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Current Issues of Training Management in European Enterprises

A study performed by the ELENA project

- Whitepaper -

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The ELENA Consortium

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Technologies

Preface

The following study was conducted within the frame of the EC funded project ELENA (IST-2001-37264). It is part of the research work that is carried out in close cooperation with all project partners. Thus we would like to mention that this study is based on direct or indirect contributions from all consortium members. For more details on the project consortium as well as the further objectives and achievements of the project please refer to www.elena-project.org.

The whole consortium would like to thank especially the interviewees and their companies for participating in this study and thus contributing to the valuable results that will be presented in the following pages. For privacy reasons the names of the companies are not mentioned in this report.

If you would like to know more about this study or if you are interested in the further development of the ELENA project, its results and implementations, you are welcome to contact one of the following persons that were personally involved in performing the interviews.

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Executive Summary

This study has been conducted in the context of an international research project called ELENA (http://www.elena-project.org/). The aim of this project is to create smart spaces for learning that contribute to a more effective and efficient development of human resources. Based on cutting-edge technology the project will create tools that support the optimization of the planning, control and implementation of IT-supported human resource (HR) development.

To determine the needs of ELENA's target group mainly HR and training managers but also the individual employees were surveyed. This study thus contributes to draw a clearer picture of the current situation of human resources development in European enterprises.

The study is based on the training management life cycle distinguishing between the following phases: development goals and training needs analysis (Phase 1), planning and budgeting (Phase 2), learning management and learning evaluation (Phase 3), and finally transfer and outcome analysis (Phase 4). In each of these phases various issues arise:

- Development goals and training needs analysis: Ideally, this process has to take place in each department considering the goals and needs of every individual employee. Communicating the necessity of such a process through a company's hierarchy is a difficult process, especially when companies lack an appropriate communication infrastructure.

- Planning and budgeting: When selecting an appropriate training measure, decision makers are limited by the number of offers they are able to screen. In this time-consuming task references, reputation and an active network of personnel developers can have a positive influence on the decision's quality. Electronic marketplaces for courses seem to be widely accepted as an effective tool for getting an overview of the market, but lack HR developer's trust when it comes to buying courses online.

- Learning and learning evaluation: The HR departments are frequently engaged in evaluating the quality of learning processes and in some cases also try to assess the knowledge gained by the learner. The later is a sensitive issue in the corporate world, where collecting data about an employee's knowledge is not always accepted by the staff council[1]. The study further reveals that the HR development still struggles with the collection of learning process evaluation data (so called "course smile sheets"), since in many cases no workflow supported process exists. However, even in the cases where the data has been collected and is available concrete actions are not always triggered, due to the lack of processing capabilities.

- Transfer and outcome analysis: Both of these measures are hardly conducted in today's HR management processes. An organisational entity where these processed can potentially be integrated is the (half-)yearly job appraisal interview, where usually a 360-degree analysis of the manager-employee relationship takes place. HR developers feel that this meeting has to become a trigger for future personnel development needs, while being the right place for evaluating past measures at the same time.

Overall, the interviews have revealed that current HR development practices strongly focus on Phases 2 and 3 of the training management life cycle. In many cases HR developers lack the tools for performing an in-depth goals and needs analysis, which however constitutes an important pre-requisite for a transfer and outcome analysis. The study further reveals that in order to realize a holistic training management approach, the support through state-of-the-art information technology (IT) is paramount.

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[1] German: Betriebsrat

1   Introduction to the Training Management Life Cycle

In times of increasing competition, shorter time-to-market cycles, and technology penetrating more and more people's workplace, a systematic approach of HR development is vital for a company's success. In this report we focus on HR development from a pure training management perspective. We assume that in the best of all possible worlds HR development ensures that an employee has constantly access to the right training measures in order to optimize his and his department's performance.

In this paper courses and training programs are the subject of our investigation. We have ignored alternative training measures such as job rotation, job enrichment, or job enlargement, although they also constitute very effective means for improving the abilities of the corporate workforce. In many cases, we refer to the HR manager as the responsible person for triggering training management processes. However, depending on the type of organisation this person can also be a HR development manager, a line manager, or even the executive director in the case of a small or medium sized company. In this paper, the concepts of trainee and learner can be used interchangeable.

For the last few decades, training management[2] has been more concentrating on evaluation of basic facts and on the administration of the financial aspects of corporate training. However, recently experts are also starting to focus more on other factors, apart from the finances, in order to evaluate training measures. Corporate training should be in accordance with the overall company goals and provide employees with the necessary knowledge and skills to react faster to the market changes and complete the strategic goals of the company.
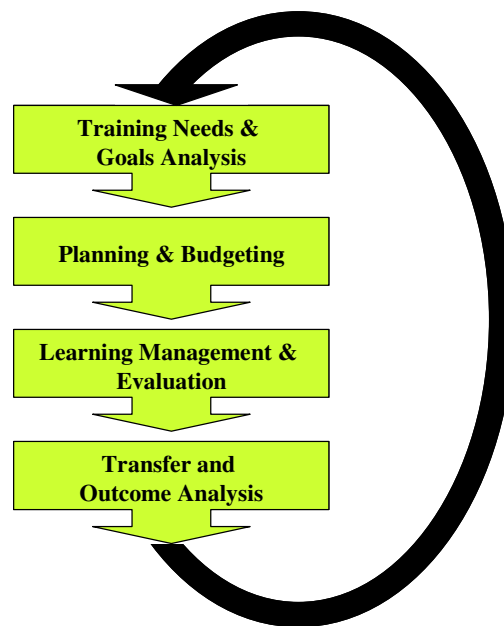

Figure 1: Training Management Life Cycle

Generally, training management measures should be applied before, during and after the training is provided, as it is illustrated in the training management life cycle in Figure 1.

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[2] German: Bildungscontrolling

As a first step, it is important to analyse the current and future *training needs* and set a *training goal*. This process needs to take place on three levels: (a) on a company level, derived from 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.

As a second step, the *planning and budgeting process* needs to be carried out. This process is also referred to as input controlling (see Seeber 2000). Here HR managers are looking at the available resources from an economical and a pedagogical perspective. Aspects such as, how shall employees be grouped for certain training measures or what kind of training methods and material should be used, should be considered. Here, costs are an important factor during the decision process. However, costs should not be the only aspects to be considered. Pedagogical issues such as cognitive abilities of the learners or the qualification of the trainers should be likewise important.

Then, the training measure is carried out and the focus lies on *learning management and evaluation*. During this process, the HR department is concerned with registering learners to the course, creating awareness with respect to the expected value of the training measure, as well as gathering learner's expectations. Immediately or shortly after the training measures an evaluation takes place. According to Seeber (2000) this phase is also referred to process controlling. Additionally, some experts also suggest conducting some kind of output controlling during the training process by which they understand intermediary assessments. Especially longer lasting training measures should rather be assessed during the training in order to take corrective measures in case the training is going into the wrong direction. Issues such as the following should be tackled:

1. Survey if the expectations have been met so far and if all concepts were thoroughly explained (for the latter so called "fast feedback questionnaires" can be used).

2. Assess periodically the level of knowledge transfer. For example, conduct a short test, by having the employee explain the main points of what was just described to her.

3. What about motivation? Are the employees still motivated to take the course, or do they feel that it is not worth the effort anymore.

After the completion of the training, the *transfer analysis* is concerned with the transfer of training to the workplace. According to some studies only 10% of training is transferred to the workplace being higher immediately after the training and declining over time (see Hummel, 2001). At this stage of the learning management life cycle also an *outcome analysis* can be carried out, in order to determine whether the training measures have had an positive impact on a company's or department's performance (typical indicators are: throughput, failure percentage, customer satisfaction, etc.).

While evaluating transfer and outcome of past training measures, future training measures need to be planned. Benchmarking the outcome of one department with related departments (within the same company or with an external one) can emphasize the requirement of improving 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 in a company should be accompanied by financial controlling measures. More and more training and/or human resource development departments are being asked to justify their expenditures spent on training with hard financial facts and to prove the return on investment (ROI). Recent research has come up with methods and indicators for calculating the ROI from training measures (see Phillips & Stone 2002). One of the important things to mention here is the fact that so far a lot of companies have not taken all cost into consideration when counting the expenditures.

Others only look at the costs, but do not have any means of calculating the benefits of training.

When it comes to evaluating the training measures many training practitioners still stick to the evaluation model of Kirkpatrick (1959) with its four-level hierarchy. He identifies four levels of training evaluation: reaction (do they like it?), learning (do they get it?), behaviour (can they do it?) and results (do they use it, does it make a difference?). Although this method has gone through some changes and criticism, it is still a widely used model for training evaluation.

Finally it is also interesting to mention that although most organisations measure trainee reactions, only a few of them measure if instructional outcomes were achieved and if learning was applied on the job. Thus before introducing any kind of training evaluation the purpose of the evaluation should be clear and key organisational stakeholder should determine how the results will be used.

While addressing the main issues of corporate training management, goals, learning and knowledge transfer we based our study on the training management life cycle and tested methods of scenario based interviews. Thus, the results in Section 3 are presented around the different steps of the training management life cycle. Before, Section 2 outlines the methodology applied. Finally, Section 4 concludes with requirements for IT-supported training management.

2 Methodology

The aim of this qualitative requirements study was threefold. First of all we aimed at assessing the current and future needs of companies for corporate training management. A second objective was to collect ideas from companies on what type of IT-support the interviewee foresees to be useful. And finally, a third objective was to find out positive and negative psychological consequences of the features developed in the ELENA project.

The interviews were designed to assist the ELENA team to draw a clearer picture of requirements of the companies when dealing with training and further education. The study was done in 18 companies in five different countries. The distribution is illustrated in Figure 2.
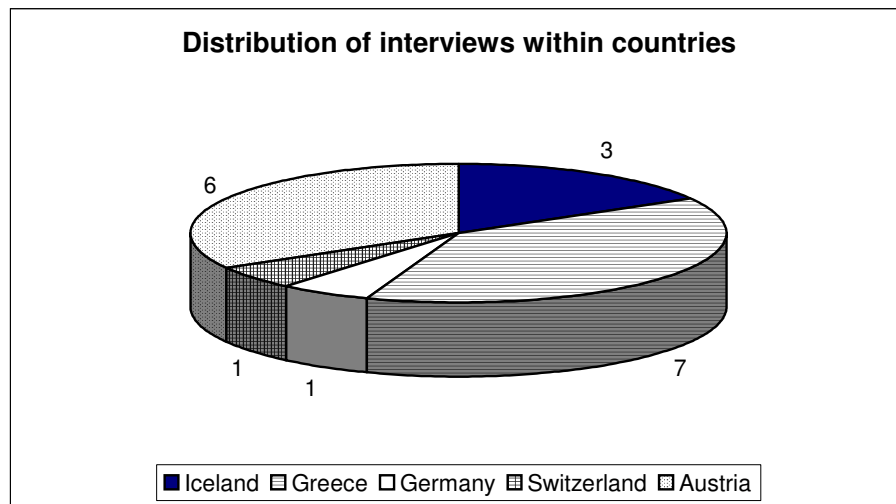
Distribution of interviews within countries

Figure 2: Distribution of interviews over countries

The 18 companies are operating in different areas of industry, six of the companies are industrial companies very different in size, four are financial institutions where two (2) of them have more than 200 employees and the other two are smaller, where number of employees are between 51 and 250. Two (2) are Telecommunication companies with more than 1000 employees, two (2) are IT companies and two (2) are typical retail companies. Finally, one company is a public power company with more than 2000 employees.

Half of the companies interviewed have more than 1000 employees and seven (7) of them more than 2000 employees. The other half that was interviewed has less than 1000 employees with five companies in the category 251-1000, four with 51-250 employees and 1 company with less than 50 employees.

Most of the persons that the ELENA team interviewed were Human Resources managers, but training managers and project managers were also involved in some of the interviews. In general the IT competence of the interviewees was high, but the experience with e-Learning was rather medium or low.

All of the interviews conducted were arranged with a similar structure and each interview took about 2 hours. The study was split in to 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

The following analysis of results is going to summarize the most important findings from the interviews, respecting the confidentiality of the information gathered.

3 Results

The analysis of the interviews as presented in this study is arranged according to the different steps in the training life cycle as presented in Section 1. The method we use for analysing the qualitative data is to find concepts, events, categorisations, and propositions. Also controlling behaviours and communications are taken into account:

3.1 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 his manager. This meeting is often referred to as the "mid-term appraisal". Older, larger companies still tend to show a more centralised behaviour, deciding employee training at boards and at management level. But even these companies also try to increasingly include the employees in this decision making process. Moving old structures is however a long process for these traditional enterprises and can only be done step by step.

When asked about the future practices in the interviewed companies it has become clear that for companies with high staff turnover creating long-term future plans for employee is not relevant whereas dynamic and often smaller companies may want to hire new staff for new projects instead of training current employees. High technology companies, especially, may not be able to plan very far into the future. Thus there is a great tendency for many companies that the training becomes problem driven instead of strategy driven (e.g. training only provided when employee cannot manage a task at a certain point in time). Such a procedure asks for fast training provision right on time (when the problem occurs), right for the skills of the employee and right for the problem to be solved, which again means a big challenge for training and HR managers.

Concerning the alignment of the training measure with the overall company strategy – one of the most important aspects of training management according to literature (see Seeber 2000) – findings differ widely amongst the interviewed companies. Whereas some companies claimed that the company strategy is well communicated through internal networks and directly to the employees other admitted that the strategy is not always clearly defined nor communicated. The former seemed to consider strategy alignment as sensitive and distribute the information in a targeted way to those it concerns. Some companies claim to communicate the strategy everywhere, while others think that the strategy is best communicated through management tools such as balanced scorecard.[3]

Surprisingly, the companies that communicate their strategy to the employees are often not aligning the training goals to their strategic goals. Only a few of the interviewed companies are deriving training needs from strategic goals. Another handful of companies aligned the training needs to the current company needs, but not the future strategic objectives.

On the other hand we already mentioned that some companies do not communicate the strategy to all employees or even lack a clear definition of what it is. Thus the interviewees in these companies where also reluctant to see any need in aligning the training goals with the company strategy.

For most companies future training needs are identified based on level of the knowledge of the employee, the knowledge about the project, the knowledge within the department and the knowledge within the company. The relevant information can be derived either through

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[3] The balanced scorecard offers an alternative to the traditional financial indicators. It describes and explains what has to be measured in order to assess the effectiveness of strategies. For further reference on balanced scorecard see: www.balancedscorecard.org

formal (questionnaire), semi-formal (pre-structure meetings) or informal assessment (unstructured face-to-face meetings). Some companies are using more than one way to determine their future training needs. In our interviews a significant group of companies uses some formal procedure (i.e. questionnaire and tests). A few companies assess the effectiveness of employee by observing the tasks performed and two companies only use informal means to assess the training need and no tools at all.

3.2 Planning and Budgeting

In planning and budgeting we can basically distinguishing two scenarios:

(1) The training activity is selected first (e.g. triggered by some outside influences such as change in law, etc) and then trainees need to be recruited for the training measure.

(2) A knowledge gap has been identified at a particular group of employees and then a training measure has to be selected or designed and budgeted in order to fill that gap.

In the first scenario, learner recruitment is based on the learners' abilities or skills, their track records in previous projects, their personality or attitude towards work and how well she matches with the new project the training measure is designed for. The availability of the trainees has to be checked. In our interviews only very few companies assess the employee subjectively (which is usually done by the superior) or select him in an ad hoc manner. Other companies usually search for this information in a CV, and some search for it in an interview database.

In terms of group composition for training measures, more companies have homogeneous than heterogeneous groups, but there are variations. Both types of groups seem to have some advantages and disadvantages. Homogeneous groups maximize the training results. Heterogeneous groups widen the horizon but can decrease the interest of the individual. It is often a decision taken by the HR manager about what type of group to set up for a specific training measure.

When it comes to selecting the training measures (Scenario 2) and the training provider, often it is the HR department that screens the wide variety of offers and selects a number of training measures for the company. This is especially true for the so called "old economy" companies where not all employees have (full) Internet access. The criteria for selecting the training provider are performance of previous courses, its reputation, the quality of service given and the costs. The means for selecting the learning service provider is to search the intranet, catalogues, consult with business associates, submit a questionnaire, and by using a pilot course. The current offer on the training market is huge and thus HR managers often rely on the companies' own experience from previous courses with a certain training provider as well as the reputation that a training provider has when it comes to determine the choice.

More than half of the interviewed companies showed some interest in using e-markets to look for learning service offers, however there were still some concerns by one or the other interviewee due to cultural reasons as well as the fear of an overflow of promotional material from training providers.

In addition, some of the interviewees recognised a real need for interoperability. Many companies want to access information that they can build their decisions on, i.e. assessment information about a training measure or access to skills and training needs database of the employees. Currently the systems used in these companies are often home-made databases built on standard office tools such as Microsoft Excel or Access. Interoperability with internal systems and different databases is thus an important aspect of any new system for training management.

3.3 Learning Management and Evaluation

During and right after the training the so called "process controlling" takes place. It refers to the assessment of the training measure, the trainer and the training environment. Most of the companies participating in this study are assessing the trainer on their own, whereas 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 it is the manager who assess 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 (sometimes assessed by supervisor) and through inquiries to the employee or the HR manager. Most companies inquire the employee about their degree of satisfaction right after the training measure, only a few companies wait four to six weeks after the course has ended.

A very common means of assessing the degree of satisfaction of the employees with the training measure and the trainer is the use of questionnaires and/or so called "Smile-Sheets".

The most common method to assess the success of a training measure is to use some kind of test. However, in some countries, e.g. Austria and Germany, labour associations are arguing strongly against the use of tests, since this might interfere with the employee's privacy and the labour policies of their countries. Thus conducting test 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 few 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 are measuring the success formally. Four companies are using ad-hoc procedures, such as talks with the employees, to assess the success.

3.4 Transfer and Outcome Analysis

In order to show the final success of a training measure it is important to measure the impact that it has in the work performance of the employee at a certain period after the training has been completed. Although it is recommendable to perform the training and outcome controlling around 3-4 months after the training some companies are only assessing the trainer's work right after the training (see above). Only one of the studied companies is measuring and comparing the result with financial data, i.e. sales figures. However, a few companies are measuring the results from the contents of the course, or training needs i.e. they are not measuring 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 participating in the measuring of the success.

Measuring the success of a course or a seminar implies an overall quality model for learning. First one has to define the goals, plan the strategy and implementation and then it can be assess whether the results meet the goals. The interviews showed that some companies are still lacking this overall quality model. Only some steps of the overall process are performed and thus lead to unsatisfactory results. When measuring e.g. the transfer of training it should be clear that this can only be done when the objectives have been defined from the start, when the training needs where assessed. A more holistic view on the training management process is still lacking in many cases.

3.5 Budget controlling

In general, all companies in this study apply some kind of budget controlling for their training, but the costs that are 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, 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 use and get consultation and needs analysis for a certain course to be provided within the company. The cost of the development and needs analysis is taken into account when budgeting the training costs. 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. Here again we might be facing cultural differences where such practices can only be performed in certain countries, whereas in others the labour unions would strongly argue against such procedures.

4 Requirements for IT-Supported Training Management

There is a current change in the learning paradigm as we change to a knowledge based society, where life long learning plays an important role for the knowledge worker. We search for information as a part of our daily activities and rarely go to places to look for data unless we have to. Similarly, learning may be more on-demand serving our needs to carry out tasks or projects that we have not taken on before etc.

Training management takes place in some context. That context is not only influenced by the company's organizational structure and regulatory frameworks and its stakeholders business, but also by the experience, attitudes and abilities of the learner and his co-workers. When introducing a holistic IT-supported training management approach, this complex context needs to taking into account.

In general, all companies that 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:

1. There exists a corporate demand for the IT supported training management due to necessary investments into human capital and the need of HR departments 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.

2. The functionalities that companies require for their training management differ according to internal practices, processes, company philosophy and the compatibility with existing software tools. In addition, cultural diversities and the strong presence and influence of labour associations in certain countries increase the differences in practices for training management especially when privacy of the employee is concerned.

3. A high potential for process innovation within corporations does exist. The already mentioned need for more transparency in the training management process together with the increasing importance of skill management and knowledge management imply new challenges for process innovation and supportive IT systems. Although companies already cover certain phases of the whole training management chain, there is still a lack in most organisations of covering and connecting all the different functions of planning-controlling-information. Thus only elements of the whole training management are applied and consequently do not show all the benefits of an optimal usage.

4. One of the central objectives of training management is to demonstrate the benefits of the training efforts in order to legitimise the training expenses and to further invest in the training of the staff. However, most companies still lack a systematic determination of such essential figures and HR managers hardly have any factual proof of the effectiveness and efficiency of the spent training budget to ascertain benefits. Thus there is still a great challenge in the area of training management to develop practical instruments and a set of indicators that give clear indications of how successful/unsuccessful training budget has been spent.

5. Finally, it is important to mention that 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 manger is an important means of defining future training needs and development plans of each employee. However, most companies are would welcome some kind if IT support for this important meeting. A

support system can on the one hand support the employee as well as the superior during the preparation process and can even support the communication process during the discussion. Later on, the gathered data can be very useful to compare goals and achievements that were defined during these meetings and provide an important source for further strategic planning in corporate training.

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