SMECTRA - An European network for online counselling on the application of new media in enterprise training

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SMECTRA(*) – An European network
for online counselling on the application of new media in enterprise training

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ABSTRACT: This communication introduces the objectives and the innovative approaches proposed in the frame of the Leonardo da Vinci pilot project SMECTRA: "Small and Medium Enterprises Counselling and TRAining network for the efficient application of new media". More specifically, it focuses on the evaluation of the status of vocational training and e-Learning in Small and Medium Enterprises emphasising that the technology and the content are not sufficient to implement successful e-Learning programmes, but specific tools, methods, competencies and specific training materials are required in a wider training frame. Consequently a structured questionnaire has been applied in the first stage of the project in order to identify the generalised needs profile. The specific results are presented in this paper. Such feedback is going to be used in the next stages of the project for the definition, developing and structuring the online couselling services as well as the training materials and the online handbook.

INTRODUCTION INTO SMECTRA PROJECT

E-learning has been used for some time especially in large enterprises. Therefore, the basic approach to learning, which integrates Information and Communication Technologies (ICT), has already proved to be successful. The SMECTRA: "Small and Medium Enterprises Counselling and TRAining network for the efficient application of new media" project is aimed to further develop this model to make it more easily usable in smaller enterprises, too.

These issues have been described in several European studies, but so far no satisfactory solution has been developed and disseminated [1][2][3][4]. Smectra.net can be seen to run parallel to the ESEN (European SME E-learning Network) project with the objective of developing "a set of skills to assist SMEs in the use of the myriad of resources available via the web, it will introduce electronic planning tools and management techniques to enable problem-solving and innovative thinking, and enable effective communication.; it will also seek to facilitate the exploration of several key areas of interest to managers, including issues specific to their own businesses, and assist in the implementation of a business plan" [5]. Thus, while ESEN concentrates on using e-learning to build SMEs` professional skills, smectra.net proposes to support SMEs` professional skills through the equally professional use of e-learning in the wider training scheme. It is not sufficient to give SMEs the technology and content (which have usually been developed for or in large corporations), but that SMEs can implement e-learning more successfully if they have the necessary tools and competencies. The methods developed are able to support the further development of national vocational training practices. The smectra.net project is developing counselling tools and materials for the efficient use of e-learning in SMEs. These tools and materials are developed by a transnational partnership on a common web platform, are used by the participating SMEs through the same platform and will finally be published as a handbook including ready-to-use methods, checklists and tools. The long-lasting possibility to put together personalised portfolios of methods and materials together with communication and cooperation functions is designed to both build the basis of a growing community and for combining the tools developed within smectra.net with resources available from other online portals like CEDEFOP [6], the European e-learning information portal [7] and others.

The smectra.net project offers to develop tools and materials to

- help SMEs understand and measure the use of e-learning,
- support the uptake of e-learning by SMEs through systematic decision-making tools and best-practice e-learning materials in the field of project management,
- evaluate and localize the tools and materials through a transnational community of training counsellors and users.

Three groups of users will profit from the results: 1) learners in SMEs, 2) training managers in SMEs in the professional use of e-learning, 3) training counsellors and providers who can combine e-learning content and processes. All the tools and materials will be available both online, offline and in print.

STATUS OF VOCATIONAL E-LEARNING IN SMEs

Employees can not rest assured that what they have learned in their formal school education will be sufficient for their whole professional lives. Even though, of course, this has never been the case, the need of lifelong and self-organised learning is dramatically increased by the increasing speed of innovation in work environments [8]. Therefore, lifelong and flexible learning is a key element of SMEs` ability to survive in their highly competitive environment. New forms of vocational

training are required and the possibilities of ICT have been promoted and developed as a solution to this problem. Over the last 20 years there has been increasing interest in work-based learning in the business sector as a means to improve and increase the skills of the workforce.

The motivation is to assist the development of a highly competitive economy within the global marketplace. Allied to this is the increasing belief that ICT can deliver effective learning to the workplace via web-based courses. According to different studies, learning assists organisations in three ways. Firstly, it increases the skills base of the workforce. Secondly, through the process of learning itself, it enables the organisation to manage and respond to change. Thirdly, it increases the knowledge base of the organisation, which is seen as the key to discovery and innovation. Set against this context, developments in work-based learning are seen as particularly appropriate to increasing the development of workplace skills and knowledge, whilst at the same time widening access to learning [8].

E-learning is visibly changing the way enterprises gain competitive advantage through improved human performance. However, this so far is true especially for large corporations which have the financial and organisational means and methods to implement e-learning successfully. On the other hand, SMEs face the problem that e-learning technologies, methods and strategies cannot be easily transferred to their needs and possibilities. SMEs operate in almost every sector of the economy.

As a consequence they vary widely in their learning and training needs. They have to deal with limited personnel, organisational and financial resources. The situation is made more complicated by their difficulty to formulate detailed and long-ranging training strategies that will surely enable their employees to cope with quicky changing requirements and increased competition [8]. The development of e-learning has been dominated by the metaphors of the virtual classroom and the virtual university, an over obsession with technologies and a focus on distance applications of existing learning opportunities, rather than the diffusion of learning in wider societal activities and forms. There has been very limited attention to vocational and occupational learning and the development of e-learning environments in less formal learning contexts.

E-learning has until now a limited application in small enterprises – and has tended to focus on providing networked access to virtual classroom type environments or to distance learning supported by computer based materials. The reason for this situation seems to be quite simple to analyse and very difficult to change: e-learning, with all its pedagogical possibilities, technical requirements and changes to established procedures has so far not been understood and used to its best effects. The provision of technology and content alone quite obviously does not lead automatically to their successful and economical use especially when many SMEs do not have full-time training managers. Many managers and learners do not know how to use these new options. In western cultures, only 5% of all adults know how to plan and organise their own learning, but this is exactly what they need to be able to do in SME work environments. For the purposes of SMEs, the learning materials and processes must be highly based on realistic learner activities rather than, as is still normal, based on fixed subject and course structures. Moreover, work-based learning within SMEs has to compete directly with the daily operational demands without enough slack in the personnel resources so that employees could cover for colleagues who

are on training courses. As a result, e-learning in SMEs hardly ever reaches users outside of management or engineering and when it does, this usually moves along extremely random selection, implementation and evaluation procedures. Several issues contribute to this difficult situation:

- many users and managers in SMEs either see a lack of quality in the e-learning products available to them or they find it generally very hard to assess the quality of e-learning products.
- the e-learning market with its range of options is not transparent to them.
- SME managers find it impossible to gauge the cost-effect ratio of e-learning
- the corporate learning culture in SMEs is problematic: learning is often not seen as an important part of the professional life and mainly accepted when employees participate in seminars outside of their working environment.
- the owners of SMEs especially are afraid that increased knowledge will lead to increased salary damands and staff turnover.
- only a minority of SMEs includes training in their formal budgets. When they do, the difference between training costs (seminar or trainer fees etc.) and affected overheads (absence from work, travel etc.) is rarely taken into account.
- man learners are overcharged when they are required to organise their long-term training themselves. They are especially wary of e-learning when there are no support structures in place
- a further step in e-learning would require investment in technology that supports synchronous as well as asynchronous communication at the workplace. This is too expensive for most SMEs if they have to finance, organise and implement it on their own.

THE ROLE OF TRAINING COUSELLORS

So far there is a failure of any organised, planned or coherent take up of e-learning by SMEs. Many SMEs lack a basic learning culture or organised training plans and infrastructure. The individual motivation of managers emerges as one of the major factors driving the adoption or otherwise of e-learning. A number of issues recur in most of the studies. Access to bandwidth may be a barrier to e-learning in many SMEs. But provision of bandwidth on its own fails to address the problem. Bandwidth without suitable and appropriate learning materials is fairly useless. And even with suitable learning materials, unless the business organisation supports the integration of e-learning then take-up will be limited [8].

SMEs usually do not assess and plan their future qualification and personnel demands sytematically or strategically – not because they do not want to, but because they often do not have the required skills, methods and tools. Training counsellors can, firstly, raise the awareness of this important issue and they can assess the mid-term needs hidden quality deficiencies or resource problems. On this basis, counsellors can support sytematic planning and they can offer methods, tools and materials in order to improve the competencies of human resource managers when it comes to planning the best form of qualification of their employees [9].

SURVEY ON TRAINING NEEDS FOR SMEs
USING E-LEARNING. THE ROMANIAN CASE.

In the first phase of the project a large structured survey with 99 questions has been designed and applied by the partner organisations [10] in 7 countries: LI, RO, DE, AT, DK, FI, CZ, in order to identify the e-learning needs profile of the SMEs and of their managers.

Table 1. Usage of e-learning in SMEs in Romania

Question	Yes	No	NA
Have you ever used e-learning?	61 %	21 %	18 %
Are you planning to use e-learning?	76 %	7%	17 %

Table 2. Rating of e-learning benefits (1-very low, 5-very high)

Benefit	1	2	3	4	5
Time flexibility	0%	5%	9%	23 %	63 %
Individual learning	1%	3%	23 %	23 %	50 %
Room flexibility	5%	11 %	24 %	27 %	33 %
Quick content updating	0%	7%	11 %	29 %	53 %
Continuous feedback	2%	7%	27 %	27 %	37 %
High content quality	0	14 %	30 %	26 %	30 %
Higher teaching efficiency	3%	23 %	35 %	19 %	20 %
More and better learning	3%	20 %	36 %	27 %	14 %
Higher motivation	7%	28 %	33 %	21 %	11 %
Optimised personal devel.	2%	15 %	25 %	31 %	27 %

Table 3. Rating of e-learning requirements (1-very low)

Requirements	1	2	3	4	5
Good usability	0%	5%	9%	24 %	62 %
Production of own content	6%	14 %	14 %	30 %	36 %
Cost reduction	1%	7%	18 %	31 %	43 %
Quick content updating	2%	4%	6%	26 %	66 %
Use of videos	3%	21 %	26 %	23 %	27 %
Use of sound	3%	20 %	26 %	26 %	25 %
Online communication	0%	3%	5%	24 %	68 %
Dowloading of materials	0%	3%	3%	18 %	76 %
Exercises	0%	3%	5%	21 %	71 %
Tests	0%	3%	11 %	14 %	72 %
User administration	0%	12 %	33 %	37 %	18 %

Table 4. Ranking consulting services for e-learning in SME

Type of consulting service by phase	[%]
• Planning phase of e-learning [100%]	
Project planning	21%
Costs analysis	17%
Needs analysis	19%
Technical questions	20%
Experiences	23%
• System implementation phase [100%]	
Company specific adaptations	34%
Calculation of expenses	20%
Required technical/training resources	27%
Traps	19%
• Operational phase [100%]	
Help during breakdowns	13%
Creation of company-specific content	22%
Training and coaching in e-learning	22%
Quality management	22%
Technical maintenance and data security	21%

In the particular case of Romania (see the partial results in the Tables I…IV) a number of 420 companies have been invited to participate in the survey and 63 filled in the online questionnaire developed at Technical University of Cluj-Napoca. The tables reports statistatical data on several questions concerning the status and the expectations of the SMEs in the usage of e-learning as an internal process as well as the expected consulting services.

CONCLUSIONS

This communication presented an introduction into the Leonardo da Vinci pilot project smectra.net dedicated to the creation of online consulting services, tools, methods and associated training materials for the implementation of innovative training strategies in SMEs using new media technologies. An overview of the status of effective using of e-learning in European SMEs has been presented. Particularly, in the first phase of this project an European survey has been applied to SMEs in order to identify the actual e-learning needs. Some of the statistical data are presented in the case of Romanian companies. Such information collected from the partner institutions has been integrated at the project level as a basis for designing and implementation of the technical requirements for the web platform as well as for the content of training materials in online consulting services.

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