Critical Success Factors and Perceived Benefits of Knowledge Management Implementation: Towards A Conceptual Framework

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Abstract: This paper presents a preliminary literature review of previous and current research in the field of Knowledge Management (KM). Its purpose is to identify the relevant soft element of critical success factors (CSFs) and perceived benefits of KM implementation for further empirical research. The preliminary literature review identified organizational culture, top management leadership and team work will bring the benefits to the organizations. Based on the finding of the literature, a conceptual model has been developed with the intention to fill the gap on the topic of CSFs of KM research. The proposed conceptual model may indicate some limitations in term of validity and applicability. Therefore, further empirical research is required in a form of survey research in the organizations by using multivariate analysis to validate this conceptual model. The use of this statistical method is suggested in order to broaden our finding on this future research. To sum up, this paper presents the research objectives based on the research problems and provides a direction and the justification for further research.

Key words: Critical success factors, knowledge management, organizational culture, top management leadership, team work.

INTRODUCTION

Knowledge Management (KM) has recently played a significant role in many organizations. KM is a discipline that regards knowledge as a strategic asset that helps organization to attain competitive advantages in the marketplace. Many organizations have implemented KM with the strategic intention to increase their competitive advantages. Hence, it is necessary for organizations to develop the right KM strategies and tools in ensuring the success of implementation KM undertakings. Nevertheless, many organizations failed or cannot sustain KM practices in their organization as they have over emphasized on hard element (e.g. information technology) rather than soft element (e.g. organizational culture and people).

This paper provides a literature review based mainly on the KM literature with the intention of identifying the soft element of successful KM implementation to develop a conceptual framework of KM Model. The initial review of earlier works and recent trends in KM research found organizations merely emphasis in hard factors in KM implementation and neglected the importance of soft element which causing catastrophe aftermaths. In view of that there is a necessity to bridge the gap by identifying the soft elements of successful KM implementation. In this regard, this study aims to identify the soft elements of successful KM implementation to develop a conceptual model for further research. Further literature review identified three soft elements of successful KM implementation, namely *organization culture*, *top management leadership* and *team work* as well as the perceived benefits of KM that form the basis for the proposed conceptual model of KM implementation. Lastly, the paper concludes with a proposed conceptual model and hypotheses for soft elements of successful KM implementation as well as the limitations of this study and the directions of future research.

The Need for Research:
People are always the most fundamental element to every effective organizational strategy, in particular a strategy of knowledge sharing. Because people have the ultimate key to successful knowledge connection as they make choices of sharing or concealing knowledge, wanting to know more and wanting to learn. Therefore, people should be the driving issue in considering any KM endeavor (Dougherty, 1999).

Based on the finding of an international survey carried out by (Chase, 1997), organizational culture was seen as the biggest obstacle to creating a knowledge-based organization. Eighty percent of the respondents reported that their organization's culture either actively or passively hindered the development and introduction of KM strategies and programmes. This finding was valid for all industries/sectors and all geographic regions. Other "soft" issues which were seen as obstacles to successful introduction of KM included:
- Lack of ownership of the problem (64%)

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- Lack of time (60%)
- Organizational structure (54%)
- Top management commitment (46%)
- Rewards/recognition (46%)
- Emphasis on the individual rather than team (45%)

Likewise, Harvey & Denton (1999) supported the importance of culture by saying that "to compete globally in our business you need to be rich in technology and to be rich in technology, you need knowledge and a culture which prizes knowledge". (Reamy, 2001) also agreed with (Harvey and Denton, 1999) that culture is essential ingredient compared to the technology infrastructure.

Based on the literature above, soft element is important in KM implementation, but many organizations put too much of emphasis in hard factors such as technology and this is the main reason why KM failed in many organizations. Accordingly, this research aims to bridge the gap by identifying the soft elements of successful KM implementation.

Objectives of the Research:

The main objective is to identify the soft elements of successful KM implementation to develop a conceptual model. In addition, the following objectives are to be achieved:
i.   To identify the soft elements of CSFs affecting the success of KM implementation.
ii.   To identify the perceived benefits of KM implementation.
iii. To identify the relationship between the soft elements of CSFs and perceived benefits of KM.
iv.   To establish a conceptual model of CSFs of KM implementation.

Soft Elements of CSFs of KM Implementation:

A wide range of CSFs has been identified by KM literature, however this study only reviews the soft element factors that can influence the success of KM implementation, namely organization culture, top management leadership and teamwork.

Organization Culture:

Leveraging knowledge is only possible when people value building on each other's ideas and sharing their own insights and much of this is shaped by the organization culture. The culture of an organization means the environment that influences behaviour, decision-making and the organization's approach to markets, customers and suppliers. It is the combination of shared history, expectations, unwritten rules and social norms mores that affects behaviour throughout the organization (American Productivity and Quality Center, 1999).

Managing knowledge is about creating an environment within the organization so that people can openly share their experience and transfer knowledge (Kermally, 2002). The culture of a knowledge-driven organization has to be collaborative in order to promote free flows of information and facilitate knowledge creation. Therefore, organization culture is one of the most significant success factors for KM implementation (Chase, 1997).

On the other hand, (Skyrme and Amidon, 1997) highlighted that knowledge sharing activities are not a common practice in most organizations. Knowledge sharing is critical since intellectual properties increase in value with application. Knowledge and intellect will grow exponentially when they are appropriately stimulated and shared. However, competition among professionals often obstructs knowledge sharing activities. According to (Davenport and Prusak, 1998), the possible reasons are:
Fear of layoffs - reluctance to share information about mistakes.
- Competition among professionals and the difficulty of assigning credit to intellectual contributions.
- Reluctance to share positive knowledge, believing that employee's value and therefore, job security was tied to their personal expertise.

According to (Sydanmaanlakka, 2002), organization must create a culture that inspires people to share their knowledge without fear and freely exchange their thoughts, ideas and ways of working.

(Akhavan, *et al.,* 2006) also supported that the organization culture especially knowledge sharing culture is a stroyng culture and this is a good atmosphere of cooperation between the employees. For example, Hewlett-Packard (HP) is known for its relaxed and open culture, all the employees, including the CEO, work in open cubicles. They enjoy learning and sharing their knowledge.

Besides, collaboration and sharing culture, (Choi, 2000) mentioned that another organizational culture which is a knowledge-friendly culture in important in KM implementation. The finding same as the Davenport & Prusak (1998), who mentioned that the important conditions leading to the success of a KM project in their survey is a knowledge-friendly culture where employees are bright, intellectually curious and are willing and free to explore without fear. This can be done by establishing the right incentives or rewards systems to the employees (DeTienne, *et al.*, 2004).

Many studies that explored KM activities proposed that organizational culture plays a key role in supporting the successful application of knowledge sharing in an organization (De Long and Fahey, 2000; Kim and Lee, 2006). In addition, according to the study conducted by Migdadi (2009), he found that the biggest challenge for most KM implementation lies in developing a culture that encourages creation, sharing and application of knowledge.

Therefore, it can be concluded that organizational culture plays a primary role in the likelihood that employees will be willing to work together in their knowledge collaboration- culture, knowledge-sharing culture and knowledge-friendly culture.

Top Management Leadership:
(Gamble and Blackwell, 2001) asserted senior management must realize that KM is virtually important to organizational success and they need to put resources in place to enable effective KM implementation. In addition, a well-articulated vision is necessary to be formulated by senior management to ensure the success for any KM endeavors (Plessis, 2007). Many researchers have proved that top management leadership and commitment are the critical factors for KM implementation. (Davenport and Prusak, 1998; Liebowitz, 1999; Civi, 2000; Greengard, 1998; Guns and Valikangas, 1998; Pemberton and Stonehouse, 2000; Moffett *et al.*, 2003).

(Wong, 2005) noted leaders are important in acting as role models to exemplify the desired behaviour for KM. For example, leaders should exhibit a willingness to share and offer their knowledge freely with others in the organization to continuously learn and to search for new knowledge and ideas. It is significant for leaders to lead by example, not just words. By doing so, they can further influence other employees to imitate them and increase the propensity of employees to participate in KM implementation.

Furthermore, (Sallis and Jones, 2002) agreed and further elaborated that KM takes different perspectives and requires leadership to predominate over management. The leadership style must encourage trust and sharing, and follow function. In fact, the new breed of leaders will always engage in enthusing and encouraging communities of experts and professionals. They emphasized that organizations now require leaders who are sensitive to the psychology of knowledge creation and whose purpose is to nurture a knowledge- creating communities.

(Politis, 2001) mentioned that knowledge-enabled leaders are professionals who are vested with the responsibility to discharge their knowledge in an empowered environment. They encourage communication, encourage negotiation, encourage knowledge-sharing and promote interactive processes for knowledge acquisition. They also encourage team members to gather information and knowledge required to monitor their performance.

From the case study conducted by (Akhavan, *et al.,* 2006), they have found that success of KM program and planning in the organization depends directly on CEO support and commitment. Besides that, CEO also needs to take part in design and implementing phase of KM.

(Kermally, 2002) mentioned that 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. A leader in any type of organization should:
- Act as a coach
- Free up information and encourage knowledge creation
- Provide resources to show commitment
- Take part in the learning organization
- Get rid of a blame culture
- Reward and recognize the efforts of his/her staff
- Facilitate individual and team development
- Share the vision and involve people in strategy formation
- Listen for various possibilities

From a survey research done by Skyrme & Amidon (1997), they have illuminated certain characteristics which can determine an organization's success with the knowledge agenda. They characteristics of the leaders are listed as follows:
- They can clearly articulate a vision and goals of KM agenda.
- They are enthusiastic knowledge champions who are supported by top management.
- They have a holistic perspective that embraces strategic, technological and organizational perspectives.
- They apply effective communication by using all the tricks of marketing and public relations.
- They always have an effective interaction at all levels with their customers and external experts.
- They demonstrate good teamwork, with team members drawn from many disciplines.
- They have a culture of openness that simulates innovation and learning.

- They develop incentives, sanctions and personal development programmes to change behaviours of the people.

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

Teamwork:

Teams are groups of two or more people who interact and influence each other; they are mutually accountable for achieving common objectives and perceive themselves as a social entity within an organization (Cohen and Bailey, 1997).

The study conducted by American Productivity and Quality Center's International Benchmarking Clearinghouse found team is one of the critical elements for the effective transfer of knowledge and best practices in order to improve operations or to embed them in products and services (McCampbell, *et al.*, 1999). For example, traditional approaches to knowledge warehousing, such as working alone or in informal networks, are being replaced by organized teamwork, learning and knowledge (Dell, *et al.*, 1999; Sydanmaanlakka, 2002). Team members are networked together according to roles, tasks and project deliverables, and have access to an electronic library of best practices that can be shared and updated on a project by project basis (Guay, 2001).

In addition, (Soliman and Spooner, 2000) mentioned that KM teams are required not only to improve the performance and standing of the enterprise but also to ensure the effectiveness of the KM programme. If the knowledge cannot be shared with others or is not amplified at the group or divisional level, then knowledge does not spiral itself organizationally; the socialization mode starts by building a team whose members share their experiences and mental models (Nonaka and Takuechi, 1995).

An organization should establish cross-functional teams to map knowledge and plan an initiative. Not only is it crucial to capture the right knowledge, it is necessary to present it so people can find exactly what they are looking for. For most companies, this underscores the importance of creating a cross-functional team comprised of technologists and non-technologists from various departments. Yet it is often an enormous challenge to manage a cross-functional team comprised of people who are not accustomed to working together. Part of the challenge is not only to ensure that collaboration takes place, but also ensure that everyone's needs are met (Greengard, 1998).

(Slagter, 2007) found that team which consists of junior and senior employees is important in KM implementation as it will create a mentor relationship between the junior and senior employees.

Thus for successful KM, team work is important and must be sustained throughout the KM efforts.

Perceived Benefits of KM:

From a survey done by (McAdam and Reid, 2001), 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. The survey further emphasized that increased business efficiency, especially in the public sector, was considered to be a key benefit of KM. Improve consistency and competitiveness through reduced costs, were seen as being associated with efficiency. This is also agreed by (Kalling, 2003) where effective utilization of organizational knowledge can improve the performance of the organizations. In addition, implementation of KM brings benefits such as:

- Efficiency (Faster and better decision - making, avoiding similar mistakes, improving productivity and increasing profits)
- Competence (improving skills, shorter learning cycle, better quality of work)
- Responsive (faster response time to customers, faster time to market)
- Innovative (new ways of working, improving new product development, creating business opportunities)

(Nonaka and Toyama, 2004) claimed that new knowledge is generated and body of organizational knowledge assets is enlarged through KM. This knowledge can bring to organizational success. KM could also 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.

(Smith, 2008) has found that Giant Eagle's (GE) achieves the customer satisfaction due to the implementation of KM. KM can help in achieving accurate forecasting sales, ordering product and faster delivery. Besides that, KM can reduce turnaround time, cost saving, more efficiency etc.

According to (Yip, *et al.*, 2010), KM can help the organization to achieve the best quality of products and services by providing greater responsiveness to customers. Moreover, other benefits that can be gained are operational excellence, efficiency, innovation in breakthrough R&D products and services, repeating smart decisions, avoiding costly mistakes and continuous improvement.

Recent survey carried out by (Migdadi, 2009) also proved that organizational culture, top management leadership and team work are the CSFs that can bring the perceived benefits to the organizations such as customer satisfaction.

Desirable Characteristics of the Soft Elements as Independent Variables:
The preceding discussion and description of the soft elements of CSFs indicate that the soft elements must demonstrate certain desirable characteristics so as to ensure the success of KM Implementation. The characteristics of the soft elements which are organizational culture, top management leadership and team work which are selected as independent variables are also supported by literature review above.

Perceived Benefits as Dependent Variables:
To measure the impact of independent variables, having well-identified dependent variables are very important. For the measurement of the dependent variables for successful KM implementation, the perceived benefits were developed. The perceived benefits of KM are adopted from the literature review.

Theoretical/Conceptual Framework:
The literature review above indicates that the CSFs of KM will bring the perceived benefits to the retail organizations. The conceptual model of this research is presented in Figure. 1. According to (Kitazawa and Sarkis, 2000), a conceptual model can be developed to be an exploratory channel for fieldwork. The present study attempts to provide a basic, thorough and insight information of CSFs of KM in organizations.
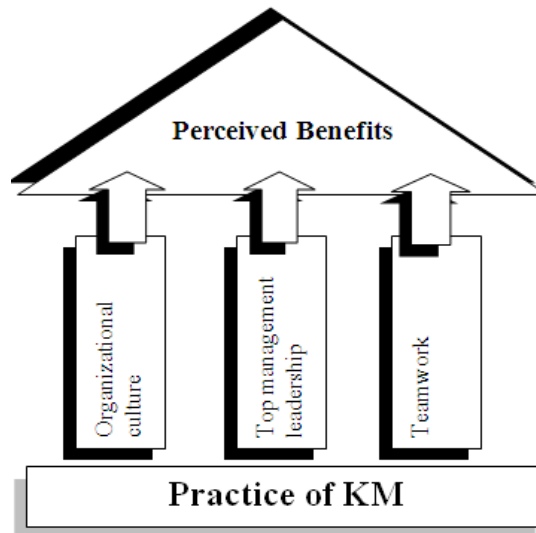

Fig. 1: Conceptual Model of KM.

Hypotheses Development:
Below are hypotheses of the soft elements of CSFs and perceived benefits of KM.
- H1: There is a positive correlation between *organizational culture* and *perceived benefits of KM.*
- H2: There is a positive correlation between *top management leadership* and *perceived benefits of KM.*
- H3: There is a positive correlation between *teamwork* and *perceived benefits of KM.*

Conclusion and Recommendation:
The proposed conceptual model attempts to fill the missing link on the topic of CSF of KM research. This study revealed that organizational culture, top management leadership and team work will bring the benefits to the organizations. The proposed conceptual model may indicate some limitations in term of validity and applicability. Therefore, further empirical research is required in a form of survey research in the organizations by using multivariate analysis to validate this conceptual model. The use of this statistical method is suggested in order to broaden the finding on this research.

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