Live eLearning:
Taking the First Steps

A Checklist to Choose a Live eLearning Solution That Suits Your Needs

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Learning for the 21st Century Organization

Keeping up with new information and knowing how to use it are "mission critical" activities to businesses and individuals alike in a market in which competition is no longer characterized by the big beating up the small, but rather by the fast running past the slow. If you were to define training as giving people the information and skills needed to compete effectively in the marketplace, many traditional training methods (e.g., classroom-based lectures, manuals) are anachronisms in today's fast-paced, information-driven economy. With that in mind, enterprises that wish to maintain a competitive workforce are beginning to make room in their training programs for a new form of preparing individuals to be productive and thrive in today's society. The growing use of networked technology to deliver training to workers has spawned an entirely new industry – one that has come to be called eLearning.

Where is the eLearning Market Today?

In 1999, U.S. organizations spent more than $62 billion on formal training, a figure that was almost 25% higher than just six years earlier. IDC estimates that approximately $17 billion was spent on outsourced services, content and technology for training, a figure which is predicted to grow to over $33 billion by 2004. Today, the vast majority of these expenditures are made on traditional training products and services like printed materials and instructor-led classes, while spending on eLearning totaled less than $500 million. By 2003, however, IDC has forecasted that eLearning expenditures will reach more than $11 billion. Clearly, a shift is taking place in the way companies are delivering learning opportunities to their employees, partners, and customers.

Today the eLearning industry is still in its infancy. Certainly we have seen technology begin to pop up in the world of training in recent years. However, early manifestations of eLearning have looked a lot like traditional learning slapped on a Web site and decorated with a few bells and whistles. It is only in the past year or so that eLearning vendors have been delivering more sophisticated content and technologies that truly take advantage of the all of the Web's various capabilities. While bandwidth limitations still hamper the widespread use of some of the more intense multimedia applications, the growing base of subscribers to broadband Internet access is alleviating this problem and creating more demand for interactive content that goes beyond the boring "read-and-click-to-next-page" model of Web-based learning. Today, eLearning can incorporate everything from simple text to complex simulations and streaming media. While such applications may not be necessary in all cases, the variety of ways in which material can be presented on the Web makes it possible to cater to learners with many different learning styles.

Why eLearning?

A lot of lip service is paid to the "anytime, anywhere" aspects of eLearning, but the true power of eLearning is likely to be found in its potential to provide the <u>right</u> information to the <u>right</u> people at the <u>right</u> times and places. eLearning is often a more effective and efficient way to educate workers because it is . . .

- **Personalized** – eLearning allows entire programs of study to be customized for a company, a department, or even an individual learner.
- **Interactive** – eLearning can truly engage the learner in a give-and-take type of learning that involves simulations of real-world events and sophisticated collaborations with other learners and instructor.

- **Just-in-time —** eLearning moves training away from the "just-in-case" model in which learners engage in event-based sessions that require learning to take place outside of the context in which it will be used.
- **Current —** eLearning allows training providers to offer learners always up-to-date materials.
- **User-centric** – eLearning focuses primarily on the needs of the learner, instead of on the abilities of the instructor.

What's more, eLearning more effectively meets the needs of the 21st century enterprise, which often has workers spread out all over the globe, is working at a much faster pace than it was even five years ago, and depends upon having the most current information in order to survive. For companies that fit this description, relying solely on traditional training methods simply won't cut it anymore – eLearning is a necessity.

Who's selling this stuff?

Considering eLearning is a fairly new concept, it may surprise you to know that there are literally hundreds of companies hawking eLearning products and services. To make it simpler to understand, you can try breaking this enormous and fragmented market into three categories: technology providers, service providers, and content providers. Of course, many technology companies also offer complementary services, and some content providers sell technology elements as well. Then there are the companies that are mainly service providers but also act as distributors of content and technology. Okay, so maybe that categorization method wasn't so simple after all.

The truth is that using any one of the above characterizations alone often leaves vast holes in the picture of almost any company within the eLearning market. To make things even more confusing, whatever categorization method you use today is likely to be invalid in the near future because, as in any developing industry, business models and product offerings are continually (and quickly) evolving. As companies seek to define their territory, many are trying to stake out fairly large areas in the marketplace by claiming to offer everything that everybody needs. To a large extent, the many vendors that claim to be "one-stop shops" for all eLearning needs are simply perplexing their target audience and causing hesitancy on the part of purchasers.

Where to turn next?

So, you have been tasked with choosing and implementing a successful eLearning strategy. Technology? Services? Content? You may be asking yourself "where do I start?" Having reviewed the options, it is time to face the fact that this is not an easy or precise sport. Deploying effective eLearning programs may require products and services supplied by a variety of vendors—leaving you to connect the dots. For example, you may be wondering whether you should execute an approach that places all of the eLearning components online at once or if you should simply plan to execute the new strategy in phases over time. Since there are no absolutes when designing a successful eLearning strategy, this paper is intended to provide some guidance as to which questions should be asked and answered before proceeding to vendor selection. How you answer some of these questions will ultimately determine which type of eLearning solution is right for your company. The benefit will be a smooth and fruitful vendor selection process.

The Overall Objective

Live eLearning has become a hot topic. In late 1999, Cisco's John Chambers brought attention to eLearning by calling it the next "killer app." As the economy has transitioned into one where knowledge is the supreme competitive advantage, educated work forces and customer bases have evolved into the definitive means of achieving market domination.

But how do companies educate people quickly and cost effectively in order to reach such lofty goals? Many companies are turning to the Internet as the all-around salvation for corporate training and education. And why not? The Internet is an informal learning channel when you consider that it is used primarily as a means of communicating, disseminating or sharing information. The issue with the World Wide Web as an eLearning system was that it did not allow for instantaneous feedback or interaction. Further, the Web was an unreliable communications vehicle, which proved painless interactive experiences. Since learning is inherently a social activity, many considered that there had to be a more effective way to educate.

eLearning was born out of the need to leverage the Internet's natural facility for timely communication. Many pioneers in the field considered the Internet to be a solid foundation on which to build. Thus, eLearning has become a way to address learning experiences that run the gamut from ad hoc meetings to ongoing communities of practice. But what factors do you need to take into account when establishing an eLearning strategy for your company?

The first thing to consider, when looking at different eLearning solutions, is the purpose of the system. How does your company propagate learning? Is it a formal activity that takes place in a structured environment or is it more informal, such as a weekly meeting to exchange information? Does your company have an ongoing forum for educating customers and employees, or is learning an ad hoc event that may or may not occur at any given time? Does your company view eLearning as a profit center or simply a cost of doing business? By reinforcing educational practices currently in use and reaching beyond the learning options your company offers today, the outcome will be a robust solution that will have the power and flexibility to expand with your company grows.

Content is Queen; Context is King

In the end, you want a vehicle through which you can train large numbers of people in a timely and cost effective manner. The first consideration has to be content. What do you need to communicate? What do people in your organization need to learn in order to be successful? What do your customers need to know to achieve maximum success with your products or services?

These basic questions beg yet more inquiries. The most critical issues you must consider in relation to training content are content sources and content quality. These are important for two reasons: you may have to buy content from someone else (i.e. off-the-shelf) and/or you may need to harvest internal expertise (i.e. custom content). But what does this really mean to you?

If you are interested in sharing valuable knowledge with an audience, you may simply purchase the content, modify it to suit your purposes and teach it. This requires only that you have some idea of your desired outcome and that you know where to go to get the content of interest.

If, however, you want to harvest the expertise or experience base of some or many of your internal knowledge experts, then you have different challenges. You must first design a method of gathering the information of value to your audience. This may involve exhaustive interviews that you tape or record in some fashion. It may entail surveying many of the experts from whom you desire information. It may simply rely on informal communications among the "counsel of advisors" you select.

But there is an easier way to lure such information from internal experts—simply choose an eLearning platform that is designed to quickly and easily draw out content or valuable information that you intend to use.

Technology: How to Flip the Switch Smoothly

So, now you have the content or you have selected the process for procuring the content. Now it is time to figure out what type of technology makes sense for your environment. There are three key questions to ask yourself at this point in your planning:

1) Am I building an infrastructure to support a profitable business around eLearning?
2) What is the delivery vehicle for my content?
3) How will I manage the content, the classes and individual education plans?

When it comes to infrastructure, many professionals start a slow burn that evolves into the shakes and sweats. Infrastructure means change to the existing technological architecture, which can be the precursor to problems on a grand scale.

Fortunately, today there are many software technologies that act as infrastructure without the implementation nightmares commonly associated with such rollouts. The key here is to ensure that your eLearning infrastructure is flexible enough to evolve with your company as your needs change.

Usually, the best decision is one that relies on innovation and experience. Who is the leading innovator in the space and who has had experience implementing large-scale projects on a worldwide scale? Can the technology handle firewalls effectively? Can it handle *your* firewall effectively?

The eLearning delivery vehicle is the most visible choice of your eLearning strategy. This is where people assess your success or failure. Does it work or doesn't it? How smoothly does the new system work? If you are building the framework for a new profit center, then the new eLearning delivery platform needs to address certain additional requirements. Issues such as digital rights management, billing, and branding all become more significant when the technology is the conduit for revenue.

The next consideration revolves around eLearning management. Once you have envisioned the best eLearning strategy for your company, how do you manage the many classes or channels offered? How do you effectively plan for and manage the individual learning plans for each professional in your extended organization? How do you account for learning plans that include a number of different learning options including live eLearning, recorded content, physical classroom experiences, et cetera? Ultimately, a blended learning plan that includes a number of different options will be best administered by a learning management system (LMS). Vendors that offer LMS options can outline the many benefits of using an LMS and how to incorporate such a system into an eLearning implementation.

The last and most significant question in the area of technologies has to involve support. What kind of support do you need? The answer really goes back to your original objective. Are you augmenting an existing internal education program or are you establishing a new profit center for your company? In the case of the latter, you will demand a higher-level support for your customers who may be paying as much as $200 USD for every virtual seat in your classes. In this circumstance, you may desire online class monitoring where an experienced individual attends your class as a fail-safe in the event that there is a technical issue or an unexpected personal problem for the instructor. Make sure that you are not out on a limb and all by yourself.

Services: Wrapping It Up

At this point, you have now determined the type of content you intend to share with internal and/or external audiences and you have decided upon or narrowed down the list of technologies you intend to implement. The next question to be evaluated centers on the implementation and implementation services. How do you move your strategy from the idea stage to the physical reality? This is a difficult time because there are many paths to consider: phased implementation over time; simultaneous rollout; hosted services model versus in-house eLearning technologies management; outsourced trainers or staff professionals, et cetera. It can be overwhelming.

The easiest rule of thumb is SCALE or Single Choices Are Largely Effective. If you can make a single decision to go with one vendor who will take care of everything, then short-term implementation is faster and easier and long-term maintenance is as quick as a single phone call. It doesn't matter how large your audience or program scales to, you still have only one call to make at any given time.

When you evaluate vendors, evaluate their services platform. Do they have hosting services so that you can outsource the implementation and management of your eLearning infrastructure? Do they offer a full menu of professional services in the event that your program grows faster than you expect? Do they provide training for trainers to make sure that every event is successful from the

first to the last? What kind of maintenance agreement and arrangement do they offer? And who is on the other end of the phone in the event that you have a problem - a machine or a person?

The most important aspect of eLearning services revolves around the trust factor. What choice will help you sleep at night? Who do you trust with your eLearning technologies and the success of your programs?

Vendor Evaluation: Finding the One(s) For You

Ultimately, everyone will have a series of questions that are more or less important depending on the phase of the implementation. We have included some questions to pose to vendors as you move forward on your journey towards live eLearning. While these will not address every situation, they will enable you to organize thoughts around the key objectives and outcomes of importance to you and your company. We look forward to seeing you in the student window.

The Live eLearning Checklist

Content Questions for Custom Content

C1: Can parts of a lesson be saved as independent objects for reuse?

C1: Instructors should be able to save and edit parts of the lesson for later reuse as individual lessons or parts of lessons.

C2: Can existing lessons be imported into the lesson plan?

C2: When creating or editing a lesson, users should be able to import lessons or parts of lessons into their workspace.

C3: Can self-paced computer-based training CBT) or Web-based training (WBT) materials be used in a live eLearning session?

C3: Existing CBT and WBT course materials should be launched from the synchronous application.

C4: Can the instructor create and administer a test / survey before the live event or on the fly?

C4: Instructors should be able to prepare both tests and surveys prior to a class or during a live class.

C5: What types of questions are available?

C5: The system should support Yes/No, open text and multiple-choice questions.

C6: Can questions / tests/ surveys be reused?

C6: The system should support saving and reusing questions, tests and surveys.

C7: Are question / test / survey results reported to the users?

C7: Participants like to see feedback from tests and surveys. The system should give the instructor the option to send this information to participants.

C8: Can all types of content (including application sharing) be recorded by all users?

C8: All the participants in a live lesson should be able to record the entire lesson and play it back at their leisure.

C9: Can recordings be played back during a live lesson?

C9: All the participants in a live lesson should be able to record the entire lesson and play it back at their leisure.

C10: Can recordings be edited?

C10: Instructors need the ability to edit recordings of their lessons in order to create effective recorded objects. Instructors should have a full editing capability available to cut, crop, insert and append recordings. Voice streams should also be editable content.

Technology Questions

T1: Is the product a software-only solution?

T1: An eLearning solution should not require any hardware that would prevent users from delivering or participating in the system's events.

For example, the system should not require switches, routers or other network-based hardware, satellite dishes or special studio equipment such as cameras and lighting.

T2: How many students can participate in a live event?

T2: The number of participants should not be bound by the system.

Any number of students should be able to participate in a given session or series of sessions in order for you to create an effective class schedule that addresses the needs of your audience in a timely and cost effective manner.

T3: How do participants receive lesson materials?

T3: Downloading materials during a lesson is bandwidth intensive. Users with a slow connection (e.g. dial up) will have difficulty participating in a lesson if their connection is not fully dedicated to processing the live content (e.g. voice streams and slide cues, etc.)

Materials should be downloaded automatically to users' desktops and managed entirely by the system in order to keep class preparation easy and fast for users.

T4: Which client software is better: Java-based or a standard C++ client?

T4: Actually, users should always have a choice of which client software to use. In the event that users are participating in an ongoing eLearning community, they would most likely want the standard client application housed on their machine. For those users participating in an ad hoc meeting or a collaborative event, a Java client may be better due to the reduced system resources utilized.

T5: How do users know which eLearning events support which type of client software?

T5: The client application should not limit the events in which users participate. Java and standard client applications should work at the same time in the same event so that users never have to concern themselves with which client application they are using.

T6: Can students and instructors participate in a live lesson from behind a firewall?

T6: Students and instructors behind a firewall must be able to participate in a live event without requiring changes to the firewall or approaching IT personnel to connect. Clearly, there must be no degradation in the functionality available in these scenarios.

T7: Can users that are located behind a firewall and a proxy server participate in a live event?

T7: The configuration of the system to support proxy servers should be self contained and fully automatic. The system should not demand that users configure their own desktops.

T8: How easy is it to create a lesson plan?

T8: Creating a basic lesson plan should be simple and fast. A person with basic knowledge of Microsoft PowerPoint® should be able to create a lesson in seconds. The lesson should include the PowerPoint notes and the system should support version changes in the original presentation.

In fact, instructors and content creators should be able to create a library of reusable lesson templates.

T9: Can the instructor take participants on Web safaris?

T9: Since we have identified the World Wide Web as an educational vehicle in itself, the eLearning instructor should be able to take participants on Web safaris that move beyond sharing their browser.

T10: Does the application support multiple instructors? How many?

T10: The system should support multiple instructors in an event. Many times, the content expert is not the organizer of the event. In turn, these instructors should all be able to teach the lesson with full teaching capabilities. The system should support several assistant instructors in an event.

T11: Can the instructor share an application?

T11: The system should support sharing of any application that runs on the instructor's desktop. Sharing the application should not require plug-ins, additions or any special bandwidth or network requirements.

T12: Can the instructor see and / or share the desktop of a participant?

T12: Instructors need the ability to see their students' desktops. This gives instructors a hands-on tool to help and/ or mentor students. The ability to share students' desktops with the rest of the class enables instructors to present relevant issues / questions / results to their class.

T13: What is the size of student client?

T13: A large installation size requires a long download and a large footprint on a user's machine. Installation sizes smaller than 5 MB are easier to download.

T14: Does the product have tools for centralized registration?

T14: The system should offer the administrator tools to easily register students to courses en masse.

T15: Can the user database be searched based on different criteria?

T15: Large groups of students need to be scaled down based on relevant criteria such as geographical location, job title, department etc. The system should offer the administrator tools to easily divide students into relevant groups.

T16: Does the application work with other Learning Management Servers? If yes, please name them.

T16: Customers should have a choice of LMS applications that are integrated with the product.

T17: How much bandwidth is needed for 10 students (with application sharing, with video)?

T17: Bandwidth requirements should not grow linearly with the number of connected users. In other words, 100 users should not require 10 times the bandwidth of 10 participants.

T18: Does the system provide Intelligent Server Selection to maximize performance?

T18: The new system should offer a means by which to achieve maximum performance by choosing and connecting the server that offers the best connection speed.

Services Questions

S1: Does the vendor offer implementation services?

S1: Large implementations of distance learning applications require the support of professional training and system experts to achieve maximum system utility.

S2: Does the vendor offer needs analysis and project planning?

S2: Conducting a needs analysis will help insure a successful deployment of the product.

S3: Does the vendor offer content creation services?

S3: Using an external vendor to create content saves time and improves the results.

S4: Does the vendor offer product training? Is this training offered online?

S4: Maximizing the capabilities of the system requires product training. The training should be offered to instructors and administrators. This training should be available on site and on line.

S5: Does the vendor offer live support? In what time zones?

S5: Support for Voice Over IP applications is many times a "People Issue" and note a "Product Issue." The vendor should offer support for users in multiple languages, locations and time zones.

S6: Hosting of application?

S6: Does the vendor offer hosting services? What is the quality and reliability of these services? Where is the application hosted?

S7: How do I know which vendor is right for me?

S7: In the end, an eLearning decision will focus on relationships with the vendor(s). Since the success of an eLearning implementation depends in large part on the people and relationships maintained with the vendor(s), make sure to identify the vendor team with whom you would work prior to making your final vendor(s) selection.

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