

# Considerations of Managerial Change in Knowledge Based Organization

Sebastian Ion CEPTUREANU<sup>1</sup>  
Eduard Gabriel CEPTUREANU<sup>2</sup>  
Alina TUDORACHE<sup>3</sup>

## **Abstract**

*An organization that leverages knowledge in organizational strategy must integrate knowledge and sell it as a key part of integrated products and services. To achieve this requires a strong commitment to knowledge management from senior managers of the organization. The organizational culture must encourage generation, access, and knowledge processes transfer within organization and provide the technology needed to achieve this processes. Finally, knowledge-based organization must facilitate organizational learning so that captured knowledge is constantly updated. This article analyzes the main challenges induced by knowledge management (KM) in organizations with a particular focus on knowledge based organizations.*

**Keywords:** *knowledge, knowledge management, knowledge based organization, organizational change*

**JEL classification:** M13, M21

## **Introduction**

The most important benefit of knowledge management is the ability to acquire and incorporate knowledge into the organization's activities and decision-making processes in order to generate value. However, in today's knowledge economy, knowledge management becomes a competitive necessity rather than a competitive choice and, therefore, it is prudent for all organizations to adopt appropriate initiatives and knowledge management to successfully conduct transition to a knowledge-based organizations.

In principle, knowledge management should be guided by the objectives of an organization, and by expected deliverables. Where knowledge management

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<sup>1</sup> **Sebastian Ion CEPTUREANU**, Bucharest University of Economic Studies,  
E-mail: ceptureanu@yahoo.com

<sup>2</sup> **Eduard Gabriel CEPTUREANU** Bucharest University of Economic Studies,  
E-mail: ceptureanu@yahoo.com

<sup>3</sup> **Alina TUDORACHE** Bucharest University of Economic Studies,  
E-mail: atudorache@yahoo.com

initiatives do not contribute to organizational competitiveness and performance, top management shall not support such initiatives. Michael Stankosky considers that the result of knowledge management efforts are not always quantifiable and are not directly related to the final results.

Knowledge management efforts to strengthen collaboration are more evident in knowledge based organizations. These efforts are embodied in improving business processes, systems and team performance. In turn, these successes will lead to increased innovation, to better decision-making system, and improve team performance.

Improving communication leads to sustainable learning and a better awareness of critical information and facilitates transforming individual knowledge into organizational knowledge and vice versa. Together, these factors will improve organizational processes and decision-making systems in knowledge based organizations.

Knowledge management efforts focus on improving employee skills and improving product quality or service. Gains on product or service quality are directly linked to both organizational performance and competitive environment. Improving employee skills turns into increased efficiency and effectiveness.

Improving learning and adapting employees as a result of knowledge management efforts will lead to transforming individual knowledge into organizational one. This will be in decision-making based on better information and increased competence to make decisions, improvement of all processes and systems of knowledge based organizations.

Knowledge as a source of competitive advantage, will continue to gain strategic importance, and organizations will have to apply knowledge to improve performance. Knowledge management will continue to evolve to develop specific systems and organizational processes.

Last but not least, when approaching links between knowledge based organization and knowledge management we should consider the four dimensions of the knowledge based organization are:

a. Processual, knowledge sharing and creation respectively, encompassing activities performed within the organization, some of them directly linked with creation of a product or a service. From this perspective, a knowledge based organization is focused on interconnected processes: effective application of existing knowledge and creation of new knowledge.

b. Geographical, regarding boundaries in sharing or creating knowledge. Nowadays, creation and transfer of knowledge are not limited in terms of location, legal or geography. On the contrary, knowledge is often produced and transmitted as a result of interaction with a series of entities, from customers to suppliers, from partners to competitors. From this perspective, the knowledge-based organization is an ensemble of individuals and supporting resources that create and apply knowledge through a continuous process of interaction.

c. Strategic, regarding company's strategy and the way it intends to efficiently serve its customers. The knowledge based organization assumes

knowledge as one strategic resources. This approach must be supported by a process of knowledge management. Therefore, the knowledge-based management refers to the process through which organizations generate value by exploiting or capitalizing the intangible/intellectual assets.

d. Cultural, regarding culture of an organization, affecting the decisions and actions of the organization. A knowledge based organization use knowledge in every aspect of its activity: organizational, production, location and proximity, human resources etc. through a continuous process of learning, adjustments and readjustment. From this point of view, organization is not exclusively oriented to sale products or services, but towards exploiting knowledge.

## **1. Discussion**

Intellectualization of business processes is the most important transformation affecting knowledge based organizations. Nowadays, in such competitive business environments, processes intellectualization is a constant due to focus on knowledge, which generates added value. This have resulted in a reduction of the differences among economic processes in various industries, complicating strategy elaboration and acquiring competitive advantage. Another result of intellectualization of business processes lies in the emergence of virtual forms of economy, shifting the focus toward intangible elements.

Another challenge that knowledge based organization has to face is the growing proliferation of out of office work, especially from home. This transformation is based on labour intellectualization, which reduces dependence on specific locations enabling employees to teamwork and focus more on the use of specific forms of employment. Intellectual work consists essentially in the acquisition, generation, processing, analysing, interpreting, storing information and knowledge by an employee, regardless of his/her job location but frequently outside a regular office, if equipped with a minimum of technical and information technology. This is facilitated by the broad dissemination of informatics, along with a substantial reduction in costs related to acquiring and use of it, coupled with software development and enabled by the rapid growth in number of qualified people who possess at least some knowledge and abilities to operate computers. The fact that most people in developed countries already have computers that are connected to the Internet, is an eloquent proof in this respect. This trend is facilitated even more by expanding telecommunications systems and networks that enable real-time communication between people located at great distances, in conditions close to those they communicate face to face. As a result, it is possible that some employees to work at home while they are de facto working together with other employees of the company, although on different sites.

Last but not least in our analysis, another change affecting modern organizations is teleworking. Essentially, teleworking consists in carrying out work interrelated processes, involving employees on different sites, using multiple communication tools working together to generate/create products, services etc.

A major trend in today's companies, teleworking represent substantial benefits like attracting the most skilled workers to achieve certain objectives, development of complex business processes with the participation of specialists in one virtual place otherwise impossible or achieving substantial savings due to reduction in fixed costs. Due to these advantages, teleworking is experiencing rapid proliferation, resulting in new forms of employment.

In terms of managerial functions, knowledge management generates multiple changes.

In any company, R&D is tasked with activities concerning design and technical progress implementation. As a result, it encompass three main activities: forecasting, engineering design and organization. Forecasting consists in drafting company policies and strategies, resulting in forecasts and plans, the breakdown periods and main organizational subdivision and monitoring of their implementation. Engineering design includes all product developments, applied research and technical studies made within the organization. Research applications involves an original scientific contribution, so implies new knowledge, but without changing scientific principles of the field. Unlike applied research, developments are limited to applications in specific conditions the company of knowledge already acquired and used, achieving some of company objectives. Engineering design work is reflected mainly in design of new and upgraded products and implementation of new technologies.

Organization, which brings together all the processes of development, adaptation and introduction of new organizational concepts and techniques. Specific to modern companies is expanding organizational processes with innovative character, most of them materialized as organizational innovations, a key component of the innovation process. Among the main tasks of organizational are setting up the organizational policy of the company, development and implementation of organizational studies or team working with consultants in improving organizational structure.

Considering knowledge management transformations, the size of is amplified in knowledge based organization activities, based on participatory management and intensive and specialized knowledge. This manifests relatively equal at each of the three component activities - forecasting, engineering design and organization.

While the pace of change content and ways of manifestation on R&D processes, regardless of its nature - technical, commercial, human resources, management etc. - is higher within compared with less knowledge intensive organizations, research and development activities are performed more frequently in communities based on specific knowledge, the so called knowledge communities, not necessarily established or based within organization.

Commercial function incorporates all processes of knowledge of market supply and demand, the direct purchase of raw materials, manufacturing equipment, etc. necessary to conduct the organization's production and sale of products, semi and its services. Commercial function includes three main activities:

procurement, sales and marketing. Procurement means purchasing of raw materials, fuel, equipment manufacturing and other material factors of production required to achieve the organization's objectives. Supply activity encompass numerous tasks: developing commercial policy of the company, assessing supply needs of the company or issuing orders to suppliers. Sales activity brings together all processes linking the production of goods and services with customers. Among the tasks incorporated are setting up sales plan, insurance of goods and services; contracting or delivery. Marketing activity encompass internal and external market research, consumer behaviour analysis etc.

Challenges that this function has to cope in knowledge based organization regards the increasing amount of specific knowledge due to increased importance of companies' commercial activities. This means that today's business has to include ever increasing knowledge within its products and services, has to even sell knowledge or has to integrate in increasingly bigger networks of suppliers and distributors to have a chance to sell nationally or internationally. Another issue is the even more common trend of outsourcing activities which require specialized knowledge, like marketing, forcing companies to use specialized companies.

Another organizational function is production. From an organizational perspective, this function group five main activities: programming, manufacturing, quality control, maintenance and auxiliary activity. Even tough production is less affected by knowledge management than other functions, it still suffered by several trends. One issue is the requirement to miniaturize products, possible due to the use of modern technologies. This means new technologies, modernization of existing ones and use of highly qualified employees, widely resorting to specialists with higher education. Production tend to have a strong and innovative dimension, often generating new intrinsic knowledge or embedded in new products or technologies. In knowledge based organization, production is based on the value chain. As a result, support activities of maintenance or auxiliary are frequently outsourced.

Financial and accounting function includes all activities which provides the necessary resources to achieve organization's objectives. As it is reflected in all other activities performed by the organization, it is highly synthetic. Within the financial and accounting function distinguish three main activities: financial, management accounting and financial control. Financial activity consists of a set of processes which determine and acquire the financial resources necessary to achieve the business objectives. Accounting is the recording of financial transactions and presenting the information in various reports and analyses. Financial control includes all processes which verify legal compliance and existence, integrity, use and storage of material and money assets of the company.

In the KM context, the size of specific work processes in knowledge based organization are reduced as a result of codification of information, standardization of financial statements, computerization and outsourcing of specific processes, such as auditing and accounting. Financial activity tends to dominate those operation, both quantitatively and qualitatively, many times using specific software application and outsourced companies, usaully for accouting and audit. The impact

of the financial and accounting on functionality remains at a considerable level considering the focus of stakeholders and management on financial results.

Concerning human resources, the size and complexity of human resources function is amplified due to the decisive role that these resources has on company's performance. New types of employees – knowledge officers, knowledge stewards and brokers, focus on organizational learning or changes in work processes reflects the level of importance of this function. Other issues that has to be considered by knowledge based organization' management are use of knowledge based communities to acquire and use of knowledge, reconsideration of staff, reflecting the increasing share of individual and organizational learning processes.

In terms of decision-making process, according to Committee on Development Information (CODI) there are two paradigms on knowledge based decision system: process oriented and best practices oriented. Process oriented considers that the basis for decision-making process are tacit knowledge, which can be "downloaded" in the minds of employees through interviews and meetings, encoded, stored and reused in a profitable way. This paradigm is based on the promotion of artificial intelligence movement, oriented towards the development of decision systems based on interrelated databases. In this orientation, decision-making system is oriented top-down and focused on IC&T technologies.

Best practices oriented paradigm is based on good practice. According to it, decision-making approach should be bottom up, decisions are determined by how employees resolve, often in innovative ways, problems, in an environment increasingly difficult to predict.

In the context of knowledge management managers must consider elements such as the incorporation and use in decision-making system of a large amount of diverse and complex knowledge, which reflects positively on the quality of decision-making process and management decisions within knowledge based organization, expanding the scope of decision-making system to the organization's external stakeholders, particularly those involved in virtual chain of value, which generates problems in terms of decisions harmonization, but is beneficial for business performance and sustainability, the emergence of special categories of decisions, for instance those adopted in the knowledge-based communities - or use of an increasing number of decision-making methods, techniques, tools, many involving information databases, special software applications, mentoring, coaching, tutoring, etc.

In terms of information, the knowledge-based economy and expanding the use of knowledge management, the market is very favourable to the implementation of applications, part of the organizational information system. There are industries that reserves as part of the budget, huge amounts of money for the purchase of information technology, which is the initiative more or less obvious to improve rates of return.

In terms of informational systems, new generation of emerging business applications will be built around a service-oriented architecture (Service Oriented Architecture). This is based on the idea to make it easier for companies to

implement, integrate and maintain software applications, substantially reducing maintenance and copyrights costs of business applications. Also, SOA will provide for business new levels of organizational capacity for their software, around business processes instead of the other way around. The ability to define and modify business processes to support operational and market requirements, and yet easily support these processes with software package is actually the original vision of ERP. Supporting end-to-end collaborative inter-departmental processes such as POS order collection, recruiting, procurement and others will become much easier. The same would happen with: industry specific requirements, methods of cost management or other associated processes.

Another trend would involve dropping classical IT solutions and move towards the adoption of new products and technologies such as CPM (Corporate Performance Management). Most of these applications have been standardized using the same system of units of measurement are reported in a very similar template and their suppliers are in the same type of business. The challenge for most companies is to manage the exponential growth of information, with connecting users with data, content, applications and processes they use in their various roles. We discuss both about the information provided by the external environment (market, administrative environment) and those that are generated as a result of the introduction and development of management information modules within the organization. Investments made in the 90s helped companies to develop and establish their powerful data networks connected to the Internet, increasing running speed data collection process in their organizations. Information technology is progressing faster than most organizations can innovate in business. This disagreement provides opportunities for organizations seeking to gain competitive advantage. What business benefits aims to raise informational contexts in which they are placed should include the location and geography.

Recent studies have revealed that knowledge information system has increasingly moved to new functions compared to classic information system, predominantly decades ago. Among them we consider the emergence of a new component - knowledge – the next stage in the evolution of information that changes significantly the quality and performance of the IT system functionality, incorporation of new information processing tools, with large processing capability and high speed, often in real time, with multiple positive effects on other components of information system, increased sophistication of other components such as procedures and tools., increased capacity to process information and communicate in real time, with multiple positive effects on the content and pace of development of managerial and operational processes in the organization; on this basis increases the speed of the forecasting, organization, coordination, training and monitoring-evaluation processes. Another issue is a visible ease in getting rapid access to information and knowledge the organization is lacking, given their relatively modest transactional costs.

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