

# Adoption of e-learning solution: selection criteria and recent trends

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## 1. Introduction

In recent years, various organizations of different nature have used at least once e-learning as a training method that can respond to a specific need. Although about 50% of the market is actually represented by the U.S., in Europe there are different realities, whose choices are only partly related to economic conditions (Temperiti, 2010).

In general, the reasons which prompted the company to resort to this kind of formation are summarized as follows (Garavaglia, 2010):

- need to train people located in remote locations;
- need to train a large number of employees, in order to create economies of scale;
- Allow greater customization of training programs and greater flexibility of use in terms of methodology and time.

The E-learning appears to be, after several years of evolution, a reality far from being transitory, that seems to move towards further consolidation as it can also face economic situations such as those of European countries in recent years. The following research is intended to understand how such factors can influence the world of online learning, coming to characterize and define the new requirements, resources and opportunities of the different solutions that can be implemented.

Specifically, it is to understand which are the criteria that different actors are using to select and build a choice concerning the “E-learning solution” to adopt. Moreover, it will be explored which are the possibilities that can be implemented according to technological developments and new organizational need of both HR and IT departments’ infrastructure.

To analyze the object of research, it has been decided to contact important learning providers and market leaders within specific service or geographical areas. In particular, the data collection has been carried out in relation to:

- Interviews with marketing managers of major available companies <sup>1</sup>;
- Analysis of solutions, products, and services offered by leading companies;
- Questionnaires to selected customers of e-learning products;

In the present case, six in-depth interviews were made with companies’ leaders who agreed to participate in the research, analyzed ten sites of providers (including some respondents) and collected the anonymous questionnaires of 125 companies<sup>2</sup> of different nationalities.

## 2. Criteria for choosing an E-learning solution

The choice of an E-learning solution is certainly a complex task that involves different levels of the company and it is different from case to case. The answers given by different companies, which largely are already using e-learning for staff training, showed a concentration of items related to general aspects of provider’s quality and service, such as **competence** (82%)<sup>3</sup>, level and **quality of customer care** (63%), **good reference and testimonial** (58%). Together with these results **competitive price** (66%) is a very important variable. The more decisive criteria seem to be less tied to the type of offer than the perception that the choice to be made is solid, safe and affordable.

Regarding technical aspects, it is to emphasize the high attention to the possibility of **integration** of purchased services and products within the organization’s system (74%): this finding highlights a major challenge faced in recent years, due to the need for simplifying access to applications, information and IT in general: dealing perfectly with different integrated softwares and systems has become a matter of survival. Other entries appear to be connected to this aspect, especially the presence of **cloud** solutions (43%), a substantially new reality that seems to evolve toward a definitive consolidation as it can be

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<sup>1</sup> We would particularly like to thank for the wide and precious collaboration CornestoneOnDemand, Docebo, Edutech, eXactLearning and Upside Learning.

<sup>2</sup> The companies that respond to the questionnaires are part of a non-probability sample made up by selecting from a list of providers’ customers and dissemination in some communities and social networks of the questionnaires through a network of professionals interested in issues regarding E-learning.

<sup>3</sup> For a detail on the perentages refer to Table 1.

exploited to achieve more easily integration with other different systems. Also related to the problem of integration is important to emphasize the utilization of specific technologies through the use of **APIs** (34%), i.e. the possibility to adapt the system to a number of users that can change greatly even in a short time, and the request of a system **Saas** (21%), definitely linked to cloud solutions.<sup>4</sup>

The **Learning Management System** remains the heart of online learning, and although it has been recorded decisive improvements in all systems, yet are emphasized the difficulties in terms of navigation (56%). There is also a remarkable interest for the presence of a **mobile** version of the platform (37%), which is obviously collecting more and more interest for the recent spread of smartphones and tablets in the professional field.

Regarding the request for a brand-new production of content (34%) and the possibility of buying ready-made solutions from a large catalog (35%), there seems to be the same interest. It is certainly an element that varies according to the needs and context.

| Item criteria                                  | %  |
|--|----|
| Competence                                     | 82 |
| Integration with other informatic system       | 74 |
| Low price                                      | 66 |
| Support  | 63 |
| References/testimonial                         | 58 |
| Quality/user friendly of LMS                   | 56 |
| Cloud  | 43 |
| Mobile version of LMS                          | 37 |
| Consulting                                     | 35 |
| Retail of Learning Object                      | 35 |
| Development of Learning Objects                | 34 |
| Unlimited Scalability                          | 34 |
| Integration with other application through API | 33 |
| Saas - Software as a Service                   | 21 |
| Talent Management System                       | 21 |
| Content Network Distribution                   | 20 |
| Hosting  | 18 |
| Fast Time To Market                            | 18 |

**Table 1 – Answers to multiple choice question “Which criteria do you use when choosing an E-learning solution?” (percentage of total builds)**

It is interesting to read these data based on responses provided by some leading companies, especially considering that the market is actually quite different for reasons related to the organizational complexity

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<sup>4</sup> Who said they will refer to Saas solutions, however, has indicated “cloud” among responses.

and number of members. Some companies base their offer on consulting especially if they historically come from the field of business consulting on HR, while other seem to focus on specific technological solutions.



Picture 1 – Tag cloud of the answers given during interviews with the e-learning’s marketing managers of six leading companies.

In the first case the offer is dedicated to solutions that aim to get a unique system of Human Resource Management and Training (e-HR and integrated E-learning), while the latter solutions are developed to integrate with the existing LMS used by the company<sup>5</sup>.

Among the first there are certainly Saba, SumTotal and Cornerstone, whose systems are strongly oriented to **talent management**, a not widely required solution at first: it requires complex planning as it works on long-term organizational level.

Among the latter there are companies that mostly come from IT, often exclusively associated with the use of educational technologies, such as eXactLearning, Upside Learning, Edutech and Docebo. These companies are focusing more on products and services with a high technology level, such as the development of sophisticated learning object for mobile devices or simulations that include more and more accurate AI engines or highly customizable Learning Management System and diversified hosting and cloud solutions.

Although guided by different philosophies, the surveyed companies did not show very divergent responses: the majority stressed that customers expect from them **appropriate consulting**, with nearly 50% of customers contacting them with general problems, barely having any idea of the kind of solution they will adopt.

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<sup>5</sup> A classic case of someone who uses very complex systems such as SAP, hardly changeable, and chooses to contact an e-learning company to implement an integrated system.

At a second level of importance, in line with the results of the questionnaire reserved to the users, customers want to verify **competences** and real **experiences**, which are generally explored through references of other companies. In this regard, a winning strategy some providers suggest is the publication on the websites of several pages dedicated to the analysis of successful cases of major customers.

A third level of importance is related to the characteristics of the offer, most of the times consisting in efficient systems' **integration**. This brings to the offering of a **hosting** or **cloud** service, often required by the customers in order to solve through the outsourcing complex issues regarding IT infrastructures. At the same level customers put technical features and quality of the **Learning Object**, even if some are looking for ready-made content to be delivered in short time and other require the development of *ad-hoc* content. However, a variable proportion of companies relies on self-made content or made by other companies specialized in multimedia contents. These requests, say some respondent, are influenced by the variability of the budget.

### 3. Platforms are not dead (yet...)

Starting from the famous article by Tim O'Reilly (2005), when it was created the term "Web 2.0", has been discussed several times about the possible abandonment of e-learning platforms (Downes, 2005). But this has not happened yet. Besides, the survey made is quite clear: all companies provide a Learning Management System (acquired or self-developed) and have never stopped doing it in the last years. From the interviews emerge very good news for the LMS providers: **the LMS platform is often the first product offered to customers**, along with other services inextricably tied to the platform itself. Every process or product comes to life within the LMS, which is, in a growing number of cases, integrated in companies' information system as well. Furthermore, whichever solution is chosen and adopted by the customer, it is necessary to acquire or consolidate an LMS environment.

It's obvious that Web 2.0 has not been able to provide a real alternative. Why? The analysis is quite simple, and is linked to the fact that when we were talking about "the platforms' death" in reality we were simply pointing out the ease-of-use of Web 2.0 over a range of issues that many LMS presented. The Learning Management Systems, while trying to meet the standards, presented different technical problems (Good, 2003), which have generally decreased over time (thanks to a greater standardization of the web protocols). Platforms evolved, taking inspiration from the tools that Web 2.0 offered, without losing their essential nature and especially the possibility to track the results and monitor the progresses of the user, a very important function for any organization.

It is possible that in the future the interfaces and the integration processes will make platforms clearer and simpler to their users, creating second level environment better integrated with other systems already loaded within the company's intranet. Here the greatest challenge will be set: whether to consolidate a unique e-HR, talent management and e-learning system or to integrate several specific different systems.

#### 4. 2012, the year of cloud?

By analyzing the different e-learning solutions proposed by different companies, we can highlight the latest innovations that are characterizing these last years. Among these, there are basically five strains to which the different developers are focusing.

A trend common to different levels is the so called **cloud**, adopted in various ways by different actors in the e-learning market (Ercan, 2010). The analysis of the interviews and the companies' offer show increasing attention to this solution which involves the IT infrastructure and the training staff. The user might not even notice the difference, since the system can work the same way: a cloud solution for e-learning involves the advantage of being able to be totally transparent to the learner. The real benefits are recorded in the possibility of releasing the ICT staff by demanding specific technical problems and to facilitate the work of the training staff due to greater stability and effectiveness of the system, which is guaranteed by the direct management of the service provider. The benefits are therefore related to key technical and organizational aspects and emerge especially during the problem solving processes. That's why around this solution we are playing the evolution of the entire IT industry worldwide. As many developers are already providing hosting solutions, a refinement of the previous offers into cloud versions seems to be the natural evolution path.

At this point we can identify other trends:

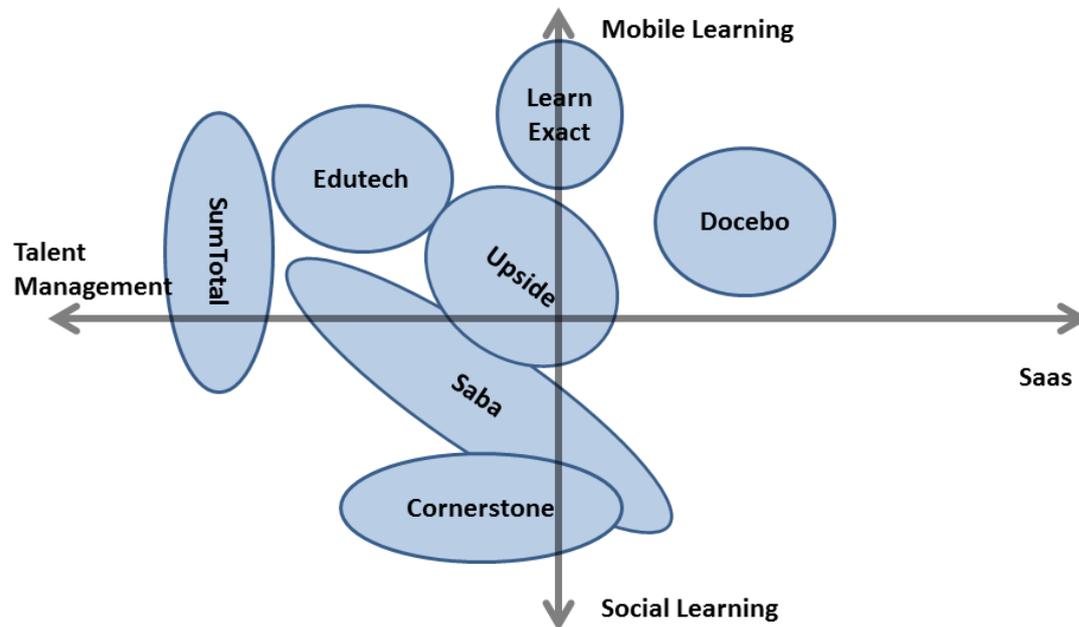
- 1) The first trend is a particular articulation of cloud computing, the so-called **SaaS** (Software as a service). Although there is not always a clear distinction between these two terms, for the e-learning they can be a source of misunderstanding: the difference between the two solutions is generally thick and is related to how to integrate systems and, above all, the possibility to build on-demand solutions. This enables users to get in a few minutes the entire educational system online (through LMS and contents) without the need of a sales agent. The adoption of a solution like this provides all of the advantages of a cloud solution and the flexibility in the management of scalability and LMS configuration. Although almost all providers are offering cloud solutions, there are only few offering SaaS. Among them is worthy highlighting Docebo, which is rebuilding the offering of its environment into an open source modular SaaS.
- 2) The second trend consists in investing in **talent management-oriented solutions** as an added value to other services related to e-learning. As mentioned earlier, this happens especially for companies that already have extensive experience in consulting and management, which integrate the e-HR LMS applications and create all-in-one solutions. Among these are highlighted Cornerstone, Saba, SumTotal, Upside learning and Edutech, which stand out for focusing in specific commercial and geographical areas. The success of this service is naturally linked to the accuracy of data tracking and the effectiveness of predictive algorithms, otherwise a

big investment will be risked in trying to integrate e-learning and e-HR systems without any real added value.

- 3) The third trend concerns the **mobile learning**: in recent years the use of portable devices for training has become increasingly common and it seems to focus on putting the learner in the center of the learning process (Geddes 2004). This phenomenon is connected to the large diffusion of smartphones and tablets, which are the most popular tools used by people even without competences in digital technology. The adoption of these solutions seems to meet the “out of office” management and on the field training needs. Developers seem to be focusing on creating a mobile version of their platform and in some cases, such as eXact Learning, specifically designed mobile learning objects.
- 4) The fourth trend is recognize in the so-called **social learning**, which aims to enrich the LMS with all of the informal communication elements typical of the Web 2.0, in order to reconstruct an interaction similar to those of the social networks, yet restricted to the company. In some cases the inclusion of the company’s partners is promoted in order to define areas of information and mutual comparison. The interviews did not reveal a particular attention to this type of product. On the one hand it is clear that this solution, whose benefits have not yet been established, is still under development, the other because, probably for the same reason, customers seem to be more interested in other solutions and trends. It’s also to be noted how difficult it is to integrate an informal communication typical of the social learning within a formal system like the one of an organization. It can be therefore hypothesized that this solution may be successful in more flexible and/or unstructured organizational systems.

If we consider the four specific trends, it is possible to construct a graph where we can get, by placing providers in relation with the trends on which they have greater experience, a picture of the current e-learning offers.

As shown in Picture 2, the four trends are quite different and it is not possible to make clear predictions about future developments. On the one hand it is possible to hypothesize that these characteristics will be acquired by all the providers. The other, and this confirms what has happened up to now, it is possible to assume a diversification for each provider leading to the creation of specific market areas.



Picture 2 – Summary graph of the offers of each providers

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