THE ROLE OF *E-LEARNING* SYSTEMS IN REGIONAL DEVELOPMENT

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Abstract

Nowadays, many countries develop human resource remodelling strategies. Having in view the increasing competition at international level, these countries develop lifelong learning systems to hold their edge in the global competition. Increasing competition leads to the development of new staff training methods in order to meet the customers' demands; the e-Learning *systems stand out.*

*The **I**nformation **C**ommunication **T**echnology – ICT, an useful strategy for the education system improvement, is a means enabling the students develop their fundamental knowledge and the necessary competences in various fields in a knowledge-based economy. Computer skills become a "must". We need to understand the way to improve the education system of an institution by implementing these technologies, in general, and the* e-Learning *systems, in particular. In this context, the information systems are the driver of a global education.*

Key-words: *Information Communication Technology, e-Learning*

JEL Classification: I_{20}, I_{21}

Introduction

On the knowledge-based economy background, education is the main field aimed at knowledge dissemination for a better world. We need a high-quality education system providing fair access to knowledge. The education system improvement must be approached from various perspectives, depending on the specific context and on the leaders' vision.

Developing a knowledge-based economy involves various objectives in a resource competition (innovation, education, information infrastructure). In the future, all economic systems (not only the advanced ones) will strive to develop a knowledge-based economy. In a knowledge-based economy, the innovators and lifelong learners will be winners. Such a phenomenon will place the human resources in the centre of competition and development. Political support and social consensus are essential in developing a knowledge-based economy. [4].

The human capital's key role in developing the regional and global economy in the contemporary knowledge-based information society imposes a new approach of education and training. Practically, an increased competitiveness in a local and global economy depends on increased investments in education and training. The

information society involves both access to information and knowledge and new knowledge generation and transfer. In this context, the education and training processes in every country become more and more important. Human resource training and improvement systems may be implemented at regional level as well, the Euroregions are not an exception in this case.

On the current economic and social background, education and training undergo major changes, turning from knowledge and information transfer-based processes, in processes enabling the citizens, irrespective of their age, sex or residence area, to learn how to learn, to access, analyse and turn to good account the available information and knowledge and to turn them in new information and knowledge, useful in their activities.

A modern economy involves turning to good account all the opportunities provided by digital, multimedia and communication technologies and particularly by the Internet-based ones, due to the importance of information systems in extending the education and training process. Practically, using state-of-the-art technologies as learning and assessment tools sets directions for each country at national and international level, in order to reduce the effects of the current global economic crisis.

Euroregions and their role

The "Euroregion" concept is made up of the term "region" (coming from the Latin „regio") denoting a geographical area in general [1]. The "Euroregion" modern term refers to a geographical area situated in a European country.

Euroregions are cross-border regions linking several European countries. Such regions are not politically independent and provide cross-border cooperation.

Their role is coordinated by the local authorities and it doesn't interfere with the international policy of the states involved [1].

The Euroregions serve the cross-border cooperation interests of outskirts population. This way the economically underdeveloped areas may flourish through cooperation.

According to the Association of European Border Regions – AEBR, there are various criteria to define a Euroregion, since it is not a mere European area. Therefore, a Euroregion must meet the following four conditions [1]:

- The authorities from two European neighbouring states must actively cooperate; under certain circumstances, the authorities from such a region must have representatives in the respective state's Parliament;
- A cross-border association of the authorities of the two neighbouring states, with a permanently available secretariat and an own technical and administrative team must be set;
- Private law rules on non-profit associations and foundations situated on both side of a border, in compliance with the legislation of the two neighbouring states, must be implemented;
- Public law rules based on intergovernmental agreements between the two neighbouring states to regulate the participation and responsibilities of border local authorities must be implemented.

As the other European states, Romania is part of a series of Euroregions, the most important being [3]:

- *Carpatica* Euroregion, bordering Hungary, Poland, Slovakia and Ukraine. The component counties are: Bihor, Botoşani, Maramureş, Sălaj, Suceava, Satu Mare and Harghita (Figure 1) [3].

Fig. 1. *Carpatica Euroregion map* [4]

- *Danube-Criş-Mureş-Tisa* Euroregion, bordering Hungary and Serbia. The component counties are: Timiş, Caraş-Severin, Arad and Hunedoara (Figure 2) [3].

Fig. 2. *Danube-Criş-Mureş-Tisa Euroregion map*

- *Dunărea 21* Euroregion bordering Bulgaria and Serbia. The Romanian part is represented by Calafat and several neighbouring communes [3];
- *Giurgiu – Ruse* Euroregion. The component counties are Giurgiu (Romania) and Ruse (Bulgaria) [3];
- *Southern Danube* Euroregion bordering Bulgaria [3];
- *Lower Danube* Euroregion bordering the Republic of Moldavia and Ukraine. The Romanian part is represented by Brăila, Galați and Tulcea [3];
- *Upper Prut* Euroregion bordering Ukraine and the Republic of Moldavia. The Romanian part is represented by Botoşani şi Suceava [3];
- *Siret- Prut- Nistru* Euroregion bordering The Republic of Moldavia. The Romanian part is represented by Iaşi, Vaslui şi Neamț [3];
- *Middle Danube – Iron Gates* Euroregion bordering Bulgaria and Serbia. The Romanian part is represented by Mehedinți county [3];
- *Lower Danube* Euroregion bordering Bulgaria. The Romanian part is represented by Călăraşi, Constanța and Ialomița [3].

The major objectives are cross-border economic development, human resource development in the neighbouring countries and joint programmes initiation [2].

***e-Learning* systems for training the human resources**

e-learning is electronic mean-based training (computer, telecommunication-assisted training and the like). Therefore, the human resource continuous training requires specialized information systems.

The traditional teaching/learning methods (printed materials, teacher – student direct interaction) are now replaced by computer and communication-based ones. Modern technology facilitates the teaching and learning process; the students can acquire the necessary information easier and faster.

e-Learning systems contribute directly to the training process:

- By improving the traditional training activities carried on within education institutions (primary schools, secondary-schools and universities);
- By facilitating continuous professional training.

The two learning types require specific information systems and methods permanently adjusting to the learners' needs.

Nowadays, the specialized information systems may be implemented within both education institutions and companies (for those seeking professional training). These two types of *e-Learning* systems are similar from various perspectives, yet there are a few differences based, to a great extent, to the learners' availability. Compared to the employees, the students have more time to learn. The former possess the necessary knowledge and expertise and the useful information must be briefly made available to them.

However, modern technology cannot substitute for the teacher. Computers and telecommunication systems help the teacher make available the information to a greater number of students.

The major difference between the education institutions and the companies, in point of the training process, resides in the fact that in the latter case, the information must be provided more quickly, the teaching methods efficiency being vital. In this case, modern technology is applicable, contributing to a great extent to the EU regional development.

In addition to the requirements of a traditional education system, the *e-Learning* system involves specialized software for auxiliary activities, such as: finding roles for the instructors and learners, creating user accounts, electronic courses provision, creating reports and the like. The software can also be used for an objective assessment process.

The *e-Learning* software must be provided with a communication interface enabling an efficient instructor/learner interaction through messages, announcements and the like.

The maintenance of such specialized devices requires additional costs.

Implementing *e-Learning* technology in the corporate environment:

- The learners enrol for various courses according to their field of expertise and to certain criteria set by the management;
- Certain conditions must be fulfilled so that the employees of an institution enrol for such courses;
- The employees are selected according to their performances; this involves an *e-Learning*/performance assessment systems interaction;
- After identifying their weaknesses, each employee will receive additional training according to their abilities;
- The training process is developed at organizational level;
- The learners are grouped according to various criteria, such as: their line of products, level of training, their area of residence, the size of the institution and the like.

Some *e-Learning* systems may be developed for trade purposes, requiring licensed access, while others are open-source type free systems.

Euroregion sustainable development due to e-*learning* technology

e-Learning modern technology contributes to the welfare and economic prosperity of the persons using it.

Whether implemented within education institutions or companies, *e-Learning* information systems have a series of advantages:

- Each learner may study at home, irrespective of location, if they have an internet-connected computer;
- Reduced time for professional training due to the course consistency and efficient methods;
- The learners are provided with case studies to help them grasp the fundamentals;
- The course content is efficiently presented by means of the latest multimedia technologies;
- The learners, especially the employees, may study when they have time;
- Each learner may study in his own rhythm and may be subject to individual ongoing assessment;
- The learners are provided with self-assessment tests enabling them to improve their knowledge.

The *e-Learning* systems are applicable irrespective of the learners' country of residence.

Having in view that traditional education involves teacher/learner direct interaction, in the past, education was not accessible to everyone. The urban population had clearly some advantages over the outskirts and rural population. Nowadays, *e-learning* modern technology enables the latter to benefit from training.

Given the fact that cross-border areas are isolated, such areas will enjoy the long-tem benefits of using the *e-Learning* system.

The component areas of the Euroregions are the main beneficiaries of an efficient training following the implementation of *e-Learning* systems. This translates in the human resource improvement, leading to an economic sustainable development in these areas.

By developing the Euroregions, the people from one European country may study in a neighbouring country, if more favourable conditions are provided. The *e-Learning* systems diminish the cross-border importance, therefore the learner and the teacher may come from different countries.

Conclusions

One of the main advantages of using the *e-Learning* systems is the human resource improvement impacting favourably the economy. The Euroregions enjoy more benefits because the component areas are usually isolated regions, thus having the opportunity to develop and become competitive.

Another advantage of *e-Learning* systems is the fact that the borders are no longer a restriction to knowledge and training. The only condition is that the learner has an internet-connected computer.

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