PERFORMANCE MANAGEMENT AND E-LEARNING IN VIRTUAL ORGANIZATIONS

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Abstract: At the present time we are facing a paradigmatic change in developing learning assisted systems: in the last years their development was technology centered, but nowadays their development centers on the application of specific human behavior concepts in using the new communications, learning, and business technologies. In the business context, knowledge and learning management are perceived as the new critical managerial battlefields aiming to sustainable performance. Technology enhanced learning, approaches and new generation knowledge management systems reveal a new context for the promotion of business strategy. The concepts of competencies and competency management are the new blueprints for merging leading edge technology approaches to business objectives. The vision for knowledge and learning ecosystem within every knowledge intensive organization is crafted around the management of competencies that brings together business processes, training needs, learning and market demands.  

Keywords: E-learning, performance management, virtual organizations.  

1. INTRODUCTION  
The Internet has dramatically changed the way people get informed, interact and communicate in the 21st century. Distribution of information and knowledge is nowadays carried out more and more via the Internet.  

The conditions under which knowledge based work is done are clearly different from those of the traditional industrial and/or service work and therefore the established criteria of work design cannot be simply copied. New approaches, concepts and methods are necessary to create optimum conditions for productive, healthy and attractive knowledge work at the organizational, team and individual level.  

In the actual knowledge-based society, the activities in domains of all kind (productive, of design, economic, research, and of other nature) are interconnected with training activity. Therefore, the necessity of continuous education at working places arose. That is why one has to find efficient training methods, to solve problems, as the persons have to be able; to learn without leaving work places; to learn about subjects related to their instant work; to learn cooperatively with other persons, interested in the same domains, but located in other places; to share information resources with their co-learners.  

At the present time we are facing a paradigmatic change in developing learning assisted systems: in the last years their development was technology centered, but nowadays their development centers on the application of specific human behavior concepts in using the new learning, communications and business technologies.  

2. KNOWLEDGE MANAGEMENT VERSUS ORGANIZATIONAL E-LEARNING  
The new economic theories of the firm shift the accent from individual knowledge to organizational knowledge. The organizational culture is represented by the groups’ assimilated experiences, comprising evolving patterns of these experiences. At the organizational level, social processes, that essentially are knowledge conversion, perform the creation of economic knowledge. Organizational learning is a knowledge transfer from the individuals and groups to the knowledge organizational systems, being sustained by the individual and collective learning.  

The general principles that stand for knowledge transfer in any knowledge organization are similar. But the specific changes in an organization cannot be transferred to other organizations, as their cultures are distinct and different communities operate in different organizational circumstances. The flexibility of the organization, its capability in adaptation, by accumulating knowledge (learning) has to be its essential feature for its evolution.  

In spite of the close relationship between learning and knowledge, there is still a lack of cooperation between the fields of e-Learning and Knowledge Management (KM).  

Are learning and knowledge management different then? Yes: learning is a way to reaching an objective, instead of KM that focuses on the critical business activity performance problems. KM is not represented by a series of procedures that have to be implemented, but it represents a paradigmatic change in the functioning of an organization.  

KM addresses learning mostly as part of knowledge sharing processes and focuses on specific forms of informal learning (e.g., learning in a community of practice) or on providing access to learning resources or experts.
Current KM technologies are aimed on knowledge acquisition, storage, retrieval, and maintenance. However, regarding the deployment process, learning is considered to be a fundamental part of KM because employees must internalize (learn) shared knowledge before they can use it to perform specific tasks.

On the other hand, e-Learning systems might also benefit from KM technologies. Especially the ones focusing on the support of technical and organizational components can play an important role concerning the development of professional e-Learning systems.

During the last years, so-called Web2.0 technologies, such as Wilds and Blogs, received more and more attention and they are currently used in many different domains. So far, these technologies seem to have a positive impact in terms of community building, knowledge sharing, and content creation - even if their success has not been empirically proven. First questions arise to what degree these systems (e.g. Weblogs, Wikis, ML/RSS based content syndication and aggregation) support certain learning processes.

An integration of KM and e-Learning, especially by using Web2.0 technologies, could dramatically change today's understanding of further education towards lifelong learning fed by dynamically changing public and organizational knowledge repositories.

3. KNOWLEDGE MANAGEMENT IN ORGANIZATIONAL BUSINESS

Business processes form the core of a company's organization. Business Process Management (BPM) refers to the ability to define, model, streamline, analyze and improve business processes. Successful BPM initiatives usually involve a mix of technology, process definition exercises and ultimately some degree of operational change within an organization. Business Process Management as a discipline is not new. It has evolved from a workflow to more workflows. The Enterprise Application Integration (EAI) appears as a system-to-system workflow. The term EAI describes automating information flow between systems, packaged business applications from different vendors and Web sites across heterogeneous platforms and networks. Then a few vendors added graphical process design to a workflow engine, added support for multi-dimensional human-based process automation, and called it BPM.

The Extended Enterprise denotes the process of linking partners in a supply chain together electronically through an extranet. This allows them to conduct business electronically, enabling them to respond more quickly to the needs of the changing needs of the consumer.

Business intelligence (BI) is a broad category of application programs and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions. BI applications include the activities of decision support, query and reporting, online analytical processing (OLAP), statistical analysis, forecasting, and data mining.

Business performance measurement is a process of quantifying the efficiency and effectiveness of purposeful action. Performance measurement (PM) can be used as a tool for implementing a strategy for an organization. The purpose of this tool is:

- to translate a strategy into concrete objectives;
- to communicate the objectives to employees;
- to guide and focus employees' efforts according as these objectives are achieved;
- to control whether or not the strategic objectives are reached;
- to use double-loop learning to challenge the validity of the strategy itself;
- to visualize how individual employees' efforts contribute to the overall business objectives.

The first researches on performance management were concentrated on productivity measurement. During recent years, the research topic has been performance measurement in knowledge organizations, which have a dynamic, network-oriented, and knowledge intensive way of operating. These characteristics set many requirements for the performance measurement. Management and measurement of intellectual capital and business intelligence are currently examined in quite large research projects.

Knowledge Management (KM) is seen as a business process that formalizes management and strategic advantage of a firm's intellectual assets. KM is an enterprise discipline that promotes a collaborative and integrative approach to the creation, capture, organization, access and use of information assets, including the tacit, enaptured knowledge of people.

A Knowledge Management System (KMS) is a specific kind of socio-technological system, designed for management of functional integration of distributed hardware, software and network elements; it sustains the processes of organizational knowledge management (KM). Developing a KMS implies, as a first stage, creating the initial knowledge building architecture (KBA) that consists of infrastructure evaluation and alignment of the knowledge management (KM) to the business strategy. The second stage is dedicated to analyzing, designing and implementation of the knowledge management socio-technological system. The installation of the software tools in an operational environment is the third phase. The last stage consists of performance evaluation and measure of the return on investment (ROI). Socio-technological systems architectures development has to be linked to the organizational KM objectives. These objectives can be achieved through a hierarchical, top-down or decentralized communication structure, and/or process guided, and/or as a support for communities of practice.
Definitions and practical applications of performance measurement knowledge management and business intelligence differ between organizations. Any managerial tool or method is designed for an operative or a strategic level.

The nature of the involved activities makes it clear that KM requires a strongly multi-disciplinary approach. Different disciplines such as Business Economics, Human Resource Management, Organizational Psychology, Communication Science, Computer Science, and Operations Research can all make a contribution here. This not only covers the instruments for making improvements, but also includes the methods and techniques for understanding knowledge-intensive work processes and tracing the causes of problems. Several projects have also demonstrated that the added value of the KM approach for organizations lies in particular in the fact that the focus is on knowledge rather than on specific methods and techniques from a single discipline.

4. CONCLUSIONS

Based on personal experience, we believe that information and knowledge gathered in some community-related nodes concerning practical subjects, is superior to that available in traditional, even academic, sources such as books, electronic or conventional.

Nowadays, where a multiliteracy education is needed for living and working in the digital era, digital communication skills are necessary. "Digital behavior" and "digital communication" rules and ethics are developed; therefore, all contemporary people should be “digitally literate”, in order to be able to survive in a changing and competitive environment. Real communication skills are not enough; “digital communication” skills are also needed. The ability to use the Internet and the new media is vital for surviving in the 21st century.

Business needs are seen as key driver for learning and knowledge management. One future direction of technology-enhanced learning is therefore to integrate learning technologies into business platforms as well as combine it with competency management and formal/informal learning methodologies.

In recent years ‘information’ has become an important new production factor in the way we think and act in economic terms. The more we have developed this concept the more we have come to the conclusion that organizations should not become obsessed by the logistics of information.

It is just as important to focus on the organization’s competence in dealing with information. The only way of combating information overload is to develop knowledge management is seen as a cyclic process of the three correlated activities: creating, integrating and dissemination of knowledge. Effective knowledge management then becomes extremely important for every business organization. Especially when we realize that countries in the world can only survive in a global economy by becoming knowledge economies.

The convergence of the tendencies evolving on the technology and education realm is represented by the fusion of the activities implied in knowledge management, learning and performance. These three elements stand for the link between the learner and technology, in supporting life-long-learning in knowledge based society and economy.

Our approach on organizational performance is multidimensional. Performance should not be considered only from the point of view of financial performance. It is also essential to regard customers and other stakeholders, as well as business processes, when monitoring organizational performance. Furthermore, especially today, when the business environment is changing rapidly, it is important to examine the success factors affecting the future performance, such as the knowledge of personnel and new innovations.
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