Managing human resources in the knowledge-based economy

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Abstract. In the management of human resources, knowledge workers have been considered as adding high value to their organizations and as being the cream of the workforce. The globalization process as well as the easier access to technology has changed this paradigm. Nowadays, the knowledge workers are found at almost all levels of the workforce, from low wages to high wages. In addition, the technological change is increasing the demand for skilled labor and has modified the relationship between employees and employers. The employees have traditionally expected a stable and lifelong employment, but in the knowledge-based economy they have to update their skills continuously. Effective knowledge management is about managing people and systems so to foster the use of information in the organizations. The information should be accessible to individuals and the employees should be encouraged to develop and use their knowledge to create value for their organizations. The efficient knowledge transfer within the firm plays a significant role on the ability of an organization to fully use its knowledge-based competitive advantage, and in the economic development of countries.

Keywords: human resource management, knowledge-based economy, learning organization, knowledge creation, innovation, knowledge-intensive firms

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1. Introduction

In a knowledge-based economy, the competitive advantage is not achieved by integrating capital, labor and material, but through the capacity of organizations to adapt to the dynamic environment, by generating and applying new knowledge. These capabilities are dependent on the human resource development, as traditional tangible assets tend to be less important than knowledge-based assets.

In a world dominated by the impact of the internet and globalization of businesses, the new knowledge-based economy is becoming a significant driver for national economies and organizations. These changes corroborated with the new patterns of employment influence to a large extent the human resource policies of organizations. In such a dynamic competitive environment, where knowledge has an essential role in the value-added creation, employees should learn fast, adapt to new challenges, acquire technical skills, as well as creating and sharing knowledge and innovating continuously.

Knowledge economy organizations need human resource development professionals with different competencies and attitudes as compared to traditional environment. Therefore, these professionals have to be trained and develop using new approaches.

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2. Human Resource Management in the Knowledge Economy

In the traditional view, HRM incorporates the practices, policies and HR philosophies needed to secure, train, retain and motivate the organization’s workforce. Therefore, in this paradigm the HR function is to control labor costs and provide a constant flow of competent personnel for the organization. This cost-based approach is efficient for organizations in which the labor represents the largest operational cost. Nevertheless, cutting labor cost does not imply automatically adding value to the organization, as in the past decades, the competitive environment has put a lot of pressure on all companies. Therefore, there have been many people who criticized HRM for not participating in the value-added process and they have tried to identify ways in which people can support directly the competitive advantage.

Human resource are defined as the accumulated stock of knowledge, skills and abilities possessed by employees, which should be turned into formal expertise by the organization (Lengnik, 2003). Other studies highlight that the HR function should be more than a set of practices, isolated one from another. In today’s climate, where technical breakthroughs facilitated communication and businesses have globalized, HR specialists focus on the development of organizational capabilities. This context means that HR managers should work closely with the top management and get involved in the strategic planning.

Organizations and their employees have to acquire new skills and knowledge to satisfy the customers’ needs and compete in today’s dynamic business environment. In addition, more and more companies have started to organize operational work in projects or according to customers, therefore employees have to expand their technical and interpersonal skills, and perform tasks once done by management. Taking into account these changes, employee training and development have gained a greater role in business strategy.

2.1. Human resource development

Human resource development has to be a future oriented process and implies learning that does not have to be related to the current job of an employee. By focusing on training their skills while having a broader approach, the organizations prepare them for upper positions in the company and increase their flexibility to take jobs that might not even exist at the moment of development. As compared to regular training programs that focus on improving the employees’ performance of their current position within the organization, human resource development prepares them for new customer, new technologies or for a new job with other responsibilities.

In a continually changing environment, where the job security and advancement within the company are not taken for granted any more, employees have to develop new skills to respond to customer needs. Therefore, nowadays it is not enough to “know how”, an employee should also “know why” (understanding the organizational culture and business concept) and “know whom” (having the right connections with vendors, suppliers).

Companies can develop the skills of their personnel by organizing different formal programs, at the workplace or in other places, such as universities. The formal educational programs include workshops customized for the organization’s employees, or courses held at universities. On the other hand, employee development can be also done by collecting information about their behavior and skills (from customers, superiors or colleagues), and giving them suggestions on how to improve several skills or neutralize their weaknesses. Therefore, the employees could attend certain courses or experience new situations by changing the job, in order to create new skills. According to researches performed in this field, the most efficient method to develop employee’s skills is through job experiences, as it makes him to develop new skills and use its current knowledge in other ways, to fit the requirements of the new position. Put in from new job
experiences, employees have to learn new interpersonal skills (conflict resolution), handle pressure and overcome challenges.

Human resource development assumes that organizations can be seen as learning entities and the learning process of organizations and individuals are capable of influence and direction through planned interventions. Therefore, HRD is constituted by planned interventions in organizational and individual learning processes (Steward and McGoldrick, 1996). Nevertheless, HRD is not necessarily tied to attaining the objectives of the organization stated by top management. In most of the cases, HRD activity influences the processes of establishing the objectives, with positive results on the organizational performance. Nevertheless, in order to use the HRD potential to create competitive advantage, its objectives should be aligned with the corporate goals.

The key persons that control the resource allocation decide if the HRD activity adds enough value, to reduce or increase the resource. Nowadays, there are many organizations that invest only in short term needed training, because they perceive long term HRD processes as arbitrary.

Many studies have tried to gain a deeper foothold in HRD activity, but their findings are divergent. On the one hand, Swanson (1995) sees the HRD processes as being oriented towards improving the organizational performance by transforming the tacit knowledge deeply embodies in key employees, by training the personnel and organizational development. On the other hand, other researchers view HRD activity as long-term oriented, its goal being to support learning for individuals, groups and organization as a whole.

HRD activity should enhance the long-term flexibility of organizations, increase their ability to compete in a dynamic environment and develop the personnel creativity, while the management should set performance targets (turnover, cost and profit per employee). Moreover, HRD should also emphasize on knowledge development that will support continuous improvement and innovation. Harrison (2004) considers that when organizations face uncertainty and unpredictable challenges, the individuals and teams have to work and learn together closely to overcome these issues. In a knowledge economy, companies need to focus on continuous learning and development to adapt and foster innovation.

2.2. Human and social capital

According to human capital theory (Schultz, 1961) people are assets for an organization, their economic value coming from their skills, knowledge and expertise in their field of activity. The intangible assets such as intellectual property and customer equity are the result of human capital work and they represent the core of the competitive advantage and drivers for the organizational performance. The human capital theory results in the perception that training and development of employees in areas related to their job are the key HRD methods to increase productivity and therefore organizational performance, as they focus on improving their skills and knowledge.

On the other hand, social capital emphasizes on the value of social networks at workplace, as it promotes learning, sharing of knowledge and eventually the creation of new unique knowledge. This approach focuses on building and sustaining a learning organization. As opposed to human capital, the HRD has a broader view of the organization, therefore supporting innovation and process. Isolating the learning to the communities of practice may create irrelevant knowledge for the organizations goals and the unchanging the old routines and processes may even block innovation.

3. Knowledge creation process

In an economy where managing knowledge creation process and continuous learning are strategic areas, the organization can be viewed in several complementary ways. Firstly, according to Wittington (2002),
organizations are a reservoir of knowledge, as it is deeply embodied in the individuals and in the organizational culture that contains the principles encouraging the cooperation and knowledge transfer. Nevertheless, he points out that the creation of new knowledge is dependent on the existing capabilities of the organizations, as new knowledge is the result of recombination of current expertise. In a similar way, the principles of the organization culture and the past and current structures of the firm may inhibit the knowledge creation process. Secondly, the organization can also be viewed as a portfolio of dynamic capabilities, or as a network of relationships.

3.1. Tacit and explicit knowledge

The knowledge-creating organization depends to a large extent on the tacit knowledge (that which is deeply embedded in individuals). The combinations between tacit and explicit knowledge (that can be explained by using formal means) help the organization grow by stimulating innovation and continuous improvement. The tacit knowledge emerges from daily interactions between people at the workplace. Most of the tacit knowledge is dispersed within the organization, as the employees gain experience by performing their daily work and create new knowledge from interactions with their colleagues.

A significant amount of the organization’s knowledge is embodied in the firm’s personnel in the form of tacit knowledge, making difficult to transfer it to somebody else by formal means. Tacit knowledge represents an essential part of the human capital of an organization, as it contains the whole experience of an employee. Therefore, transforming it into explicit knowledge, which can be aggregated and used anytime, the company’s competitive advantage is not sustainable on the long run as employees might leave the company at any moment, taking with them valuable expertise. An organization can reduce its dependency on key personnel by implementing a proactive human resource strategy that encourages knowledge transfer and creation: work in teams, encouraging the employees to share information. Even more importantly, the effective knowledge transfer within the organization is essential for building a sustainable knowledge competitive advantage.

An essential aspect when deciding the organizational design is how much freedom to give to the knowledge-creating process of workplace communities of practice. In order to exploit the knowledge creation process to its full potential, an organization has to integrate the tacit and explicit knowledge of its key employees and find ways to disseminate the knowledge to create sustainable competitive advantage. The methods of decision-making, training and solving programmed or non-programmed problems can either block or foster the knowledge creation process. For example, companies that encourage the development of certain skills might end up doing more harm to the organization than good, as essential secondary skills are overlooked and employees might get a narrow view in which they perceive their world. In addition, they could even develop a rigidity regarding decision-making and a defensive culture (avoiding confrontation), even though “best practice” could bring short-term gains for the firm. Eventually, these strategies will have a significant negative impact on innovation, as the organization will emphasize only on several methods of learning, assuming there is no knowledge left to acquire. These rigid procedures will also deskill the workforce and affect the core capabilities of the organization. On the other hand, the managerial strategies are damaging, when the decision-making is concentrated in a single group, especially in domains where new learning is the key to attain success.

A firm’s strategy making process methods have a strong influence on the structural organization of the company. These strategies determine the ability of the company to solve problems regarding the right assets to create competitive advantage and how to develop and use these assets. Therefore, the choice of appropriate strategies affects directly the performance of the organization. Numerous studies have revealed that heterogeneous groups perform better in strategic decision-making, as compared to homogeneous groups,
because they have a broader view on the organization and are able to come up with innovative strategies.

In their research about knowledge creation, Einenhardt and Santos (2002) studied the impact of different ways of organizing the knowledge sourcing, transfer and integration. They found that encouraging the work in teams, liaisons and meetings improved the knowledge creation. In addition, organizations with loose links adapted better to the competitive environment and had greater innovative knowledge flows. On the other hand, Hedlund (1994) came with a different model of knowledge management, which takes into consideration the interdependency between explicit and tacit knowledge at four levels: the individual, the small group, the organizational and the inter-organizational. Therefore, he proposed two main organizational structures: the N-form and the M-form. On the one hand, the N-form organizations combine tacit with explicit knowledge by horizontal communication and by creating temporary teams for multinational or multidivisional projects. In this organizational structure, middle management stimulates and coordinates knowledge creation inside and outside the organizational boundaries. On the other hand, in the M-form organizations, the interdependence between people takes place in permanent structures and the top managers monitor and support the knowledge creation.

3.2. Knowledge-intensive firms

Knowledge-intensive firms (KIFs) are organizations that generate most of their revenue by creating new knowledge and adapt it to match their clients’ needs. Professional knowledge workers are essential for these enterprises and these companies are providing media organizations or consultancy services. As opposed to other firms, top management does not have the main strategic role, but the knowledge workers are also key actors. What differentiates a knowledge intensive firm from another are the competence of employees, their client contacts and their ability to learn everyday something new through projects, and to create new knowledge. In addition, although many of these firms do not have clearly stated strategies, they still have certain guidelines that are embodied in their organizational culture.

Data gathered from several technology organizations from UK show that knowledge intensive work challenge the traditional views about how firms in an emergent knowledge-based economy should be structured and managed. The researchers from Bath University propose a new model of managing human resources, which focuses on three main aspects:

- developing individual knowledge and skills
- sharing and developing this knowledge within organization
- sharing and developing this knowledge with clients and other parties in the network (Swart, 2003)

According to this study, knowledge workers represented a large part of the total employees in all the firms involved in the research, and they were all essential to the organizational performance of the companies. Nevertheless, the study also highlighted that there was a significant conflict between their needs to be part of interesting projects that challenged their skills and the requirements to share their knowledge with others from the organization and beyond it. In addition, taking into account their essential role within the knowledge intensive organizations, the management should implement proper HR strategies to manage recruitment, training, motivation and retention. The top managers should also find ways to help the knowledge transfer between different teams and to mitigate the tension between parties.

The researchers involved in the study concluded that the best way to remove the barriers to knowledge creation and integration in KIFs is to allow the people management practices develop inferentially and not top-down. Thus, these practices will be embraced more easily by the knowledge workers, as they will become part of the organizational routines.
Nevertheless, the new economy based on knowledge requires new approaches; therefore companies should take into consideration replacing the traditional management with self-management.

4. Building a learning organization

In a changing competitive environment that requires new patterns of work, increased flexibility and knowledge creation, the HR managers should contribute to culture change, by implementing new values and skills. During the last decades managers have been interested in implementing an organizational culture which stimulates people to improve their skills and knowledge, by learning continuously. The process starts with monitoring the competitive environment and using the findings to make decisions and make changes in the organization, based on the feedback. Building an efficient information system plays a great role in creating the learning organization, as it stores knowledge and make it available at any given time and place to employees, even after the people providing the knowledge have left the firm. However, people are the essential component when building a learning organization, as they must be committed to learning and share what they have learned. Continuous learning represents the individual and collective efforts of employees to gather information and apply it in the decision-making process. By exploiting the learning curve and implementing a learning culture, any organization competing in a knowledge-based economy can develop a sustainable long-term advantage as compared to its competitors. By improving the overall quality of the products and services, and increase the efficiency of chain management, a company will differentiate and decrease the overall costs. However, to make the competitive advantage sustainable, a company should develop mechanisms that encourage employees to share knowledge. Therefore, the main challenge when building a learning organization is to focus on generating and sharing culture and not only on training.

Nonaka (1994) describes the organizational culture as ‘a shared understanding of what the company stands for, where it is going, what kind of world it wants to live in and how to make that world a reality’. In other words, the organizational culture represents the symbols, stories, procedures and skills that influence people in the decision-making process and in their actions. In addition, the corporate culture is influenced by various factors, such as the country culture, the economic sector or the size and geographic structure of the organization.

Imposing an efficient culture from the top of the organization is impossible, but it can be achieved by training managers and supervisors to involve the rest of the employees in the process. However, strong subcultures will always exist within organizations, according to functions, therefore the shared understanding about the company’s goals and values will also vary creating issues when implementing culture changes. The reality is that in order to shift the culture of an organization, the managers should adapt the HR practices to the unique needs and situation of each company. The main elements that practitioners have to take into account are the vision, the way the vision is communicated and the management style across the organization.

In order to implement a learning culture, managers should have a deep knowledge of culture and its impact on organizational behavior and performance, be good communicators and know how to motivate and stimulate personnel to learn. In addition, it is essential to identify those aspects that might block the strategies implemented to change culture.

Building a learning culture is essential for companies competing in the knowledge-based economy, as it focuses on creating an organizational environment that facilitates individual and collective learning and develops an environment of trust and openness. Although workplace learning is not a new concept, nowadays it has become a source of competitive advantage that supports innovation in a climate where customers are becoming more demanding and the competition has globalized.
Engestrom (1995) distinguishes between adaptive, investigative and expansive learning, each typology having a distinct relationship between the learner and the context. The adaptive learning refers to improving existing routines in an organization. Investigative learning encourages people to develop questions and investigate the issue until finding the right solution. On contrast, expansive learning emphasizes on exploring and questioning existing conditions and finding solutions to unstructured problems.

4.1. Promoting innovation through the use of dynamic capabilities

The competitive advantage relies heavily on innovation in organizational and administrative processes, especially in the new knowledge-based economy. Therefore, the organizations should develop dynamic capabilities to integrate, build and reconfigure internal and external competencies. These capabilities also facilitate the implementation of strategies for new services, products or processes. In a knowledge economy, an organization will achieve high levels of performance if it is able to create a sustainable advantage and improve it continuously, by learning quickly and adapting the resource configuration to market changes.

Generally speaking, there are three types of capability development: cross-hierarchical, cross-functional and cross-value but there are companies in which capabilities are developed in all three modes. These organizations manage to integrate both self-organizing teams that create new capabilities through research, with exploitation of capabilities.

First of all, capability development can be a vertical process that emerges from top management and it is exploited at lower levels. On the other hand, capability development can also be the result of individuals or groups placed lower in the organization hierarchy. For example, first line managers know a lot more about customers or organizational processes therefore they should participate in the capability development activity. Secondly, new capabilities can also be created as a result of an interactive process, such as working in teams or projects. The horizontal capability development depends to a large extent on the organizational support for self-coordination of employees across organizational and functional boundaries. Nevertheless, the efficient cooperation between experts and the collective learning can be affected in the absence of the appropriate strategies. Last but not least, cross-value capability development differentiates an organization from others, through its ability to increase the loyalty of employees to perfecting the organization’s mission. In such companies, all employees share a common set of values, beliefs and language and they identify with the organization’s mission and vision.

There are numerous studies on efficient techniques for innovation, but the most important aspect is to provide the need tools so that any member to be able to select and use the methods effectively. Nevertheless, only organizations with strong cultures oriented towards understanding and satisfying the customers’ needs, working in teams, using their creativity to solve problems and adapting their technical potential to market changes, have the capacity to innovate. One of the most common views expressed in the specialty literature is that management should create an organizational environment that encourages members to take initiative, learn and operate changes. That is why top management should develop a vision and coordinate the organization through the process of achieving its goals. However, the employees should have enough autonomy and diversity to support the innovation process. Top management should also integrate the areas with the most potential into strategy and deploy value adding knowledge resources to increase the organizational performance.

In the knowledge economy, no organization can have all the needed capabilities to develop sustainable competitive advantage. Therefore, a company needs to create external relationships to complement their internal capabilities. Partnerships with other companies have advantages and disadvantages for both parties, therefore the firms should find a balance for long term cooperation. On the one hand, alliances help reduce costs and increase the efficiency for both parties through the knowledge transfer. On the other hand, an
alliance can reduce the competitiveness of an organization, as it might lose its core competencies and capabilities and increase its dependence on the partnership.

Therefore, an organization should have the right skills in order to balance the risk to benefit ratio and to choose the right partners. In addition, the firms should monitor the exchanges of competence and assets, to reduce the transaction costs while improving the cooperation and mutual trust.

5. Concluding remarks

Implementing proper human resource management strategies require an integrative approach, so that there are aligned horizontally with all human resource processes and vertically with the organizational goals. Achieving horizontal fit of the human resource strategies with all HR policies would improve the productivity of employees, increase the flexibility of the organization and facilitate the incorporation of new technologies. The main principle is to link learning and development to HR processes, to support the best practices on the long term. According to recent studies, training has become vital to knowledge management, therefore new structural relationships should be promoted.

The relationship between human resource management and development has to do more with collaboration, rather than subordination. Therefore, the HRD practitioners have to use their skills in new directions, as their work will be effective only if it is integrated and aligned with the human resource function. This approach is essential when the organization faces unfamiliar environment and it has to generate innovative solution to its challenges.

Organizations competing in a knowledge economy need to create dynamic capabilities continuously, based on continuous learning and knowledge creation. All knowledge creating enterprises face issues regarding the structures and processes that help the knowledge creation, transfer and creation. In addition, knowledge intensive firms should manage tacit and explicit knowledge as to stimulate continuous improvement and innovation.

There is no universal success recipe for all companies competing in the knowledge-based economy. Therefore, each organization should find its own strategies to exploit opportunities and mitigate threats by using its core capabilities, as well as solve the issues related to internal and external knowledge creation. In addition, they have to develop a strong knowledge base in order to organize for innovation.

6. References


