Chapter X
Human Capital and E–Learning:
Developing Knowledge Through Virtual Networks

M. Eugenia Fabra
University of Valencia, Spain

Cesar Camison
Universitat Jaume I, Spain

ABSTRACT

Companies are increasingly conscious of the fact that the achieving of their objectives, together with the improvement of their competitive advantages, depends on the appropriate management of the human factor. The dynamism and strong competition that characterize the business world make it increasingly necessary to introduce a system of human resources to allow the exploiting of the knowledge and skills of both people and teams, thus encouraging their learning capacity. In this context, e-learning is becoming established as a flexible and quick way of improving the acquiring of knowledge and skills within a company. The rapid growth and expansion of e-learning, together with the failure of some of its projects, has made the development of various assessment approaches a necessity. Given the importance of this aspect, the aim of this study is to analyze the progress that has been made in the quality of e-learning initiatives.

INTRODUCTION

Globalization, rapid technological innovation, and deregulation in certain sectors have been changes that have had a strong impact on the structure of the markets, and have consequently caused changes to the business environment. Some of these changes are connected to the shifting of the basis of competitive success. The physical, financial, and even technological assets that were a
source of differentiation in the industrial economy are no longer sufficient, as they tend to be available to all under equal conditions. In contrast, people and the way in which they are managed are becoming more and more important.

The literature insists on the fact that human resources constitute the most valuable asset and the most difficult to imitate, mainly because most of their characteristics are tacit and complex (Wright, et al, 1994; Boxall, 1996; Kamoche, 1996). The reserve of human capital in a company thus becomes one of the main stimulators of its competitive advantage, and depends on the strategic management of these human resources in order to develop and maintain them (D’Aveni, 1999)

In this context it can be said that a system of human resources that allows companies to exploit the existing knowledge of people and teams, thus encouraging their learning capacity, is what is necessary (Koch and McGrath, 1996; Kamoche and Mueller, 1998). In dynamic environments, indeed, the company’s skill in learning faster than its competitors may be the only sustainable source of competitive advantage (Stata, 1989; McGill and Slocum, 1993: Nevis et al, 1995; Lei, Slocul and Pitts, 1999). In the words of Nonaka and Takeuchi (1995), the only companies that will be successful are those that consistently create new knowledge, disseminate it throughout the company, and rapidly incorporate new technologies and products.

For the Resources and Skills Theory, knowledge is consolidated as one of the most important strategic resources that the company has with which to achieve a sustainable competitive advantage. Faced with this situation, companies are becoming aware of the importance of the development of human capital as an element generating organizational knowledge, together with organizational learning as an essential part of the development of this knowledge.

The literature gives various definitions of learning. Montes, Pérez, and Vázquez (2002) define it as the dynamic process of the creation, acquisition, and integration of knowledge aimed at the development of resources and skills that allows a company to improve its operations. Martinez, Ruiz, and Ruiz (2001) refer to it as the process allowing individuals and/or companies to acquire knowledge or skills based on a certain concept, or how to make a certain thing or why this is done, transforming the information that reaches them into knowledge through the said learning process.

There are various ways at the disposal of companies in which their employees can acquire knowledge. Itami and Roehl (1987) show two:

- Professional practice where employees can acquire knowledge through their experience, having conversations with colleagues or managing company information.—Continuos training to eliminate lack of knowledge and provide with new skills to the human resources.

The part placed by new information and communication technologies in the process of the creation of knowledge is that of introducing alternatives into the information transformation cycle. According to Nonaka (1991), in the data-information-knowledge cycle the last named factor is the result of the efficient management of the other two dimensions. The importance of new technologies is above all their effect on data and information accessibility, this contributing to the creation of the third. As we make process in the knowledge generation cycle the degree of human participation increases as it is consolidated as an information processor (Daveport, 1999). New technologies are therefore necessary tools but are not enough for the service that people need (Sáez Vacas, 1991). The following figure shows the differences among data, information and knowledge.