



ISTUD

## **E-LEARNING: WHAT ABOUT LEARNING?**

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### **Introduction**

The most recent figures issued by the IDC (forecasts which will probably have been exceeded when this article is published) estimate that the e-learning market world-wide will amount to 23,008 million dollars in 2004, of which 3,847 dollars will be accounted for by Europe and 259 by Italy. To give an idea of the growth trend, the figures predicted for 2002 are 11,089 million dollars world-wide, 1,319 in Europe and 84 in Italy.

These are significant figures, both in absolute terms and with specific regard to the training market, which is generally conditioned by a completely different sale/profitability ratio. The training market has always been characterized by low volumes and high margins, but e-learning seems to introduce a new scenario, one which can be better understood if we reconstruct its features and its critical aspects, principal among which is the issue of learning processes.

The current practice is to design training programmes able to combine the various technologies available: e-mail contacts between trainees and trainers, synchronous discussions (chat rooms) and asynchronous ones (discussion forums and electronic noticeboards), connections with various resources on the web, and the use of personalized teaching platforms updated as the student proceeds through the course.

### **The scenario**

The development and spread of information and communication technology is radically altering the traditional ways of doing business. Increasing computer literacy and the exponential growth of the Internet have changed company organization and processes, introducing new ways to sell goods and services. As regards e-business – a term used to denote the strategic use of new



technologies – one of its most rapidly evolving sectors is e-learning, a general term for all the new forms of learning. E-learning is defined as “the learning brought about by means of technologies which connect the learner to the Web and enable him/her to access on-line resources and the ways in which learners connected to the Web produce, socialize and share knowledge” (F. Varanini, “E-learning come luogo di convergenza”, *Sistemi & Impresa* ...).

Definitional problems aside, e-learning seems to hold out numerous promises, both for self-learning and for what seems to be the greatest challenge faced by training: namely linkage with the processes of development of individuals and companies. E-learning is situated within a context of renewed interest in (i) the enhancement of human resources called upon to respond to the (presumed) demise of scientific management and of organizational certainties (hierarchy, control, standardization, specialization and division of labour), and (ii) in new organizational horizons with as yet ill-defined boundaries and which require the individual to mediate among pressures for integration between the company and its environment with increasingly unstable prescriptions and undefined value-building systems. As regards competences, these oscillate between the specialist technical domain (in which they are still assessed) and social and relational competences, competitiveness, and an ability to adapt to a profoundly different environment.

In the transition from scientific management to emerging management models difficult to define in conventional theoretical terms, e-learning is proposed as a synthesis between certain and what is standard. dimensions of scientific management and subjective and individual ones connected with self-assessment, the choice of one’s current and future professional profile (albeit within boundaries and markers set by the company), and employability.

Accordingly, at least from the purely theoretical and formal point of view, the possibility of mediating among pressures within the company seems to explain the current success of e-learning, together with its novelty value, which in management is a variable that significantly influences the adoption of practices in general.



## **Distinctive features**

The theoretical dimension that underpins e-learning has solid foundations. In its most extreme rationalization, e-learning allows even major redefinition of the nature of training. More specifically its most distinctive features are the following: linkage with the company's strategies and change processes and with individual skill levels, the intensive use of information technology, and an orientation to service and multiple clients.

### *The linkage with strategies*

The close connection of e-learning with business strategies enables training to be focused not only on the systematic and targeted transmission of the organization's specialist and distinctive expertise but also and especially on the development and diffusion of new competences and skills useful for competition in the future

One change brought about by e-learning is a shift from training programmes centred on classroom or on-line instruction to programmes which incorporate knowledge management or other forms of learning like the communities of practice, on-the-job training based on learning by doing, coaching and monitoring which use resources obtained off-line and on-line.

Interesting in this regard is that e-learning seems able to accomplish a crucial step forward in the evolution of training processes by combining the interests of the company with those of individuals. It focuses on the company's distinctive competences, on the one hand, and on the individual skills that make a person employable on the other.

### *Intensive use of information technology*

For companies whose boundaries and frames of reference are increasingly global, information technologies enable the rapid transmission of managerial approaches and techniques. Moreover, training courses can be structured outside the classroom, with considerable savings in terms of the cost and timing of delivery. In the 1990s, technology made it possible to provide on-the-job



training with the use of not only conventional audio and videotape but also intranet, Internet, videoconferencing, etc. I&CT has changed the form of training delivery, which can now become 'learning on demand' (the training 'happens' when and where the learner wants); it can be combined with traditional presence training; and it can support individual mentoring or counselling relationships to develop skills. The intensive use of IC&T recasts learning as an evolving dynamic of participation within corporate and professional communities which reproduce shared knowledge and identities. Moreover, information technology eliminates the classroom as the exclusive and traditional setting for training.

### *Orientation to service and multiple customers*

A large part of current applications of e-learning in theory also set themselves the objective of integrating different parts of the organization in accordance with the model of the 'open company' with broad boundaries. Not coincidentally, all applications of e-learning tend to use metaphors which evoke the idea of the company as a corporation or system of relations.

Training thus conceived is addressed not only at employees but also at all the links in the company's value chain: customers, suppliers and partners. In this case, too, e-learning seems well able to match the evolutionary processes of organizations.

### **Advantages and disadvantages of e-learning**

Generally considered to be the advantages of e-learning are the following:

**Costs.** The cost of training for each learner decreases with an increase in the number of people being trained. For companies with extensive and continuous training programmes, e-learning is obviously the best, and to some extent only, way forward. Moreover, the use of technologies reduces transfer costs, also in terms of travelling time.

**Personalization.** In a world constantly in search of customized or personalized solutions, e-learning means that teaching is uniform for all learners, that contents are adjusted to the learner's needs, and that s/he can learn at his or her own pace.



Assessment. E-learning enables constant monitoring of the learner's progress and constant assessment of results.

The main disadvantages of e-learning are the following:

Investments. The environment that supports the training structure is particularly costly and redundant. The new systems based on ASPs (Application Service Providers) tend to reduce structural costs but obviously shift them onto management and maintenance.

The training curriculum. In its purest form, exclusively at a distance, the preferred type of e-learning curriculum is the standard one, and therefore comprises business language and information technology. But the trend is towards blended forms where the optimal solution is a mix of training approaches.

The trainer/trainee relationship. The switch from a face-to-face relationship to a mediated one hampers interaction, exchange and discussion – the essential components of active methods – shifting the locus of the relation into a virtual space where relations of different type and intensity develop. Learning support systems – on-line tutoring, forums and the like – are also undermined and their effects monitored.

Training as a social event. The training ritual is often used by companies as an occasion for reflection on the sense of organizational belonging, especially in the case of residential courses. Obviously, shifting the training from a physical to a virtual environment removes the symbolic dimension from the event.

Against this background, discussion is required of the meaning of current developments. The belief that merely attaching an 'e-' to 'learning' means that training acquires the ability to integrate and synthesise organizational changes is to make a dangerous mistake. A simplification of this kind, in fact, may be likened to the introduction of ERP systems in order to rationalize managerial practices, without considering that their introduction alone was the visible cost of an organizational change that brought with it organizational transformations and 'suffering'.

If we do not want the new training platforms to become yet another technological panacea to be purchased, laboriously installed and then systematically by-passed so that we can work effectively, we must return e-learning to its more natural setting, that of learning. And we must



also probably have the courage to criticise attitudes, behaviours and commercial actions that contradict their initial premises.

## **On learning**

The development and spread of e-learning tools and technologies have profoundly changed the way in which training is delivered to adults in organizational contexts. The spread of Learning Management Systems in particular, and the increasing availability of e-learning products, are two phenomena with major impact on management training.

The success of e-learning is beyond dispute, so evident are its extraordinary achievements, so obvious its strength and potential. And then the expression ‘e-learning’ is so extremely apt: pithy, incisive, easy to communicate, the blazon of modernity, like the ‘.com’ and @ added to a brand name or a pay-off. It is a success so taken for granted that the world of management training seems unable to stop and reflect on the phenomenon and on a contradiction – apparently lexical but in fact deeper-lying – inherent in the expression.

The expression e-learning – which, as already mentioned, is understood and defined differently according to the interpretation given it in a particular context – is nevertheless a simple expression with a simple meaning: it’s “a learning process realized with the aid of electronic technologies”. It is an expression that – however interpreted and defined – stresses the process of learning, its andragogical rather than pedagogical dimension, the responsibility of the learner for his/her learning rather than the role of the teacher. It implicitly propounds the dichotomy between training learning and underlines– at least in formal terms – the value of the learning process instead of the training processes. It emphasises the role of the individual who learns over the role of the organization which creates the conditions for his/her learning to take place.

Yet if we consider two of the salient features of e-learning and which are currently exerting the most impact on the training world – as already mentioned, the spread of LMS and the increasing availability of e-learning products – we realize that what is lacking from e-learning seems precisely to be the learning.



Learning Management Systems – available on the market in an infinite variety with diverse technological specifications and substantially similar performances – are by now a commodity (still too costly) intended to satisfy a simple corporate need (simple at least in conceptual terms): introducing a technological infrastructure which manages training processes, integrates them with human resources management and is a system that enables e-learning.

On reading a presentation of an LMS, or on analysing a commercial proposal for the implementation of an LMS, or again on hearing a description of the characteristics of an LMS, is an instructive experience for those who concern themselves with training. One generally gains two impressions. The first is that implementing an LMS is a substantially technological problem: ‘protocols’, system integration’, ‘standards’, ‘band width’, ‘database’ are some of the recurrent keywords which seek to make the difference. The second impression is that the impact of implementing an LMS concerns the training cycle as a whole, in an attempt to answer the questions asked by those in the company responsible for training: How can an LMS support and integrate the traditional phases of training? How can it help with needs analysis? How does it link with the system of company competences? How does it integrate with the characteristics of human resources? And with management systems (compensation, development and career plans, etc.)? How can it assist with the planning of the material and human resources for training? What forms of delivery can it support? How can it facilitate the training assessment process?

These are important questions (and answers). But they fail to address an issue implicit in the name itself given to these systems: the issue of learning. An LMS helps to manage the training process and it enables e-learning. But what about the learning? Where are the answers relative to it? In an LMS system the learner is a username and a password, a user tracked and monitored by the system, who more or less freely accesses the training resources available. But we are told little or nothing about his or her learning process.

Let us therefore look for the answers and the meaning of e-learning in the training products now abundantly available on the market. Products which over the years have evolved and been refined in the light of methodological analysis conducted by the most attentive players. Thus, after a pioneering stage when traditional contents were indiscriminately transposed to a new and different support – multimedia and hypertext – paying little attention to methodological



considerations, e-learning focuses on the user and his/her learning process. It introduces solutions of increasing technological sophistication, and pays ever greater attention to involvement of the user in the learning process – a user shaped by the system and allowed to move freely among the resources available (although under constant supervision and constraint), to activate communicative channels and community tools to promote cooperative learning and to recreate the assumptions and features of the learning community that arises in the traditional classroom.

In this case, too, one gains two impressions from examination of the products available. Firstly, methodological inquiry has led to a qualitative improvement in the final product, which now has usability characteristics and utilizes approaches very different from those of the pioneering systems. But it has also led to the perception of e-learning as a universal panacea for training – management training as well. However, those who understand e-learning in this sense fail to grasp the crucial difference that characterizes the learning of such complex abilities and competences as managerial ones. The use of advanced and complex technological solutions, the introduction of inductive features and the most disparate devices to activate and involve the user are (methodologically justified) attempts to recreated an efficacy that learning based on man/machine interaction and mediated relationality is unlikely to achieve. This is a methodological endeavour that risks losing sight of ‘what’ by concentrating excessively on ‘how’. Concentrating on aspects of method connected with e-learning seems in fact to overlook the object of learning, the coherence between medium/method and training content.

The second observation is that methodological analysis of learning seems to be an ex-post attempt to legitimate at the level of learning a phenomenon that has grown and prospered at an entirely different one, namely efficiency and the costs/benefits ratio. E-learning was not born to improve the learning processes of the individual, but rather to give greater efficiency to the process of company training. It was intended to deliver uniform training – but more often instruction – to a large number of people at low cost (less travelling, fewer man-hours, fewer teachers to pay) while substantially maintaining levels of training efficiency. The products of the pioneering phase sought to satisfy simple training needs coherent with the instrument used – basic computer technology, languages, company procedures, the regulations – and were astute



enough to present themselves as tools for self-training or distance learning without disrupting the learning process. Distance training – an expression now either rejected or regarded indulgently as somewhat ‘retro’ but evoking a past now superseded – was and is simply a way to industrialize the training delivery process; a method that could be utilized for specific training contents and goals. But this is a contradiction in terms when applied to management training to develop skills, competences and abilities.

In the form that e-learning is now configured and proposed, therefore, it is a phenomenon that has misappropriated an efficacious label which emphasises the dimension of learning when it is precisely learning that is the weak or absent link in the process. And part of the e-learning community seems either to be changing its mind about the potential of the approach and its value for learning processes, or at least losing its unquestioning faith in it. E-learning (or better, to remove its misappropriated label, technology-based training, whether computer-based, web-based, collaborative or whatever) with regard to managerial competences is returning to its original role as only part of a broader learning process, at the centre of which the classroom is now reappearing (but did it ever go away?).

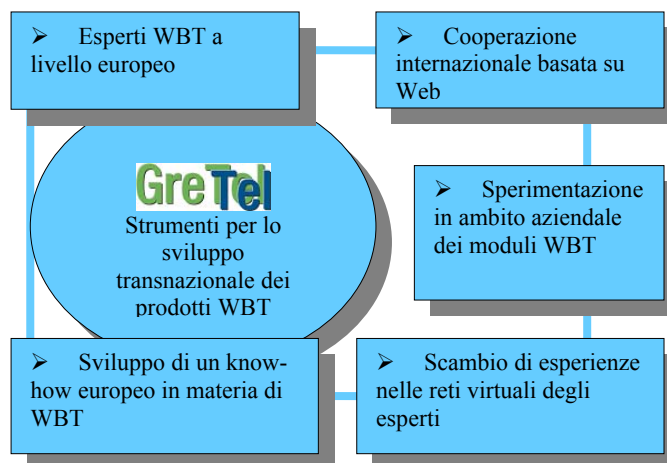


## GreTel - un modello transnazionale per la realizzazione di un circuito virtuale di esperti di e-learning

La crescente internazionalizzazione dei rapporti economici, lo sviluppo dell'industria, i cambiamenti apportati dalle nuove tecnologie in tutta Europa hanno portato nuove sfide ai fornitori di formazione. prima di tutto la competitività non si gioca più solo all'interno dei propri confini nazionali ma continentali. Contemporaneamente, le aziende richiedono che la formazione venga organizzata in modo tale che le risorse possano utilizzare il prodotto formativo direttamente dalla propria postazione lavorativa.

Soprattutto all'interno delle PMI, i fornitori di formazione devono cercare di venire sempre più incontro alle esigenze aziendali, rispondendo con soluzioni ad hoc.

Lo scopo del Progetto GreTel è di qualificare specialisti appartenenti a istituti formativi responsabili dello sviluppo e della implementazione di materiali ICT per la collaborazione in circuiti virtuali transnazionali.



### Gli strumenti GreTel

All'interno del progetto GreTel le conoscenze degli esperti WBT di ogni istituzione partecipante, devono essere raggruppate, alimentate senza soluzione di continuità e rese disponibili. All'interno di questo pilota finalizzato allo sviluppo congiunto dei moduli WBT applicabili in



tutti i paesi partecipanti, gli esperti creano strumenti volti a semplificare e ottimizzare la cooperazione transeuropea: realizzare moduli WBT in varie lingue e per culture diverse non è soltanto un problema di traduzione. Spesso è necessario adeguare anche contenuti e forma dei moduli stessi. Va inoltre accordata un'attenzione particolare alla creazione di un ambiente di apprendimento interattivo che corrisponda in maniera uniforme alle esigenze dei diversi gruppi bersaglio nei vari paesi. Altri strumenti sono rivolti allo sviluppo di criteri volti a realizzare e valutare le fasi sperimentali in ambito aziendale.

Vengono realizzate linee guida e checklist sulla base dei criteri messi a punto all'interno della rete GreTel. Al fine di raggiungere questo scopo, si vuole realizzare uno strumento online che comprende checklist, linee guida, manuali per lo sviluppo di prodotti online in un contesto internazionale.

Il progetto prevede anche la realizzazione di una piattaforma "pool per gretel" [www.poolweb.it/gretel], dedicato al contatto tra i partner del progetto e per la condivisione di idee e materiali.





## Scheda informativa

### **Finalità**

L'obiettivo principale del progetto è il miglioramento della qualità dei prodotti interattivi di apprendimento a distanza attraverso la formazione del personale delle istituzioni formative a sviluppare prodotti rilevanti a livello internazionale

### **I Partner di GreTel**

#### **Partner della rete ENTER:**

Germania:  
Berufliche Fortbildungszentren  
der Bayerischen Wirtschaft (bfz)  
gemeinnützige GmbH  
bfz Bildungsforschung  
[www.bildungsforschung.bfz.de](http://www.bildungsforschung.bfz.de)

Italia:  
Istituto Studi Direzionali Spa  
(ISTUD), Stresa (Verbania)  
<http://www.istud.it>

Regno Unito:  
EEF Engineering Employers'  
Federation / Woodland Grange  
<http://www.wgrange.com>

#### **Università:**

University of West Bohemia,  
Pilsen  
<http://ftp.zcu.cz>

Université de Technologie  
Compiègne (UTC), Compiègne  
<http://www.utc.fr>

#### **Organizzazioni delle parti sociali:**

VBW Federation of the Bavarian  
Industries  
<http://www.vbw-bayern.de>

#### **Piccole e medie imprese (PMI):**

IWT Industrielle Wickeltechnik  
GmbH, Erlangen  
<http://www.iwt-gmbh.de>  
Révision Expertise Conseil,  
Besançon

### **Obiettivi**

- Formare un gruppo di esperti in istituzioni di formazione professionale responsabili dello sviluppo e realizzazione di materiali I&CT per la collaborazione internazionale in gruppi virtuali
- Diffusione delle forme di apprendimento multimediale

### **Azioni realizzate**

Il progetto si sviluppa in cinque fasi.  
Raccolta delle informazioni iniziali per la creazione di un network virtuale di esperti  
Implementazione di uno strumento online per lo sviluppo transazionale di prodotti di teleapprendimento  
Sviluppo del modulo online in base agli strumenti GreTel forniti nella fase precedente: Ia fase di test Verifica del modulo online nelle aziende: IIa fase di test; adattamento e miglioramento  
Realizzazione di una guida allo sviluppo di prodotti di tele apprendimento attraverso la cooperazione con il gruppo virtuale di esperti

### **Tempo**

2000 - 2002

