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Critical review of success factors of Knowledge Management System (KMS) on competency building of it based organization

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ABSTRACT

This research paper is based on extensive research work on success factors and framework of knowledge management in competency building of business organization. In this research paper the researcher analyzed the success factors, which are enablers towards decision making process and explore the knowledge management in every phases of the organizational decision making process. The researcher is also tried to optimize the decision making capabilities in competency building on decision making platform towards business optimization. This paper is also emphasized the success factors which directly affected to decision making capabilities in competency building of business organization.

Introduction

Knowledge is something that comes from information passed by using data. It includes experience, values, insights, and contextual information and help in evaluation and incorporation of new experiences and creation of new knowledge. Knowledge originates from, and is applied by knowledge workers who are involves in particular jobs or tasks. A people use their knowledge in making decision as well as many others actions. In the last few years, many organizations realize they own a vast amount of knowledge and that this knowledge needs to be managed in order to be useful. Davenport and Prusak (1998) defined knowledge as a "fluid mixture of experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information". They argue that knowledge originates and is applied in the minds of people. In organizations it becomes embedded in documents and repository in organizational routines and processes, practices and norms. There is slightly different definition is given by Alavi and Leidner(1999). The knowledge management (KM) is very important in 2000'2 because it helps organizations to gain competitive advantage and effective working through sharing and re-using knowledge. In the market of e-business, KM initiatives are used to systematically leverage information and expertise to improve organizational responsiveness, innovation, competency and efficiency (RICE) (Lotus, 2001). There are many reason why should be managed properly especially using the collaborative technology. Among these are information overload, technology advancement, increased professional specializations, competitions, workforce mobility and turnover, and capitalization and organizational knowledge. Based on this, Nonaka and Takeuchi (1995), proposed four Km interactions is also called SECI model. This model consists of socialization (Tacit to tacit using teleconferencing technology, externalization (tacit to explicit using e-mail and broadcasting technology), Internalization (Explicit to tacit using visualization technology) and combination (Explicit to explicit using groupware technology).

In this research paper the researcher discussed the knowledge and its characteristics will be based on Davenport and Prusak (1998) and Nonaka and Takeuchi (1995) found the their knowledge of context is more relevant and applicable for organizations that involved in learning activities as knowledge management system (KMS) where a lot of information will be take into action from knowledge repositories and potential of generating of new knowledge among communities of practices in collaborating environment.

Factors Using Management To Kms

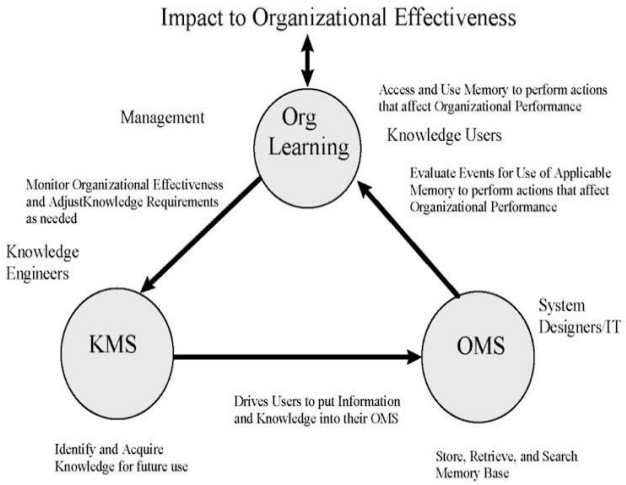

Fig. 1.1 Adapted: Gandon et al. (2000)

A KMS is an important system that should be developed in an organization. There are many ways to describe a KMS. One of them is from the technical perspective as proposed by Meso and Smith (2000), which consists of three components: Technology, function and knowledge. This KMS involves the processes for acquiring or collecting, organizing, Disseminating or sharing knowledge among people in an institution or organizations or enterprises. The knowledge management (KM) framework is very important for the organizations that intend to implement the knowledge management system in organizations. It will becomes as the guidelines in order to avoid the errors and

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gain, others benefits in terms of time and effort as well as costs involvement. Numerous researchers have proposed several Km frameworks. Many of these frameworks are perspectives, providing direction on the type of KM procedure without providing specific details on how those procedures should be accomplished.

Factors influencing KM factors influencing success of KM initiatives are culture, leadership, technology, organizational adjustments, and evaluation of knowledge, management activities / knowledge resources, governing and administrating knowledge activities, employee motivation and external factors.

Influencing Factors

Influencing factors of knowledge management can be broadly organized into three categories. Managerial influences, resources influence, and environmental influences. These are the core factors which describe the direction of business and success ratio of organization development.

Managerial Influence

Managerial influences emanate from the organizational participants responsible for administrating the management of knowledge, the framework partitions which are categories into following categories.

Exhibiting leadership in management of knowledge is the crucial reason why organizations are unable to effectively leverage knowledge is: lack of commitment of top leadership to sharing organizational knowledge or there are too few role models who exhibit the desired behavior of the four fundamental influences, leadership is the primary and strategy, it establishes enabling conditions for fruitful Knowledge management (KM).

Exhibiting leadership in management of knowledge describes the coordination, control, and measurements are contributors to establishing these conditions, but there is a additional aspect to fulfill the leadership mission. This distinguishes characteristics of leadership is that of being a catalyst through such traits as: inspiring, instilling a cohesive and creative culture, listening, learning, teaching, and knowledge sharing.

Exhibiting leadership is management of knowledge defines the core competencies for effective leaders of knowledge intensive organizations are being a catalyst, being a coordinator, exercising control, and being a evaluator. The knowledge management leader creates conditions allowing participants to readily and cultivate their knowledge manipulation skill to: contribute their own individual knowledge resources to the organizations and have easy access to relevant knowledge resources for ongoing success of KM initiatives, it is necessary to develop leaders at all levels of functionality / accountability. Execution and cultivation of leadership depends on an appreciation of knowledge resources, knowledge activities and other Km influences.

The coordination management of knowledge development is a primary driver of knowledge management (KM), the planned approach requires coordination, involving the determination of knowledge development activities to perform in what sequence, which participants will perform them and what knowledge resources will be operated by each. Coordination refers to managing dependencies among activities. It aims to harmonize activities in an organization by ensuring that proper resources activities in an organization.

The management of knowledge in an organization is strongly influence by how such dependencies are managed. Coordination involves not only managing dependencies activities bur marshaling sufficient skills for executing various activities, arrangement activities in time and integrating knowledge processing within organizations operations.

Literature Review

The Leonard Barton (1995) highlighted a KM framework that comprises of four core capabilities and four knowledge building activities that are crucial to knowledge based organization (KBO). Arthur Andersen and APQC (1996) have developed a advanced model comprising seven Km processes that can operate on an organization knowledge: create, identify, collect, adapt, organize, apply and share.

The framework of advanced knowledge management system by Van Spek and Spijkervet (1997) identifies a cycle of four knowledge management stages: conceptualize, reflect, act, and retrospect. Chih-Ping et al. (2002) proposed another framework by integrating the previous framework. It's consisted of three aspects, knowledge resources, knowledge management activities, and knowledge influences.

Although Chih-Ping et al. (2002) , has conducted a review on these frameworks of knowledge management performance and its global support towards the organizational development. The researcher also emphasized the rapid technological advancement and changes are not feasible in some cases as systematic process of finding, selecting, organizing, distilling and presenting information in way that improves an employee's comprehension in a specific area of interest. Knowledge management helps an organization to gain insight and understanding from its own experience. Conceptually, it is easy to comprehend how knowledge can be thought of as an integral component of business intelligent and hence, decision making. Knowledge management has been defined with references to collaboration, content management, and organizational behavioral science and technologies. Km technologies incorporate those employees to create, store, retrieve, distribute and analyzed structured and unstructured information.

Some researchers are also focused on knowledge management is an element of business intelligent which provides internal facing, sharing intelligent information among employees about effectively perform the variety of function of the organization run smoothly. They are also focused on the data warehousing which provides knowledge repository for business intelligent system towards decision making. That is, the BI metadata repository implements technical solutions that gathers, retains, analyze and disseminates corporate.

Other researchers are noted that many people forget that the concept of knowledge management and business intelligent are both rooted in pre software business management theories and practices. They claim that technology has served to cloud the definitions, defining the role of technology in knowledge management and business intelligent – rather than defining technology as knowledge management and business intelligent. Malhotra and Galletta (2003) identified the critical important of user commitment and motivation through a survey of users of KMS being implemented in health care organization. The researchers found that using incentives did not guarantee a successful KMS. They created an instrument for measuring user commitments and motivation that is similar to Thomason, Higgins, and Howell's (1991) perceived benefit model but it was based self determination theory and uses the perceived locus of causality.

Ginsberg and Kambil (1999) explored issues in the design and implementation of an identified in the literature and then experimentally implemented in KMS in a field setting.

Alavi and Leidner (1999) analyzed the executive's participants to develop the program with respect to what was

needed for a successful KMS. They found organizational and cultural issues are associated with user motivation to share and use knowledge to be the most significant

Koskinen (2001) investigated tacit knowledge as a promoter of success in technology firms by studying in small organization. Key to success of KMS was the ability to identify capture, and transfer critical tacit knowledge. A significant finding was that new members take a long time to learn critical tacit knowledge and good KMS facilitates the transference for this tacit knowledge to new members.

Barna (2003) studied six Km projects with various levels of success and identified two group of factors important to successful KMS.

Critical Review Success Factors

Mandiviwalla, et al. (1998) summarized the state of the research and described the several strategy issues Ackerman (1994) studied the six organizations that had implemented a successful capabilities of KMS of the system to exceed the actual capabilities. Ackerman and Mandel (1996) found that a smaller task based system was more effectives on the sub organizational levels because of its narrower expectations.

Jennix and Olfman (2000) studied three KM projects to identify design recommendation for building a successful KMS. These Recommendations includes:

1. Develop a good technical infrastructure by using a common network structure.
2. Incorporate the KMS into everyday processes and IS by automated knowledge capture.
3. Have an enterprise wide knowledge structure.
4. Have senior management support.
5. Allocate maintenance resources for OMS.
6. Train users on use and content of the OMS.
7. Create and implement a KM strategy / process for identifying the knowledge base.
8. Expand system model / life cycles to include the KMS and asses system/ process changes for impact on the KMS.
9. Designing security into KMS.

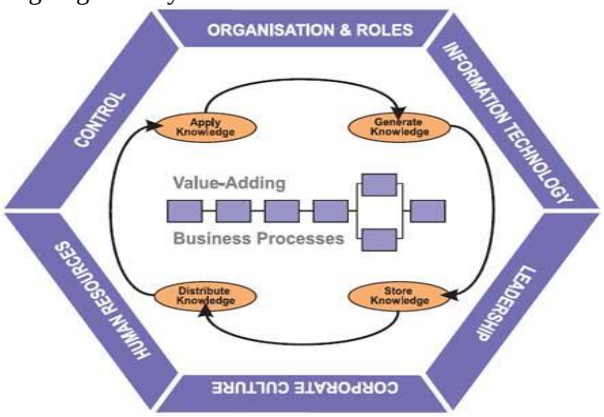

Fig 1.2: Framework of Knowledge Management (KM)

Davenport, et al. (1998) studied some projects on some companies to determine to find the success factors in organization to towards decision making. They found the eight common factors in KM projects:

1. Senior management support
2. Clearly communicated KMS proposal/ Goals
3. Linkage to economic performance
4. Multiple channel for knowledge transfer
5. Motivational incentive for KM users
6. A knowledge friendly culture
7. A standard flexible knowledge structure
8. A solid technical and organizational structure.

Cross and Baird (2000) proposed that KM would not improve business performance simply by using technology to capture and share the lesions for experience. It was populated that for Km to improve business performance the creating of organizational competency memory center or knowledge repository.

Factors that improved organizational learning include:

1. Support personnel relationship between expert and knowledge users.
2. Providing incentives to motivate users to learn from experience and to use the KMS.
3. Providing distributed database to store knowledge and pointer to knowledge.
4. Providing work processes for users to convert personnel experience into organizational learning.
5. Providing direction to what knowledge the organization needs to capture and learn from.

Sage and Rouse (1999) reflected on the history of innovation and technology and identified the following issues.

1. Modeling processes to identify knowledge needs and sources.
2. KMS strategy for the identification of knowledge to capture and use and who will use it.
3. Provide incentives and motivation to use the KMS.
4. Infrastructure for capturing, searching, retrieving, and displaying knowledge.
5. An understood enterprise knowledge structure.
6. Clear goals for KMS.
7. Measuring and evaluating the effectiveness of KMS.

Proposed Research Study

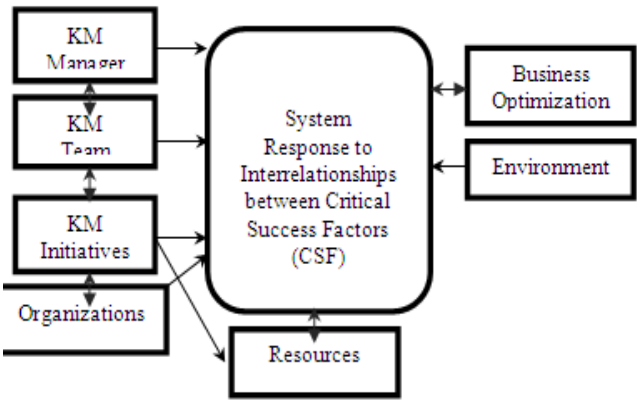

Fig 1.3: Framework of Critical Success factors of KMS

The proposed framework of critical success factors of knowledge management system and its possible resources which optimized the business process and its capabilities towards organizational activities. It also signifies the essential components which are interrelated in specific system and improve the organizational services towards development.

The researcher stated that the following essential components which are designed to control the business organization up to its optimization level.

Km Manager

- Ability to delegate authority
- Coordination
- Perspective their role and responsibility
- Having relevant past experience
- Commitment
- Education

2. KM TEAM

- Full time dedicated staff
- KM background
- Commitment

- Trust

3. KM INTITIATES
- Training and education
- Clears goal and objectives
- Knowledge strategies

4. ORGANIZATION
- Top management support
- Organization structure and culture
- Systematic processes
- Knowledge infrastructure
- Technology infrastructure

5. ENVIRONMENT
- Competition
- Fashion
- Markets
- Technology up gradation
- Time
- Climate

6. AVAILABILITY OF RESOURCES
- Human
- Financial
- Raw materials
- Facilities

7. BUSINESS OPTIMIZATION
- Improved business processes
- Working efficiency
- Fast and responsive
- Global competitors

Apart from the above the knowledge management system is also based on the explicit and tacit knowledge about the nature organization and working environment. Explicit knowledge can be articulated, stored and codified in certain media and technological support where as tacit knowledge is difficult to transfer knowledge to another person by means of verbalizing and writing. It is just opposite to explicit knowledge where people are not aware or knowledge they passes.

Knowledge management system includes technological support to enhance the competency model of business organization and its development environment, KMS uses Database, Groupware, and File Management System (FMS), Cross Platform Computing Environment. The basic idea of knowledge management system is enabler employee to access the company documents of facts, solutions and sources of information

Conclusion

In this research paper the researcher emphasized the critical success factors of knowledge management system and its role and responsibilities towards organizational development. The researcher focused on KM manager, KM team, KM Initiatives, Organizations, resources and environment which are essential for generating the knowledge and its attributes towards development. The researcher has taken different kind of view from the different literature and sources of information which are essential for generating knowledge. Technology advancement, knowledge repository and data mining and its components are the mandatory part of knowledge management system in any kinds of competency busing organization towards decision making. Knowledge management system is the main hub in business organization where decision process can be generated to handle and control the operational activities of the organization or enterprises.

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