Chapter VIII

E-Learning Strategies of Italian Companies

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Abstract

The chapter gives a contribution to the understanding country-specific e-learning models, focusing on the e-learning experience of Italian companies in the pharmaceutical and banking industries. The chapter analyzes the antecedents of a corporate e-learning adoption process, asking whether it is forced by the rational search for economic benefit, or by bandwagon pressures, whereby companies are more interested in their reputations. The chapter also aims at understanding how companies are implementing e-learning, analyzing the most important features of the e-learning strategies: users, contents, infrastructures, and services and supports. After having discussed the result of the research conducted on a document analysis, a survey, some interviews, and two in-depth case

studies, the emerging B2E strategy for e-learning is explained. In the conclusions the main issues related to the e-learning processes in the Italian companies are summarized, and the research methodology and the possible future research lines are discussed.

Introduction

In recent years, corporate e-learning has been the subject of several studies. On the one hand, it has been identified as one of the latest best practices in HRM (Nacamulli, 2003) because it enables companies to meet new intellectual capital investment requirements (ASTD, 2001). These include the need to enhance quality and effectiveness in program development while reducing costs, to update the skills base throughout the organization (at all levels, across a wide geographical area, etc.), and to increase the organization's learning capability by integrating online training and strategic knowledge management (Ley & Ulbrich, 2002).

On the other hand, due to the exponential rate at which this innovation was adopted in the USA, in the last years the experience of pioneers, in both the public and private sectors, and their best practices have become one of the main issues dealt with in corporate e-learning research and literature (Shank, 2002; Horton, 2001; Rosenberg, 2001).

However, corporate e-learning is not spreading worldwide as fast as expected, and it is far from being applied extensively in Europe and Italy, despite a number of enthusiastic forecasts (Anee, 2003; IDC, 2002). Furthermore, if we look at companies' e-learning experiences, it appears that organizations are approaching it in an incremental and experimental manner. Among other explanations, three factors (partially related) can help to understand this controversial rate of diffusion. First of all, many benefits promised on paper are not what e-learning is really providing (Prandstraller, 2001). Secondly, even if the standardization process does seem to simplify the identification of some main features of a corporate e-learning strategy, it is still rather difficult to relate them to ROI. Thirdly, technological and organizational best practices are not simply introduced as they are by companies, but adoption of best models is a learning process and depends on specific organizational capabilities such as absorptive capacity (Martin, Robson, & Jennings, 2002; Cohen & Levinthal, 1990).

These considerations suggest that the study of e-learning should take a more in-depth view of the ways it is adopted and of the context-related factors that, nationally and within organizations, may promote or prevent it and influence the way companies implement corporate e-learning.

From this perspective, the chapter aims to give a contribution to understanding the e-learning adoption process in Italy. First of all, the chapter will focus on what makes a company adopt e-learning, asking whether it is forced to by the rational search for economic benefit, or by institutional pressures whereby companies are more interested in their reputation and image. The adoption process will be analyzed, considering who the decision makers are in companies, the main sources of information, and the perceived and achieved organizational aims.

Secondly, the chapter will contribute to understand how companies are implementing e-learning and the main issues related to this process. From an organizational point of view, it will analyze the main features of the e-learning strategies that are emerging in Italian companies.

Since the spread of e-learning in Italy is in its infancy, research has been undertaken in two industries — pharmaceuticals and banking — where e-learning has been adopted more extensively than in others, and where both companies with very early and more advanced experiences can be analyzed. An empirical study has been developed in each industry based on a survey, interviews, and document analysis.

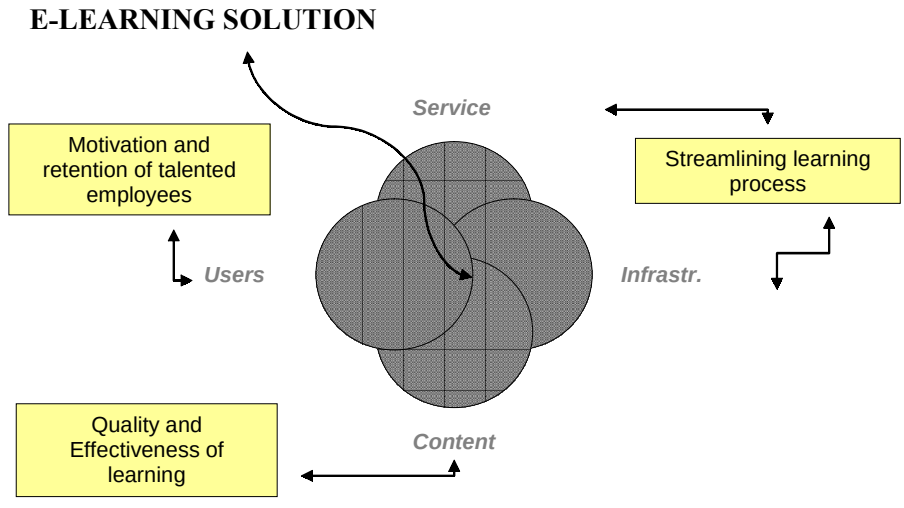
Corporate E-Learning: How Companies Adopt It

Corporate E-Learning and Its Main Drivers

Corporate e-learning can be defined as an extensive computer and Internet-based method (Piskurich, 2003) for a company's training and development policies.

Today's new browser-based HR portal technology is changing the way organizations manage human resources (Walker, 2001), specifically the way firms train their employees. The debate around this latest killer application of

Figure 1. Benefits of e-learning



ICT, as John Chamber, Cisco CEO, has defined it, has contributed to the knowledge about e-learning being codified, by updating common languages and frames of reference. Networks of research projects, consultants, and companies continuously rationalize experiences at a national and company level, comparing different alternatives and building common theoretical assumptions on e-learning strategy (Nacamulli, 2003; Cunningham, 2001; Rosenberg, 2001). Researchers and practitioners mainly agree that by investing in e-learning, companies try to gain three types of benefits (Hartley, 2003; Shank, 2002):

1. **Streamlining learning processes** through cost savings (instructional costs, opportunity costs, administrative costs, travel costs, scalability resulting from the repeatability of courses or modules). Cost reduction and flexibility can be achieved in many ways, mainly by choosing the level of interactivity and cooperation of a learning experience and its synchronicity or asynchronicity.
2. **Quality and effectiveness of learning** through flexibility (just-in-time access to knowledge/information) and by tailoring time, methods, and content of courses to work requirements and learning by doing.

3. **Motivation and retention of talented employees** through customization and learning on demand. The delivery of online courses fitting personal learning style seems to enhance the learning experience. Learning on demand and free choice of courses may also develop employees' employability.

Recent debate is questioning why these benefits are not accomplished yet, why there are more failures than successes in achieving economic and quality benefits (Prandstraller, 2001). One main question to address is that the adoption of e-learning is not a rational choice but an ambiguous decision process, characterized by "opaqueness or lack of clarity surrounding an organizational assessment of an innovation" (Abrahamson & Rosenkopf, 1993, p. 494). As a company cannot evaluate the technical efficiency or the returns of an innovation, because of ambiguity of goals, of means-end relationships, and environment (March & Olsen, 1976), it will rely more on social as opposed to economic factors, in order to decide whether to adopt an innovation or not.

Considering the innovation of e-learning, we may find that ambiguity does matter. Doubtless there is a codification of best practices process going on within the international e-learning marketplace. It is driven by academic studies, research centers (Astd, Idc, Masie, etc.), and providers, and it is also facilitated by the actions of standardizing groups (AICC, IEEE Ltsc, EU Ariadne project, ADL) (Rosenberg, 2001) and by the emergence of shareable courseware object reference models (reusable learning objects). This codification process of e-learning best practices seems to make it easier to identify both strategies' dimensions and advantages. Considering this process, managerial literature and research centers (Astd, Masie, IDC) maintain that a company can rationally identify the best e-learning model and decide which to adopt after evaluating the ROI of this type of investment. But even if the standardization process does seem to help companies identify some main features of an e-learning solution and its main benefits, it is still rather difficult to relate them to economic performance.

First of all, it appears that companies are suffering from *ambiguity of goals*, especially in the early-stage adoption. Considering the Italian context as an example of early-stage adoptions, results of research into e-learning in Italy in 2002 by A.D. Little 2002 highlighted that, while companies seem mainly efficiency driven, when they choose an e-learning solution, their decision process is far from being rational. Companies do not plan the adoption of e-

learning taking into consideration each phase of the introduction process and do not specify the related objectives and measurements of performance.

Secondly, considering the type of innovation e-learning triggers, *ambiguity of means-ends relations* has an effect. E-HRM policies like e-learning should be considered more than just a simple technological change of people management tools and more than online delivery of HR services (Hansen & Deimler, 2001). From this point of view, firstly, e-learning adoption implies not only technological but also organizational changes and, secondly, for this reason, their impact on efficiency could be less clear. Quality results can be achieved by CBT asynchronous courses, but also by blended solutions. Moreover, even though some indicators of efficiency and also of effectiveness of training are widely adopted (Kirkpatrick, 1998), individual learning processes are "soft" issues. Their results are mainly of an intangible nature, and even though skill or competency development can be achieved and partially measured, it is rather difficult to isolate its impact on job performance and individual motivation from several other causes. It is also more difficult to measure increased employability that people can gain thanks to online training. For this reason measurements are not univocally quantifiable, related indicators have an ambiguous meaning, and the evaluation process is still time consuming and costly. Thus, the adoption process of e-learning could be difficult to evaluate on a traditional basis (Schank, 2002).

Under these conditions, companies rely more on information about who has adopted an innovation (Abrahamason & Rosenkopf, 1997). Moreover, adopters choose an innovation because of the threat of lost legitimacy under *institutional bandwagon pressure*. Recent studies of the managerial best practices (e.g., quality management or teamwork) (Staw & Epstein, 2000) demonstrated that what forces the adoption of a new organizational solution is the pursuit of reputation within a social and cultural environment (DiMaggio & Powell, 1983; Granovetter, 1985).

E-learning is a particularly relevant innovation from a corporate point of view. For example, it impacts on the issue of lifelong learning, which is one of the priorities of the EU (2003), national governments, trade unions, and training institutions. Furthermore, the flexibility and the connectivity of such solutions facilitate remote learning from home, and this is an important issue for workforce retraining from a trade union point of view. From this perspective, as e-learning impacts on the investment in human capital and lifelong learning, it may attract the attention of institutions operating in the labor market such as unions, training associations, and public institutions. Secondly, companies seek

standardized responses to cope with uncertainty related to innovation. They do this by imitating those organizations that, thanks to their competitive capabilities or their international dimensions, are considered a reference model (for example, Cisco is often referred to as a benchmark in E-HRM and e-learning in many conferences, studies, and consultants' reports) (Haberberg & Binsardi, 2002). Finally, the managers' choice of e-learning is influenced by the professional community with which they share common learning paths and the same social networks (Haberberg & Binsardi, 2002).

When the adoption process is uncertain and results are ambiguous, there might also be *competitive bandwagon pressures* towards the introduction of an e-learning strategy by companies (Abrahamson & Rosenkopf, 1993, 1990). Companies will adopt innovations because of the threat of lost competitive advantage. Bandwagons occur if potential adopters perceive the risk that an innovation is a success and that if they do not adopt it, their performance will fall below the average performance of adopters.

From a bandwagon perspective, benefits like cost cutting, scalability, and flexible delivery of skill training to a spread number of trainees can be easily communicated because they are measurable in the short term and quantifiable, and so are perceived as a threat of a competitive disadvantage. If this threat, in the utility scheme of companies, outweighs the perceived value of an equally large competitive advantage (Abrahamson & Rosenkopf, 1993), bandwagon pressures exceed the company's adoption threshold — that is, a company's reluctance in the face of innovation and change.

E-Learning in Italy and the Adoption Process

As discussed previously, institutional and competitive bandwagon pressures may be main determinants of e-learning adoption. In the following paragraphs we will also concentrate on the knowledge creation process related to an adoption process. We will discuss how external pressures are translated within an organization in company-specific solutions, by analyzing four main dimensions of a corporate e-learning strategy: *content* delivered (asyncronicity, learning object, information, knowledge, and competency issues), *infrastructure* (learning portal, authoring system, LMS, interoperability issues), *users* (issues related to the role of HRM, push or pull learning, learners' problems, and motivation), and *services and supports* (tutoring, tracking functions, feedback, culture building, etc.).

Empirical Research: Research Design and the Sample

The research presented in this section focuses on two industries — pharmaceutical and banking — that both have undergone significant changes in recent years. Considering the competitive environment of the two industries, which were highly protected until a few years ago, they have both been caught up by new challenges like technological innovations, deregulation, globalization, and M&A. On the one hand, both types of companies have been forced to reorganize their structures (making them flatter and decentralized) and to manage more efficiently and effectively their supply chain processes as well as staff services like human resource management policies. On the other hand, in order to increase their response to the market and competitors, they have been induced to reskill their workforce, thereby increasing their investment in human capital (for instance, those staff who deal with end customers). For these reasons the two industries are among those in Italy where e-learning seems to be widespread (Anee, 2001), and where both early and more advanced experiences can be studied. Another reason to study them is their different institutional contexts, especially from an industrial relations point of view. This aspect matters if we consider institutional pressures as determinants of e-learning adoption.

The empirical study has been developed on a survey, interviews, and document analysis. The survey was conducted through structured questionnaire e-mailed to the main companies in both sectors between September and December 2002.[1] Some interviews of HRM managers of leading companies in the two industries were conducted before and after the survey, in order to prepare the cross-sectional analysis, to assess triangulating sources of data, and to develop some case studies. Two cases (Unicredit and BPM) are discussed in the following sections. Finally, document analysis was carried out on collective agreements and on a secondary source of data provided by ABI (the Italian association of banks).

The pharmaceutical sample[2] includes 20 organizations, both multinational and Italian, and represents both large and medium-sized companies. Five of the companies interviewed (25%) belong to the top 10 pharmaceutical companies in Italy.

The banks[3] surveyed include 22 companies: both large banking groups and very small banks like cooperative banks. Six of the companies interviewed (27%) belong to the top 10 banks in Italy.

Adoption Decisions

We started our analysis by looking at the rate of adoption of e-learning in relation to the different institutional and competitive bandwagon pressures that characterize the two industries.

With regards to labor market institutions in the pharmaceutical industry, even though the national collective contract (CCNL) mentions *"the arrangement of remote training modules on subjects specific to workers of the pharmaceutical industry,"* and since the end of 2002 the Bilateral National Organization (created by the same CCNL) has had the task of investing in lifelong training of employees, e-learning is not explicitly taken into account by the agreement between employers' associations and unions. Besides, the national employers' association (Federchimica) has not yet adopted policies or realized activities aimed at promoting or studying e-learning. These considerations lead to the conclusion that regulatory institutional pressures are rather low in the pharmaceutical industry.

In the banking sector, by contrast, the use of e-learning for continuous training is recognized by the labor market's institutions. First of all, the CCNL says that continuous training of personnel is an essential tool for developing human capital, and it has a strategic role in the transformation of the banking system. For this reason the collective contract states that the Bilateral National Organization has the task of promoting training by applying for European, national, and regional funds. It also states that from the year 2000, banks have to provide all employees with not only a fixed amount of training hours during working time, but also 26 hours per year spare time "through self-training using appropriate computing tools". Furthermore, the employers' association is promoting e-learning adoption through its training company (ABIFormazione), which is also one of the main e-learning providers in the banking industry. ABIFormazione also promotes e-learning awareness in the industry through conferences and researches. For example, during 2002, ABIFormazione carried out two surveys on state-of-the-art e-learning in the banking industry. Finally, Bank of Italy (the Italian central bank) also did a survey, contributing to the development of e-learning awareness.

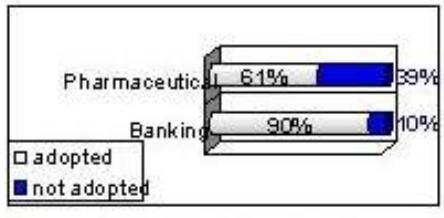
Adoption Rate

The rate of adoption in the two industries has been measured by three indicators: level of adoption (number of companies in the sample that have adopted e-learning), length of experience (number of years), and type of experience (an initial experience vs. a consolidated one).

The survey results show that in the pharmaceutical industry, the rate of adoption is in its infancy. Only 45% of pharmaceutical companies have adopted e-learning. However, in the banking industry, 91% have adopted it. Pharmaceutical companies are still at an initial phase, the majority have no more than two years experience, and the solutions are still sporadic. Only one company has well-established experience in e-learning and two organizations are at an intermediate stage.

Figure 2. Adoption of e-learning and quality of experience

Number of companies



Type of experience

	Banking	Pharma
Advanced	28%	8%
Intermediate	33%	17%
Initial	39%	75%

Lenght of experience

	Banking	Pharma
< 1 Year	22%	40%
2 Years	45%	50%
> 3 Years	33%	10%

Main Trainees

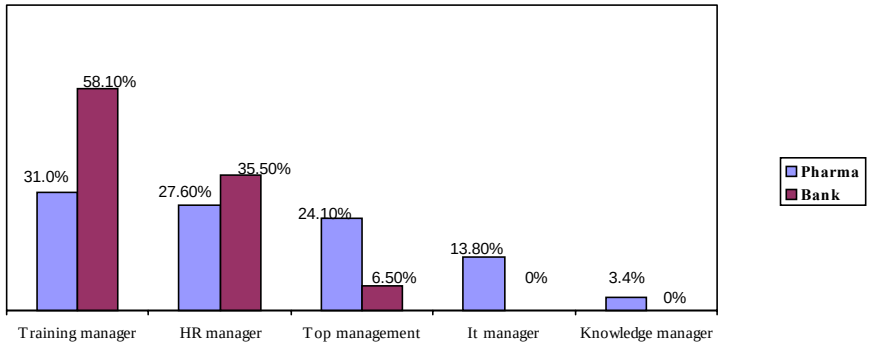
Banking		Pharma	
Tellers	94%	Sales people	92%
Private consultants	78%	Production	8%
Corporate C.	61%		
Branch manager	72%		
Head offices	78%		

In the banking industry, nine banks have already experienced e-learning solutions for about one to two years and, in six cases, this training experience started more than three years ago. In 65% of the banks that have adopted e-learning, the application rate is intermediate/high. A confirmation of the spread of e-learning in the banking industry comes from an ABI survey, which shows that the majority of the banks interviewed (mostly the larger ones) have experienced distance training, with a high number of courses already supplied technologies by advanced. Moreover e-learning in banks is delivered to more segments of personnel than in pharmaceutical companies.

Decision Makers

As regard the decision makers, the unit in charge of the e-learning strategy is usually the HRM one in both industries. It manages the budget for e-learning (on average less than 25% of the total investment in training) and decides on the adoption of e-learning solutions. In half of the pharmaceutical companies interviewed, the adoption of e-learning solutions is decided by a single person who, in 70% of cases, is a human resources professional (HR director or training manager). In another nine companies, the responsibility is shared among the personnel management staff or with the IT manager. In banks, this decision is made mainly by the training director (18 banks); only in seven cases (35% of the total sample) is it made by both the training director and the HR manager.

Figure 3. E-learning decision makers



Main information sources are not only consultants but also colleagues. They are used to make decisions about e-learning adoption and to select the provider, which is chosen considering its capability to help companies during the implementation and maintenance phases. The advice of other users is a source for 23.4% of companies in the pharmaceutical industry. In 45% of the cases, these two sources are used together. In half the cases, companies indicate that conferences are important sources for gathering information, together with the advice of other users. This result seems to indicate that a social network is activated, helping the exchange and gathering of information necessary for the choice.

*Table 1. Main sources of information for choosing e-learning providers in the pharmaceutical industry**

	% of answers
Newspapers and magazines	6.4%
Internet	6.4%
Consultants	31.9%
Professional associations	4.3%
Management studies	10.6%
Conferences/fairs	17.0%
Advice of other users	23.4%

** multiple choices were possible*

*Table 2. Main sources of information to decide on e-learning adoption in the banking industry**

	w.a.**
Colleagues	2.8
ABI	2.2
Rules	2.5
Training companies	2.2
Unions	2.0
ICT provider	1.9

**multiple choices were possible*

***weighted average on a scale1-4: 4=very important, 3=important, 2=less important, 1=not important*

These outcomes are confirmed in the banking industry. The interviewed banks state that the advice given by colleagues in the human resources area are decisive for the adoption of e-learning. Secondly, the companies interviewed stated that training regulations have a significant influence on their adoption of e-learning. Another notable influence comes from the indications given by ABI or other public institutions, which deal with training. It is interesting to note that ICT providers are the least used source of information from the companies' point of view.

Concluding Remarks about the Adoption Decisions

Data suggests that institutional pressures could explain the different rate of adoption in the two industries. In both industries, social professional networks are an important source of information and advice. This is particularly true in banks where the decision is made mainly by human resources professionals. Moreover, the analysis of sources of information also seems to demonstrate that banks' decision makers rely on labor market institutions, namely ABI.

The presence of institutional factors that impact on the adoption decision is also demonstrated by the level of e-learning effectiveness stated by the interviewed companies. In fact, it seems that, despite its diffusion, e-learning is not perceived to be very effective. In the pharmaceutical industry, three companies out of the nine experimenting with e-learning find this experience non-effective (two of them have a well-established experience of over two years). Furthermore, it has to be underlined that on an evaluation scale from 1 (not effective) to 4 (very effective), none of the companies attributes the maximum score to e-learning. In the banking industry, only one organization states that e-learning is a highly effective training tool and another eight (5% of the banks that use e-learning) say it is effective, while six (30% of the banks that use e-learning) admit that its effectiveness is limited. Among these last six, one bank is at an initial stage in the application of e-learning, while the other five have a longer established experience. The choice of investing in e-learning, although the effectiveness is not high, can be considered a signal of the presence of search of reputation rather than of ROI.

One can argue that competitive bandwagon pressures are also present: if competitors apply e-learning because they perceive that it can allow flexibility and efficiency in the training processes even if in the short term there are a few problems, then the fear of competitive disadvantages related to non-adoption

of e-learning (in terms of higher training costs) is a pressure that exceeds a company's resistance to adoption costs.

E-Learning Strategy

As seen in previous paragraphs, Italian companies belonging to the two industries analyzed have invested in e-learning in the last few years. Thus most of them do not yet have a well-designed and implemented e-learning strategy. However, their reply to the question on objectives shows that a common trend among banks and pharmaceutical companies can be identified. Data from the survey show that the main benefit expected from e-learning is flexibility of designing and delivering courses (anywhere and anytime). A second advantage is connectivity that fosters communication and diffusion of knowledge in the company. In addition to these factors, there is cost reduction. Objectives, as expected, are mainly associated with efficiency and flexibility, those more easily related to competitive bandwagon pressures.

*Table 3. Aims of e-learning**

	PHARMA OBJECTIVES w.a.**	BANK OBJECTIVES w.a.**
Anywhere, training closest to the trainee	3.0	3.2
Anytime, when I want, at the right time	3.0	3.4
Updating training content rapidly and efficiently	3.1	3.0
Fostering the spread of knowledge within the organisation	3.0	3.4
Flexibility, coherence with learning style of trainees	2.9	2.9
Cost savings	2.9	2.7
Fostering communication processes within the company	3.0	2.8
Monitoring how much the trainee has learnt	3.3	2.7
Faster learning than traditional training	2.3	2.1
Coherence among training and individual and company objectives	2.7	2.9
Self responsibility of trainee towards training	3.1	3.1
Attracting talent people	2.5	2.2

** multiple choices were possible*

*** weighted average on a scale1-4: 4=very important, 3=important, 2=less important, 1=not important*

E-Learning Users

The issue of e-learning users (Figure 1) should be considered from three perspectives. The first is the HRM perspective. E-learning implementation could be an opportunity to reorganize the training processes and also HRM processes from a functional approach (policy-based) towards a more customer-based approach, to match two different and sometimes opposite drivers. One is the need to reorganize the training and development function in order to focus it on key roles and their competencies profile. The second is to cut administrative costs. This type of change has been made by some companies in both the industries studied, where the adoption of e-learning is associated with a reorganization of training activities (75% of the pharmaceutical companies and 80% of the banks). The most common impact is the redefinition of training processes by targets (professional families).

A second perspective is that of the end user. First of all, the full exploitation of efficiency advantages, namely cost reduction and flexibility of delivery, are related to the fact that specific roles, such as a sales force, are geographically spread. They need to be in continuous contact with the clients/customers and the market on the one hand, and on the other with the companies to stay up to date regarding new products or procedures. Thus, courses that can be delivered anywhere and anytime are particularly suitable for them. Secondly, to the extent that e-learning leaves more freedom to users, trainees' commitment is critical. Thirdly, e-learning needs basic ICT knowledge to access material and tests. Finally, the problem of isolation could undermine the learning process and results.

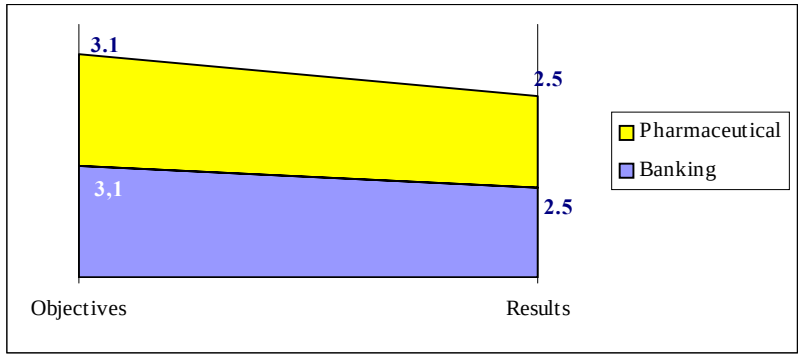
Data from both industries confirm that the sales force is the main user of e-learning courses. In the pharmaceutical industry, the main trainees are sales

Table 4. Impact of e-learning on the reorganization of training activities[*]

	PHARMA No. of companies	BANK No. of companies
Reorganization by targets	7	15
Reorganization by processes	5	4
Reorganization by geographical area	1	1
No impact	5	4

[*] *multiple choices were possible*

Figure 4. Self-responsibility of trainees



people and, in a few cases, the personnel in charge of production (training in standard procedures). In the banking industry, 95% of the banks that adopt e-learning use this tool to train counter staff. E-learning is also used to train private consultants (80% of the banks that adopt e-learning) and corporate consultants (61% of the banks that adopt e-learning). Only a few larger companies with consolidated e-learning experience also train branch managers and head office personnel. Five banks (25% of the banks that use e-learning) stated that they use e-learning with all their personnel.

Basic ITC knowledge among learners is a problem in the early stages, but companies do not think that this will still be a problem in the future. This is related to the fact that the first courses provided online are ICT and language courses, as data show.

Different results regard trainee commitment. Comparisons of objectives and problems highlight the fact that Italian companies consider the self-responsibility of trainees one of their main objectives but, at the same time, this is one of the critical problems of the future. To force people to take ownership of their learning will be a big challenge for companies that want to move from just-in-case to a just-in-time and "just-for-me learning".

The third perspective regarding users concerns the line managers. Line managers are particularly relevant in the early stages, when e-learning needs a culture-building process, managerial support, and communication. Managers themselves could be learners. Data on Italian pharmaceutical and banking companies confirm that among the most frequent problems cited, there is a lack of e-

*Table 5. Main problems of e-learning strategies**

	Pharmaceutical **EXPERIENCED** (w.a.)**	Pharmaceutical **FUTURE** (w.a.)**	Banking **EXPERIENCED** (w.a.)**	Banking **FUTURE** (w.a.)**
Changing the training processes and structure	3.0	3.2	3.3	3.0
Blended learning	4.0	2.8	3.4	3.5
Basic IT knowledge among learners	4.0	2.6	2.1	2.0
Limited cooperation between HR and IT	4.0	2.5	2.2	1.8
Showing the benefits of e-learning to the management	3.7	3.3	3.1	2.6
Increasing bandwidth	3.7	2.6	3.2	2.3
E-learning culture	3.6	3.3	3.5	3.3
Showing the benefits of e-learning to the trainees	3.4	2.9	3.1	3.3
Measuring effectiveness	3.0	2.6	2.9	3.3
RU knowledge	3.0	2.3	2.9	2.7
Platform choice	2.7	2.8	3.1	2.5
Infrastructure	2.5	2.9	2.8	3.0

** multiple choices were possible*

*** weighted average on a scale1-4: 4=very important, 3=important, 2=less important, 1=not important*

learning culture and a difficulty to show the benefits of e-learning to the management. These problems can be seen not only among past problems but also among future issues (Table 5).

Content

The choice of content is driven by three factors. First of all content may be defined as being related to the type of learning it will support. In the IBM content model, there are four e-learning levels. At the first level, content is information (*learning by information*: Web lecture, Web books, etc.). At a second level, content is knowledge, multimedia, and interactive learning objects (*learning by interaction*: CBT, interactive games, self-directed learning objects, coaching, and simulations). At a third level, the main content is collaboration (*learning by collaboration*: e-labs, real-time awareness, live conferences). At the fourth level, the content is delivered off-line (*learning by face-to-face*: mentoring, coaching, case studies).

Secondly, content may be identified by taking into consideration the type of result it would obtain: provide *information* about products and processes, enhance job-specific or company-specific *knowledge* and develop best performers' *behaviors*.

Finally, a third approach to content concerns the architecture of the course-product. A course like a product could be considered as an integral product or a modular product. In the first case, a company is much more constrained by its choices, and the course can be changed at a higher cost than a product in modules. The search for modularity through the granularity of a learning object is driven by the advantages of costs (scalability) and flexibility. Designing learning objects, however, requires a metadata index and a reference for the content of the learning objects, like skills required for a job.

As regards e-learning contents, pharmaceutical companies develop technical-operative skills by e-learning courses; they also train in product and service knowledge, and computing and foreign language skills. The majority of companies do not believe that managerial skills can be taught effectively through e-learning. Training contents delivered mainly by e-learning in the banking industry are information concerning new products and banking ser-

*Table 6. Main contents**

	PHARMA **REALISED** w.a.**	PHARMA **FUTURE** w.a.**	BANK **REALISED** w.a.**	BANK **FUTURE** w.a.**
Technical-operative skills needed to perform one's job	3.0	3.5	3.2	3.7
Organizational systems and processes	1.7	3.4	2.9	2.8
Basic and specialist knowledge	2.3	3.2	3.1	3.3
IT training	2.7	3.1	3.2	3.3
Linguistic training	2.8	3.1	2.7	3.2
Distance coaching	1.7	3.0	1.7	1.5
Company's product and services	2.7	2.8	3.5	2.8
Managerial competencies (communication, project management, etc.)	1.0	2.6	2.6	2.0

** multiple choices were possible*

*** weighted average on a scale1-4: 4=very important, 3=important, 2=less important, 1=not important*

vices. E-learning is also considered very important for teaching basic and specialist knowledge (e.g., basic finance, counter operations, and credit management), technical-operative skills (anti-money laundering, privacy and security, Lira/Euro conversion procedures), as well as the company's internal systems and processes. E-learning is also considered effective in teaching ICT skills and foreign language skills. It is considered far less effective though as a tool to create managerial skills (selling or project management) or organizational skills such as the ability to communicate, and even less important as a distance coaching tool.

In both industries, e-learning allows companies to deliver courses anywhere and at any time thanks to modular and asynchronous solutions. It also allows quick redefinitions of the courses in order to face changes in regulations or the reduction of time to market of new products.

In brief, Italian companies seem mainly to deliver learning by information (about product and process) and only in part learning by interaction, and they aim mainly to develop job-specific knowledge.

Infrastructure

Technology is not the main driver of an e-learning strategy. From a company's point of view, the right learning management system does not ensure the quality of the e-learning. As some authors maintain, the choice of technology is related to a comparative analysis of costs and effectiveness: CBT may be an alternative tool to online training (Shank, 2001).

Data from top companies in the U.S. revealed that they are still struggling with technological problems (Kruse, 1999). From the trainees' point of view, technology matters in the daily or weekly access to e-learning courses. Some technological problems (slowdown or failure to access the Intranet) may undermine the delivery process and should be considered when a company decides what type of services and support it must provide learners with.

In the Italian pharmaceutical industry, the technological solution considered most effective is the virtual classroom, together with the personalized LMS platform, computer-based training, and training via mobile phones. In two cases, CBT is supported by other tools (laptop and virtual classroom).

In the banking industry, the technological solution used mainly and very effectively is indeed personalized LMS platforms. Computer-based training is

*Table 7. Technological solutions**

	PHARMA w.a.**	BANK w.a.**
Customized LMS platform	3.0	3.6
LMS platform in ASP solution	0	3.3
Standard LMS platform	1.0	3.0
LCMS	0	3.0
CBT	3.0	2.5
Virtual classroom	3.5	2.0
Tools used jointly	0	2.4
Mobile phones	3.0	2.0
Business television	0	0

** multiple choices were possible*

*** weighted average on a scale1-4: 4=very important, 3=important, 2=less important, 1=not important*

the second choice in terms of the number of interview responses, even though it is considered less effective. Virtual classrooms and training via mobile phones are used less.

As for the main problems for the future, both the banks and the pharmaceutical companies declared that there are infrastructure problems, while increasing bandwidth (a present issue) will no longer be a priority in the future.

Services and Supports

Services and supports means that e-learning can be delivered and utilized by trainees, if they are assisted by organizational and technological solutions at the different stages in the e-learning process. In order to foster satisfaction with e-learning, to reduce drop-out rates, and to create an e-learning culture within the organization, Italian companies are implementing a number of organizational solutions.

Most companies in the pharmaceutical industry use internal tutoring and consider it pivotal in the process of e-learning training. Another solution is the support given by unit managers. A positive judgment is given to collaborative learning such as online discussion forums and chat sessions. However, these tools are still not diffused.

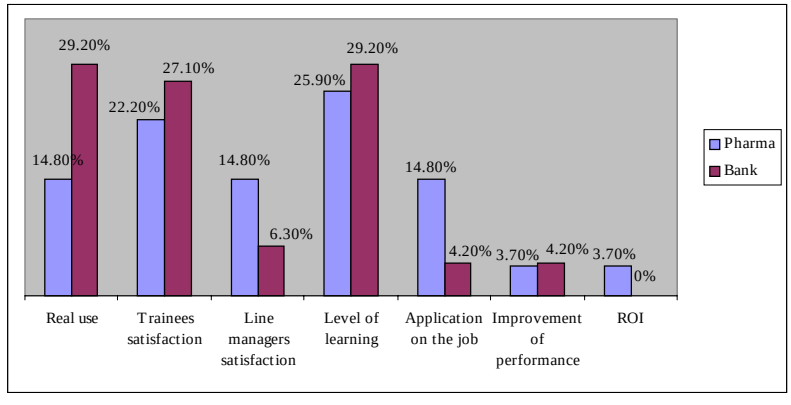
*Table 8. Organizational supports to technological solutions**

	PHARMA w.a. **	BANK w.a. **
Internal tutoring	3.4	3.2
Support of unit manager	3.0	2.7
Online forum	3.0	2.5
External tutoring	2.5	2.3
Chat rooms	3.0	2.2
Virtual classroom	2.5	2.0

** multiple choices were possible*

*** weighted average on a scale1-4: 4=very important, 3=important, 2=less important, 1=not important*

Figure 5. Control systems



Tutorship is also the most widely adopted solution in the banking industry. In particular, an internal tutor is considered more effective than the external one. The support of unit managers is less common (six banks), but is considered effective. Eleven banks (55% of the companies that use e-learning) also mention online discussion forums, however, they are not considered to be as effective as internal tutoring.

As regards the *control* systems used in order to assess the results of courses and learning processes, pharmaceutical companies use more than one indicator. On average they use three different ones. Feedback information about e-learning performance is obtained mainly by testing how much employees have

learned and how satisfied they are with the courses. Other criteria adopted in 15% of the cases are the assessments of how satisfied the whole organization is and the extent to which the knowledge acquired through training applies to one's job. Evaluation criteria such as ROI or improvement of performance are not used.

In the banking industry, companies assess the level of learning attained in order to measure the effectiveness of an e-learning program; moreover, they compare the aimed targets with how effectively the training programs are used and measure the satisfaction level of users. Three banks also measure the satisfaction level of the whole organization. The application of knowledge and skills learned on the job and the improvement of performance are both measured only in two cases (10% of the banks that use e-learning). ROI is definitely not contemplated. It should be noted that 15 banks (75 % of the banks that use e-learning) use at least two measurements, nine banks (45%) use three, and in two cases, five indicators are used.

To summarize, the results indicate that on average more than one indicator is used in both industries, pharmaceutical and banking, but the most that are adopted are traditional; monitoring systems that focus on means-ends relations (like improvement of trainees' performance) or on returns on this innovation (like ROI) are rarely used, confirming the hypothesis that the assessment of e-learning returns is difficult and ambiguous.

Future Trends

A B2E Strategy for E-Learning

Both institutional and competitive pressures seem to have a twofold effect on adoption processes. On the one hand, they prompt a search for information and best practices through social networks. On the other hand, they provide a frame of reference to companies that have to choose. They seem to highlight two issues from among others emerging from the debate on e-learning. Pressures are forcing companies towards a B2E strategy, through which it may increase both the value to employees and the value to the company. Institutional pressures highlight the added value to employees of e-learning solutions. Competitive pressures seem to highlight a firm added value more related to the

aspects that can most easily be recognized by companies: cost savings and uprating a flexibly deployed workforce.

Recent research into e-HRM (Hansen & Deimler, 2001) developed a model conceiving both sides of added value. If we apply the model developed by Hansen and Deimler to the whole system of e-HRM applications, specifically to e-learning, we may identify three facets of a *B2E strategy for e-learning*:

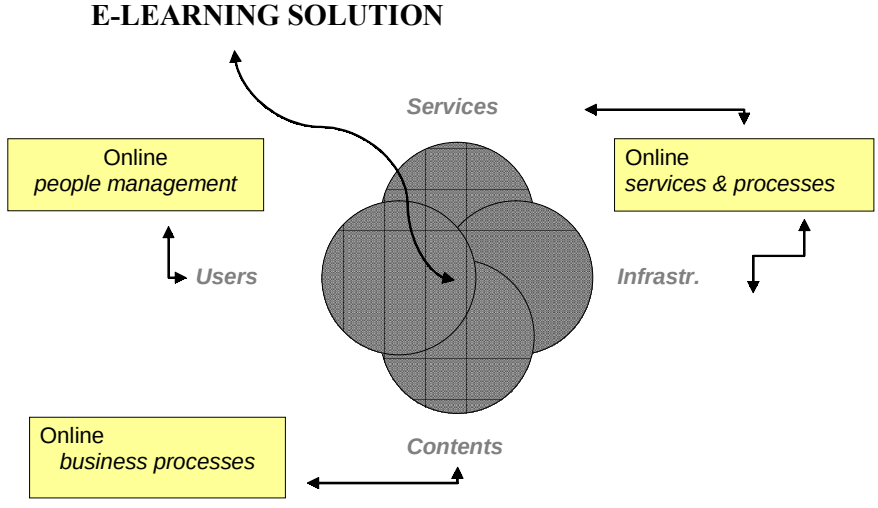
- **Online business processes:** The primary driver of this facet is to reduce interaction and coordination costs and effort within the organization to do the business with e-learning solutions (Maxey, 2003). A first objective is the codification process of knowledge and information about product and processes—for instance training in common processes in companies interested by M&A strategies, or training on new products — in innovating companies. A second objective is enhancing individual information exchanges by facilitating the creation of discussion groups and communities of practices as a by-product of an e-learning course. Third, e-learning could help customer/employee interaction by providing just-in-time information and integrating knowledge management tools with e-learning, such as an information desk.
- **Online people management:** The primary driver of this facet is to provide easy tools to help employees to develop personal skills and competencies. This facet on one hand comprises bundles of policies like online performance management and/or competency management complementary with e-learning. On the other hand a new direction of this policy is to facilitate "learning in the context of work rather than in the context of training" (Rosenberg, 2003) — increasing not only the freedom of employees to choose the courses they think they need and the way they learn through them, but also providing online access to something (knowledge, information, material, etc.) that people need for a better performance, when and where they want.
- **Online services and processes:** The primary driver of this facet is to provide services and information useful for benefiting from e-learning courses such as counseling, educational advice, or tutorship. E-learning B2E applications may reduce costs and effort associated with delivery and training courses, for instance by an online search for courses and information on course availability.

Emerging B2E Strategy for E-Learning in Italy

In the actual experience of Italian companies, some weak signals of an emerging *B2E strategy for e-learning* can be seen (two in-depth case studies are in Appendix Box 1 and Box 2):

- **Online business processes:** Respondents are interested in a company's benefits of streamlining learning processes. The importance of connectivity shows that online business processes of B2E e-learning strategy, thus the coordination of employees spread throughout the organization and in the field (sales force), is a primary driver. Another objective is the codification process of knowledge and information of product and processes, as the two cases of Unicredit and BPM illustrate. As previously mentioned, companies are in search of cheaper, faster solutions for providing learning by information and by doing so in the context of work.

Figure 6. "B2E" perspective of e-learning



- **Online people management:** Italian companies analyzed seem to implement e-learning with a push approach instead of a demand pull one. Moreover, in the more advanced experiences, such as the cases of BPM and Unicredit, e-learning is planned and delivered mainly by following companies' training programs and scheduling. Also, companies are not investing in other policies related to e-learning, like knowledge management and performance management. However, they pay a great deal of attention to properly designed courses and tests, in order to overcome individual problems and increase motivation. Companies interviewed seem to be oriented to facilitate "learning in the context of work rather than in the context of training" by providing just-in-time information.
- **Online services and processes:** Tutoring is, among other things, the solution Italian companies favor most, even if companies approach it in different ways: internal vs. external, push or pull tutorship, or both. As the two cases (BPM and Unicredit) in the banking industry suggest, there is no one best solution. This facet, as well as online people management, aims to arouse the interest and the motivation of people, by providing services and roles that make e-learning less "cold" and isolated.

Conclusions

This research was aimed at studying the adoption of e-learning in the Italian pharmaceutical and banking industries and their e-learning strategy.

The ambiguity of decision gives importance to bandwagon pressures, and to external networks of colleagues who HR professionals use when they need information and suggestions about adopting e-learning. Results seem to confirm that e-learning is more widespread and sophisticated in the banking industry, where there are more bandwagon pressures. Some common traits can be identified in the e-learning strategies of companies of the two industries. However, the two cases studied, Unicredit and BPM, show that e-learning is adopted by an implementation process that leads to firm-specific solutions.

By analyzing the main objectives and problems cited by companies interviewed, the learners' motivation is the current and future main issue of both pharmaceutical and banking management. On one hand, e-learning, especially based on self-directed training courses, allows more autonomous learning. This

means that e-learning helps a participant choose how and when to access the course. On the other hand, people face problems in terms of isolation, complexity of multimedia tools, slowness in running cooperative tools, and technological problems. Consequently, firms should care for their people commitment by investing on the four features of their e-learning strategy.

Finally, with respect to our research methodology, it is worthwhile highlighting that, given the explorative nature of the research, we have favored the analysis of a small but significant group of companies, together with case studies, in order to study in greater depth the dynamics of the adoption process at the organizational level. A line of research could be the extension of the analysis to other cases within the same industries, for stronger literal and theoretical replication (Yin, 2003; Eisenhardt, 1989). The study of other industries, characterized by different institutional and competitive pressures, could help to test the bandwagon model.

References

Abrahamson, E., & Rosenkopf, L. (1993). Institutional and competitive bandwagons: Using mathematical modeling as a tool to explore innovation diffusion. *Academy of Management Review*, *18*(3), 487-517.

Abrahamson, E., & Rosenkopf, L. (1997). Social network effects on the extent of innovation diffusion: A computer simulation. *Organization Science*, *8*(3), 289-309.

Anee. (2002). *E-learning 2001.* Report of the Associazione dei Servizi e dei contenuti multimediali, April.

Brewster, C., & Hegewisch, A. (Eds.). (1994). *Policy and practices in European human resource management*. London: Routledge.

Cohen, W.M., & Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly, 35*, 128-152.

Comacchio, A., & Camuffo, A. (1999). Diffusion patterns of lean practices: Lessons from the European auto industry. In A. Comacchio, G. Volpato, & A. Camuffo (Eds.), *Automation in automotive industries.* Berlin: Springer

DiMaggio, P.J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*, 147-160.

Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532-550.

European Commission. (2003). Lifelong learning: An overview of national measures in the EU Member States and Candidate Countries, *European trend chart on innovation*, Brussel.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, *91*, 481-510.

Haberberg, A., & Binsardi, A. (2002). Institutional influences on organisational consensus. Paper presented at the *British Academy of Management Conference,* Hammersmith, London, UK. September.

Hansen, M.T., &Deimler, M.S. (2001). Cutting costs while improving morale with B2E management. *MIT Sloan Management Review*, *43*(1), 96-100.

Horton, W. (2000). *Designing Web-based training*. New York: John Wiley & Sons.

IDC. (2002). *European corporate business skills training market forecast and analysis 2000-2005.*

Kirkpatrick, D.L. (1998). *Evaluating training programs: The four levels* (2nd ed.). San Francisco: Berrett-Koehler.

Kruse, K. (1999). Real world WBT: Lessons learned at the Fortune 500. Paper presented at the *ASTD International Conference & Exposition,* Atlanta, Georgia.

Ley, T., & Ulbrich, A. (2002). Achieving benefits through integrating e-learning and strategic knowledge management. Retrieved from *www.eurodl.org/materials/2002*

Martin, G., Robson, I., & Jennings, A. (2002, September). When absorptive capacity meets institutions and e-learning: Adopting, diffusing and exploiting e-learning in organizations. Paper presented at the *British Academy of Management Annual Conference,* Hammersmith, London, September.

Maxey, J. (2003) E-learning brain trust, ASTD, learning circuits. Retrieved from *www.learningcircuits.org/2003/sep2003/braintrust.htm*

Nacamulli, R.C.D. (Ed.). (2003). *La formazione, il cemento e la rete.* Milano: Etas.

Piskurich, G.M. (2003). Editor's introduction: What is e-learning? In G.M. Piskurich (Ed.), *The AMA handbook of e-learning.* New York, Amacom.

Prandstraller, F. (2001). Corporate e-learning: Myths and reality. Paper presented at the *Hawaii International Conference of Social Science.*

Rosenberg, M.J. (2001). *E-learning. Strategies for delivering knowledge in the digital age*. New York: McGraw-Hill.

Rosenberg, M.J. (2003). E-learning brain trust, ASTD, learning circuits. Retrieved from *www.learningcircuits.org/2003/sep2003/braintrust.htm*

Schank, R.C. (2002). *Designing world-class e-learning*. New York: McGraw-Hill.

Staw, B.M., & Epstein, L.D. (2000). What bandwagons bring: Effects of popular management techniques on corporate performance, reputation, and CEO pay. *Administrative Science Quarterly, 45*, 523-556.

Walker, A.J. (Eds.). (2001). *Web-based human resources*. New York: McGraw-Hill.

Yin, R.K. (2003). *Case study research: Design and methods.* Thousand Oaks: Sage Publications.

Endnotes

1 The collection of data for the survey in the pharmaceutical industry was carried out by Business International with Sfera's sponsorship.

2 Companies interviewed in the pharmaceutical industry were: 3M, Air Liquide Sanità, Astrazeneca, BristolMeyers Squibb, Chiesi, Farmaceutici Caber, Farmaceutici Damor, Gsk, Informa, Lilly Italia, Merck&Sharp, Organon, Pfizer, Procter&Gamble, Sanofi Sythelabo, Taked Italia Farmaceutici, Sigma Tau, UCB Pharma, Wyet Lederle, and Zambon.

3 Companies interviewed in the banking industry were: Credem, Deutsche Bank Spa, San Paolo IMI S.p.A, Banca Popolare di Milano, Bipielle, Cardine Finanziaria S.p.A., Banca S. Biagio del Veneto Orientale, Banca

121 S.p.A, Banca di credito cooperativo di Cartura, Banca Fideuram S.p.A., Banca delle Marche S.p.A, Banca Carige S.p.A, Banca Popolare dell'Emilia Romagna, Banca Popolare di Verona e Novara, Banca popolare di Vicenza, Banca Antonveneta, BNL, Cassa di risparmio di Trento e Rovereto, Banca Intesa, Banca di Roma, Unicredit, and Bancaintesa.

Appendix

Box 1. Unicredit

Unicredito Italiano, created in 1998 by the union of seven Italian banks, is the top banking group in Italy in terms of stock exchange capitalization and, furthermore, it is one of the major European groups. The group overall has a network of 4,115 branches and 66,000 employees. Following a reorganization process, which was concluded in 2003, the group operates through three national banks specializing in customer-based operations: Unicredit Banca (families and small businesses), Unicredit Banca d'Impresa (medium-sized and large companies and corporations), and Unicredit Private Banking (for major customers). In 2002, UnicreditBanca launched an e-learning project that was implemented through a company belonging to the group, TradingLab, which coordinates the project and handles most of the matters together with two of the group's other companies, jointly with marketing management and personnel management, and in collaboration with Sda Bocconi-Milano, which acts as consultant and content auditor.

Infrastructures

For some two years now, the Unicredit Group has already had a platform that carries out online training activities and is supported by an overall strategy of computer literacy. In the context of this strategy, the group has decided to provide each employee with a free home computer, which gives comprehensive access to the Internet. The group is equipped with a network of 400 multimedia stations, which will be expanded in time to 600 stations.

From a technological point of view, TradingLab's e-learning project is part of a general, wider initiative that seeks to use the digital approach in order to accomplish an expertise and information development strategy, which not only benefits the abilities of the individual but the entire know-how of the Unicredit Group. In addition to Banca Unicredit's e-learning project, other examples of this strategy are a commercial desk, which is at the disposal of all the members of the group, and the presence of an online group investment desk.

Content and Learners

The goal of the TradingLab project is to develop and certify the distinctive expertise profile of the private customer consultants. The goal is also to develop the competencies present in the group, at the same time standardizing the know-how of the seven member banks.

Planning of the content takes place internally and, as a whole, concerns 10 areas relating to investment services and to the skills required to sell them (financial mathematics, risk analysis, shares and bonds, the working of the capital markets, managed savings or funds, warrant certificates, and financial derivatives). Training is at three levels of expertise and therefore involves three courses: Level A, the most basic, through to C for a senior consultant. The content for each level is subject to constant checking and re-editing. A preliminary online self-assessment test, in which nearly all the consultants have participated freely, has allowed the training level and the course or modules for each learner to follow to be established. Certain consultants had direct access to the B-level/course.

Box 1. (continued)

The 10 modules planned for each level/course are structured in an integrated manner, especially at the higher levels: the preparatory material for the Level B modules is obligatory, while in the case of Level A, being the basic, they are only recommended. Blended-learning is envisaged at each level, which integrates eight online modules with two in the classroom. The classroom activities are spread over four days and are thus aimed at the modules that are more difficult to manage online (for example, in the case of Level A, warrants, financial derivatives, and bonds), and the administering of an evaluation test on all 10 of the course's modules.

Also as part of a path established by *company push*, the access to each online module (which lasts two to four hours) is *learner pull*. The internal structure of each of the eight online courses is divided into three sections. Unrestricted navigation within each section is possible, just as it is from one section to another. Each module can be used at different times and flexibly, according to individual requirements. Therefore, for a module with an average duration of two to four hours, individual utilization time is extremely variable.

The bookmark function is included to make the program even easier to use. This will allow the user to pick up again from exactly where he/she stopped in the previous session. Furthermore, there will be an interactive exercise every three or four slides that has the purpose of keeping the user's attention and monitoring the learning. Each module has a glossary and perhaps a link to further the study of a particular point (for example, the cross-reference to a law).

There will be a test at the end of each module that can only be accessed if the entire module has been completed, and it is recommended that at least a week be dedicated to study after the e-learning is finished. In the event the test is not passed, the examination can be taken again after doing the complete course once more.

Services and Supports

Services and support materials are aimed at facilitating access to the online course and minimizing the perception of isolation. To support e-learning courses, printed material is distributed to make it easier for people who find it hard to follow the online course alone to study. This solution has meant an improvement in the results in the testing of certain modules, which recorded a 90% pass rate.

As regards the offices equipped with a multimedia station for e-learning, there is a person in charge of the local organization who fixes the dates for use of the courses during working hours. Each person in charge coordinates about 40 employees. Even though he is closely involved in the quality and the development of the online training process, this person does not perform the function of tutor—a role that has not as yet been activated.

From the project's outset, the group's portal has had a section dealing with the instructions and to the recommendations for use of the online courses. There is also a mailbox for users that provides (within 48 hours) answers to problems both of a technical and organizational nature (method of use). This activity is managed by an internal structure currently consisting of two people who telephone the users who have taken the examination the previous week to congratulate them on the positive examination results, and to give advice on the rest of the course on the basis of an examination of the weekly attendance and exam result statistics. The principal aim of the service, which is most appreciated by the learners, is that of maintaining the motivation to learn and, above all, to establish a relationship that the trainees will then have to recreate with the final customer.

Box 1. (continued)

Tracking and Assessment

The tracking activity is currently aimed at monitoring the access to a module (that is freely chosen by the employee) and the test results. In the future, the plan is to activate more of the platform's functions for more in-depth tracking of the use of the courses. Moreover, to check the satisfaction of the e-learners, a "your opinion of the course" approval test has been prepared, which can only be completed after the whole course has been attended and which concerns course satisfaction and how clear and usable the course content was.

Box 2. Banca Popolare di Milano

The Banca Popolare di Milano (BPM), founded in 1865, is an interregional commercial bank and one of the largest in Italy. The group is developing an expansion strategy nationally, and at the European level, through internal growth and mergers and acquisitions.

Infrastructures

The Banca Popolare di Milano started using internal distance learning back in 1988, making it one of the pioneers of distance learning in Italy. It has had training activities available on CD-ROM and videoconference forums since 1997 and, starting from 1999, it has introduced blended solutions (FAD and classroom) supported by tutorship.

The BPM group is equipped with a widespread technology. The platform has become an extranet and the courses are used from learning points wherever the bank operates through an LMS. Depending upon the number of people, there are one to three learning points per branch dedicated to distance learning,. Consequently, the network of 600 branches has one learning point available for every 15 employees, with a total of about 6,700 workers involved. The workstations are also present in the head office and in the training unit, where there are 10 computers available. The distance training activity currently covers 65-70% of the total training delivered to the employees. The main advantage of the high investment in e-learning is considered, from a business point of view, to be efficiency in terms of the times and codifying of the company know-how, as, for the first time, new profiles of expertise are identified and widely developed within the organization.

Content and Learners

Training in BPM is structured on the basis of professional families. For each professional family (private managers, private plus managers, retail company managers, portfolio managers), a competency model has been identified on the basis of which a specific blended learning training path is designed, which provides for the combination of online modules and classroom modules. The competency analysis process, which was begun in 2000, has been implemented with the cooperation of external companies and through interviews with branch and office managers.

Box 2. Banca Popolare di Milano (continued)

The most consolidated competency profile within BPM is that of the *private* manager and includes knowledge pertaining to the products and services offered to the customer which in recent years have broadened to include insurance and the complementary security, as well as knowledge of regulations (national and internal memos). The skills to manage relations with the customer such as negotiation, customer care, and customer satisfaction skills also fall under the expertise of the *private* manager.

Starting with the expertise model thus identified, a training path was designed in seven steps, each of which could consist of online or classroom modules. As part of planning a modular approach, the learning path is sequential and each of the didactic units is therefore a preparation for another. On average a course lasts two hours and is broken down into didactic units of about 20-40 minutes. The individual user time envisaged for an hour of e-learning is about one week (during working hours), branch activities permitting. The contents of the modules have been designed with attention to the interactive elements: self-evaluation tests for the quantitative part, cases, tasks, and interactive games. Each module also comprises supplementary activities such as commercial proposals or bibliographies that can be called up by clicking on the screen at the user's discretion. Among the new professionals involved in training is that of the *information broker,* who is particularly significant, as s/he is responsible for finding, researching, and cataloging data and materials useful for the definition of the content. S/he acts, for example, as the story boarder at the moment when a certain amount of information concerning a particular subject is necessary, and s/he also has the task of organizing the alternative subjects.

Each module is designed to include a final meeting in the classroom which has an evaluation as well as a training purpose. The post FAD is considered to be a motivational element that is very important to stimulate the learners at the end of the course. The path lasts nine months overall.

Services and Supports

The distance training modules are published on the learning management system, which has an initial "Welcome on Board" session in the classroom or in a videoconference that lasts about three hours. This session has the aim of introducing the tutors, the training environment, and the planning of the start of the individual modules. During the Welcome on Board session, the tutors provide all the instructions necessary for how to use the course. Two types of tutorship are used in BPM: pull tutorship and push tutorship. *Pull tutorship* is done through a call center managed by outsourcing. *Push tutorship* is internal and based upon the monitoring data (what and amounts) obtained. It provides the trainees with motivation, coaching, and counseling services. The tutors telephone the learners during the course to give ongoing encouragement and advice to do with the course.

Box 2. Banca Popolare di Milano (continued)

The permanent pool of tutors forms part of the training management and is composed of a minimum of two up to a maximum of six people. The tutor is neither associated with an individual course nor a determined number of people; he can, therefore, follow different courses and can manage an average of 150-200 learners. The push tutor does not carry out any expert subject matter activities, which are entrusted externally to a network of content experts. Second-level tutorship is, therefore, active upon demand, even if generally the number of questions is filtered by the tutors. The tutors' pushing activities and the classroom activity at the end of the e-learning course are considered fundamental factors of success of the training path. With the activation of the orientation and pushing services, the people who completed the training in an effective and satisfactory manner went from an initial percentage of 13-17% (completion percentage in line with European data) to the current percentage of 85-95%.

Tracking and Assessment

The data on the training path are gathered through an evaluation and tracking system. *Dependent-learner* monitoring is done at the end of each module and during the classroom meeting at the end of the overall training path, when both the approval evaluation by the trainees and the evaluation of their level of learning is ascertained. *Independent-learner* monitoring refers to the information concerning the work done and the way people learn (amount, times, methods of use, etc.), collected through the platform's tracking facility. This type of information is given to the tutors on a daily basis and is used by them in planning the push calls. The tracking data and those of the evaluation questionnaires (both individual and as a whole) are used either during the path or thereafter to evaluate the overall progress of the path or the time actually taken by the learners to use it, and to review (for example the duration) and design activities for subsequent courses.