Knowledge Management Abstract

On a global basis, organizations are recognizing the importance of knowledge as a means to gain or sustain competitive advantage. Researchers have concluded that the only thing that is sustainable, for successful businesses, in the New Millennium – is what it knows, how it uses what it knows, and how fast it can know something new.

In the past, the dilemma was finding enough information, but now the problem has shifted to identifying and managing the nuggets of mission-critical knowledge amongst the mountains of meaningless noise.

Many organizations are primarily knowledge-focused. They obtain data and information and produce either a product or service. In this production process they use their own, and other's, knowledge and information. Much of the knowledge in an enterprise is grounded in the minds of employees. Past experience and internal learning create processes, insights, methodologies, how-to and understanding that represent what the business is and how it adds value. Since knowledge is the most basic of all competencies, its recognition, creation, application, and management should be a critical success factor for attainment of a competitive advantage.

Since information builds on data and knowledge builds on both data and information, knowledge management includes all three elements. It does not focus on databases or information technology, although it may use both. Its concern is with managing its knowledge assets: creating, storing, protecting, disseminating and using mission-critical knowledge. When people need knowledge, is it the right knowledge and is it timely and easy to locate and access? Is this precious commodity updated as learning occurs and better ways of doing things are discovered?

The awareness of the value of knowledge to a business, coupled with its management, acts as an integrator that improves cross-functional communication and cooperation. Shared knowledge not only makes for a more effective, efficient and agile organization, but creates a common perspective and culture that produces a natural consistency of successful decisions and actions.

This paper discusses in question and answer format the key KM essentials:

What is knowledge?
What are the different types of knowledge?
Where does knowledge reside?
What is knowledge management?
What is the purpose of knowledge management?
What is a knowledge culture?
Is knowledge management unique?
How is knowledge management different from other fields?
Why is knowledge management important?
What are the benefits of knowledge management?
How is knowledge management evolving in the market?
What are the key elements of a knowledge process?
What is included in knowledge management planning?
How do we create knowledge?
What are the components of a knowledge management strategy?
How is knowledge managed effectively?
How do you prevent knowledge loss in the business?
What is the future of knowledge management within the business environment?
What is knowledge?

Knowledge is a level higher than information. Knowledge resides in the minds of knowers. It is a fluid mix of contextual structured and unstructured raw material that is transferred into valuable knowledge assets that can be renewed, grown, and acted upon. Knowledge is an inherently human state of affairs, while information is what resides in mindless computers.

Many agree with the definition that “knowledge” is not only personal, it is also an evolutionary mental process – we formulate and structure what we know. Knowledge also includes intuitive and spontaneous responses to the environment in which we find ourselves.

What are the different types of knowledge?

There are two types of knowledge. One is explicit knowledge, which is expressed in words and numbers and shared in the form of data, scientific formulae, product specifications, manuals, universal principles, etc. This knowledge type can be readily transmitted across individuals formally and systematically. The second type of knowledge is referred to as tacit, something not easily visible and expressible.

Tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or share with colleagues. Subjective insights, intuitions and hunches fall into this category of knowledge. Additionally, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values or emotions he or she embraces.

Where does knowledge reside?

Knowledge resides in many forms within an organization, but the primary areas include structured and unstructured information, and employee expertise.

- **Structured Information** – Transaction-based data managed and maintained within information systems. Transaction data is often locked away from users because it is difficult to retrieve or synthesize.
- **Unstructured Information** – Associated with documents. It includes PC, paper, video, and audio formats that are not easily accessed and shared.
- **Expertise** – Experience base or innate understanding of employees. Because this type of knowledge is broadly dispersed and continually changing, it is rarely codified and moves through the organization unwittingly.

What is knowledge management?

Knowledge management is a collaborative work environment in which all untapped and unconnected knowledge is systemically collected, structured, and distributed enterprise-wide to support effective decision making and improvement of competitive advantage. The following are generally considered integral components of knowledge management.

- Generating new knowledge
- Accessing valuable knowledge from external sources
- Using accessible knowledge in decision-making
- Embedding knowledge in processes, products and services
- Representing knowledge in documents, databases, and software
- Facilitating knowledge growth through culture and incentives
- Transferring existing knowledge into other parts of the organization
- Measuring the value of mission-critical knowledge assets
What is the purpose of knowledge management?

The purpose of knowledge management (km) is to deliver value to an organization. The goal of KM is to harness knowledge resources and knowledge capabilities of the business to enable the organization to learn and adapt to its changing environment. Therefore, KM practices aim to draw out the tacit knowledge people have acquired, what they carry around with them, what they observe and learn from their experience, rather than what is usually explicitly stated. The knowledge executive process is about acquisition, creation, packaging, and application or reuse of knowledge.

What is a knowledge culture?

Culture (from the Latin cultura stemming from colere, meaning "to cultivate," generally refers to patterns of human activity and the symbolic structures that give such activities significance and importance. Cultures can be "understood as systems of symbols and meanings that even their creators contest, that lack fixed boundaries, that are constantly in flux, and that interact and compete with one another"

An organization can build a knowledge-supporting culture by integrating people, process, and technology. A knowledge culture supports changing employee behaviors for knowledge use and sharing.

Is knowledge management unique?

Knowledge Management is unique because it does more than manage and present information. It unlocks the contextual value and includes assumptions, experiences and insights.

Earlier attempts at information management concentrated on the amount of information accumulated the efficiency of processing, and the speed with which an organization could move data. Legacy systems primarily stored information in separate business silos, rarely integrating enterprise-wide information.

In contrast, Knowledge Management embarks on the next management frontier: What is in the minds of the knowers? Knowledge management includes insights in the form of successful experiences that were never before reflected in the information technology repositories and warehouses.

How is knowledge management different from other fields?

Knowledge Management is rooted in many disciplines including psychology, sociology, business, economics, education, information and document management among others. These areas have developed perspectives on the workings of individuals and systemic knowledge. Knowledge Management embraces these perspectives, but operates from the basic premise of the "sticky" nature of knowledge. That is, knowledge is dynamically imbedded in networks and processes as well as in the human beings that constitute and use them. For example, people acquire knowledge from established processes and routines, the entirety of which is usually impossible for any one person to know.

However, routines evolve as people interact with them in response to changes in the environment, the particular organization, and the composition of the employees that carry out the routines. This distinction provides impetus for knowledge management, at least in the current state, to focus on enhancing an organization’s innovation potential to leverage it for competitive
advantage. This is the “Holy Grail” – a set of activities and tools that organize and nurture creativity on a large scale for effective competition.

**Why is knowledge management important?**

In the new global environment, an organization’s competitive capability is intrinsically tied to the ability to rapidly collaborate with customers and key stakeholders. The primary concern today is to ensure that the knowledge necessary to drive critical business processes is available where it needs to be, when it needs to be.

A variety of market factors have contributed to the growth of and interest in knowledge management. They include:

- Accelerated pace of change
- Staff attrition – especially that resulting from years of downsizing and reengineering
- Growth in organization scope – geographic dispersion associated with globalization of markets
- Global integration
- Increase in networked organizations
- Growing knowledge-intensity of goods and services
- Revolution in enabling technology

**What are the benefits of knowledge management?**

Experts get better at what they do by learning and absorbing more how and knowledge. Some individuals can only learn by trying to do things themselves, however most people learn from human interactions. When people share knowledge wholly and openly, the sum is greater than the parts. Quantum leaps in knowledge can be generated when knowledgeable people collaborate. Then there is simple efficiency. Time and other resources are wasted when workers have to learn something through trial and error, working in isolation. The pace of change and innovation is so great that one person cannot do it all. When experts collaborate, improvement can be made much faster than any one employee working alone. Speed is the essence today – speed of execution as well as that of innovation.

**How is knowledge management evolving in the market?**

Knowledge Management is fertilized the soil for thinking about several recent technology developments. Today's B2B and portal technologies, for example, embody the principles of KM - they just don't use the term as a label. But it's not just a migration from one label to another. Now that we have tools that can manifest KM principles by making them visible and tangible, it allows us to put together a value proposition with significant benefits.

**What are the key elements of a knowledge process?**

An organization’s knowledge process usually includes:

- Mastering transaction data management
- Transforming transaction data into information
- Converting information into knowledge that can be used in decision-making

When an organization becomes proficient in managing knowledge and performs the three tasks consistently, the organization learns. When this process achieves mass, knowledge management begins to occur spontaneously in self-organized networks. Such an organization has an
opportunity to create knowledge at any stage at which data and information are processed. Communities of knowledge workers come into existence throughout the value chain.

**What is included in knowledge management planning?**

Knowledge Management planning includes the following:

1. Develop an understanding of why a knowledge initiative is being undertaken. The key to this is a clear set of business objectives. These may be one or more of the following:
   - Focus on enriching relationships with customers (understanding their requirements, giving them better service and delivery, informing them of potential developments)
   - Focus on product leadership (better, more innovative features, higher quality, better value for money, improved reliability)
   - Focus on operational excellence (reduced lead times, better forecasting of delivery times, improved performance in meeting delivery promises, better quality of manufacture)
   - Increase market share in particular sector up to a specific percentage through improved marketing, sales organization competitive pricing, and availability and performance of product)

2. Obtain a knowledge landscape, of the organization, to identify those activities that are likely to give an immediate and significant payback.

3. Focus on the knowledge-focused requirements for competent execution of complex decisions and tasks.

4. Identify areas where knowledge is missing for particular business and support processes.

5. Identify repositories of knowledge and determine whether any of the gaps in the knowledge requirements may be filled from these repositories.

6. Identify bottlenecks in knowledge transfer or knowledge distribution, and attempt to eliminate them.

7. Identify how to organize appropriate approaches to standardize knowledge acquisition so that knowledge can be cumulated and merged with other knowledge.

**How do we create knowledge?**

The ideal knowledge management process would work as follows: Data enters an organization in product and service transactions. The data becomes information when it is analyzed to create summaries of customer, account, service, product, and business unit activity and performance. This information populates databases and is minded into knowledge repositories, where it can be integrated with other relevant information.

Knowledge is created when data and information from these repositories are used in the normal course of business and the results are recorded and codified.

For example, the customer service representative can capture knowledge surrounding transaction data. Then the organization can use this customer knowledge to determine what products or services will provide value add for the customer. Decisions about such matters as product alternatives, additional products and services, better use of products might be made on the basis of knowledge garnered from previously successful scenarios.
What are the components of a knowledge management strategy?

A successful Knowledge Management Strategy has the following critical components. They include:

- Appoint a Chief Knowledge Officer – CKO
- Develop the Knowledge Management Strategy in alignment with enterprise strategy
- Strengthen management’s commitment by showing executives successful knowledge management practices
- Integrate Knowledge Management into core work processes and make knowledge capture a step in key processes
- Create a culture of trust and learning and provide employees incentive for sharing knowledge
- Create a discipline in the organizations to ensure quality of knowledge content
- Deploy technologies for enabling knowledge and speeding the pace of product and service creativity
- Establish methods for measuring the benefits of knowledge management investments

How is knowledge managed effectively?

A significant amount of KM programs have failed for a number of reasons, one of which is that they are too centrally driven. The KM activities are less interesting to potential users if they feel a lack of ownership for them. Communities of Practice (CoP) are one means around this problem. Rather than concentrate all knowledge at the enterprise level, specific user groups or types of experts are organized into specialized networks. After effectively localizing the management of knowledge, the next action is to involve the users in designing a knowledge sharing process that they can sign up to and will use. This raises the problem of the fundamental purpose of KM. Is it to store knowledge for all employees to access or is it more about sharing and collaborating in real time?

Our educational system typically stuffs knowledge into the heads of students that it thinks will be useful to them for future use. Frequently most knowledge is lost because students don’t feel a need for it at the time. It has no application in the here and now for them. A KM system based on this viewpoint is bound to fail. Organizations that foster live collaboration during an actual project are more likely to succeed. On the downside, the relevant expertise may not be captured for future use, but the organization achieves its most essential objective – to exponentially transform the expertise of multiple experts into tangible competitive advantage.

How do you prevent knowledge loss in the business?

Preventive actions can be implemented to offset loss of valuable employees with mission-critical knowledge. They include:

- **Don’t let your highly-skilled workers leave.** This seems like an obvious solution to this dilemma, yet it is the one that can be easily ignored. The easiest way to diminish knowledge loss is to avoid losing knowledge in the first place. By retaining workers that have the knowledge, businesses can reduce loss. This can be achieved by offering competitive compensation and incentives, providing alternate career paths, transitioning an employee to a new position or providing job rotation to enhance skills and industry experience.
• **Mentoring and coaching.** Mentoring and coaching methods have become very fashionable focuses of training and knowledge transfer in the current environment. By matching newly hired or inexperienced employees with more seasoned workers, the intangible, tacit knowledge of the business can be passed on effectively.

• **Sharing best practices.** The sharing and use of best practice knowledge has become a critical success factor for market leaders. The ability to use tested and proven knowledge of other businesses has helped others make decisions and improvements with greater speed and reliability. The objective is to begin sharing what works in successful companies to generate new ideas and changes in the business processes and activities.

• **Sharing lessons learned.** Similar to the mentoring and coaching methods, sharing lessons learned allows companies to tap the experiential knowledge of its workers. Lessons learned represent the actual experiences of individual employees or teams, identifying knowledge created and/or obtained. As a rule, lessons learned are shared in a larger group setting as opposed to one-on-one sessions between mentor and protégé.

• **Content documentation.** This is likely to be the most monotonous method of reducing knowledge loss. Tracking and maintaining information used in decision-making can assist a company to retain critical mission-critical for future use. Regrettably, it is easy to neglect documentation, but when compared to the time and effort to rediscover knowledge the amount of time it takes to document valuable content becomes inconsequential.

**What is the future of knowledge management within the business environment?**

KM is a critical success factor and challenge for the future. Creating, capitalizing and sharing knowledge capital will be a primary function of any successful organization. It is a long-term program starting from a strategic commitment, involving a correct understanding of KM and know-how in the business, and integrating various and well-adapted tools.

Knowledge is now considered capital, which has a significant value. It is a strategic resource for increasing productivity; stability factor in an unstable and dynamic competitive environment. Technology can enable organizations overcome obstacles and barriers of space and scale. With appropriate technology, workers can easily find others with needed expertise or common interests. Once connected, they can work together to share and enrich knowledge in virtual spaces, allowing for the discovery and use of valuable insights, exchange of ideas and information and the building of relationships.