

# CHALLENGES AND POSSIBLE SOLUTIONS FOR MODERNIZATION OF ROMANIAN COMPANIES UNDER THE KNOWLEDGE REVOLUTION

**Adrian GHENCEA, Lecturer, Ph. D. candidate,**

**Dana-Florența SIMION, Teaching Assistant,**

*„TITU MAIORESCU” University, Bucharest- Faculty of Economic Science*

## **Abstract**

Increasingly, many academics and business people appreciate that the kind of society humanity is moving towards is a knowledge society which is supported by a knowledge economy. A key feature of the knowledge society (Draganescu, 2004) is the emergence of a new economy where innovation process becomes crucial, where knowledge is unprecedentedly disseminated to all citizens through new ways of communication (Internet, e-book, e-learning, etc.).

In this type of society, the new economy - often called knowledge-based economy- owes its appearance to a number of important forces now at work in the sense of changing the rules of business and national competitiveness: globalization, the increasingly use of knowledge and information, the computers networks and internet connectivity.

**Keywords:** knowledge management, knowledge-based economy, web technologies.

## **INTRODUCTION**

Economic agents survival and development in a dynamic market economy, depend of the relations they have with other market factors, the environment and especially the ability to respond to change.

At present we can say that the changes suffered by the environment in recent years fully characterize the climate in which agents are conducting their economic activity in our country. Enter into the European Union, internationalization of the economies not only at European level and the trend of markets globalization along with a diversification of demand, the scarcity nature of resources and the increasingly personalized consumption, all leading to the establishment of a national strategy, which allow companies across the country to cope with requirements imposed both by customers and the European Community which we belong to.

Thus, competition is felt increasingly fierce throughout Europe, many Romanian companies not being able to fully meet the requirements and standards imposed. Therefore, a clearly defined strategy at country level and furthermore to economic agents, can reduce the possibility of failure in the European competition.

Emphasis will be placed on knowledge-based strategies, thus in this decade we will see clearly the advantage that the knowledge-based society have, compared with the classical ones. Harvard teachers, Hansen, Nohria and Tierney, which have developed two strategies based on knowledge, points out very clearly that personalization strategy promotes knowledge possessed by employees who through direct contact with each other may develop this knowledge and can share to the entire society in which they operates. Emphasis is placed on tacit knowledge, and this strategy is seen as a possible solution for Romanian companies. The main feature, include investments in information technology which right now can be considered vital for development and promotion of products and services.

## **PROMOTION TECHNOLOGIES**

Worldwide, many companies use the Internet for advertising. Internet marketing is an opportunity to create a company image and attract customers. Companies are providing technical information and use the website as a platform to launch business news. Using their own website as a store, companies offer products and take orders.

Electronic trading of goods and services is an extension of current trade. This promotes greater efficiency and reduces the costs including those related to marketing and enhances the customer-client relationship.

Electronic commerce facilitates cooperation between firms. Reduce marketing and delivery costs, sustain the company's marketing strategy and provide access to new markets. In the near future, electronic commerce will have a strong impact on the firms competitiveness.

As a result, Web 2.0 appeared which generally refers to the next generation of services available on the World Wide Web through which businesses and consumers collaborate and share information online. By

contrast with the previous generation, Web 2.0 allows users an experience closer to desktop applications than traditional Web pages static applications.

Most welcome is the fact that Web 2.0 does not require any investment from the user. No need for a new computer, an improved operating system, new software or an additional device. Changes occur primarily in the background at server level. This has many consequences. Firstly, anyone has access to all services, even without knowing them. No need to install something new, which would be beyond the power of most users.

The Internet is increasingly accessible through the wireless network and PDA phones are becoming more efficient. In Japan and the U.S. are already sold more notebooks than desktops and Apple computers with Mac OS X operating system are very popular.

Of course it became a necessity as accessing a computer in a strange place, at home or at work, to be able to use our daily software. For example we can use Outlook on Windows, AppleMail on Macintosh or Evolution on Linux for e-mails, or choose one of the Internet Explorer, Safari or Firefox browsers.

One way to increase mobility is to use cross-platforms. Browsers like Firefox or Opera can be found on all platforms as well as Thunderbird client mail or Open Office package. Currently, if someone would like to change its computer operating system, he can use to a great extent the same programs as before.

But that solves only one problem: to work in our familiar environment. If we have some mails in Outlook and the others in Evolution, we can not access them all at once. Bookmarks used at work and those used at home will become different with time and each involves different habits and different computer operating system.

But there are even better alternatives:

- **CSS, XHTML and Microformats;**
- **Rich Application techniques - like AJAX or Ruby on Rails**
- **Java Web Start;**
- **XUL;**
- **WinLIKE;**
- **RSS/Atom;**
- **XML service APIs;**
- **Support the blog postings;**
- **Flex/Laszlo/Flash.**

These are mostly Web 2.0 technologies that help the user, in this case the trader, to promote its services globally.

In light of the above, it is clear that Web 2.0 is a solution to promote economic agents based on knowledge revolution.

## **KNOWLEDGE-BASED MANAGEMENT AND INFORMATICS APPROACH OF LESTER**

This approach fits perfectly with Lester's computer-based knowledge management that is considered a key process by which the companies, industries and ultimately countries achieve superior economic performance for the people involved, maximizing potential earnings generated by digital technologies and the Internet transformation.

In some degree, we can meet the characteristics presented by Lester in the case of Web 2.0 technologies, for instance:

- **Knowledge management approach is in direct relationship with leading information technology;**
- **It pays attention to innovation and knowledge associated with it;**
- **The focus is on involving all interested parts, thus appearing the stakeholder concept.**

Lester content characteristics (those listed above) is supported by computer technologies such as Web 2.0 blog, rss-software, wiki, peer-to-peer networks.

These applications allow the users to select, filter, edit and publicate information so there is a creative participation by editing new information. There are also information analyzed out of their context and a different approach from traditional ways of publishing information.

Blogs - or weblogs are probably the oldest applications. Allow publishing in a simple way on the internet, no need for dedicated software in realizing the site design. At first it was used as a simple diary, but with time it became a powerful and widely used publication.

Wiki – as the blogs that allow publishing information on the Internet, don't demand dedicated software. But the novelty is that wikis can support a process creation of information by multiple registered or unregistered users. They are authorized to use all tools and application but at the same time are audited. It has a large commercial application and there are companies using wikis through which project team members can work together and supervision is done by the manager. A strong and well know example is Wikipedia.

RSS software - while the centralization of information is done through wikis, decentralization, of information uses RSS technology. RSS enables users to get updated information when a site changes information content. A simple RSS subscription to the site connectivity, and changed content is passed on automatically to the RSS reader.

With Web 2.0 RSS, we have quickly access via syndication, filters and remix news, articles and other into content of new information.

## CONCLUSIONS

In the context addressed by this theme, that of knowledge revolution, we believe that the Romanian companies, namely their management, must have a proactive attitude towards information technology and to use as much as possible the existing Web 2.0 environments. Among young people is felt this approach and we should consider that future managers of Romanian companies will make full use of technologies that make performance at lower cost.

## REFERENCES

[1] David, P.A., Foray, D., *Economic Fundamentals of the Knowledge Society, în Policy Futures In Education. An e-Journal, 1(1): Special Issue: Education and the Knowledge Economy, (January 2003).*

[2] *Distributed System Online (dsonline.computer.org) - Services Mashups: The New Generation of Web Applications - IEEE Internet Computing, vol. 12, no. 5 ,*  
[http://dsonline.computer.org/portal/site/dsonline/menuitem.9ed3d9924aeb0dcd82ccc6716bbe36ec/index.jsp?&pName=dso\\_level1&path=dsonline/2008/09&file=w5gei.xml&xsl=article.xsl](http://dsonline.computer.org/portal/site/dsonline/menuitem.9ed3d9924aeb0dcd82ccc6716bbe36ec/index.jsp?&pName=dso_level1&path=dsonline/2008/09&file=w5gei.xml&xsl=article.xsl)

[3] Drăgănescu, M., *The society based on information and knowledge. Vectors of the knowledge society. www.edemocratie.ro, (2004).*

[4] Ghencea, A. "Innovation and Knowledge Management in Twin Track Economies - Challenges & Solutions", - *Cyber-warfare and Business Development – the 11th International Business Information Management Association Conference, January 4 - 6, 2009, Cairo, Egypt, ISBN: 978-0-9821489-0-7;*

[5] <http://www.zdnet.com/blog/hinchcliffe/creating-real-business-value-with-web-20/14>

[6] PCMag.com – *Definition of API -*  
[http://www.pcmag.com/encyclopedia\\_term/0,2542,t=application+programming+interface&i=37856,00.asp](http://www.pcmag.com/encyclopedia_term/0,2542,t=application+programming+interface&i=37856,00.asp)