KNOWLEDGE MANAGEMENT: ISSUES AND CHALLENGES IN MALAYSIA: A PRELIMINARY FINDING

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ABSTRACT

The objective of this paper is to examine the issues and challenges facing Malaysian organisations and the implications in its effort towards implementing knowledge management. This paper hopes to provide an insight into what are the issues and challenges facing Malaysian organisations towards successful implementation of knowledge management. For practitioners and researchers, this study will add on to the literature on the issues and challenges facing Malaysian organisations. This will certainly aid to better understanding of the prerequisites necessary to succeed in business especially in today’s global and competitive environment.

Keywords: Knowledge management, issues and challenges, implications, Malaysian organisations.

INTRODUCTION

Knowledge management might be “hot” as of today, but successful managers have always realised its value. The increasing globalisation of business, explosion of information technology, erosion of corporate hierarchies and dispersion of business activities are important characteristics of today’s business environment. Thus, the issue of more efficient and effective operation of an organisation’s knowledge assets has become more important as numerous organisations have moved from information age to knowledge age (Choi, 2000). Drucker (1999) fittingly warned us three years ago that “those who wait until this challenge indeed becomes a “hot” issue is likely to fall behind, perhaps never to recover”, but its only now that companies have finally woken up to the value of managing their knowledge and bringing it to bear upon decisions that drive them up or out of existence. As Drucker (1995) has predicted, knowledge has become the key economic resources and the dominant source of competitive advantage.

Far from vendor sales pitches, the crying need for knowledge management is evident. This need is a growing reality, worldwide: from Antigua to Zaire. The Scotsman reports that 98 percent of senior managers in KPMG believes that knowledge management was more than just a passing fad (Andriesz, 1999). The London Times calls it the “fifth discipline” after business strategy, accounting, marketing and human resources and called upon British companies to harness it to improve their performance and profitability (Hoare, 1999). In the United States, big businesses that practised knowledge management now top the Fortune 500 list and a few small ones top the Inc. 100 hot companies to watch list. In Canada, top executives of both Canadian Financial Post 300 firms view knowledge resource as critical for organisational success (Covin et al., 1997). In Singapore, the need for knowledge management is evident where senior managers of corporations have unequivocally voice their intent to make knowledge management their number one priority (Tan, 1999). That is why knowledge management has become a currency in management circles even though the field of knowledge management is only about ten years old (Liebowitz & Beckman, 1998).

In view of this, there are several important issues and challenges, which highlight the reasons why implementation of knowledge management is important, especially in Malaysian organisations. These issues are discussed as:

i) Globalisation
ii) The shift from Production-based economy to Knowledge-based economy
iii) The growth of Information Communications Technology (ICT)
iv) Knowledge Management and Organisational Competitiveness
v) Knowledge Leverage and Organisational Learning
Before we go into detail on each of these issues and challenges, it is important for us to know the development of knowledge management in Malaysia.

**Current Development of Knowledge Management in Malaysia**

One of the main initiatives taken by Malaysia to move itself out from the old economy and enter the new economy was by creating the Multimedia Super Corridor (MSC) which was officially launched on the 27th June 1996. The MSC is an initiative taken by the government to leapfrog Malaysia’s development through the creation of an ideal multimedia environment for world-class companies to use as a regional hub. By providing the infrastructure and the necessary environment that encourages innovation and creativity, Malaysia is paving the way to be a platform for growth and advancement as well as a leader in ICT. The MSC is developed specifically to explore the frontiers of information and multimedia technology, revealing its full potential through the creation and implementation of cyberlaws, cutting edge technologies and excellent infrastructure.

A project as big and as important as the MSC requires a fully competent and a highly effective and efficient organisation to take charge of the development and implementation of the MSC. Therefore, the Malaysian government established the Multimedia Development Corporation (MDC) in 1996. The MDC markets the MSC globally, shape laws, policies and practices specifically for the MSC by advising the government, and standardises the MSC’s information structure and development. It also facilitates the establishments of company operations to the MSC.

Among the many aims of the MSC, one of them is to help the nation to create a knowledge-based society. MDC is probably the first Malaysian organisation to endorse knowledge management as an integral part of its organisation and to integrate knowledge management programmes and practices in a structured and organised way. It is also the first organisation in Malaysia to appoint a Chief Knowledge Officer (CKO) and this was back in 1999 when MDC’s knowledge management department was set up.

In addition to MDC, renowned organisations such as Siemens, Bank Negara Malaysia, Nokia Malaysia and Telekom Malaysia were the pioneers for the implementation of knowledge management in their organisations in Malaysia. For example, Siemens Malaysia have started adopting knowledge management by focusing on their marketing operations in identifying the pivotal customer needs.

A more recent tool for knowledge management, as agreed by many researchers, is the corporate university – educational organisations established and run by companies to ensure their workforce’s total education. For example, Motorola, McDonalds and the Bank of Montreal are providing knowledge management training through corporate universities (Sunoo, 1998). In Malaysia, the Ministry of Education has invited three major companies in Malaysia, namely the Telekom Malaysia Berhad, Tenaga Nasional Berhad and Petroleum Nasional Berhad (PETRONAS) to set up corporate universities such as the Multimedia University, Tenaga Nasional University and the University of Technology, Petronas. Besides, collaboration between universities and industries are encouraged to further boost the development of knowledge management in Malaysia. For example, Multimedia University (MMU) and Siemens Malaysia have collaborated to set up the Centre for Knowledge Interchange in MMU in 2001. This centre was set up to collaborate in a few activities, among others, to undertake the Sharenet programme, a knowledge management-based technology application in the educational environment. Multimedia University is perhaps the first university in the world to testbed Sharenet.

Moving towards knowledge management emphasises a lot of research and development (R&D). Nokia Malaysia is an example as this company focuses intensively on its R&D in enhancing their product development (Chan et al., 2002).

However, one critical issue of knowledge management in Malaysia is the intellectual management effort. Managing intellectual wealth is still new in Malaysia (Chan et al., 2002). Although companies
have attempted to establish themselves as knowledge management-based organisations, they have failed to look into the essential of maintaining and managing the intellectual wealth. In Malaysia, not many companies have the necessary knowledge management skills and infrastructure in place. For example, although Telekom Malaysia Berhad embraced knowledge management programmes and spent a substantial amount of money annually on training and development of its employees, the information gathered and the knowledge acquired by individuals of the company have so far not been effectively leveraged into the company’s intellectual assets than can be accessed and used by a broader set of individuals. In addition, Telekom Malaysia Berhad lost vast amounts of these valuable intellectual capital when employees retired or change jobs. According to Sulaiman (1999), knowledge is also lost with the constant transfer of employees within the company.

Where Do We Go From Here?

The impact of new development and change in demographics, information technology and lifestyles on the organisation has been proven to be significant. Information technology, especially, proves significant challenges for many organisations to compete in the knowledge age. As mentioned earlier, there are several important issues, which highlight the reasons why the implementation of knowledge management is important among the Malaysian organisations. These issues are as discussed below:

Globalisation

One major trend today that has implications on knowledge management is globalisation. The world is fast becoming one interdependent global marketplace. There have been cross-border investments by Asian enterprises such in other countries in Asia and in other regions. The Asia and Pacific region has seen waves of investment by the Japanese, American and European companies and cross border investments by the “four” Asian dragon economies of Hong Kong, South Korea, Taiwan and Singapore pushed by labour shortages, rising wages, stronger exchange rates as well as the development of external wings to its economy. The three “tiger” economies of Malaysia, Indonesia and Thailand are also investing overseas. There has been an increase in regional cooperation zones in the Association of South East Asia Nations (ASEAN) such as the Growth Triangle formed by Malaysia, Indonesia and Singapore. Three other cooperation zones have been proposed as well.

Therefore, as we become increasingly global, there will be an increasing competition, particularly from the Asian continent due to deregulation and new legislation; fast and accelerating rate of business environment change under the influence of technology, science, politics and socio-economic factors; and changing customer demands regarding time, cost, flexibility and quality. The current business environment may be characterised by a shift from a world of predictable, incremental and linear change to that of radical and discontinuous change. The competitiveness of both nation and enterprises will be on an international basis, thus a country or an enterprise’s capacity to add value to global economic products, services and processes would determine their viability. Thus, there is a critical need for effective knowledge management more than at anytime in history. With regards to this, the key contributor will be knowledge as the key competitive advantage for the 21st century.

The Shift from Production-based Economy to Knowledge-based Economy

One of the main challenges of the 21st century is the change in the emphasis of economic development from a production-based economy to a knowledge-based one (Amat Taap, 2001). A knowledge-driven economy evolves around knowledge and information, in which the generation and exploitation of knowledge plays the predominant part in the creation of wealth, economic growth and development (United Kingdom Department of Trade and Industry, 1998). In Malaysia, knowledge-based economy (K-economy) will imply using knowledge and information to enable individuals, corporations and the country to compete more effectively.

Based on new growth economies, a country’s capacity to take advantage of knowledge economy depends on how quickly it can become a “learning economy”. Learning means not only using new
technologies to access global knowledge, it also means using them to communicate with other people about innovation. Innovation and creativity is now requisite and will be at a premium. There will be increasing realisation that sustainable organisational competence depends upon the organisation’s capacity for creating new knowledge through an ongoing and continuous process of learning, developing expertise and improving or developing core competencies (Malhorta, 1998). In the “learning economy”, individuals, firms and countries will be able to create wealth in proportion to their capacity to learn and share innovation (Forray & Lundvall, 1996).

The shift to the k-economy is part of the wider plan of Malaysia to achieve fully developed country status by the year 2020. K-economy is also imperative to be served as a strong foundation for the nation to face the challenges of globalisation and liberalisation. Malaysia’s shift from production-based economy to the k-economy turns around high volume production to high value input, processes, systems and outputs. In the production-based economy, land, labour and capital are the three factors of production. On the contrary, knowledge and people skills will account as the most important factor in the k-economy. The changes imply that the k-economy will have serious impacts on the work environment.

The transformation into the k-economy is imperative in facing competition from countries with low labour costs. Malaysia is facing increasing competition from its labour-intensive and lower-end manufacturing products from the lower-wage and resource-rich economies such as China, Indonesia and Thailand (OPP3, 2000). Therefore, focusing on knowledge-enhanced products or services will enable Malaysia to develop a new competitive edge. Furthermore, k-economy will position Malaysia to enjoy sustainable and rapid economic growth.

The exponential growth of knowledge and the rapid change of science and technology is another global trend (Amat Taap, 2001). Knowledge is doubling every seven to ten years. This will bear implications for better managing knowledge in terms of knowledge updating and skills upgrading. Malaysia therefore sees the needs to shift from the production-based economy to the k-economy in order to avoid loss of competitiveness. The k-economy will complement efforts to improve economy and productivity through enhancement in Total Factor Productivity (TFP) as it will add new value to existing activities and will be accompanied by improvements in technology, greater innovative capability and the input of higher skilled workers (OPP3, 2000). According to OPP3 (2000), an assessment using input-out analysis confirmed that knowledge-intensive industries have higher value-added multiplier and higher productivity compared to those non-knowledge intensive industries.

It can be concluded that the generalisation and utilisation of knowledge in the k-economy plays a significant role in economic growth and wealth as the new business environment demands knowledge growth and maturity that is relevant, applicable and value-added (Liebowitz, 1999).

*The Growth of Information Communications Technology (ICT)*

Technology, including the information revolution and globalisation continue to exert major effects on knowledge management development. In developed countries, ICT has been the drivers of knowledge-based society. The new economists look at ICT as drivers of change, tools for releasing the creative potential and knowledge embodied in people. ICT has transformed the ability of both individuals and organisations to augment their intelligence via accelerated learning (Pemberton & Stonehouse, 2000). They are providing new and faster ways of delivering and accessing information, innovative ways for real-time communication and new ways to do business and create opportunities. The technology is putting more and more information into the public domain, leading rearrangements of societal forces and governance structures towards greater efficiency, transparency and accountability in functioning.

The greatest advantage of ICT is the reach and the low-cost of technology and data transmission (Nath, 2000). The costs of building national level ICT infrastructures may be high but there are no equally effective alternatives and the costs of not investing in such infrastructures may be even higher.
Further, once the infrastructure has been laid, the low cost of propagation technology will help countries to leapfrog ahead through distance education, distance health facilities, better access to market information and better governance (MSCTimes.com, 2001).

For this purpose, the Malaysian government has set aside US1.4 billion for ICT-related programmes and projects undertaken over the Eighth Malaysian Plan period (2001-2005). As a result, the ICT companies in Malaysia has grown to 1,300 today from a mere 300 companies in 1996 (MSCTimes.com, 2001). Some of the ICT companies have also attained the status of MSC companies. Most of these companies are also members of The Association of the Computer and Multimedia Industry, Malaysia (PIKOM). These numbers of ICT companies are projected to increase in the future. The long-term success and progress of the MSC depends on the growth and success of the local ICT companies. They are the major driving force in today’s economy.

It can be seen here that technological changes and competition in the fast moving competitive marketplace has changed work organisations and working patterns as well. The production of goods and services has moved from mass production to flexible and customised, and repetitive tasks in fixed automation is being replaced by flexible automation. On-line quality control has replaced end-of-line checking. Instead of fragmentation of tasks, increasing use is made of teams and multi-skilled workers. Decision-making is decentralised to points of production and sale. The organisational hierarchy is flatter and the gap is narrowed. As a result, employees now need wider complements of knowledge and skills.

**Knowledge Management and Organisational Competitiveness**

As stressed by Malhorta (1998), in an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge. Many leading organisations recognise the value of intangible assets, such as know-how, relative to tangible assets, such as manpower, buildings and equipment. The measurement of intangible assets (e.g., expertise, experience, patents) is increasing in importance because these assets are more permanent than the tangible assets by which organisations’ values have traditionally been evaluated (Drucker, 1995). Whether the specialty is manufacturing or service, many organisations are beginning to investigate how these intangible knowledge assets or intellectual assets can serve as the basis for competitive advantage (Steward, 1994).

It is clear that the ability of companies to exploit their intangible assets has become far more decisive than their ability to invest and manage their physical assets (Davenport & Prusak, 1998). As markets shift, uncertainty dominates, technologies proliferate, competitors multiply and products and services become obsolete, successful companies are characterised by their ability to consistently create new knowledge, quickly disseminate it and embody it in their new products and services. In the post industrial era, the success of corporation lies deeply embedded in its intellectual systems, as knowledge-based activities of developing new products, services and processes become the primary internal function of firms attempting to create the greatest promise for a long-term competitive advantage.

**Knowledge Leverage and Organisational Learning**

Another major trend in the 21st century would be knowledge leveraging and organisational learning. For a long time, development was viewed as the accretion of both physical and human capital. Currently, however, there is a growing awareness that successful development should not only entail these factors, but also include closing of knowledge gap. A new economy in which knowledge is pervasively recognised as a vital source of economic growth, determinant of wealth and basis of competitive advantage is rapidly developing. Thus, the transition from production-based economy to k-economy implies that organisations will be faced with a new set of challenges and success is dependent on their ability to leverage knowledge the best possible way.
In today’s competitive landscape, firms must develop idiosyncratic, difficult to imitate capabilities. This requires effective knowledge deployment and development. Therefore, increasingly senior executives are recognising that the rapidly changing environment requires every organisation to master fundamentally important issues such as organisational learning and exploitation of new knowledge (Drucker, 1992; Lee, 1994) which represent the preeminent source of competitive advantage. A crucial aspect within the available (and locked) knowledge between employees mutually, between employees and managers, between departments and so on. The senior executives know it is no longer enough to leave critical knowledge sitting passively in the minds of the individual employees (Audreu & Sieber, 2001). It is obvious that knowledge management practitioners maintain that knowledge must be shared and served as a foundation for collaboration. Yet better collaboration is not an end in itself; without an overarching business context, knowledge management is meaningless at best and harmful at worst (Nath, 2000).

**IMPLICATIONS**

The global business environment demands employees who can work effectively across national and cultural boundaries. Companies in the era of k-economy are beginning to realise that highly skilled knowledge workers are critical to organisational competitiveness and that a comprehensive human resource development system geared to the needs of business can help them acquire, train and retrain those valuable and knowledgeable workers (Amat Taap, 2001). The importance of knowledge work is reflected in the fact that in the rich economies, more than half of the total Gross Domestic Product (GDP) is knowledge-based and 8 percent of new jobs involve knowledge work. As mentioned earlier, knowledge and people skills will account as the most important factor in the k-economy.

At the same time, labour, capital, raw materials and entrepreneurship, the elements of traditional factors of production still remained important. Knowledge, however, will be the most important factor to stimulate and to create new value and thus, provide the basis to remain competitive. Human capital will be the central part of the k-economy that is indispensable to create, innovate, generate and exploit new ideas as well as apply technology and better practices entrepreneurial skills.

If Malaysia wants to achieve its vision of a knowledge-based society, a truly daunting task lies ahead for the government to lead the masses into using ICT in their daily lives. It is interesting to note that there is a misconception that the k-economy is similar with ICT, computers, e-commerce as well as the Internet. Knowledge is applied to all facets of Malaysia’s economy in the k-economy. The k economy consists of every sector of the economy: agriculture, manufacturing, government and other services. In this case, ICT is best regarded as the facilitators of knowledge creation in innovative societies. It is a mistake to regard technology as the driver of knowledge management. Knowledge management is much more than mere technology where it is just about 35 percent technology. While technology is an easy part, it is the people and processes part that is hard. Technology per se is not productive, and does not add value unless there are people who can use it productively. Information technology, like knowledge, is easily accessible, but is valueless without the knowledge and skill to use it productively. The competitive advantage is not the technology, but how the technology is applied.

Thus, from the organisational point of view, in order to compete effectively, it must adapt the changing rules of the corporate arena for long term success (Porter, 1990). Knowledge creation should be the foundation of a company’s human resource strategy. It is critical that knowledge be interpreted, deciphered, analysed and applied in terms of relevance to the knowledge worker (Davenport, 1999). Additionally, an enterprise must provide an environment that enables knowledge workers to better deal with problem solving in terms of the uncertain and unpredictable future (Malhorta, 1998). The new knowledge management system must stress on working in teams, providing training to employees, empower and involve them in decision-making to enable organisational success. With more proactive and continuous involvement of human imagination and creativity, firms can achieve greater levels of growth, the ability to develop innovative solutions and enhance overall success in terms of measurable performance or productivity (Davenport, 1999).
To achieve this, one essential element of success in knowledge management is to create an organisational culture that can motivate, support and encourage, capture, create, share, codify and reuse of knowledge at an individual, group and organisational level. An another important aspect of knowledge management success is the elimination of organisational constraints. Organisational constraints can impede perception and/or attitudes necessary for knowledge management success (Bonaventura, 1999), and eventually lead the organisation towards a competitive disadvantage. Besides, Dr. Edward Demings has emphasised that management must lead the way for enabling continuous improvement and learning. In this case, enterprise leadership and senior management must support knowledge management to enable success (Davenport & Prusak, 1998).

There must also be a well-established knowledge structure, which includes knowledge about internal and external customers, suppliers and organisational work groups. This is to ensure that reliable, useful, up-to-date and timely knowledge can be created and shared not only internally but also externally.

Effective utilisation of knowledge can contribute to the development of an organisation’s new capabilities, such as design of new products/services and improvement of business processes. Benchmarking has been one of the most effective measurement of organisational performance against leading knowledge management organisations (Day & Wendler, 1998; O’Dell & Grayson, 1998).

Finally, regardless of the types of knowledge (tacit or explicit), its contribution must be measurable not only by traditional financial measures but also by other performance measurements. The traditional view of knowledge management has treated knowledge in terms of simple application of existing quantifiable information (Liebowitz, 1999). Knowledge must be measured because an organisation’s intellectual capital includes the brains of its employees, their know-how, the processes and customer knowledge that they create. Thus, it is clearly a competitive advantage to organisations that look into their performance measurement system as a key factor for successful knowledge management implementation (Barsky & Marchant, 2000; Pearson, 1999).

As a conclusion, successful adoption of knowledge management system will require thoughtful, incremental redirection of skills and knowledge bases. Enterprises need the right people, processes and technology at the right time and the right place in order to sustain competitiveness. The management of knowledge is a skill, like financial acumen, and managers that understand and develop it will dominate competitively (Leonard-Barton, 1995). The new business environment must be characterised by continuous redefinition of organisational goals, purposes and the tried and trusted “ways in which things have always been done” (Nonaka, 1998). It is the individual employee or “knowledge worker” at all levels within a firm that enables the ability to transform technology rapidly into solving problems and enhancing performance in regards to new products, services and processes. In today’s environment, it is critical to be the first mover or a product or service leader (vice follower) (Roos et al., 1998). The process of ongoing and continuous knowledge growth and creation are needed for organisational survival and competence in the new business enterprise environment.

REFERENCES


