ebusinessforum

WORK GROUP H2

Executive Summary

eLearning in Work Environments

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1. Introduction

The electronic learning based on internet technologies constitutes a technological development that abolishes time and space limitations, but it also constitutes a reality for businesses/ organizations, having as principle benefits the reduction of cost for the training provided, the parameterization of training in what concerns the specific client business needs and demands. Thus, electronic learning constitutes an intervention of technological as well as organizational character, aiming to avoid or improve problems that concern the professional efficiency of employees in the framework of a business. The effect of electronic learning in a work environment is already important and it is constantly growing. This is also reflected in the ever-increasing rate of adoption and implementation of electronic learning technologies by Greek businesses of the private and public sector. However, even though many organizations/ businesses have already adopted electronic learning as an alternative channel for the provision of professional training, few are the cases, which present a complete plan for the evaluation of electronic learning initiatives.

In general terms, the evaluation of similar initiatives may be implemented on various levels and various ways, by the so-called smiley sheets, questionnaires that assess the first impressions of trainees until the assessment of whether or not electronic learning leads to the achievement of specific business goals. The problem that is strongly observed on an international as well as to a national level, is that there is a lack of specialized knowledge and concentrated experience concerning the evaluation of electronic learning, as it is used in work environments and businesses. According to the following, the Work Group will proceed to this direction. More specifically, it will attempt to:

- Evaluate the current situation in what concerns the adoption of electronic learning by Greek businesses
- Record cases in which organizations have proceeded to an evaluation of electronic learning initiatives
- Record the principle problems that concern the evaluation of electronic learning
- Record international case studies and best practices that concern the evaluation of electronic learning
- Classify and state the central axis for a complete approach of electronic learning in the context of business organisations.

2. Work Group H2: Participants

The coordinators of this particular Work Group were Dr. Nikhtas Kasths (Deputy Director Genera, Lambrakis Foundation (LF), (Http://www.lrf.gr/)) and Dr. Angeliki Poulymenakou (Assistant Professor in Information Systems, Athens University of Economics and Business, (http://ois.eltrun.gr)). Dr. Panagioths Zaharias and Mr. Athanasios Nikas were the two rapporteurs of the Work Group, responsible for organising all the necessary activities i.e. organising events, workshops and writing the final report.

Other participants of the present Work Group were specialized executives (as for example executives from Human Resources Administration departments, Human Resources Training and Development departments, with emphasis on the development, management and evaluation of educational programmes etc) from the business agencies - "players" that are active in the sector of electronic learning and training, representatives of University bodies or Research Institutions that study the wider framework of development and evaluation of electronic learning initiatives.

3. Proposed methodology

The Work Group will execute the proposed project following the methodology described below:

Phase one: In this phase some initial meetings were organised among the group's coordinators and the rapporteurs in order to decide and design the purpose and the future activities of the Work Group. The goal of this phase was on recording - registering the level of information, interest, diffusion and implementation of electronic learning programmes by Greek businesses.

Phase two: in this phase wider discussions followed so that it can be ascertained whether or not the companies that have adopted electronic learning solutions and have implemented relevant learning programmes, proceed to standard evaluation procedures. Furthermore, any problems faced by business executives that undertake the role of electronic learning initiatives evaluation, were extensively discussed. Finally, the major problems that are faced in action were been summarized and classified. - Drafting of a relative text for the registration of major problems in the evaluation of electronic learning educational programmes.

Phase three: The purpose of this phase was on recording the international experience through relevant case studies, reviewing of international bibliography on evaluation frameworks, theories and models for electronic learning. - Drafting of a relevant text

Phase four: Recording of Conclusions and Indication of Proposals in the form of basic axis for a complete approach regarding eLearning issues in businesses organisations.

CONTENT OF THE FINAL DELIVERABLE

1. Recording of electronic learning initiatives in the frameworks of Greek businesses
2. Recording of major problems faced by businesses during the execution of evaluations on electronic learning programmes
3. Review of international bibliography on evaluation frameworks of electronic learning - Recording of international experience
4. Conclusions and proposals: The principle axis for the evaluation of electronic learning programmes in the framework of businesses

4. General conclusions

4.1 Developing an Organizational learning culture

The development of an organizational learning culture is of critical importance. Some critical factors affecting the development of an organizational learning culture are:

- Top management support
- Focus on organizational level
- Alignment of training and work tasks. Emphasis on quality and certification procedures
- Easy access to the learning content

4.2 E-learning and performance improvement

The e-learning performance improvement found to be affected from several stages:

- Close collaboration
- Evaluation of existing training plans
- Development of an intervention plan
- Design of learning activities that fit the organizational context
- Implementation
- Evaluation of the intervention plan

The most popular model for the evaluation of training programs is that of Donald Kirkpatrick which has been used widely since 1950. Many researchers and practitioners suggest the use of this model in e-learning initiatives as well. This model consists of four levels (Kirkpatrick, 1994) as exhibited in the following table:

Levels of Evaluation	Description
Level One: Reaction	In this first level or step, trainees are asked to evaluate the training after completing the program
Level Two: Learning	Level Two in the Kirkpatrick model measures learning results. This type of evaluation is not as widely conducted as Level One, but is still very common.
Level Three: Behavior	Level Three evaluations attempt to answer whether or not trainees' *behaviors* actually change as a result of new learning.
Level Four: Results	The fourth level in this model is to evaluate the business impact of the training program
Level Five: ROI	ROI assessment

Table 1: Evaluation Stages

Recently researchers Phillips (2003) argue that the addition of a fifth level is necessary and it is related to the encapsulation ROI (Return Of Investment) estimation.

5. E-learning models, systems and cases

The main differences in e-learning models focus on the following: a) the presence of a tutor/instructor, b) synchronous or asynchronous delivery of information, c) the type of knowledge and skills that have to be mastered by the trainees, d) individual learning, group-based learning and organizational learning. According to previous criteria the main types of e-learning models can be classified as follows:

- Asynchronous Self-paced web based training
- Asynchronous Web-based electronic performance support systems
- Asynchronous Virtual Class
- Synchronous Virtual Class

5.1 E-learning Systems and case studies

- ➢ Technological initiatives
- ➢ Learning Management Systems
- ➢ Learning Content Management Systems
- ➢ Collaborative Learning Tools
- ➢ Authoring Systems
- ➢ Testing and Assessment Tools

In our study some representing case studies are analyzing the challenges of eLearning in organizational environments. Specifically, international case studies are presented (i.e. Hewlett Packard, Regence Group, American Express) as well as some national ones (Delta Holdings S.A., Alpha Bank and Piraeus Bank).

6. Conclusions and implications

The conclusions of our work group are focusing on the following issues:

- Training needs assessment
- E-learning as an integral part of an overall corporate training and development strategy
- Employees familiarization with new technologies
- Certification
- The need to create eLearning awareness in an institutional level
- Viability of supply-driven e-learning market
- Low levels of trainees' motivation to use e-learning technologies and lack of technical support
- Careful selection of the e-learning personnel.
- The critical existence of an Information Systems department.