

Integrating Knowledge Management and Human Resource Management for Sustainable Performance

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Abstract

Strategic knowledge is increasingly becoming an engine for change and creativity in many industries and organizations: enabling effective operational and strategic initiatives. Existing literature in knowledge management (KM), however, has focused mainly on generic outputs obtainable from KM systems. This paper examines the strategic relevance of KM in enhancing human capital management in firms. To achieve this objective we present a detailed literature review on the implications of KM on effective human resource development, and the consequences for an organization's ability to sustain competitive position in the marketplace. We propose that firms that develop and apply strong KM culture would be able to achieve consistent high performance. In addition, when a firm is able perform better than competitors; such a firm would be able to achieve sustainable advantage. This paper could serve as a frame of reference for researchers, and could enable practitioners to gain better understanding of key requirements for maintaining competitive performance in this 21st century via effective integration of KM and human capital initiatives.

Keywords: Human Resource Management, Knowledge, Knowledge Management, Sustainable Performance, Malaysia

Introduction

For many countries, the degree of knowledge application is becoming a key measure of human capital and industry. Today's technologically advanced economies are setting great examples of typical knowledge-based economies (World Development Report, 1999)

Work in developed economies has migrated from agricultural to manufacturing and more recently to service/knowledge based. The migration comes with two notable developments, both of which carry significant implications for human capital management (HCM) (Charles and Jean-Marie, 1999). The two notable developments are:

1. An evolution from rational (engineered, fragmented, bureaucratic) to natural (organic, psychosocial, humanistic) to open systems frames of meaning in the management and organizational literature (Charles and Jean-Marie, 1999). This caused a transformation from the Old Economy to the New Economy, from an emphasis on the main forms of production being capital, land and labor to an emphasis on information knowledge and technology. The New Economy is moving beyond bulk-material manufacturing to designing new technologies, beyond processing physical resources to processing knowledge, beyond applying raw

energy to applying ideas (Lang, 2001). Because of this, it is commonly observed that organization designs and managerial practices are becoming more differentiated, less bureaucratic, less reliant on hierarchical authority structures and more psychosocially integrative (Charles and Jean-Marie, 1999)

2. The development involves the post-industrial revolution, which, spurred especially by the information revolution, has installed knowledge as a primary factor of production. In the early 1990s, the classical factors of production – land, labor and capital – are becoming secondary to knowledge as the primary resource for the New Economy (Charles and Jean-Marie, 1999).

In view of the above developments, it is now accepted that the productive economic core is being relocated from land, labor, capital and machinery to intellectual resources, which emphasize information, knowledge and technology. The increasing knowledge-based nature of competition is driving changes in how value chains are managed across companies. It also signals a demographic shift in the workforce to knowledge work, whose mobile exponents demand a different type of work environment and executive leadership.

The evolution in technology has enhanced the borderlessness of the global market place and global knowledge work. Global e-commerce and e-business as well as unprecedented e-money flows develop speedily. The organizational structure in the knowledge economy is more flexible and leaner as the business direction is now focusing more on the upstream activities, which demand knowledge workers who are skilled in the application of knowledge and the use of information and communication technology (ICT). In other words, it requires more strategists rather than doers.

Flexible and lean organizations reduce waste and increase the productivity of both labor and capital by integrating 'thinking'

and 'doing' at all levels of their operations. In doing so, they eliminate many layers of middle management, which are dysfunctional in terms of information flow. Flexible organizations also avoid excessive specialization and compartmentalization by defining multi-task job responsibilities (which calls for multi-skilled workers) and by using teamwork and job rotation.

In view of the above trends in the new economy, there is a need for firms in Malaysia to break through and shift to the knowledge economy recognizing knowledge as a core competence based on skills and experience. In the next sections, therefore, we highlight the key developments associated with knowledge economy, introduced the term knowledge worker, define knowledge and knowledge management (KM), link KM and HCM, and identify the performance relevance of KM and HCM integration.

The Knowledge Economy

The Knowledge-Economy Plan in Malaysia was advocated by the former Prime Minister, Datuk Seri Dr Mahathir Mohammad in March 2000, with the aim of transforming Malaysia into a knowledge-based economy by strengthening human resources development and shifting the industrial structure to high value added production through fostering the IT industry. The goal is to transform Malaysia into an advanced K-economy by the year 2020. To achieve this, the early stage of transformation began in 2001 and continues through 2003 (and beyond) with national and corporate plans and budgets earmarked for this purpose. The mid stage of transformation is targeted to be in 2010, when Malaysia will be fully compliant with the "new WTO" (K-economy policy, 1999, page 6). However, it is hoped that the evolution will happen more quickly because the best practices will serve as examples, which help Malaysia avoid reinventing the wheel.

A Steering Committee has also been established to guide and supervise the development of the National K-economy

Master Plan. The Committee is chaired by the Secretary General of the Treasury, with representatives from the Economic Planning Unit, Ministry of International Trade and Industry, Bank Negara Malaysia, the Malaysian Industrial Development Authority, the Inland Revenue Board, ISIS, the Malaysian Institute of Economic Research, the Multimedia Development Corporation and MIMOS as members. A Task force has also been established to identify high quality projects, including K-economy projects that qualify for special tax and non-tax incentives.

In view of the above development, the knowledge economy has become the nation's main agenda and focus in the 21st century. The challenge for Malaysia will now be to define a niche area to form a new competitiveness paradigm. This will mean that Malaysia needs to work very hard to be on par with other countries. The time is right for such a shift by injecting a catalyst such as knowledge and advances in technology into all sectors of the economy.

The world has changed: Exploiting the K-economy within the globalized trade environment has become the current focus of attention for many countries, which aspire to remain competitive. The trend in the economic growth is now favouring industries with high knowledge content because of the transition from a production economy to knowledge economy. Thus, Malaysia must also respond similarly to the challenges and opportunities offered by the emerging K-economy.

Change in employment: Employment in the knowledge economy is characterized by increasing demand for more highly skilled workers who are also enjoying wage premiums (OECD, 1996). Changes in technology, and particularly the advent of information technologies, are making educated and skilled labor more valuable and unskilled labor less so. Studies in some countries show that the more rapid the introduction of knowledge-intensive means of

production, such as those based on the information technologies, the greater the demand or highly skilled workers.

Other studies show that workers who use advanced technologies, or are employed in firms that have advanced technologies, are paid higher. This labor market preference for workers with general competencies in handling codified knowledge is having negative effects on the demand for less skilled workers (OECD, 1996). In the knowledge-based economy, individuals employed in knowledge work perform symbolic analytic services, namely problem-identifying and problem-solving services by consultants, brokers, professors, etc. The value of symbolic-analytic services is not a direct function of how much time is spent on the job but rather creativity. This work is called real work, the work of thinking about and acting on ideas relating to products, markets and customers (Lang, 2001).

The Knowledge Worker

Generation X has joined the workforce of the new economy. Unlike the baby boomers who preceded them, generation Xers cannot and do not seek lifelong employment but they do crave life-long learning (Maureen and Elaine, 2002). This group of generation seek employability over employment: they value career self-reliance. Generation X has joined a workforce dominated by 77 million baby boomers, many of whom, because of poor financial planning or personal satisfaction derived from work, do not willingly make room for Xers on the corporate hierarchical ladder (Maureen and Elaine, 2002). As a result the generation Xers perceive that, even if they excel, they cannot move up so they move on. Due to this reason, Xers are seen as preparing themselves for careers not for tenure in a specific organization since they cannot hope for career-long support from the organization. They are also increasingly self-reliant with high human capital, technical skills, education, learning and experience.

With increasing competition in professional work and a generation of baby boomers about to retire, many organizations are concerned about losing expertise. The statistics are alarming. In the US, more than 25 percent of the working population will reach retirement age by 2010, resulting in a potential worker shortage amounting to nearly 10 million people (Winkelen and McDermont, 2008).

Definition of knowledge

In the new economy of the new millennium, knowledge has emerged as an asset to be valued, developed and managed. It is a critical factor affecting an organization's ability to remain competitive in the new global marketplace. Indeed, some argue it has supplanted the traditional factors of production – land, labor and capital – to become the pre-eminent corporate and competitive resource (Maureen and Elaine, 2002). This is because knowledge does not wear out and people can duplicate it practically without cost. It is a source of value and productivity, where knowledge can add value to an otherwise closed, zero-sum system of value and it can increase value without diminishing it somewhere else.

Knowledge is defined as the ability to sustain the coordinated deployment of assets and capabilities in a way that helps the firm achieve its goals (Fawzy and Soliman, 2000). These assets, or "Knowledge Treasures", need a knowledge map which describes how to find, what to find and where to find useful knowledge within the organization. Acquisition and enhancement of these assets have become crucial management concerns (Al-Atahari and Zairi, 2001).

Knowledge or "intellectual capital", could be in three forms, namely:

1. Human capital (evidenced in staff's knowledge, skills and talents);
2. Structural capital (comprised of systems for codifying, storing, transmitting and sharing knowledge); and
3. Customer capital (resulting from connections between organizations

and clients, vendors and partners) (Fawzy and Soliman, 2000).

More recently, Audrey and Smith (2001) define knowledge as understanding, awareness, familiarity acquired through study, investigation, observation, or experience over the course of time. It is an individual's interpretation of information based on personal experiences, skills, and competencies.

To the organization, knowledge is defined as what people know about customers, products, processes, mistakes and success (Audrey and Smith, 2001). They further add that such knowledge resides in databases or through sharing of experiences and best practices, or through other sources both internal and external to the organization. There are many arguments in the literature stressing that knowledge is the subject for companies to focus on because of the increasing competitive market place. For instance, in classical economies, the sources of wealth are land, labor and capital (Civi, 2000). However, in this 21st century, other engines of wealth are at work. It takes many forms: technology, innovation, science, expertise, creativity and information. In a word, it is knowledge. Thus, knowledge is certainly the best resource and the only sustainable competitive advantage. In a growing number of countries, with expanding firms contributing, this knowledge is migratory in some forms, embedded, and slow to be retrieved in other forms (Civi, 2000). Building on this, Nonaka (1995) pointed out that successful companies are those that consistently create new knowledge, disseminate it widely throughout the firm and quickly embody it in new technologies and products: explicit and tacit (McC Campbell, Clare and Glitters, 1999).

Explicit: Explicit (objective) knowledge is clearly formulated or defined easily expressed without ambiguity or vagueness, and codified and stored in database. Since it is easily shared and communicated, most organizations have captured this knowledge in ordered repositories,

systems or operating technologies of the firm, thus making it available to all members of the organization. Three types of explicit knowledge reside in a firm: cognitive knowledge, advance systems skills and system understanding (Meso and Smith, 2000)

1. **Cognitive knowledge**, also termed "**know what**", is the "basic mastery of a discipline that professionals achieve through extensive training and certification"
2. **Advance skills** or "**know how**" refer to the "ability to apply rules of a discipline to complex real-world problems."
3. **System understanding**, also termed "**know why**" is the deep understanding of the web of cause and effect relationships underlying a discipline.

Tacit: Tacit (subjective) knowledge on the other hand is the unarticulated knowledge that is in a person's head, which is often difficult to describe and transfer (McCampbell *et al.*, 1999). It includes lessons learned, expertise, judgments, rules of thumb and intuition (Audrey and Smith, 2001). It resides within the individual and is difficult to express in words.

There is a great wealth of tacit knowledge inside people's heads and embedded in the way we do things. Every employee has a wealth of tacit knowledge deeply rooted in his/her actions and his/her commitment to a particular craft or profession, a particular technology, a product market or the activities of a work group or team (Meso and Smith, 2000).

It is vital for business success that tacit knowledge is shared so that, when people leave, their knowledge does not disappear with them (Bagshaw, 2000). Bagshaw (2000) states that rediscovering the knowledge of an employee who has gone can be a very long and expensive process. Tacit knowledge can also be seen as that knowledge, which resides in the culture of the firm (Meso and Smith, 2000). An example by Meso and Smith (2000) is self-

motivated creativity, which refers to the will, motivation, and adaptability for success exhibited by employees working within certain corporate cultures. They further elaborate that it is difficult to identify the precise cause of care-why. However, literature on KM acknowledges that high levels of care-why significantly enhance overall performance of the firm (Meso and Smith, 2000).

Nonaka and Takeuchi (1995) have also established a dynamic model of knowledge creation. In this model, they explain a critical assumption that human knowledge is created and expanded through social interaction between tacit knowledge and explicit knowledge (Civi, 2000). This interaction is known as "knowledge conversion" and their belief is that explicit and tacit knowledge are not totally different. They interact with and interchange into each other in the creative activities of human beings. Nevertheless, Fawzy and Keri (2000) argue that joining tacit with explicit knowledge could be a very complex task and in some circumstances may not be possible. In other words, they state that reconciling what is in employees' minds with what is stored in databases requires extensive research and, in spite of major advances in knowledge-based technologies, this task is still in its infancy.

Knowledge Management Defined

The scope of knowledge management is wide and the existing literature gives an endless number of definitions for knowledge management. The definitions and activities involved depend largely on which they are intended for, and every firm has different approach to their knowledge management practices. In the literature, knowledge management is concerned with capturing a firm's stock of expertise through creation, collection, storage and application (Bollinger and Smith, 2001). It means identifying and harnessing the collective knowledge of the organization gained through experience and competencies.

Organizations are interested in managing knowledge for several reasons. One reason is that core competencies are based on the skills and experience of the people who do the work and may not exist in the physical form (Kridad and Goulding, 2006). Therefore, it is important that firms find ways to tap into this knowledge base in order to preserve and expand their core competencies (Bollinger and Smith, 2001). In view of this, knowledge management has become a critical subject of discussion in the business literature in the recent years. Both business and academic communities believe that, by leveraging knowledge, a firm can sustain its long-term competitive advantage.

Knowledge management ideally captures, transfers, and leverages what everyone in the firm knows. Thus, there is a daunting challenge as who is 'everyone in the organization' and how does the firm manage its knowledge, human capital, thus transforming it into intellectual capital?

Definition of Human Resource Management (HRM)

As defined by Noe *et al.*, (2000), human resource management (HRM) refers to the policies, practices and systems that influence employees' behavior, attitudes and performance. They emphasize that there are several important human resource practices that need to be considered to maximize their influence on company performance. Such practices include: Human resource planning, Recruiting, Selection, Training and Development, Compensation, Performance Management, and Employee Relations. Strategic HRM requires a balance of emphasis, which needs to integrate with the business strategy (Kaye, 1999). With strategic HRM, employees are seen to be proactive, capable of development, and worthy of trust and collaboration. It emphasizes communication, motivation, and leadership (Noe *et al.*, 2000)

Human Resource Management and Knowledge Management

As human resource management (HRM) provides broad strategies to influence the cultural assumptions and beliefs of employees, it should play a central role in the move towards a knowledge management culture (Silke and Alan, 2000).

There is clearly a role for the HRM functions in helping firms to identify the crucial knowledge base on which their competitiveness depends, ensuring its appropriate development, and reviewing structures and process, both formal and informal, which help or hinder the integration of knowledge base with decision making process (Winkelen and McDermont, 2008). However, according to her, this issue has not received sufficient attention in the context of HRM (Ryan, 1995). While the HRM function is justifiably concerned with such aspects of the firm's social system as the development of company culture and the management of change, some important aspects of the relationship between social system and technical knowledge base receive relatively little attention. Ironically, human capital management as a discipline is naturally suited for both to performing KM functions and advocating KM activities. After all, HRM is charged with capturing, analyzing and tracking variety of information about its company's employees. By doing so, HRM can apply knowledge to find the right assignments for employees as well as the right employees for the assignments, with the aim of ensuring that a company's human capital is put to its best use.

Human resource employees are being called on more often to promote knowledge management inside their departments and across the organization. David J. Dell, research director at The Conference Board Inc., a research network and business membership firm in New York, says that the work of human resource departments overlaps completely with core knowledge management challenges and now it must rise to those challenges. The

emergence of knowledge management has also caused a rise in the demands of knowledge workers who require a different order of thinking.

Knowledge involves thinking with information and it takes human system to realize it. Thus, to leverage knowledge, HRM needs to enhance both thinking and information. The most natural way to do it is to build knowledge communities that cross teams, disciplines, time, space, and business units (Clarke and Rollo, 2001). Four key challenges are involved in building such communities in business:

1. Technical – The technical challenge is to design human and information systems that not only make information available but also help community members to think.
2. Social – The social challenge is to develop communities to share knowledge and still maintain enough diversity of thought to encourage thinking rather than sophisticated copying.
3. Management – The management challenge is to create an environment that values sharing knowledge.
4. Personal – The personal challenge is to be open to the ideas of others, willing to share ideas, and to maintain a thirst for new knowledge (Clarke and Rollo, 2001).

HRM Practices in Managing Knowledge

According to Svetlik and Starvrou-Costea (2007), if HRM is about managing people effectively, and if people's most valuable resource is knowledge, then HRM and KM are closely interrelated. They added that if we compare the KM cycle with HRM processes, we would find the various activities shared between KM and HRM as mentioned below:

Knowledge acquisition entails recruiting outstanding people and about helping them learn and grow as individuals and as professionals. It is also about encouraging

employees to participate in professional networks and communities of practice that extend beyond a firm's boundaries.

Knowledge creation is achieved by creating a supportive environment, through requisite HRM, for individuals, groups and teams in order to be challenged by the firm's problems, to search for the problems' solutions and to innovate. It goes from the creation of positions and teams, to the provision of information feedback flows, to the design of stimulating remuneration and other systems of encouragement. It includes also investment in the training and development of human capital.

Knowledge transfer concerns various forms of learning, the creation of a knowledge-sharing climate, establishment of training units, which assess and analyze training needs, provide and evaluate training, and lead towards learning firm.

Finally, *knowledge utilization* is about the deployment of human resources by means of proper leadership, division of tasks and responsibilities, remuneration systems, and performance appraisal.

Recruitment and Manpower Planning

A central concern of human capital management, especially in relation to knowledge workers, is the recruitment and retention of valued employees. The importance of managing the employment relationship such that it generates value added resources for the firm has an obvious link to the recruitment and retention of staff (Carter and Scarborough, 2001). Furthermore, the shortage of knowledge workers will get worse as the birth rate drops and members of Baby Boom generation retire. Therefore, human resource practitioners have to shift their focus to deal with the issue of knowledge transfer and get back to the basics of attracting, retaining and placing the best people. Since the aim of recruitment and selection in the knowledge economy is to source high talent possessing a range of capabilities related to the strategic

knowledge areas, the challenge for HRM practitioners is to select the employees who are capable of contributing to the firm in a variety of ways now and future, rather than simply filling the current vacancy (Whicker and Andrew, 2004).

Training and development

Discussion of human capital accumulations occurs frequently in the recent literature as a key outcome of human capital development (Garavan *et al.* 2001). There is also evidence that firms likewise view investment in human capital to be important. Increasingly firms seek, through the implementation of sophisticated human capital development and workplace learning, strategies to develop employee competencies to enable them to respond quickly and flexibly to business needs (Garavan *et al.* 2001). They further state that professional competence is best developed through the use of mentoring and job rotation processes.

Changes in firm structure have created a situation where job insecurity is common with the consequence that individuals are now required to take ownership and responsibility for career management (Garavan *et al.* 2001). New careers, in this regards, requires individuals to focus on remaining employable across many firms rather than just one (Garavan *et al.* 2001). Progression up the hierarchy is replaced by the accumulation of competencies. According to Garavan *et al.* (2001) the dominant theme is one where individuals are required to exhibit competencies such as team working, the development of network relationships, and the acquisition of knowledge and learning capability. Therefore, firms are encouraged to provide some help to employees simply because goals such as increased profit and productivity are dependent on the innovation and creativity of the employees

Competency enhancement can also be achieved through the employee actively seeking to move into other areas within the firm (Garavan *et al.* 2001). Firms should facilitate this movement as it allows a firm to develop opportunities for networking within and outside the firm (Bollinger and

Smith, 2001)]. These firms focus on providing employees with a full set of competencies and experiences, which should be utilized. As for the development of human capital, such development opportunities would include opportunities for project, coaching and counselling of employees, mentoring and 60-degree feedback processes and assessment/development centers (Garavan *et al.* 2001). Based on the above literature, the nature of knowledge-based work is fundamentally different from that known previously and requires a different order of thinking.

Professional intellect within a firm frequently becomes isolated (Smith and Rupp, 2002). It is a fact that the existence of a large organizational culture creates conflict with other groups, such as marketing or manufacturing conflicting with research and development departments. Thus, at the heart of an effective professional organization, managing and developing the professional intellect is critical for sustained competitive performance. Advice for successful "coaching" practices to ensure the development and growth of the professional intellect include: Recruit the best; Force intensive early development; constantly increase professional challenges; and evaluate and weed (Smith and Rupp, 2002).

Compensation & Benefit

While traditional compensation and reward systems pivot on the disbursement of monies, those located in knowledge environments do not. Non-monetary rewards become important factors and rely heavily on symbols of personal and professional excellence. Such arrangements make it a point to recognize achievement, allow researchers to pursue their own projects and offer the praise, acknowledgement and independence, which have been found critical to innovation (Depress and Hiltrop, 1995). General Motors, for example, sponsors the Kettering Awards, which recognize outstanding scientific achievement. Phillips

Petroleum builds advertising campaigns around its innovative researchers, and knowledge workers at the Batelle Memorial Institute receive 10% of the royalties on their inventions. Most people value their self-respect and the self-satisfaction derived from a job well done more highly than they do material rewards (Depress and Hiltrop, 1995).

Studies focusing on scientific breakthroughs indicate that knowledge workers, who undertake pioneering research typically dislikes bureaucracies, resent administration and work most creatively when satisfying their own curiosity (Depress and Hiltrop, 1995). In line with this, knowledge workers tend to have high needs for autonomy, significant drivers for achievement, stronger identity and affiliation with a profession than a company and a greater sense of self-direction, making them likely to resist the authoritarian imposition of views, rules and structures (Depress and Hiltrop, 1995). Silke and Alan (2000) also claim as non-monetary rewards become important, as in a knowledge-intensive environment, employees are potentially more motivated by intrinsic career considerations. Examples include professional recognition and working in a challenging area and valuing their self-respect and their self-satisfaction (Depress and Hiltrop, 1995).

Depress and Hiltrop (1995) suggest that, in the knowledge age, effective systems will embrace three major dimensions:

1. They will be externally competitive in order to attract and retain competent staff, and sensitive to employees' perceptions of internal equity.
2. They will be perceived as rational in their organizational context, administered in a consistent way over time, and contributors to the company's strategic direction.
3. They will be constituted in a new order of thinking, which makes cultural, socio-political and work challenge issues primary, and pay, bonus and incentive schemes secondary.

Performance Management

The traditional performance management focuses on narrowly defined tasks or job roles and observable outputs rather than long-term and diffuse contributions. Thus, Whicker and Andrew (2004) suggest that in today's economy, performance management must be re-conceptualized with knowledge work in mind. The process by which people obtain results become less significant and the focus shifts to managing outcomes, many of which are long term and difficult attributes to individual. Balanced scorecard is an increasingly popular approach in identifying performance measures from a holistic, long-term perspective (Garavan *et al.*, 2001). Each stage of the performance management, i.e. system development, appraisal process and feedback, should ensure procedural fairness, interpersonal fairness and outcome fairness (Garavan *et al.*, 2001).

Employee relations

Studies focusing on scientific breakthroughs indicate that knowledge workers who undertake pioneering research typically dislike bureaucracies, resent administration and work most creatively when satisfying their own curiosity (Depress and Hiltrop, 1995). In line with this, they state knowledge workers tend to have high needs for autonomy, significant drives for achievement, stronger identity and affiliation with a profession than a company and a greater sense of self-direction, making them likely to resist the authoritarian imposition of views, rules and structures.

Studies also show that needs for autonomy, achievement and personal growth are met when job structures and leadership styles promote empowerment and self-management. Many R&D job designs promote autonomy, and the desirable leadership style is one, which is more collegial than supervisory, shares information, delegate responsibility and encourages upward and horizontal communication. Despite the above

arrangements, a work setting needs to be created in which work contributions, serving organizational needs, are also valued by individuals as path towards desired personal rewards and where employees are able to use their full potential.

Soliman and Spooner (2000) state that there are at least seven roles for human capital management department in supporting knowledge management cultures, which include:

1. Social gathering of staff: In some firms, talking to colleagues may be considered a no value-added activity. The human resource department could facilitate staff meetings to support knowledge management activities.
2. The office layout: The layout of spaces for staff to meet informally is important to encourage exchange of ideas and share knowledge. The human resource department could liaise with management to create office space for staff engaged knowledge management meetings.
3. Trust between employees of the firm. In general, increased trust between employees improves that chance of knowledge sharing. The human resource department could play a role in building trust among staff so that they can share knowledge.
4. Differences in culture and language: Clearly the more languages staff speak the better their ability to acquire knowledge of customers and markets, especially in global markets. The human resource department through its role in recruitment and staff development could assist in selecting with appropriate cultural and linguistic backgrounds to support knowledge management activities.
5. Timeliness: The timing of knowledge management effort is important for its success. The

timing of facilitating support for knowledge management activities by the human resource department could assist the success of the program.

6. Learning and mistake handling: If staffs are encouraged to discuss their mistakes openly, a culture of "openness and seeking help" could lead to the creation of learning organization. The human resource department could assist in creating a learning environment far from fear of punishment and penalties. This could in turn facilitate the knowledge management activities.
7. Senior management involvement and support: The inclusion of senior management in the knowledge management effort provides additional motivation for staff to share knowledge and increases the chance of success of the knowledge management program. Human resource department assistance in motivating staff could lead to increasing support of knowledge management activities.

According to Slagter (2007), HRM in the knowledge economy must:

1. provide expertise in understanding and defining firm-level strategic knowledge capabilities;
2. develop and manage knowledge workers by leveraging the knowing-learning-doing nexus;
3. build knowledge value as an organizational as well as an individual asset; and
4. minimize the organization's knowledge risk associated with loss of requisite capability and knowledge.

Influence of Organizational Factors on KM

Effective knowledge management is most likely in businesses that find the right

balance between organization systems, which on the one hand are sufficiently open and flexible to allow creativity to flourish, but on the other possess enough formality and discipline to ensure that creativity produces tangible outcomes. They argue that bureaucracy and formal communication inhibit spontaneity, experimentation and the freedom of expression necessary for innovative responses to environmental change. They also acknowledge that a great deal of knowledge originates from personal intuition, networking and chance encounters, but contend structured and standardized procedures are needed to capture, control and connect the knowledge thus gained to business objectives.

The focus of KM should be placed on individuals themselves, and the impact made by human resource management on KM practices, and that KM is actually an evolved form of human resource (Svetlik and Starvrou-Costea, 2007). In line with the resource based-view, employees with all their capacities become desirable and real resources for the firm if they are to a high degree: valuable and scarce, inimitable, non-substitutable and appropriable (Boxall and Purcell, 2003).

Sustaining Performance and KM-enabled HCM

Numerous firms have recognized that knowledge plays an essential role (Choi et al., 2008) and is a crucial resource in gaining sustainable performance in any industry (Alton and Dion, 2008, Anantatmula and Kanungo, 2007, Civi, 2000). Civi (2000) found that achieving competitive performance ranks high as the most important application of knowledge in terms of its contribution in attaining an effective human capital management and the overall firm objectives. For many firms, gaining sustainable advantage lies in the capability to create and apply intellectual expertise (Choi et al., 2008). Firms should, therefore view knowledge as a valuable asset for building a strong human capital department in a firm. According to Lloria (2008), the strategic objectives of KM vary,

such as developing new opportunities or creating value for the customers.

Effective integration of HCM and KM would enable a firm to harness its capabilities in a systematic and comprehensive fashion, which will aid in the effective allocation of firm resources. This would consequently, create avenues for cost reduction and enable greater maximization of capabilities. Consequently, the firm would have greater strength in taking up opportunities in the marketplace. The ability of a firm to harness its human capital and expertise in a way superior to competitors would create key competencies in the firm that could be rare and inimitable, which could provide the firm a chance to gain and maintain high performance in the industry. According to Lubit (2001), firms are able to use their knowledge resources to not only create effective HRM performance, but also build sustainable competitive position in the market. He further explains that to create competitive position, firms' need to: 1) internally spread tacit knowledge, and 2) create KM capabilities and approaches in fostering innovation.

Conclusion

Knowledge is fast becoming a key success factor for many companies. The current employment trends indicate that a significant proportion of global workforce is increasingly evolving as knowledge workers and it is reasonable to propose that their importance to a firm's ability to gain and maintain competitive advantage will exceed that of other types of employees by several orders of magnitude. HRM managers and their firms will need to develop innovative ways of attracting, retaining and motivating such employees, and compensation systems will play a critical role in coping with these new realities. HRM managers will need to shift their focus from old organizing models to new ones, together with a change in compensation systems that are more flexible, process-oriented and team-based. These new compensation systems will be based on different forms of leadership, authority and structure from those that

now prevail, and will be critically important in determining the environment of a successful knowledge-intensive firm. Whether or not a corporation speaks of knowledge management, human capital practitioners will have to learn to redirect themselves and their corporate culture toward sharing, collaboration and cross-functional teams. They also have to apply those standards to finding and retaining the best talent in the market, along with capturing as much as possible employees' knowledge before they leave the firm. A healthy interaction between knowledge management efforts and the existing organizational culture will undoubtedly result in changes to that culture, which may indeed lead to the competitive and successful application of knowledge management initiatives.

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