge resources to generate superior performance.

Firestone and McElroy (2004) argue that the relationship of OL and KM is close enough to be termed intimate. According to Chattel (1998), if an organization wishes to fulfil KM functions, it must provide a learning environment to maximize its human resources. Cavaleri (2004) proposes that those two approaches are complementary and may be integrated into a larger framework that can offer managers a potentially potent way to leverage human intellectual capital for performance.

Bierly *et al.* (2000) comment that in addition to learning capability, organizations need to develop and implement effective knowledge strategies. Many writers (Nonaka and Takeuchi, 1995; Wigg, 2000; Ordóñez de Pablos, 2002) perceive KM as the process of

capturing a firm's knowledge and using it to foster innovation, through a spiral of OL. Loermans (2002) add further insight into the learning-knowledge synergy by claiming that high-velocity change in the global business environment demands high-velocity learning, while this requires new knowledge to be generated continuously and managed in a systematic way. The combined disciplines of the LO and KM provide the theoretical framework within which this can occur and a clear understanding of the relationship between them is therefore necessary. Finally, Dimitriadis (2005) argues that effective learning requires the development of a strategic learning capability by linking OL and KM in and among organizations.

Therefore, the need for combining these two processes of OL and KM becomes more important, especially, nowadays. But what is essentially the difference, or the exact relationship, between those concepts that seem to bother the academic community recently?

Writers propose different arguments on this interesting debate. Most of the authors that seem to be essentially involved within this debate (Hong and Kuo, 1999; Pemberton and Stonehouse, 2000; Loermans, 2002) argue that a LO generates new knowledge which helps sustain its competitive advantage; however, just creating knowledge alone does not mean that knowledge is being efficiently and effectively used or managed. KM takes the output from the LO (new created knowledge), manages it and ensures that an appropriate environment to perpetuate the generation and management of knowledge capital is being properly maintained. Similarly, Rowly (2000) believes that learning leads to knowledge, which may be either tacit or explicit, while knowledge is available to support and enforce decisions, behaviour and actions.

Our view is that, indeed, successful LOs must create an organizational environment that combines OL with KM. OL capability constitutes the infrastructure of the organizational knowledge system, while KM is concerned with all those strategies that are required for its development and maintenance. In other words, a LO develops a culture which emphasises the importance of learning (knowledge creation), constantly promotes it as a central idea or value within the organization and creates the right conditions for such ideas to prosper. On the other side, KM, within this environment of the LO, is primarily concerned with the accumulation, sharing, utilization, internalization and use of knowledge assets throughout the organization.

OC and their relationship with KM and OL

The concept of capabilities is not a new one. An emphasis on building distinctive capabilities or competencies can be found in Selznick (1957) and Learned *et al.* (1969). An early generic description by Nelson and Winter (1982) categorises capabilities as lower-order organizational knowledge and skills, and higher-order co-ordinating mechanisms. Madhok (1997) refers to capabilities as a combination of resources that creates higher-order competencies. For Day (1994), capabilities are complex bundles of skills and collective learning, exercised through organizational processes that ensure superior coordination of functional activities. Hoskisson *et al.* (2004) refer to capabilities as the capacity to perform a task or activity in an integrated manner. Other descriptions of capabilities view them as a set of organizing processes and principles a firm uses to deploy its resources to achieve strategic objectives (Kogut and Zander, 1992; Grant, 2002).

Reviewing the literature, one can point out, that OC seem to be closely related with KM initiatives. According to the KBV, competitive success is governed by the capability of organizations to develop new knowledge-based assets that create core competencies or OC (Pemberton and Stonehouse, 2000; Narasimha, 2000; Miller, 2002). Nonaka and Takeuchi (1995) extent this view further by examining the role of employees' interaction in the development of new capabilities, which emerge from the development (creation) of new knowledge through the processes of organizational learning. Moreover, Pemberton and Stonehouse (2000) argue that the creation of knowledge through learning processes is seen to be critical to the development of capabilities.

The impact of OL capability in the development of OC is also evident throughout the literature. OL capability seems to positively influence capabilities in a similar way that KM does (Nonaka and Takeuchi, 1995; Pemberton and Stonehouse, 2000). As Chaston and Badger (1999) have noted, OL functions as an antecedent of OC. It brings employees and other resources together, firms develop the processes on which capabilities are built, and employees continuously apply their knowledge and skills to operational or strategic problems so that a deeper knowledge base develops, which will also enhance capabilities. Wang and Lo (2002) adds to this view by noting that competence building and upgrading can only be achieved by organizational learning.

Nowadays, although the knowledge-based and OL views have managed to clear the theoretical meaning of each concept (KM and OL), a large amount of empirical research (Sher and Lee, 2004; Protogerou *et al.*, 2005) still treats KM and/or OL as unique OC and not as processes which play their own distinctive role in the development of OC. Our view is that KM and OL should be treated as processes that lead towards the development of capabilities, which are considered as the end products coming out of these processes (i.e. knowledge of doing something specific).

Organizational capabilities and performance

The relationship between OC and performance is well established in the literature and has been researched in various perspectives such as the RBV, OL theories, KBV and the dynamic capabilities perspectives (Shrivastava, 1983; Wernerfelt, 1984; Barney, 1986; Rumelt, 1987; Barney, 1991; Nonaka and Takeuchi, 1995; Teece *et al.*, 1997; Raft and Lord, 2002; de Carolis, 2003; Lopez, 2005).

RBV suggests that competitive advantage and performance results are a consequence of firm-specific resources and capabilities that are costly for competitors to imitate (Wernerfelt, 1984; Barney, 1986; Rumelt, 1987; Barney, 1991). In the KBV, analysis of capabilities has incorporated human, social and organizational resources next to economic and technical resources. In this view, firms that possess stocks of organizational knowledge, characterized as uncommon or idiosyncratic, stand a good chance of generating and sustaining high returns (Raft and Lord, 2002). Further, these stocks of knowledge develop dynamic learning processes. These learning processes are capabilities that are described by different academics as OL (Shrivastava, 1983; Lopez, 2005). Under the dynamic capabilities perspective, dynamic capabilities are the drivers behind creation, evolution and recombination of other resources into new sources of competitive advantage and performance (Teece *et al.*, 1997).

In the research model proposed here, organizational performance is separated in two sets of measures, the non-financial and the financial ones. The former could comprise

operational performance measures and the latter corporate and market performance measures. Banerjee and Kane (1996) report that for organizational performance measurement there is a need for integration of financial and non-financial measures. Kaplan and Minton (1994) suggests that financial measures are important although other indicators such as product innovation, product leadership, employee morale, and customer satisfaction and loyalty could be much better indicators for future profitability and thus organizational performance.

Concerning operational performance, the most common measures in this category are: unit cost, quality, delivery, flexibility and speed of new product introduction (Ahmad and Schroeder, 2003). In Denmark, findings report that non-financial measures such as inventory turnover, on-time deliveries, and quality are major indicators for more than 50 per cent of companies (Israelsen *et al.*, 1996). In Belgium (Bruggeman *et al.*, 1996) and The Netherlands (Groot, 1996), while financial indicators are preferred, measures such as customer satisfaction, quality, innovativeness, are of increased use.

Corporate profitability and market performance are the two basic components of financial performance (Spanos and Lioukas, 2001). The most common measures of financial organizational (corporate) performance are: net profit, return on investment, return on assets, profit margin, asset turnover, return on equity, and economic value added. Similarly, the most common measures for market performance are: sales volume, growth in sales volume, market share, and growth in market share (Spanos and Lioukas, 2001).

Table II presents all significant theoretical contributions concerning the relationships between the constructs of the proposed framework. Its purpose is to strengthen all the arguments made about these relationships which seem to act as the basic mechanisms through which best HRM practices influence performance.

Discussion and conclusions

Despite the undeniable fact that management theory has made a lot of advancements, there is still some ambiguity around the concepts of OL, KM and OC and, especially, the relationships between them. Some times, these concepts are closely related, adjacent to certain points, overlapping each other or even being presented as synonyms. More importantly, within the field of “best HRM practices”, the literature has not been clear enough concerning the specific mechanisms through which HRM practices influence performance.

This brief literature review explores all those organizational concepts that seem to be strongly influenced by people but can also become the drivers for sustainable competitive advantage in an era of new demands and rapid organizational change. Towards this end, a conceptual framework has been proposed which:

- takes into consideration the already existing theoretical knowledge;
- attempts to shed some light in the relationship between the constructs under examination; and
- has the intention to contribute towards the better understanding of the specific mechanisms through which HRM practices influence organizational performance.

Part of the value provided by this framework lies in the reflection of factors and their relationships that have not received the appropriate attention when thinking about

Relationships	Significant contributions	Key themes
KM and OL capability	Pemberton and Stonehouse (2000), Firestone and McElroy (2004), Dimitriades (2005), DiBella (2001), Bierly <i>et al.</i> (2000), de Pablos (2002) and Chermin and Nijhof (2005)	Bierly <i>et al.</i> (2000) argue that besides learning capability, organizations should develop and practice successful knowledge strategies Dimitriades (2005) argues that effective learning requires developing a strategic learning capability by linking OL and KM in and among organizations
KM and OC	Nonaka and Takeuchi (1995), Pemberton and Stonehouse (2000), Sher and Lee (2004), Macher and Mowery (2006), Roberts (1998) and Nielsen (2006)	It can be argued that emphasis on capabilities is of little value if the KM activities are not taken into account as well (Nielsen, 2006) The development of knowledge through processes of learning within and across organizations is seen to be central and critical to the development of capabilities (Nonaka and Takeuchi, 1995)
OL capability and OC	Senge (1990), Nonaka and Takeuchi (1995), Chaston and Badger (1999), Pemberton and Stonehouse (2000), Wang and Lo (2003), Chaston and Badger (1999) and Real <i>et al.</i> (2006)	Learning can result in incremental improvements as well as the development of new capabilities (Senge, 1990) OL functions as an antecedent of organizational competences (Chaston and Badger, 1999) A LO gains sustainable competitive advantage by accelerating learning to develop superior intelligence and knowledge that, when harnessed, produces unique and durable core competences (Pemberton and Stonehouse, 2000)
OC and performance	Innis and La Londe (1994), Koufteros (1995), Tracey <i>et al.</i> (1999), Regan and Ghobadian (2004), Barney <i>et al.</i> (2001), Fiol (2001), Henri (2005), Macher and Mowery (2006), Williamson (1999), Caloghirou <i>et al.</i> (2004) and Regan and Ghobadian (2004)	Nonaka and Takeuchi (1995) argue that the role of interaction in the development of new capabilities is emerging through the development of knowledge by processes of OL and has a direct or indirect impact on the financial performance of an organization

Table II.
Significant contributions on the relationships between the basic mechanisms that mediate on the human resources-performance relationship

managing people. While the value of the human factor in KM and LO initiatives, as well as on OC, has already been underlined in the past, there is still not a complete model describing and analyzing specific relationships between all these organizational concepts. The proposed framework is considered to be an original, complete model that intends to contribute to the literature by exploring the linkages between best HRM practices, KM, OL, OC, and organizational performance.

The effective management and development of people is seen as critical in leveraging the firm's rare, valuable and difficult to replicate resources, thus gaining an advantage over the competitors, leading to higher performance. Inimitable resources,

mainly invisible assets, are not directly developed by human resource practices. Those practices mainly increase organizational commitment, motivate and generally affect people's willingness to create, share or explore those invisible assets. Therefore, HR practices effectively act as a trigger toward effective KM and OL processes, which, if combined, can create valuable, rare and inimitable OC. Those capabilities that can usually help to perform a task or activity in an integrated manner are sources of sustainable competitive advantage and performance.

Finally, the HR system proposed in this paper presents a complex but clear picture of some important variables that can influence HR managers' way of thinking about HR practices. OL and KM play their own unique role, in realizing that the traditional focus on managing people has been broadened to managing OC, managing relationships and managing learning and knowledge (Coates, 2001; Lengnick-Hall and Lengnick-Hall, 2003). According to Gloet (2006), a considerable number of experts warn that HRM faces extinction if it does not respond to changes brought about by the shift from a traditional to a knowledge-based economy. This paper adds to the view that KM and OL offer the much-needed window of opportunity that the HR profession so desperately needs to redeem its credibility maligned by historical reasons throughout its troubled evolution (Wright *et al.*, 2001).

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