TOP MANAGEMENT LEARDERSHIP: SUCCESS FACTOR OF KNOWLEDGE MANAGEMENT IMPLEMENTATION IN TUNKU ABDUL RAHMAN COLLEGE (TARC) IN MALAYSIA

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ABSTRACT

Knowledge Management (KM) is an approach in *identifying, acquiring, applying, sharing, creating, developing, preserving and measuring* the knowledge of the organization. However, recent global analyses of such KM initiatives highlight the fact that not all of them are necessarily successful. The reason is due to the efforts on technology. Practitioners are now realizing the importance of the soft aspects of KM initiatives, i.e. Top Management Leadership. The main purpose of this study is to examine the relationship between Success factor (Top Management Leadership) and KM perceived benefits. Success factor (top management leadership) was implemented in Tunku Abdul Rahman College (TARC). This study was accomplished through structured interview with the lecturers from Division of Mechanical Engineering, TARC. Findings revealed that top management leadership has a positive influence on the perceived benefits of KM.

Keywords: Knowledge management, Top management leadership, success factor, perceived benefits.

Introduction

As the growing demand for knowledge-based products and services is changing the structure of the global economy, the role of knowledge in achieving competitive advantages is becoming an important management issue in all sectors.

Creating, managing and transferring knowledge is at the top of the agenda for a growing number of organizations. As the transition from the industrial age to a global knowledge economy gathers pace, it is imperative for organizations to understand and develop knowledge management business strategies and tools (Chase, 1997). Therefore, practice of knowledge management is essential in an organization.

Definition of Knowledge Management

Defining KM is difficult because it has multiple interpretations. The following are definitions of KM which illustrate the varying views of many researchers and practitioners.

1. KM is the explicit and systematic management of vital knowledge and its associated processes of creation, organization, diffusion, use and exploitation. (Skyrme and Amidon, 1997)

2. KM is a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information (Davenport and Prusak, 1998).

3. KM is a process of critically managing knowledge to meet existing needs, to identify and exploit existing and acquiring knowledge assets and to develop new opportunities (Quintas *et al*., 1997).

4. Salleh and Goh's (2002) definition of KM states it is a process of leveraging knowledge as means of achieving innovation in process and products/services, effective decision-making, and organizational adaptation to the market for creating business value and generating a competitive advantage to organizations.

5. KM is a systematic, explicit and deliberate building, renewal and application of knowledge to maximize a firm's knowledge-related effectiveness and returns from its knowledge assets (Wiig, 1997).

6. According to Choi (2000), KM caters to the critical issues of organizational adoption, survival and competence in the face of increasingly discontinuous environmental change. Essentially, it embodies organizational processes that seek synergistic the combination of data and information processing capacity of information technology and the creative and innovative capacity of human beings.

7. Ow *et al*. (2001) found that KM has multiple interpretations. When applied in an IT context, KM is about the managing of hardware, software or systems. Applied in a business education context, less attention is focused on technical aspects of KM and more emphasis is given to social aspects such as organizational theory, leadership and other issues in the human side of management. The curricula of Asian institutions of higher education appear to follow this pattern. With respect to the management of higher education establishments themselves, however, KM is clearly to be interpreted in the second, broader sense.

In sum, KM can be defined as the processes of managing knowledge.

The Need of the Research

Many organizations are implementing KM, but recent global analyses of such KM initiatives highlight the fact that not all of them are necessarily successful. The reason is due to the efforts on technology. They are concentrating on buying technology and implementing technology in their organization.

Banks (1999) mentioned that technology can help gather, analyze and disseminate information; as yet, only humans can successfully interpret and exploit it. Having state-of-the-art technology does not necessarily correlate between investment in technology and business performance. There is certainly no necessary correlation between investment in technology and knowledge management. Effective utilization of technology is necessary but not sufficient; it must be made to be a part of the process of utilizing the creative and innovative capacity of the human beings. Therefore, successful Knowledge Management implementation is mainly linked to soft issues.

Respondents from Chase's (1997) survey stated that more attention should be placed on people when developing a Knowledge Management strategy. The respondents cited people (70%) as the most important factor, followed by technology (25%) and processes (22%), in some cases respondents cite two areas are equally important. However, many organizations are encountering great difficulty in getting employees to understand the scale of the "knowledge" problem and in training them in knowledge management tools and techniques. The conclusion from this study also stated that successful Knowledge Management implementation is mainly linked to soft issues – human.

Therefore, this research is fully concentrated on soft issues, i.e. top management leadership. And the success factor (top management leadership) of KM will be developed, implemented and tested practically**.**

Review of Success Factor of KM: Top Management Leadership

According to Nahavandi (2000), a leader is defined as any person who influences individuals and groups within an organization, helps them in the establishment of goals, and guides them toward achievement of those goals, thereby allowing them to be effective.

Leadership is all about getting people to work together to make things happen that might not otherwise occur or prevent things from happening that ordinarily would take place (Rosenbach and Taylor, 1993).

Leadership plays a vital role in steering learning within the organization and encourages a philosophy of continuous improvement based on sharing ideas, trust, experimentation and external vision (Pemberton *et al*., 2002).

Many researchers (Chong, 2005: Liebowitz, 1999; Civi, 2000; Davenport and Prusak., 1998; Dutta, 1997; Greengard, 1998; Hansen et;al.,1999; Moffett et.al., 2003; Pemberton *et al*., 2002; Ryan & Prybutok, 2001; Salleh & Goh, 2002) have insisted that top - management leadership and commitment are the most critical factors for a successful knowledge management project, particularly in knowledge - creating and culture - sharing activities.

Furthermore, according to the international survey, the top management and the information technology group were cited by more than half of the respondents as leading KM activities in their investigation (Chase, 1997). At 3M, KM does not just bubble up from middle

management; top management sees it as one of the major duties to encourage knowledge linkages (Brand, 1998).

At Xerox, a consistent communications strategy from senior management demonstrates similar support. Besides giving verbal support, senior managers have adopted a hand - off policy toward KM projects to ensure that the process of innovation is not hindered by bureaucracy or budgetary considerations (Hickins, 1999).

Wah (1999) argued that top management is needed to put into in action knowledge - sharing as the way to move forward and know what knowledge should be captured. Top leadership should lend full support to KM strategies, constantly probe the unknown and bounce it off project teams to get them thinking about new ideas.

KM initially focused on IT applications, such as intranets, extranets, groupware etc. More recently, however, their focus has been more on "the people side", developing schemas and methods for assessing and improving the "organizational culture", especially as many KM initiatives have been seen to fail through lack of commitment and supportive action from employees and senior management (Andersen *et al.,* 2000).

An important hindrance to knowledge creation and utilization can be a lack of support from top management. A knowledge leader or champion - someone who actively drives the knowledge agenda forward, creates enthusiasm and commitment is important. The supportive CEO will ensure that there are efforts to create a culture that supports innovation, learning and knowledge - sharing and to give more explicit recognition to tacit knowledge and related human aspects, such as ideals, values or emotions (Jarrar, 2002). Furthermore, Sallis and Jones (2002) agreed and further elaborated that KM takes different perspectives and requires leadership to predominate over management. The style of leadership needs to encourage trust and sharing, and follow function and the new breed of leaders will engage in enthusing and encouraging communities of experts and professionals.

When planning implementation of a KM program, the organizations need to consider whether to create a leadership role to develop and drive the process, for instance, a chief knowledge officer. Many firms have developed responsibility to an existing or new position. Some firms use a cross - functional team to develop knowledge management while in others the CEO has taken a leading role (Soliman & Spooner, 2000). Cook (1999) said that the Knowledge champions can be very helpful as catalysts. These can be specially created roles as used in companies. In fact, it has been reported that over 40 % of Fortune 1000 companies have Chief Knowledge Officers (Chong, 2005).

In order to manage knowledge effectively, Drucker (1992) also mentioned that the foundation of effective leadership is thinking through the organization's mission, defining it and establishing it, clearly and visibly. The leader sets the goals, sets the priorities, and sets and maintains the standards. He makes compromises, of course; indeed, effective leaders are painfully aware that they are not in control of the universe.

Jarrar (2002) stated that senior management support is a common cliché for all change and improvement programs. The type of support needed includes sending messages that KM and organizational learning are critical to the company's success, providing funding and other resources for infrastructure and direct modeling of the desired behavior.

Kermally (2002) mentioned that leadership has to be looked at as a holistic concept. There has to be focus on attributes such as values, credibility, power, integrity, ability to see the whole picture and ability to motivate staff. If the leader and employees share the same values and they internalize these values, the bond between the leader and employees will be strong. In a situation

like this, staff will freely communicate in order to transfer their knowledge. An effective leader has to focus attention on organizational culture, in relation to the share beliefs, values and expectations of the people in the organization. It influences the performance of every individual and consequently affects organizational performance.

Bollinger and Smith (2001) indicated that management needs to focus on four particular areas in knowledge management. One of the four areas is that management must initiate government functions of top - down monitoring of systems and processes to facilitate knowledge - related activities. This can include implementing incentives to encourage knowledge - sharing, identification and management of knowledge assets and restructuring operations and organization if necessary.

Honold (1997) also said that leadership should focus on the development of the individuals throughout the organization, creating a vision and developing common goals and continually scanning the environment and adapting to it. Personal responsibility for performance exemplified in job autonomy, control over decisions directly relating to one's work, job enrichment through multi-skilling and cross - training, access to information to measure one's own performance and make good decisions and allowance of risk - taking.

A leader must understand that time is needed not only to build the system but also to search for new information and uses of that information. Mid - level managers, in particular, must be granted time to develop better processes and better uses of information even as they fulfill required objectives. A critical part of the process is designing an incentive or reward system to encourage collection of information (Shockley, 2000). In addition, Davenport and Prusak (1998) also agree that one of the five KM principles that can help make fusion work effectively is to make the need for knowledge generation valuable so as to encourage, reward and direct it toward a common goal.

Thus, top management leadership is important in KM implementation and must be sustained throughout the KM efforts.

Benefits of KM

According to Bhatt (2001), KM has become a critical subject of discussion in the business literature. Both business and academic communities believe that by leveraging knowledge, an organization can sustain its long-term competitive advantages. A KM philosophy emphasizes learning collaboratively so that they can add more value to their products and services for the customers.

According to a survey done by McAdam and McCreedy (1997), the perceived benefits of KM are the four top scoring items which are improved quality, efficiency, management learning and reduced costs. They are seen to relate to improving internal efficiency within the organizations. Improve consistency and competitiveness through reduced costs, were seen as being associated with efficiency.

According Santosus and Surmacz (2001), the benefits that companies can expect from KM are:

- Foster innovation by encouraging the free flow of ideas
- Improve customer service by streamlining response time
- Boost revenues by getting products and services to market faster
- Enhance employee retention rates by recognizing the value of employees

- Streamline operators and reduce costs by eliminating redundancies (cost of defects)

According to Beijerse (1999), by managing knowledge, organizations can:

- Improve efficiency
- Improve the market position by operating more intelligently on the market
- Enhance the continuity of the company
- Enhance the profitability of the company
- Optimize the interaction between product development and marketing
- Improve group competencies
- Make professionals learn more efficiently and more effectively
- Provide a better foundation for making decisions like making or buying of new knowledge and technology, alliances and mergers
- Improve communication between knowledge workers
- Enhance synergy between knowledge workers
- Ensure that knowledge workers stay with the company
- Make the company focus on the core business and on critical company knowledge

A comprehensive survey of the German TOP 1000 and European TOP 200 companies showed that KM helps to achieve the goals of a company. KM can best be used to increase innovation ability, increase of product quality, reduction of goals, increase of effectiveness and customer satisfaction (Mertins *et al*, 2001)

According to Battersby (2004), most firms have recognized that the key benefits of KM are increased efficiency and quality. They realized that the work will be carried out faster and more cheaply due to the re-use of knowledge by appropriate methods. These take into account time - saving. Quality is regarded as one of the most critical factors in the successful delivery of services and most customers now take technical quality for granted. KM facilitates sharing of knowledge and helps provide consistently high quality service to the customers. Many organizations are moving toward sharing at least part of their knowledge resources directly with customers, either as an added value extra to maintain a profitable relationship or as a new product sold to customers in its own right. Therefore, innovation arises out of the cross-fertilization of knowledge so that KM can lead to the creation of new products and knowledge.

Ng (2005) mentioned that KM could achieve operational excellence. This is because all the employees can share their knowledge and this will translate lessons learnt for internal as well as global application, for example, sharing mistakes made to avoid the similar mistakes in the future. Besides that, KM can enhance customer responsiveness such as providing consistent and professional service standards to the customers. Moreover, KM can make employees to be more innovating when they are sharing their knowledge. A number of new ideas will be generated in their knowledge - sharing sessions.

Requioma (2005) said that by practicing knowledge management, the employees will be able to deliver exceptional customer service satisfaction by enhancing the staff morale and intensifying product innovation that meets customer needs and expectations. KM introduces an environment that encourages self - driven innovative – thinking staff to generate the breakthroughs by challenging the effectiveness and efficiency of existing practices and methods. This encourages the employees to think and explore beyond the boundaries of conventional approach in resolving issues. Moreover, KM can achieve a high level of customer responsiveness on initial customer exposure (within the past 3 months) from more than a day to less than 4 hours.

Objectives of the Research

The objectives of the research are:

i. To identify the success factor (top management leadership) affecting the KM implementation in TARC.
ii. To identify the benefits of KM implementation in TARC.
iii. To identify the relationship between the success factor (top management leadership) and KM benefits.

Research Design and Methodology

The research methodology consisted of literature review and the identification of success factor (top management leadership) of KM implementation in higher learning institutions, following by the KM implementation in TARC. Results of the implementation process were collected by in-depth structured interviews from the lecturers of Mechanical Engineering Division.

Implementation of Success Factor (Top Management Leadership) of KM in TARC

Top management leadership was implemented in Mechanical Engineering Division, TARC for one year. The implementation is as follows:

(a) The top management has developed and facilitated the KM vision, mission, objectives and goals for the organization through awareness training and is also displaying KM awareness posters in the offices, laboratories etc.
(b) The top management has encouraged continuous improvement based on sharing ideas. Staffs are encouraged to share their best practices, new techniques, and new teaching methods with all the other employees.
(c) The top management has encouraged employees to give feedback to improve KM performances. This has been done by providing a suggestion box. Top management openly accepts all the comments and ideas.
(d) The top management has and continues to provide adequate funds and facilities for KM implementation such as providing time, money and places for KM activities. Some amount of the money was allocated from the budget of our School of Technology for KM implementation.

(e) The top management has and continues to encourage formal/informal communication such as organizing formal knowledge - sharing forums and staff social activities such as a carnival, dinners etc.

Measurement Process After Implementation (Qualitative Approach)

Following are the results of the implementation process which consisted of in-depth interviews with Mechanical Engineering Division staffs. Generally, structured interviews were conducted. These interviews were conducted in a variety of ways – for example, by observing team meetings, knowledge sharing activities etc. In addition, the author has collected a variety of company documentations such as company reports, manual, company news etc. Interviews

were conducted with a total of 5 members, including the Head of School, Head of Division of Mechanical Engineering, senior lecturers and lecturers of the Mechanical Engineering Division. This is because of the saturation result of the structured interview was achieved at 5 persons. The procedure for selecting participants was that of purposive sampling; there are the staffs from mechanical engineering division who are involving in implementation of KM. Interview with the staffs were conducted by face to face. An interview was conducted from 45 minutes to two hours. Structured interviews were conducted based on the action of implementation of success factor (top management leadership) in TARC.

Below are the content of the questions or this structured interview.

Question 1: How we implement the success factor (top management leadership) of KM?

Question 2: What are the problems encountered during the implementation of KM?

Question 3: What are the solutions for the problem encountered?
Question 4: What are the benefits after the implementation of KM?
The results from five interviewees are listed in section below.

Top Management Leadership

a) Top management develops and facilitates the KM vision, mission, objectives and goals for the organization.

- **Implementation**: This are implemented through awareness training and also displaying the awareness posters in the office, laboratory etc. Organization's vision, mission, goals are actively communicated by all the employees and top management lead by example towards these.
- **Problem encountered**: Not many staffs aware on KM initially.
- **Solution**: More training and education on KM concepts are conducted.
- **Benefits**: This improves communication among all the employees in an organization. All the employees have the same direction and this will increase the work efficiency in an organization

b) Top management encourages continuous improvement based on sharing ideas.

- **Implementation**: We are encouraged to share our best practices, new teaching techniques and lessons learned. Best practices adopted by the college are shared among all the lecturers. For example, best teaching methods are shared. Besides that, leaders empower our staff to be more creative and innovative.
- **Problem encountered**: Nil.
- **Solution**: Nil.
- **Benefits**: This will lead the employee to solve the problems faster and more effectively. This increases the efficiency and quality of performance. Finally, creativity and innovation are established.

c) Top management encourages employees to give feedback to improve KM performance.

- **Implementation**: Suggestion boxes are provided. All the staff and students are welcomed to give any feedback for KM activities. Employees are free to give ideas and suggestions to improve organizational performances.
- **Problem encountered**: Nil.
- **Solution**: Nil.
- **Benefits**: Speed up the service to the student feedback and increase staff's competency in administration and/or teaching.

d) Top management provides adequate funds for KM implementation.

- **Implementation**: Principal and head of school are committed to allow us to organize knowledge fairs- i.e. Mechanical Engineering Project Exhibition (MEPE) and Project Design and Exhibition (ProDex). Time, venues and funds are provided. Besides that, top management is committed to fund the students for competitions such as the Robocon Competition. Top management encouraged and provided funds to the employees who were participating in presenting their research works in conferences.
- **Problem encountered**: Less fund was allocated for the Robocon Competition.
- **Solution**: Get sponsorship from the companies.
- **Benefits:** This increases the public's perception of our faculty and college. Newspapers showed that our students were capable of being creative and innovative in MEPE and ProDex, knowledge sharing - fair.

  This also helps the juniors to acquire knowledge from the seniors during this knowledge fair. The MEPE and ProDex fair were also intended to serve as a benchmark and a motivator to their juniors to emulate or improve on the quality of their project work and theses. As a result, this helps to increase the students' capability and competency. This increases the staffs' competencies improves quality of performance and reputation.

e) Top management encourages formal/informal communication.

- **Implementation**: Formal communication such as knowledge - sharing forums (twice a month, the lecturers presented their areas of specialization). Informal sharing in social activities such as dinners and lunch gatherings were organized.
- **Problem encountered**: Nil.
- **Solution**: Nil.
- **Benefits:** Formal and Informal sharing could facilitate the effects of information and experience exchange. This was echoed by the lecturers who said that the social interactions among the staff strengthened the mutual sharing of knowledge and experiences. This increases staff competencies, creativity, innovation and efficiency.

Discussion

Top Management Leadership and Perceived Benefits

Success Factor of KM implementation is top management leadership which was found to positively influence the perceived benefits of KM. This research study indicates that with top management leadership brings benefits to the organization.

This finding is consistent with previous and current KM researchers and most organizations considered that top management leadership as the success factor of KM implementation (Davenport and Prusak, 1998; Skyrme and Amidon, 1997; Choi, 2000).

Author found that top management develops and facilitates the KM vision, mission objectives and goals for the organization. With this clear objective, employees will be able to work to achieve it. This will significantly bring benefits such as creativity and innovation to an organization. This is in agreement with Pickering and Matson (1992). Goh (1998) also pointed out that benefits such as effective knowledge being creative and innovative are not possible unless top management develop clear objectives and empower employees and show a strong commitment to the organization.

Author also found that top management emphasizes continuous improvement based on sharing ideas will bring the benefits to the organization. From the research done by Wong (2005) and Bhatt (2001), they found that sharing knowledge will generate continuous improvement and quality performance.

This research shows that top management encourages employees to give feedback to improve KM performance. This will encourage the employees to contribute more new creative and innovative ideas. For instance, idea boxes or suggestion boxes are provided, so that the employees can freely give ideas and suggestions to improve the organization's performances. Hogberg and Edvinsson (1998) also supported that companies need to have a supportive environment that can capture, encourage, and stimulate the creative and innovative culture.

Besides that, the author found that top management provides adequate funds, incentives and rewards for KM implementation in order to motivate the employee to become more efficient and competence. This is strongly supported by Wong (2005), Skyrme and Amidon (1997) and Davenport and Prusak (1998).

Author found that top management encourages formal and informal communication. For instance, employees are encouraged to share knowledge in a formal way such as meetings, conferences, seminar etc. Besides formal communication, informal communication is encouraged such as informal knowledge - sharing sessions; they are encouraged to share their expertise. As a result, this makes the work to be carried out faster and more cheaply due to the sharing of knowledge, this brings to time savings and increase the efficiency and quality. This is supported by Battersby (2006).

In sum, top management leadership is important in KM implementation and this is positively influence the perceived benefits of KM.

Conclusions

After the implementation of success factor (top management leadership) of KM in TARC for one year, the results were collected by using a qualitative method, i.e. structured interviews. It concludes that there is a positive influence of top management leadership with the perceived benefits of KM.

The most significant contribution of this research study is to provide a framework for the development of measurement instruments for KM implementation in all the higher learning institutions. The contribution of this study may help higher learning institutions that are implementing or seeking to launch a KM initiative.

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