

KNOWLEDGE MANAGEMENT IN SMEs

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Abstract

The expression "Knowledge Based Economy" is coined to describe trends in the most advanced economies towards greater dependence on knowledge, information and high skill levels. Today Knowledge in all its forms plays a very crucial role in economic progress. Nations, which develop and manage their knowledge assets effectively, perform better. Firms with more knowledge systematically outperform others. More knowledgeable employees get better-paid jobs. The political, economic and social environments have changed during the movement from industrial era to knowledge era. Emphasis is now shifting from physical to intangible assets, operational efficiency to innovation, and management control to common goals. All this is resulting in increase in demand for new structures, re organization, and co-ordination of knowledge in enterprises. And appropriate Knowledge Management (KM) is a pre requisite for building new structures in any enterprise. But the unawareness of people regarding the concept of KM is still a challenge.

Knowledge management can be defined as learning from past experiences (whether successful or unsuccessful) and various knowledge pools and to create new knowledge by effectively analyzing that available knowledge. Actually the entire concept of KM is based upon gathering, sharing and creating Knowledge. It's the task of developing and exploiting both formal (explicit) and informal (tacit) knowledge resources of an organization. Informal knowledge resources include information and experience-based knowledge about customers, suppliers, products, competitors etc. Formal knowledge resources include the competencies and knowledge resources of people within the organization. At the people level, KM puts emphasis on the individual competencies, education and learning abilities of organizational members. At the organizational level, KM is concerned about the creation, utilization and development of the collective intelligence of an organization. KM is aimed at creating a 'smart' organization, which is able to learn from experience-based knowledge and to transfer it into new knowledge in form of product and/or service innovations. According to KM gurus, KM should be business driven and strategic in outlook so as to maximize return on (intellectual) capital and to sustain business success in an era of global market and tough competition

The process of globalization - driven by the explosive growth of new information and communication technologies - has increased competition and thereby the need to make more effective use of both individual and organizational knowledge assets. Another factor, which explains the emergence of KM concepts, is the continuous 'rightsizing' trend. Starting in the 1980s, corporate downsizing measures led to the loss of valuable information

and knowledge resources and subsequently to the emergence of KM as strategic countermeasure. These developments saw an increased emphasis on technology and KM systems to capture knowledge residing in employees' minds (tacit knowledge) and to turn it into explicit knowledge. In view of the explosive growth of information sources (e.g. internet) and accelerated pace of technological change, KM was propagated as an effective coping strategy. KM gurus often regard technology as a crucial "enabler" of information and knowledge sharing across platforms and continents. It serves as a tool within an organization to use knowledge more effectively.

KM may be particularly relevant for SMEs (Small and Medium Sized enterprises), as normally SMEs have approx. 20-50 employees. Being smaller in size these firms are relatively more ready to learn but also more vulnerable to the loss of key personnel. Thus good and effective KM practices can ensure their competitiveness in the present environment. Further management literature states that organizations go through a distinct life cycle, containing a startup phase characterized by slow growth, followed by an adolescent period of explosive growth. The growth then slows during a maturity phase, followed by a period of decline. KM provides a set of approaches for the different phases of the organizational life cycle. KM distinguishes newer firms from mature & established firms as newer firms are much more likely to adopt new product innovations because these firms are small and flexible but Established firms become specialized over time due to continuous incremental process improvements. It is more difficult for such mature firms to adopt new technologies. Rather they should focus on process improvements that lead to increased

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economies of scale. For making fullest out of every stage of SMEs life cycle KM suggests:

During the startup (“entrepreneurial”) phase, the focus is on resource acquisition and locating opportunities. The organization requires flexibility and adaptability. They are more concerned with their external competitive environment than their internal structure. They will benefit from emphasizing *knowledge creation* processes through internal invention and external discovery of opportunities.

During the growth (“collectivity”) phase, the firm tries to coordinate individual activity. When the firm begins to grow and add more employees, its focus shifts from resource acquisition to structural coherence. The firm will emphasize human resource functions and try to generate cohesion and high morale. Knowledge management emphasis shifts to *sharing knowledge*. Firms must take intentional actions to foster sharing, such as creating formal systems and procedures

As the firm moves toward maturity (“formalization”), there is a greater emphasis on productivity and efficiency. KM suggests creation of formal systems and structures that will facilitate the *exploitation of knowledge* and opportunities.

There are many other benefits also, which both small and large firms can derive from the implementation of KM systems. Core business driven knowledge processes in organizations include:

- (i) Locating and capturing knowledge;
- (ii) Sharing knowledge and
- (iii) Creating new knowledge

By *locating and capturing innovative ideas* and other types of strategically important knowledge such as best practices used by technicians to solve maintenance problems, small entrepreneurs can improve innovativeness, service quality and response time. The documentation of 'war stories', yellow pages and data mining are useful KM tools for locating and capturing knowledge.

By *sharing knowledge and experiences* about cost-effective procedures and operational approaches, SME owners can achieve substantial savings. Tea gatherings, TGF meetings, intranet systems and groupware platforms represent suitable 'technological' enablers of knowledge sharing and collaborations.

Through *generation of new knowledge* in form of lessons learned through action reviews of sales campaigns, completed projects etc. and the analysis of completed projects, the small entrepreneurs can avoid potentially costly future mistakes. Creating new knowledge within small teams whose members share a mutual context of experience and collaborate on a joint task bonded by a common sense of purpose and the need to know what the other 'community members' know, can lead to profitable product and service innovations.

Steps in the KM Event Chain and Benefits of KM Systems

To share knowledge

To link 'islands of knowledge' within an organization or in regionally/globally operating firms for benefit of various stakeholders by transferring knowledge to those who might benefit from it elsewhere.

To locate & capture knowledge

To utilize customer knowledge to anticipate changing customer preferences (by mining of data such as customers 'buying habits').

To create new knowledge

To create product and/or service innovations by combining the expertise and competencies of different subject matter experts such as designers, customers, marketers etc.

Knowledge Management Challenges in SMEs

Challenge No. 1: One of the objectives of KM is to maximize return on an organization's tangible and intangible knowledge assets and resources. But many SME owner-managers are not familiar with the conceptual basis and potential benefits of KM models, the latest KM software tools and so forth. To develop people and their capacity to learn as well as the collective intelligence of an organization requires KM competencies and healthy organizational culture so that people are willing to share ideas, information and knowledge and last but not least an efficient and suitable communication and information infrastructure.

Challenge No. 2: The development of a truly visionary KM strategy and creation of a business driven, IT-based knowledge information system are often neglected though SMEs use various KM tools in their day-to-day business such as maintaining CV databanks, having discussions with customers etc. SMEs seldom have a systematic KM policy on strategic level with regard to the monitoring and evaluation of available knowledge or the development, acquisition, organization, sharing, utilisation and/or creation of (innovative) knowledge.

Challenge No. 3: SME owners do not always create facilitative structures for simple KM activities. Very often cultural barriers such as distrust, lack of recognition and communication, knowledge, power mindsets, retrenchment concerns etc. act as de-motivators with regard to effective knowledge sharing and utilization of individual knowledge.

Towards Effective KM in SMEs

Observing the present scenario we find that SMEs lack

- (i) Systematic KM policies on strategic level with regard to the monitoring of available /necessary knowledge or the development, acquisition, locking, sharing, utilization or evaluation of knowledge (strategy);
- (ii) Policies on tactical level to make the structure facilitating to development, acquisition and locking of knowledge (structure)
- (iii) Policies to make the culture motivating with regard to sharing and utilizing knowledge (culture).

As in the context of change management, the mindset of small entrepreneurs is often a major hindrance for implementing new KM systems. Based on research on change management practices of SMEs in Singapore, we argue that entrepreneurs with a tertiary education in business

management or engineering and certain personality traits such as change propensity will find it easier to appreciate and embrace KM concepts, provided they are not too impatient when it comes to measuring the return on investment (ROI) in KM systems. With a good strategy, suitable KM policies, a caring leadership behavior and a proper performance management system as well as the right KM tools, it can be expected that more and more SME owners will succeed in making internal/external knowledge assets more productive so as to leverage organizational core competencies.

We will now examine the case study of a Singaporean SME, which overcame these challenges and implemented a knowledge management solution for its business operations.

Conclusion

SMEs can benefit from knowledge management concepts and tools. As economies and businesses shift towards a new world configuration of digital information and knowledge-based work, SME owners need to take on this challenge and to find out how information and communication technologies as well as KM solutions can assist them. To assist the SME sector to keep pace with the emerging knowledge-based economy, government agencies, chambers of commerce, industry associations and private sector organizations will need to commit more resources and assistance to make the implementation of KM in SMEs more tangible and economically viable. Owners and managers of SMEs must be willing to break away from practices that had worked well for them in the old economy, and embrace the changes now associated with the new economy. Based on these indicators, it can be concluded that many SMEs are not yet ready for the new economy. SME policy makers hope that new economy related assistance schemes would motivate more local small entrepreneurs to embrace related changes proactively. To increase online transaction capability of local SMEs and to encourage small entrepreneurs to adopt "ready-made" e-commerce solutions, one way could be to implement various new economy related SME upgrading schemes. The characteristics of those small entrepreneurs who take up the challenge (and those who do not) have yet to be ascertained by empirical research. Many analysts are excited about the challenges and economic dynamism that KM will bring and are working on it. The research study aims to examine how knowledge is created and utilized in business organizations, and seeks to understand the process whereby individual and organizational learning is transformed into key competencies and practices. It is hoped that the study will help to identify some of the drivers of effective KM processes in small firms and to establish what it takes to improve firm performance through KM systems.

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