

From e-Learning to Learning Management: Results of an International Survey

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Abstract: Corporate training increasingly takes place within the framework of a company's strategic orientation. A holistic view of learning and training processes as well as a focus on a comprehensive management of corporate training ("training management") emerges. The paper presents and analyses results from an international survey conducted by the EU-funded research project ELENA.

Keywords: e-Learning; Learning Management

Categories: A.0, A.1, H.5.3, H.m, K.4.3, K.6.1

1 Introduction

In times of increasing competition, shorter time-to-market cycles, and technology penetrating more and more people's workplace, a systematic and holistic approach of HR development is vital for a company's success. Holistic in this case means that individual learning, to an increasing extent, takes place within an organization's strategic framework. It reflects a company's qualitative and quantitative goals; and it is measured against its contribution to the company's overall economic success. Individual training and learning, thus, become an integral part of an organization's asset management. And since knowledge is the key asset in most economic sectors, its strategically oriented management also includes the systematic development of employees' qualifications.

Hence, what we witness is a convergence of institution-based knowledge management on the one hand, and individual training and learning on the other. This amounts to a shift of emphasis from e-learning, defined as the production, distribution, and use of electronic content for educational purposes, to training and/or learning management, understood as the comprehensive management of all processes involved in managing knowledge and skills in view of their contribution to a company's overall economic success. The "Training Management Life Cycle" is a conceptual framework to capture and analyse this change of perspective.

2 Training Management Life Cycle

Training management refers to a set of activities geared towards designing, planning, administering, monitoring, and evaluating training activities. It captures the phases before, during and after a specific training activity is provided (Figure 1).

A first phase consists in analysing the current and future *training needs* and to determine *training goal*. This takes place (a) on a company level and in view of a company's strategic objectives; (b) on a department level, taking performance goals into account; and (c) on an individual level by considering the employee's strengths and weaknesses as well as its personal development goal. In a second step, the *Planning and Selecting process* is carried out. This process is also referred to as input controlling [Seeber 2000]. Here, HR managers look at the available resources from an economic and pedagogical perspective.

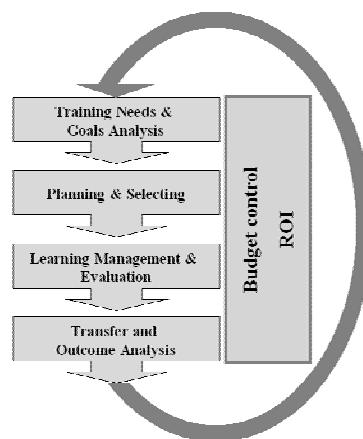


Figure 1: Training Management Life Cycle

During the training measure the focus lies on *learning management and evaluation*. Here, the expected value of the training measure is highlighted, and the learners' expectations are identified. Immediately or shortly after the training measures an evaluation – also referred to as “process controlling” [Seeber 2000] – takes place. Some kind of “output controlling”, i.e. intermediate assessments of a learner's expectations, motivations, and learning achievements, may be included. This is of particular importance in the case of training measures that cover a longer period of time.

The *transfer analysis* follows after the training measure.. According to some studies, only 10% of the actual training content is transferred to the workplace [Hummel, 2001]. Furthermore, an *outcome analysis* may determine whether the training measures have had a positive impact on a company's or department's performance. Benchmarking the outcome of one department with related departments (within the same company or with an external one) can emphasize the need of improvement in specific areas through additional training measures. As a result, the training management life cycle is re-entered again.

All these measures for managing and controlling the training efforts, of course, should be accompanied by financial controlling measures. Training and/or human resource development departments have to justify their expenditures and to prove the return on investment (ROI). Recent research has come up with methods and indicators for calculating the ROI from training measures [Phillips & Stone 2002].

3 Survey: Training Management in European Enterprises

In order to capture some of the current trends and issues in training management, the ELENA-project carried out a survey and interviews in selected enterprises in five European countries. ELENA is an IST-project funded by the European Commission in the 5th Framework Programme (www.elena-project.org). It aims at creating a smart space for learning that contributes to a more effective and efficient development of human resources. The project creates tools planning, controlling, and implementing IT-supported human resource (HR) development. In order to determine the needs of ELENA's main target group, the consortium conducted a series of interviews. Human resource and training managers as well as individual employees were included in the surveys.

3.1 Methodology

The survey was conducted as a qualitative requirements study. Its goals were:(1) to assess the current and future needs of companies for corporate training management; (2) to collect ideas from companies on what type of IT-support the interviewee foresees to be useful; and (3) to find out positive and negative psychological consequences of the tools developed in the ELENA project.

The study was done in 18 companies in five different countries. 7 interviews were carried out in Greece, 6 in Austria, 3 in Iceland and one in Germany and Switzerland respectively. The selected companies operate in different areas of industry: industrial companies (6), very different in size, financial institutions (4), telecommunication companies (2), IT companies (2), typical retail companies (2), and a public power company. Half of the companies interviewed have more than 1000 employees, the majority of them(7) even more than 2000 employees. The other half interviewed has less than 1000 employees, with five companies in the category of 251-1000, four with 51-250 employees and 1 company with less than 50 members of staff. Most of the people interviewed were Human Resources managers, but training managers and project managers were also involved. In general, the IT competence of the interviewees was high, but the experience with e-Learning rather medium or low.

All of the interviews conducted were arranged with a similar structure and each interview took about 2 hours and was split into several parts: (1) Introduction to the study; (2) Pre-questionnaire; (3) Open question-answer session for good and bad

practice of learning management (only performed in Austrian interviews); (4) Scenario validations combined with questionnaire; (5) Claims analysis for different artefacts and features; (6) Wrap-up and conclusion

3.2 Results

The analysis of the interviews follows the different steps in the training life cycle.

3.2.1 Training Needs and Goals Analysis

One of the most common practices of identifying the training needs and setting the training goals is the annual meeting of the employees with their manager. This meeting is often referred to as the “mid-term appraisal”. Older, larger companies still tend to show a more centralised approach, deciding about their employees’ training at boards and on the management level.

Companies with high staff turnover do not engage in long-term planning of training measures. Similarly, dynamic and smaller companies prefer to hire new staff for new projects instead of training current employees. High tech companies, in particular, are not always able or inclined to plan very far into the future. Thus, for many companies, training tends to be problem-driven rather than strategy-driven.

With regard to a possible alignment of the training measure with the overall company strategy some companies claimed that their strategy is well communicated through internal networks and directly to the employees. Others, however, admitted that the strategy is not always clearly defined nor communicated. Some companies think that the strategy is best communicated through management tools such as balanced scorecard. Surprisingly enough, the companies that communicate their strategy to the employees do often not align the training goals to their strategic goals. Only a few of the interviewed companies derive training needs from strategic goals. Others aligned the training needs with the current company needs, but not with strategic objectives. Companies that do not communicate their strategy were also reluctant to see any need in aligning the training goals with the company’s overall strategy.

For most companies, training needs are identified based on level of the knowledge of the employee, the knowledge about a specific project, the knowledge within the department and the knowledge within the company as a whole. The relevant information can be derived either from formal (questionnaire), semi-formal (pre-structure meetings) or informal assessment (unstructured face-to-face meetings). Some companies use more than one way to determine their training needs. In our interviews, a significant group of companies uses some kind of formal procedure (i.e. questionnaire and tests). A few companies assess the effectiveness of the employee by observing the tasks performed, and only two companies use informal means to assess the training need and no tools at all.

3.2.2 Planning and Selecting

In this phase we can basically distinguish two scenarios, i.e., (1) the training activity is selected first and then trainees are recruited for the selected training measure; (2) a knowledge gap has been identified at a particular group of employees; subsequently, a training measure is designed in order to fill the gap. In the first scenario, learner recruitment is based, for instance, on the employees’ abilities or skills, their track

records in previous projects, their personality or attitude towards work and how well they match with the new project. In the interviews, only very few companies assess employees directly, in face-to-face meetings. Some companies usually search for this information in a CV, and others search for it in an interview database.

When it comes to selecting the training measures (Scenario 2) and the training provider, it is often the HR department that screens the wide variety of offers and selects the appropriate trainings. The criteria for selecting the training provider are performance of previous courses, its reputation, the quality of service given and the costs. The intranet, specialized catalogues, conversations with business partners, questionnaires, and the administration of a pilot course are means of selecting a specific learning service provider. The current offer on the training market is huge; HR managers, thus, often rely on the companies' own experience from previous courses with a certain training provider as well as on the reputation of a training provider.

More than half of the interviewed companies showed interest in using e-markets to look for learning service offers. However, still some concerns prevail due to cultural reasons within a specific company and due to the fear that promotional material from training providers will invade the company via the new electronic markets. In addition, some interviewees recognised a real need for interoperability of technological systems in place. Many companies want to access relevant information in their decision-making processes.. Interoperability of electronic markets with internal systems and different databases is thus an important aspect of any new system for training management.

3.2.3 Learning Management and Evaluation

“Process controlling” refers to the assessment of the training measure, of the trainer and the training environment. Most of the companies participating in the study assess the trainer on their own: only few rely solely on pre-existing assessment information, such as the certification of the trainers or certified qualifications of the service provider. Usually it is the employee who does the assessment, only in some cases it is a peer who is asked about information concerning the trainer. Only in a few companies is it the manager who assesses the trainer by judging from the trainees performance.

The learner's degree of satisfaction with the consumed training is determined through effectiveness on the job and by means of inquiries. Most companies ask employees about their degree of satisfaction right after the training measure; only a few companies wait four to six weeks after the course has ended. Another commonly used means of assessing learners' satisfaction are questionnaires and/or so called “Smile-Sheets”.

The most common method of assessing the success of a training measure is testing. However, in some countries, e.g. Austria and Germany, labour associations argue strongly against the use of tests, since this practice might interfere with the employee's privacy as well as with existing labour policies. Thus, conducting tests seems to be very much a question of culture, within a nation and within a company. Still, six companies conduct tests. A few more said that they only had a small number of tests and only in specific circumstances, e.g. for compulsory training that certain jobs require. Eight companies stated that they never had tests. Six companies measure the success formally. Four companies use ad-hoc procedures, such as talks with the employees, to assess the success.

3.2.4 Transfer and Outcome Analysis

In order to demonstrate the success of a training measure it is important to find out its impact on the work performance some time after the training has been completed. Although it is recommendable to perform the training and outcome controlling some 3-4 months after the training, some companies only assess the trainer's work right after the course. Only one of the studied companies measures and compares the result with financial data, i.e. sales figures. However, a few companies measure the results from the contents of the course, or training needs, i.e. they do not measure the knowledge transfer. Most companies do this informally with internal support, e.g. working with peers, more experienced workers or supervisors. Some have formal support like tests and questionnaires. Others get support externally, e.g. from the training service provider. A significant group of companies have the manager of the employee participate in the measuring of the success.

Measuring the success of a course implies an overall quality model for learning. The interviews showed that quite a few companies still lack a comprehensive quality model. Only some steps of the overall process are performed. For instance, knowledge transfer can only be assessed in view of the the objectives pursued at the beginning. Very often, this is not the case. In general, a more holistic view on the training management process, thus, is needed.

3.2.5 Budgetcontrolling

In general, all companies in this study apply some kind of budget controlling, but the costs taken into account vary strongly from company to company. The training budget is usually assigned on an employee-basis or on a department-basis; sometimes it is even based on a shared cost form. Some (smaller) companies tend to have only a training budget for the whole company or for a group of departments. The types of expenses considered in this budget vary considerably and range from full expenses (travel, hosting, training costs, both of internal and external trainers) to only selected expenses. Opportunity costs are usually not included.

Most of the companies interviewed do add up the price of the course, cost of travel and daily allowance when calculating training cost. The use of video-conferencing and other tools are very rarely taken into account. Some companies do also consider how much it will cost to replace the employee that is being trained.

Many companies do get courses developed for their specific use and get consultation and needs analysis for a certain course to be provided. These costs are also taken into account in determining specific training budgets. An interesting finding is also the tendency of personnel departments to request the employee a partial refund of the training costs when the employee leaves the company within a specific time period.

4 Conclusion: Requirements for IT-Supported Training Management

All companies which participated in this study revealed a certain concern about training management and the need for supportive systems that allow for a greater transparency. The following conclusions can be drawn concerning the current state of training management in European enterprises and the future development in this area:

A corporate demand for the IT-supported training management exists due to necessary investments into human capital and the need to show evidence of the success of training measures. This need is further supported by the ISO 9001 requirements related with training management and training controlling.

The required functionalities of software solutions for training management differ according to internal practices, processes, company philosophy and the compatibility with existing software tools. Also, cultural diversities and the strong presence and influence of labour unions in certain countries increase the differences in practices for training management especially when the privacy of an employee is concerned.

A high potential for process innovation within corporations does exist. There is a need for more transparency in the training management process together, a stronger focus on skill management and, accordingly, IT-based knowledge management. Although companies already cover certain phases of the training management chain, there is still a lack, in most organisations, of comprehensive approaches to learning management.

One of the central objectives of training management is to demonstrate the benefits of the training efforts. However, most companies still lack an appropriate set of performance indicators, and HR managers hardly have any factual proof of the effectiveness and efficiency of the training administered.

Finally, technology cannot and should not replace all human interaction and face-to-face meetings. As mentioned in most interviews, the annual talk between the employee and the superior and/or HR manager is an important means of defining future training needs and development plans of each employee. However, most companies would welcome some kind of IT support for this important meeting. A support system can help the employee as well as the superior during the preparation process and can even support the communication process during the discussion. The gathered data can be useful in order to compare goals and actual achievements. This may also provide an important source for further strategic planning in corporate training.

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