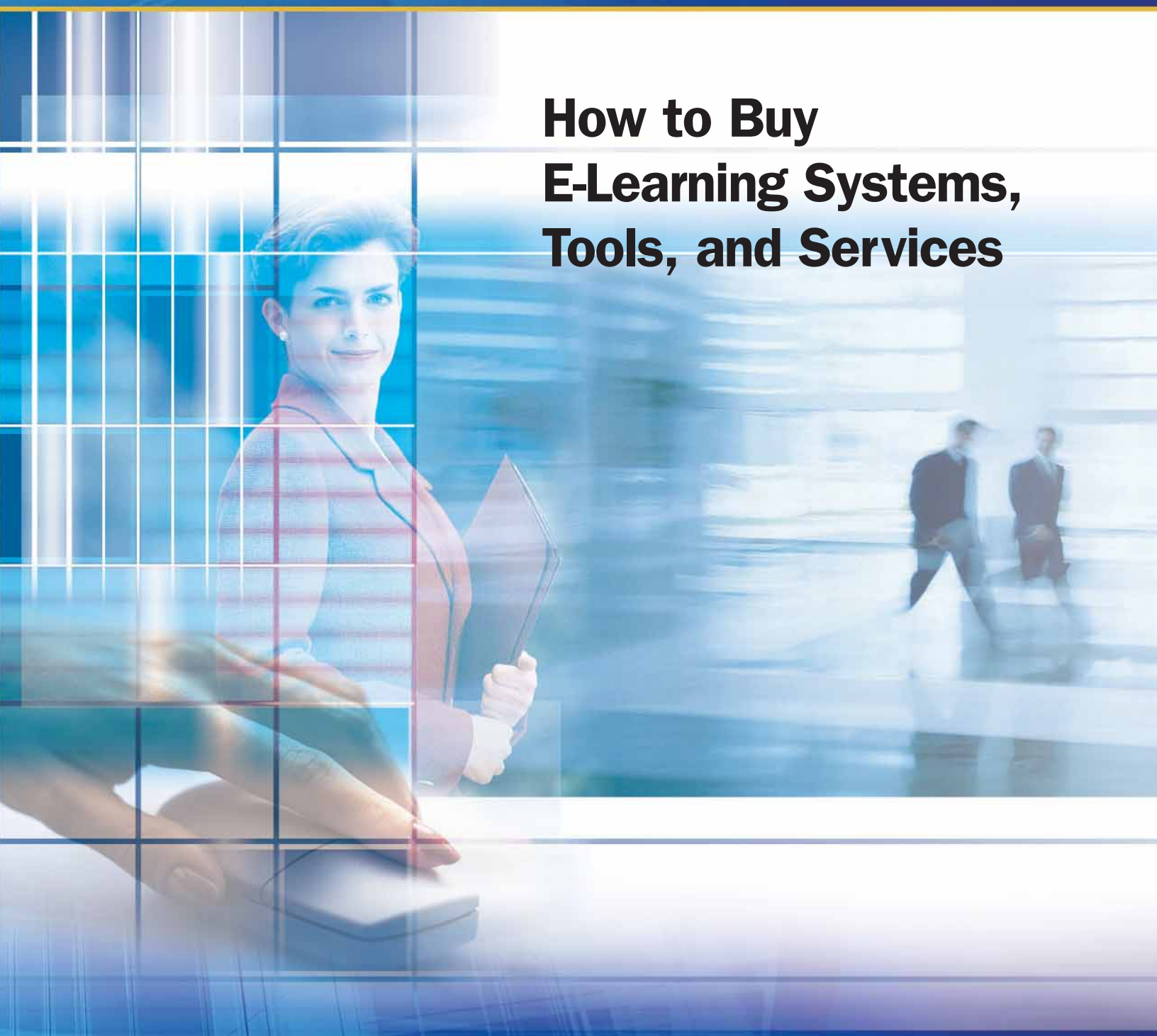
Brandon Hall Research

How to Buy E-Learning Systems, Tools, and Services



- Authoring Tools
- Custom Content Developers
- Learning Management Systems (LMS)
- Learning Content Management Systems (LCMS)
- Live E-Learning/Web Conferencing Systems
- Simulation Development Tools

Training Magazine's
training solutions
conference & expo

BY THE STAFF OF BRANDON HALL RESEARCH

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Our Statement of Independence

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- Vendors and featured organizations are often asked to complete extensive request for information questionnaires and may be interviewed for inclusion in reports or online services. Once submitted, Brandon Hall Research has editorial control and final approval over the content. Brandon Hall Research emphasizes factual non-marketing-type information in our research reports and online services.
- Brandon Hall Research does not benefit in any way in the sale of any product included in our research reports or online services. Brandon Hall Research does not provide leads to vendors or assist them in any way in making sales.
- Brandon Hall Research does respond to requests for consulting from both user organizations and vendor organizations based on the contents of reports and online services. In those cases, the only benefit to Brandon Hall Research is the consulting fee, which is the same rate for user or vendor organizations.

About the How-to-Buy Report

The purpose of our research is to:

- Introduce learning professionals to the key things to consider when purchasing learning technology products and service
- Provide the ability to quickly create a short list of tools or services based on user requirements
- Provide the ability to create apples-to-apples comparisons of products to make informed buying decisions

What's included in this report:

- **How-to-Buy Authoring Tools** — With so many authoring tools on the market, it's clear that different organizations have different needs. Authoring tools are also immensely varied in the number of ways their features are presented to developers. The how-to-buy authoring tools section of this report will provide you with a list of factors to consider when purchasing an authoring tool, as well as the features commonly found in authoring tools. Together, they'll help you both avoid feature scope creep and select the right tools for your organization.
- **How-to-Buy Custom Content Development Services** — More and more organizations (1) need large volumes of content made available for self-paced, online delivery; (2) realize that their own limited, internal resources may not be sufficient to carry out their enterprise e-learning vision; and (3) find that the needs of their learners become more sophisticated, requiring more dynamic and more interactive, rich learning content, such as simulation-based content and experiential e-learning. Often, they turn to custom courseware development companies who offer professional services to create engaging, Web-delivered learning content in a timely and efficient manner. We assembled the top 10 characteristics of custom content developer sought by end users. You can use this information as a checklist of "things to ask" when interviewing or requesting information from the vendor.
- **How-to-Buy a Learning Management System (LMS)** — The biggest mistake made by those seeking an LMS solution is that they quickly get bogged down in a process of going through individual LMS features at the item-by-item level, while forgetting to assess the overall need for the system and the selection criteria used to select final candidates. In this section, we provide a list to help you narrow your search. The product and vendor characteristics listed are the ones that our research indicated are what most companies are most concerned about. We also provide helpful information for creating "use cases," and creative ways to lower the cost of your LMS.

- **How-to-Buy a Learning Content Management System (LCMS)** — This section includes a list representing some of the key drivers that may indicate your organization is looking for LCMS technology to solve e-learning development and delivery problems. We also share our process for identifying enterprise technology needs.
- **How-to-Buy Live E-Learning/Web Conferencing Services** — An organization looking to purchase learning technology, such as a live e-learning/Web conferencing/ virtual classroom system, can easily be overwhelmed with the available choices. The key to selecting the right system is to identify the features that are important to your organization, create a short list of systems, and invite vendors to demo only the products that meet your requirements. This section provides a listing of some features to consider when selecting the technology that is the right fit for your organization.
- **How-to-Buy Simulation Development Tools** — With traditional e-learning becoming more mainstream, learning practitioners are now positioning themselves for the next, significant movement in the use of technology in learning — namely — simulations! Most people don't know these tools exist or how they can help reduce costs or improve learning. The companies who provide simulation tools are often relatively small with very little marketing or exposure, yet some of the greatest innovation of the learning market is taking place in this area. This section gives you common considerations for evaluating simulation development tools.

Our Research Methodology

Our Research Methodology includes:

- Using, testing, evaluating, and viewing demonstrations of tools
- Surveying our 26,000+ Brandon Hall Research newsletter subscribers
- Database-driven questionnaires designed to gather comparative analysis information on products
- Vendor invitations for comparative data
- Focus groups and interviews with Chief Learning Officers (CLOs), e-learning managers, and training directors
- Requests for Proposals (RFP)
- Follow-up satisfaction surveys from end users
- Requests for Information (RFI)
- Use of review teams made up of individuals with extensive e-learning and learning technology experience (not associated with vendors covered), and instructional designers
- Panel discussions at trade shows
- Study of needs analysis documents prepared by companies to categorize common and unfulfilled needs
- Assessments
- Meta-analysis

The Brandon Hall Research team focuses on consistency in its research methodology to assure accuracy.

The scope of our research has grown significantly in the last few years. More of our research is being migrated from a traditional model of providing static, downloadable, Adobe Acrobat PDF documents to a database-driven online service. See all of our research at www.brandon-hall.com. Our KnowledgeBase research links are listed below.

- **AUTHORING:**
www.brandon-hall.com/publications/atkb/atkb.shtml

- **CUSTOM CONTENT DEVELOPMENT:**
www.brandon-hall.com/publications/cckb/cckb.shtml

- **LIVE E-LEARNING:**
www.brandon-hall.com/publications/lelkb/lelkb.shtml

- **LMS:**
www.brandon-hall.com/publications/lmskb/lmskb.shtml

- **LCMS:**
www.brandon-hall.com/publications/lcmskb/lcmskb.shtml

- **SIMULATION:**
www.brandon-hall.com/publications/simkb/simkb.shtml

Authoring Tools

In the early days of e-learning, content developers had few choices regarding the tools they could use to create courseware. Although the features found in these early programs were limited by today's standards, training content developers did the best that they could with what they had. Today, hundreds of tools are available to developers of online training content. Best of all, today's authoring tools are rich in features and easy to use.

Types of Authoring Tools

Authoring tools are often described as software programs that let you create content without the need to write programming code. For a large number of products on the market, this is true. However, many of the most popular tools, including Macromedia Flash and SumTotal's ToolBook Instructor, include their own sophisticated scripting languages or use programming languages such as JavaScript to allow developers to create powerful e-learning content by writing functions line by line. You can produce excellent content without writing a line of code with applications such those listed above, but the scripting or programming language is available if you need to create a function or calculation that isn't pre-built in the system.

Authoring tools are often imagined to be the realm of WYSIWYG (What You See Is What You Get) environments, where objects such as graphics, audio and video clips are simply imported and dropped into position on a page. Many page-based authoring tools work this way. Many other tools, however, lack a WYSIWYG environment. For instance, many popular programs use a form-based interface. To create content, you enter content into fields, make selections using check-boxes and drop-down lists, and then preview or publish your work.

Other authoring tools use a timeline metaphor. Drag objects and actions onto the timeline, and they will appear or disappear at a specific point in time. Other authoring tools use a flow chart metaphor instead of a timeline. Add icons representing images, sounds, decisions, etc., to the flow line of a flow chart and then preview your application to see what your flow chart has generated.

Still other authoring tools, such as some popular products used to create software simulations, use a recorder metaphor. Turn the recorder on and click through a procedure. Stop recording and edit the result, adding text, audio, interactions, etc.

Sometimes, a product appears on the market that uses an entirely different authoring metaphor. Developers might work within a spreadsheet interface and synchronize events using the time stamp of a video clip.

In summary, authoring tools are immensely varied in the number of ways their features are presented to developers. Whereas we can sit in almost any model automobile and drive away, we can't always place a developer at workstation loaded with an authoring tool and expect peak efficiency. Dragging flow chart icons onto a page may seem like an intuitive way to create e-learning content to one developer, but not to another. Still another author may love the simplicity of a form-based interface, while another may be frustrated by the inability to see his or her work until it's previewed or published. There are almost as many paths for how content is created as there are authoring tools.

Today, hundreds of tools are available to developers of online training content. Best of all, today's authoring tools are rich in features and easy to use.

Tips for Choosing an Authoring Tool

The fact that there are so many authoring tools on the market is a clear indication that different organizations have different needs. It's also an indication that many organizations are creating different types of e-learning content. Before selecting the tools you will use to create e-learning content, you should consider many factors, including:

- What is the level of technical ability of your developers? Who will be responsible for creating your content? Programmers? Graphic designers? Subject matter experts?
- What type of content do your learners require to be engaged?
- What level of interoperability must this content have with your learning management system?
- How long a life must your e-learning content have?
- What features do you really need?

Ease of Use

Authoring tools are now available that can make a new developer look like he or she has been developing content for years. Many tools come with pre-built course templates that simply require the developer to populate fields or frames with the appropriate text, images, animations, and video segments. Once that's done, all that remains is to publish the content. You might want to consider easy-to-use tools if you plan to have subject matter experts (SMEs) develop content right in the authoring tool. In some organizations, SMEs are course authors from the beginning to the end of the development process. In other organizations, SMEs are the initial content authors. Technicians are then called in to polish and finalize the content.

So why aren't the easiest-to-use tools the most popular? Although all tool vendors aim to make their software intuitive and easy to learn and spend considerable time and money on usability testing, there's a cold reality that the greater the level of functionality and extensibility, the longer it takes to learn to use the tool and the greater the perceived level of difficulty. Very easy-to-use tools are often capable of creating template-based content very well. They often do not, however, provide the ability to customize their output to any great degree. If they lack a feature, the easiest-to-use tools rarely allow to developer to develop the functionality through scripting or programming.

Level of Engagement

In the early days of e-learning, learners were often impressed with the novelty of taking courses online. Just the fact that learners could study at their own pace and leisure at their desks, rather than attend long classroom-based sessions, often provided sufficient "wow" factor to keep them excited. For many organizations, those days are over. Students have been taking online courses for a number of years now, and the delivery has lost its novelty. To keep students engaged, especially for topics that require a greater time investment, the content and presentation needs to be stimulating. A six-hour-long orientation course split into 30-minute static, text-filled, page-turning modules will not generate a high completion rate unless the training is deemed mandatory. Forcing learners through such training will not create excitement for future non-mandatory e-learning courses.

Not all content needs to be media rich. It isn't necessary to blow your development budget on a 30-second course introduction suggestive of a Hollywood blockbuster. But, if your learners will be asked to sit through long, difficult topics, consider acquiring authoring tools that will allow you to create content that will keep their interest levels up. Simulations that allow them to learn while doing, instructional games such as crossword puzzles, even branching, text-based scenarios can help keep students engaged.

On the other hand, if the training you need to provide requires a smaller time commitment, or if your learners are the type who like to quickly access a short topic, find the information they need to complete a critical task, and jump out again, then static, simple, text-based e-learning content may be the most appropriate approach for your organization. In such a situation, creating flashy intros, instructional games, and simulations will likely lead to frustration on the part of learners who need answers quickly. Although this type of "just-in-time" training falls closely within the definition of performance support, static online content with few media elements can be appropriate in situations where topics are small and need to be accessed quickly.

For most organizations, there isn't one ideal type of e-learning content. The training topics and the characteristics of the learner should really drive the presentation. Simple, static Web pages may be fine for one topic but not for another. Discovery games and role-playing may be perfect to teach a soft skill but inappropriate to teach programming. A recorded demo may be fine to show someone how to do something using a software application, but it will not be appropriate for other subjects. The result is that you likely will require a number of tools to create different types of e-learning content.

Interoperability and E-learning Specifications

Learning management systems (LMS) are the e-learning cornerstone of most organizations. An LMS automates the administration of training events, registers users, manages courses in a catalog or by competency, manages online assessments, tracks the completion level of student interaction with content, and provides reports to management. Although many learning management systems contain built-in authoring capabilities, none offer the ability to create such a wide range of content as is possible with third-party tools presently available. No single LMS, for instance, can provide the ability to create Flash animations, Java applets, animated GIF files, instructional games, etc. Authoring tools built-in to an LMS are often aimed at importing media elements such as images, audio and video clips, animations, and simulations — and assembling the pages using this content. So, although your LMS may contain authoring capabilities, you may still find yourself turning to third-party authoring tools for the development of specific components.

Integration of authoring tool content with learning management systems raises the issue of interoperability. For an LMS to be able to track a course or assessment created with a third-party authoring tool, the LMS and authoring tool must be able to communicate. The course, for instance, may contain assessment questions. The LMS must be able to track whether the student successfully answers these questions, as well as whether the course was completed or abandoned. For the LMS to be able to track the course, communication standards need to be in place.

For most organizations, there isn't one ideal type of e-learning content. The training topics and the characteristics of the learner should really drive the presentation.

The e-learning world follows a number of standards, including AICC (Aviation Industry CBT Committee), SCORM (Sharable Content Object Reference Model), IMS (IMS Global Learning Consortium), and DCMI (Dublin Core Metadata Initiative), among others. By far the most popular standards are AICC and SCORM.

Some authoring tool vendors have made standards compliance and even certification a priority. Other authoring tools on the market may state that they conform to an e-learning specification, but since "compliance" is not regulated, the level of compliance may vary. If you want your e-learning content to be tracked in detail by your LMS, focus on vendors that place a great deal of time and effort on standards compliance. In addition, since most tool vendors provide evaluation versions of their software, perform a few tests of prototypical content within your LMS.

Just as floppy disks have become extinct, so will some authoring tools.

Content Longevity

The "shelf-life" of e-learning content should be a consideration in selecting appropriate authoring tools. Some organizations produce a lot of content that is quickly out of date. Reusability isn't a factor since the content is only meant to serve a purpose for a few months. On the other hand, some organizations may require that their e-learning content be developed and updated for many years to come. Companies in industries such as aviation, for instance, require maintenance training courses to be available for all the years in which a specific model plane will remain part of their fleet. Training on using enterprise systems such as ERPs or HR systems may be another example of a situation that requires the maintenance of content over the long term. The ERP or HR program may evolve through a number of version enhancements over the years, but these enhancements may only affect training enough to make it cheaper and easier to edit the existing content than to start developing new content from scratch. In these two examples, reusability and longevity of content is a priority.

Content shelf life raises a couple of issues. For one, if reusability of content is a priority, you should consider working with authoring tools that produce pages and media elements that integrate well with learning content management systems. This will help manage what can quickly become a large amount of content.

A second more sensitive issue is whether current proprietary file formats are supported in years to come. Just as floppy disks have become extinct, so will some authoring tools. Companies fail, merge, or are acquired by others. You would think that buying tools from a well-established company would mitigate those risks, but this is often not the case. Even in the most successful companies, products are retired and replaced with new ones.

Here's an example. Years ago, a leading software vendor launched a Windows-based authoring tool specializing in creating database-driven Web sites. The tool used a proprietary file format from which Web pages were generated. Since such development tools were rare back then and the demand was growing for Web sites that could access content in a database, many developers purchased the product and used it to create Web sites. About a year after the launch of this product, the company discontinued the software and replaced it with a new product. Not only was the product removed from store shelves, but the company also decided not to support the product in any way.

A few months later, Microsoft launched a new version of the Windows operating system. This was a significant upgrade to the operating system, so many developers purchased and installed the new version of Windows. The HTML/database development application that was retired by the software vendor didn't work in the new operating system. Developers were now stuck with the problem of maintaining and updating existing content without being able to use the software that was used to develop the content. Although the product generated HTML files, it was impossible to use a different HTML editor to update the content since alternate development tools couldn't display the content correctly in their editors. In the end, these justifiably cranky developers had little choice but to redo all their sites from scratch using another tool.

In summary, if you believe you'll need to maintain and update your e-learning content for many years, ask yourself these questions:

- "What are the chances this authoring tool may no longer be available?"
- "How will we maintain this content if the authoring tool we used is no longer available?"
- "Can the content be edited using another tool?"
- "To what extent does this tool use industry supported formats at the authoring level?"

Considering these questions now can help you avoid the need to re-author substantial amounts of content at a future date.

Business Requirements

We often hear horror stories about cost overruns in selecting a large application such as a learning management system. The cause is often "feature scope creep." Feature scope creep occurs when committees start to create a list of fundamental business requirements and end up with a laundry list of every possible feature. Finding an LMS to fulfill these requirements often requires custom development on the part of the LMS vendor — and costs go up accordingly.

Since even an enterprise license for an authoring tool cost substantially less than an LMS, feature scope creep may not result in large cost overruns. But, without considering your requirements in selecting authoring tools, you may end up with the wrong products for the type of content you wish to present to your learners.

Basic Criteria for Selecting Authoring Tools

Let's take a moment to examine the basic criteria for choosing an authoring tool. You can use these categories to judge authoring tools as you begin the selection process. Initially, the categories are somewhat arbitrary. Only after you assess your own needs will they become the means for selecting the right tool. Here are the main criteria:

- Ease of Use
- Template-Based
- Content Reusability
- Richness of Instruction
- Use of Standards
- Managing Content Changes
- Write Once, Publish Many
- Team Development Tool
- Minimal System Requirements
- Value
- Product Support

Ease of use

This is perhaps the most subjective of all the criteria in selecting an authoring tool. In "the old days," there was a raging debate about which was the easier paradigm for creating learning content — page metaphor (e.g., ToolBook) or icon-based authoring (e.g., Authorware). In reality, it was totally dependent on the way the author felt about each environment. It was easy to find authors who would argue adamantly for each of the approaches. Today, it's about finding an authoring tool that strikes a resounding chord with those who will author content inside your organization. Will the authors be technical experts or technology neophytes? Ease of use becomes a different issue for each camp.

Template-based

We're living in Internet time… meaning that rapid development is here to stay. Even the most optimistic futurists in the e-learning space don't foresee a time when we'll have 6-12 months to create a four-hour course like we did in the old days. Authoring tools with good rapid development capabilities will make it possible for us to do our jobs in a timely fashion and, hopefully, without sacrificing too much interactivity.

Content reusability

It is terribly inefficient to continually develop every e-learning course from the ground up with all new content. You've probably heard the term "learning object" before. In simple terms, a learning object is a small module of instruction (perhaps 5-15 minutes in length) that can be clustered with other learning objects to construct a course. The theory is that once a library of corporate learning objects is assembled, it will be relatively easy to create multiple derivative versions using various assemblies of content. For example, you might construct one version of a course for the engineering group and a derivative, high-level version of the course for management. When selecting an authoring tool, one must consider how well it will support reuse of course content and even media objects.

Richness of instruction

If your goal is to build "page turning" courses, this is not a critical issue. However, if you want to build content that is dynamic and engaging — and actually teaches something — this is an important characteristic you're looking for in authoring software.

Use of standards

Does your software need to be AICC-compliant? Does it support SCORM? Do you really care? This classification will help you find a system that works with other components of your e-learning model; e.g., your learning management system. If you create a test or performance-based simulation using your authoring tool, can the results be scored in the learning management system without you having to program the connectivity?

Managing content changes

How easy is it to change course content once the course has been made available to everyone? You don't want to have to pull the course out of circulation and re-author the content. This would be very inefficient. Many authoring tools are now embracing the idea of change management and making it easier for you to make instantaneous content changes.

Write once, publish many

This becomes an issue if you want to deliver the content in more than one way. For example, some companies still have employees without Internet or Intranet access. As part of their e-learning model, they want to simply be able to export the content to a

format capable of playing from a CD-ROM, or even create print-based versions of the training for use in a classroom setting. If this is an issue for you, you will want to place emphasis on this category.

Team development tool

In the old days, all authoring tools were single-use desktop applications. Today, many organizations consider the e-learning development process to be a group function. It's like publishing a newspaper. Could you do it using only Microsoft Word? Probably but, how efficient would you be in producing the paper? News agencies use sophisticated publishing technologies that allow different contributors to work on different sections of the newspaper. For example, the person entering sport scores and sports news is working in the same environment as someone writing a headline piece, yet they are both using the same server-based application. Many of today's authoring tools are starting to address the issue of multiple contributors to an e-learning project.

Minimal system requirements

The authoring tool you select may be the easiest thing in the whole world to use and it may create content faster than lightning, but if the content is unusable by the learners, you've created it all for naught. You have to know something about the slowest and worst computer that will play your content and design to the lowest common (acceptable) denominator. Look for authoring tools that don't make it difficult for your end users to access and view the material. One of the most common issues you'll face in this area is the use of proprietary plug-ins. Some of the authoring tools require learners to download and install a plug-in.

For some of you, this may not be a problem because the sophistication of your user base makes it possible. However, for others the requirement of a plug-in may cause a problem with your IT group, or with learners who feel unsure about dealing with plug-ins.

Value

Nobody wants to pay too much for anything. Pricing is all over the map for authoring tools. You want to find a tool that provides the appropriate value for your organization without breaking the bank. Some tools, even though they will match your requirements, will simply be too expensive to deploy.

Product support

This is a must. Authoring tools have much higher learning curves than tools like PowerPoint. You'll have questions about how to do things you want to do with the tool. Product support means more than a technical support line. Does the company have an active user community? Discussion boards? User conferences? Training classes? You should also think about how easy it will be to find people who are trained using your authoring product.

Top Ten List of Requirements

What are the most common business and technical requirements for people selecting an authoring tool? Based on our research, the following are the top ten things people want:

1. Novice friendly, yet still has underlying extensibility for complex interaction types.
2. No plug-in required (with the exception of Flash output)
3. Adherence to SCORM specification and AICC standard. (The real need is full interoperability with many LMS solutions.)

You have to know something about the slowest and worst computer that will play your content and design to the lowest common (acceptable) denominator.

4. Short learning curve for new content developers
5. Extensive library of very interactive question types (beyond multiple choice and true false)
6. Robust testing engine (with features such as randomization, drawing from a test item pool, etc.)
7. Rich media support
8. Ability to repurpose content quickly from other sources, such as PowerPoint, Word, and specialty authoring tools (i.e. simulation tools)
9. Minimal time spent creating navigational control structures (i.e. navigation buttons, menus, etc.)
10. Low cost (for stand alone authoring tools)

List of Products Currently Included in Our Authoring Tool Research

- Accordent Capture Station (Accordent Technologies)
- AcroTrain e-Learning System (AcroServices)
- Articulate Presenter (Articulate)
- Articulate Quizmaker (Articulate)
- AuthoLearn (TrainVision Ltd.)
- Authorware (Macromedia)
- Banshee (McKinnon-Mulherin Inc.)
- Brainshark Communications Platform (Brainshark Inc.)
- Camtasia Studio (TechSmith Corporation)
- Captivate (formerly RoboDemo) (Macromedia)
- CLI Virtuoso Authoring System (Cisco Learning Institute)
- Composica Enterprise (Composica Ltd.)
- CONSTRUCT Author (Reusable Objects)
- CONSTRUCT Roleplaying Engine (Reusable Objects)
- Content Authoring Software (Mediapro Education Technology Pvt. Ltd.)
- Content Point (Atlantic Link Limited)
- CourseGenie (Horizon Wimba)
- CourseMaker Studio (Learn.com)
- Design-a-Course (MindIQ Corporation)
- Designer's Edge (Allen Communication Learning Services)
- Director and Shockwave Player (Macromedia)
- Dreamweaver 8 (Macromedia Inc.)
- EasyAuthor (Eclipsys Corporation)
- Edufolio (Terra Dotta)
- Eedo ForceTen (Eedo Knowledgeware)
- Elicitus Content Publisher (Harbinger Knowledge Products)
- Exam Engine (Platte Canyon Multimedia Software Corporation)
- Experience Builder (Experience Builders LLC)
- Experience Builder LE (Experience Builders LLC)
- Firefly (Knowledge Planet)
- Flash 8 (Macromedia Inc.)
- FLEXeLEARN EDITOR (FLEXeLEARN Limited)
- FLEXeLEARN POWERSYNC (FLEXeLEARN Limited)
- IBT Content Conversion (time4you GmbH)
- IBT Web Authoring (time4you GmbH)
- Impatica for PowerPoint (Impatica Inc.)
- Impatica OnCue (Impatica Inc.)
- Instant Demo (NetPlay Software)
- Intiva (Business Performance Technology - BPTech)
- Intuition Publisher (Intuition)
- iPerform Course Builder (Integrated Performance Systems Inc.)
- Kallidus Authoring System (e2train Limited)
- KBridge (KnowledgeXtensions Inc.)
- Knowledge Assembler (Generation21 Learning Systems)
- Knowledge Builder (Experience Builders LLC)
- KnowledgeHub Authoring Services (Element K)
- Learning Composer (TEDS Inc.)
- LearnPoint Creator (LeanForward)

- Lectora Automation 2005 (Brainvisa Technologies Ltd.)
- Lectora Publisher (Trivantis Corporation)
- LECTURNITY (imc AG)
- LERSUS (DELFI Software)
- LessonBuilder (SoftChalk)
- Macromedia Breeze Presentation (Macromedia)
- MAXMEDIA (RealTimeTech, Inc.)
- Mindflash Training System (Mindflash Technologies Inc.)
- MOS SOLO (Generator + Styler) (MindOnSite - Integral Coaching SA)
- OnPoint Course Manager (OnPoint Digital Inc.)
- OutStart Trainer (OutStart Inc.)
- PedagogueTesting (Pedagogue Solutions)
- Performance Analyzer (XStream Software Inc.)
- podia (podia Ltd.)
- PointeCast Publisher Professional (PointeCast)
- Power Book Builder (Resource Engineering)
- Presentation Studio (WebEx)
- Quest (Allen Communication Learning Services)
- Question Writer — Quiz Edition (Central Question Ltd.)
- Questionmark Perception (Questionmark)
- RapidBuilder (XStream Software Inc.)
- RapideL (Brainvisa)
- RapidGuide (XStream Software Inc.)
- Raptivity (Harbinger Knowledge Products)
- ReadyGo Web Course Builder (ReadyGo Inc.)
- Red inQ (Hurix Systems)
- Respondus (Respondus Inc.)
- SCObuilder (Westcliff)
- SCORMxt (Westcliff)
- ScreenWatch Producer software (OPTX International)
- Sculptoris Voices Studio (Imaira Digital Media)
- Seminar Author (Information Transfer)
- Siebel SimBuilder (Siebel Systems Inc.)
- SimCorder (TEDS Inc.)
- SimShop Developer Tool (Strategic Management Group Inc.)
- SkillSoft Course Customization Toolkit (SkillSoft)
- SmartBuilder (Suddenly Smart)
- STT Trainer (STT: Software Training Technology (a division of Kaplan IT)
- StudyMate (Respondus Inc.)
- TACTIC! (EDU-PERFORMANCE CANADA)
- Testcraft (Ingenious Group LLC)
- The Qube Learning System (QBInternational)
- ToolBook Assistant (SumTotal Systems)
- ToolBook Instructor (SumTotal Systems)
- Toolbox (Mohive)
- TurboDemo (Bernard D&G/TurboDemo)
- VBTrain.Net (Platte Canyon Multimedia Software Corporation)
- VCB (MaxIT Corporation)
- ViewletAce (Qarbon.com Inc.)
- ViewletBuilder (Qarbon.com Inc.)
- ViewletCam (Qarbon.com Inc.)
- Vox Proxy (Right Seat Software Inc.)
- Wizard Training Suite (Assima)
- WTDS-Web Training Development System (INTEC)
- X-Pulse LearnCube (X-Pulse E-Learning GmbH)

Note: The list above represents the products included in this research as of October 2006. New products are continually added.

Where to find more information about buying authoring tools

www.brandon-hall.com/publications/atkb/atkb.shtml

Custom Content Development Services

How do organizations requiring custom content development services locate potential providers? It may surprise you to learn that almost all courseware development vendors are chosen via word-of-mouth. In a survey conducted by Brandon Hall Research, purchasers of outsourced custom content development were asked to name ten custom courseware development companies. Most could not name five.

The truth is, there are hundreds of companies that specialize in creating custom courseware for any industry, or to meet any specific training need.

Introduction

As experts make their predictions about the future of e-learning, one prediction seems to appear most frequently on nearly everyone's list. What is forecasted is that there will be an explosion in the amount of custom developed, outsourced courseware as more and more organizations (1) need large volumes of content made available for self-paced, online delivery; (2) realize that their own limited, internal resources may not be sufficient to carry out their enterprise e-learning vision; and (3) find that the needs of their learners become more sophisticated, requiring more dynamic and more interactive, rich learning content, such as simulation-based content and experiential e-learning. However, if you really think about it custom courseware development has been around since the very beginning of using computers to teach. It predates learning management systems (LMS), virtual classrooms, learning content management systems (LCMS) and even popular desktop authoring tools. In the early days of computer-based training (CBT), most courses were created by custom development shops, sometimes by using early precursors of today's authoring tools, and sometimes by programming learning content from scratch.

...there are hundreds of companies that specialize in creating custom courseware for any industry, or to meet any specific training need.

So, why all the recent attention on custom development?

In many ways, the scenario is similar to the advent of word processing technology. When word processors first appeared on the market, many predicted the decline of professionally published newspapers and magazines. After all, the idea was that word processors would be so easy to use that literally anyone could create a quality publication. In reality, what we all discovered is that there is more to the publication process than being able to layout text, graphics, photographs, page numbering, etc. What about the actual writing, reporting, proofreading for content, photographic composition (let alone actually taking the pictures), and — most importantly — the whole process of developing engaging material in a timely manner? This most often requires a team of multidisciplinary specialists working as a well-orchestrated unit to create something that readers will ultimately value.

Video camcorders are another example of this paradox. They didn't completely replace the need for professionally produced television shows and feature movies; although they have had a significant impact on reducing the costs for corporate video production. For certain types of productions, there is still a strong need for experienced video or film production crews to create just the right storyline, mood and atmosphere, through a balance of expert writing, direction, acting and production.

Similarly, in e-learning there are times when internally developed content will fill the need quite nicely and other times when turning to an experienced custom developer may be the best approach. Custom courseware

development companies offer professional services to create engaging, Web-delivered learning content in a timely and efficient manner. Most have experienced multidisciplinary specialists that can be used to extend the resources of companies as they work toward accomplishing their long-term e-learning strategies. As corporate training groups and lines of business utilize greater amounts of online learning as part of a blended curriculum, they will find more opportunities to engage external resources in addition to all the reasons listed above; namely (1) to create or convert large volumes of learning content to online learning, (2) to add members to teams of limited, internal development resources for strategic projects, and (3) to meet the needs of projects that require advanced levels of interactivity using simulation-based and experiential e-learning designs.

Top 10 List of Requirements

Knowing what to look for is more than half the battle when choosing a custom courseware development partner. During our interviews with CLOs, e-learning managers and training directors, we asked them to tell us what they looked for in a vendor. We also matched this information against what companies typically wanted from bidders. Here is a list we assembled of the top 10 characteristics sought by end users. You can use this information as a checklist of "things to ask" when interviewing or requesting information from the vendor.

1. Well-defined, efficient instructional development process

The vendor should at least be able to freely articulate their model for instructional development and in most cases provide documentation of what to expect from the project kick-off to final completion. Many of the participants in this study follow one of several variations of the basic ADDIE model: A=Analyze, D=Design, D=Develop, I=Implement and E=Evaluate. While this is a good overview approach, watch specifically for details about how they accomplish this. How do they ensure that the analysis is correct? What is the level of quality assurance you can expect during final evaluation? Etc.

2. Experienced staff

A company's name is only as good as the experience of the people. Hiring a custom developer is similar to hiring a new employee. You not only want someone who seems eager to get the work done but is also qualified for the work. For example, do the instructional designers have advanced degrees in their field? Does this matter to you?

Note: We asked the vendors in our research to feel free to share names and experience of specific staff members, so please don't think they are bragging if they mention someone by name. They are not name dropping. Rather, they are letting you know who they consider significant players in their organization. During your final RFP process you may consider asking for full resumes of the people you will be working with.

3. Instructional integrity in all courses

Ultimately you are looking for courses that teach and meet your objectives. Ask the vendor to share case studies with you about successful implementations. Be sure and look at different measures of effectiveness. Did learners like the course? Did they learn something? Can they demonstrate their competency on the job? Etc.

In general, the more sophisticated the level of interaction and the more media-rich content (such as video, audio and animations) that are needed for the project, the higher the cost.

4. Body of work with similar types of projects

Remember that demos are designed to catch your attention. Most courseware vendors are happy to show you polished demonstration courses. What you should do is ask the vendor to show you a course that most closely resembles the type of course you'd like them to produce (by teaching style and subject matter). Most vendors will be happy to comply and may even be willing to create a special prototype course using your content.

5. Communication skills/project management

One of the most frequent complaints we hear when companies hire custom courseware developers is that the vendor simply didn't share much information over the project development cycle. Most problems, even major ones like not keeping up with the timeline, can be overcome by fostering an open communication channel between vendor and customer. Look for information in each vendor profile about how they work to establish clear communication throughout the development process.

6. Ability to grasp complex or difficult subject matter

Some courses have difficult and demanding learning curves to get up to speed on the content that is to be taught. Imagine having to learn a concept that is only taught in the fourth year of medical school. How hard would it be if you were tasked with creating learning content on the topic? A good custom courseware developer should have the capacity to absorb and disseminate information from subject matter experts and convert this into meaningful course material. It doesn't mean they have to already have subject matter expertise. Rather, it means they have the ability to work under these conditions. If you have a specifically difficult subject matter area, be sure to ask the vendor to talk through several of examples where they have had to deal with similar issues.

7. Rapid prototyping capabilities

One of the most frequent mistakes a custom content developer can make is to wait until the course is completely finished before showing you how the course works. Look for a vendor who has prototyping steps built-in to their instructional development process. A good vendor will at least create a mini-prototype of each new type of interaction to be used in the course. This will keep expectations at a proper balance. No surprises.

8. Moderate cost

In reality, customers are simply worried about paying too much for the service. In general, the more sophisticated the level of interaction and the more media-rich content (such as video, audio and animations) that are needed for the project, the higher the cost. It is a good idea to learn what the approximate costs might be before opening the project for bid. And, be sure to get a good representative sampling of bids for the project, asking the vendor to share exactly what you get for your money.

9. No page-turners

Another area of dissatisfaction is when a customer chooses a vendor and they provide nothing more than mere page-turning content. This has been the source of much conflict and even lawsuits. Be sure to get a description of the level of interaction before signing a contract. Be somewhat wary of very low-cost bids. Ask the right questions.

10. Experience working with standards-based, Web-development tools

It is one thing for the vendor to create a nice looking, engaging, interactive course and quite another to make sure that it works within your infrastructure. If you are already using an LMS (learning management system),

you need to make sure and specify the amount of data that must be passed between the content and the LMS. Also, look for companies that have experience with the systems you intend to use.

List of Companies Currently Included in Our Custom Content Developers Research

- 4C-Learning Solutions Pvt. Ltd
- AcceleraRomar
- Accenture Learning
- Adacel Technologies
- Adayana Inc.
- Allen Communication Learning Services
- Allen Interactions
- Alpine Media Corporation
- Aura Interactiva
- Automated Learning Corporation
- AXG Tecnonexo
- BinaryLabs Inc.
- Bluedrop Performance Learning
- Braahmam Net Solutions Pvt Ltd.
- Brainvisa Technologies Ltd.
- Bright Alley Knowledge & Learning BV
- Brightwave Ltd.
- Brookwood Media Arts
- Business Performance Technology
- Care2Learn
- Carney Inc.
- Catalyst Interactive Pty Ltd.
- Centrax Corporation
- CFOEd LLC
- CognitiveArts, A Division of NIIT Technologies
- CommLab India
- Convergys Corporate
- Creative Approaches Inc.
- Creative Channel Services LLC
- d'Vinci Interactive Inc.
- e-dactica
- edCetra Training
- EDT Learning
- Educacorp
- Eedo Global Learning Services
- Element K
- Enspire Learning
- Eprosys
- eTrinsic
- Exegi
- Experience Builders LLC
- Fuel IT Ltd.
- GeneEd Inc.
- General Physics Corporation
- Get Thinking Inc.
- Gronstedt Group Inc.
- Harbinger Knowledge Products
- HCI Training
- Hurix Systems
- I.C. Axon
- Integrated Performance Systems
- Intellinex
- Interactive Alchemy Inc.
- Interactive Point of View
- Interactive Solutions new media inc.
- InterCom
- IsoDynamic
- ITACA Interactive Training Advanced Computer Applications
- Jardon and Howard Technologies Inc.
- Kaleidoscope Learning
- Karta Technologies Inc.
- KLi Learning Corporation
- Knowledge Anywhere
- KnowledgePlanet
- Lambda Solutions
- Learning Evolution
- LINE Communications Group Limited
- Lionbridge
- Little Planet Learning
- Media 1
- Mediapro Education Technology Pvt. Ltd.
- MediaPro Inc.
- Medsn

- Meridian KSI
- Midi Inc.
- NexLearn
- NIAM-TMS
- NIIT
- NogginLabs Inc.
- NXLevel
- Omega Performance
- Option Six Inc.
- Pinneast
- Point-Productions
- PriSim Business War Games
- Professional Touch Multimedia
- Resource Bridge
- RWD Technologies
- Savoy River LLC
- Sify Limited
- SkillSoft
- Smartfirm
- SmartVista Technologies
- Socratic Arts
- SoftAssist Inc.
- SSE
- Sublime Media LLC
- Synesis Corporation
- Tata Interactive Systems
- Teach Concepts AG
- TechEmpower
- Technical Information Associates
- Teleologic Learning Co.
- The CMOOR Group
- The Digital Ranch Inc.
- Thomson NETg
- TraCorp Inc.
- TrainingOnline
- TRC Interactive Inc.
- Trivantis Corporation
- Type A Learning Agency
- VEGA Group PLC
- Via Training LLC
- Vubiz Ltd.
- Vuepoint
- Web Courseworks
- Web Technologies
- Zenith Systems Pty Ltd.

Note: The list above represents the products included in this research as of October 2006. New products are continually added.

Where to find more information about custom content development

www.brandon-hall.com/publications/cckb/cckb.shtml

Learning Management Systems (LMS)

A learning management system is the cornerstone of any e-learning implementation. These powerful systems have long been hailed for their ability to bring administrative efficiencies to training departments. By automating processes such as registering learners for courses, keeping track of whether employees completed the training or passed a test, and generating reports for managers, they allow training managers to save valuable time and resources.

When used to their full potential, learning management systems (LMSs) can help organizations

- Deliver the right information to the right people at the right time
- Connect knowledge and competencies to specific business objectives
- Track users' progress through training so managers can make decisions about how to best use resources and spot trouble areas before they become problems
- Make both employees and their managers accountable for completing training and obtaining specific performance results

Top Ten Characteristics

There are several sources of information that will help you map out your business requirements and set your focus on what is most important when selecting an enterprise learning management system. The biggest mistake made by those seeking an LMS solution is that they quickly get bogged down in a process of going through individual LMS features at the item-by-item level, while forgetting to assess the overall need for the system and the selection criteria used to select final candidates.

The following list may be of some assistance. During our research process, we analyzed dozens of RFPs (Requests for Proposal). We found that the following 10 LMS product and LMS vendor characteristics are the ones that most companies are most concerned about. Following is the list (sorted in the order of priority of most frequently requested).

1. Standards-based, e-learning launching and tracking capability

Without question, the number one request we've seen is to have the systems comply with SCORM and/or AICC specifications. It is a clear indication that interoperability between LMSs, authoring tools, LCMSs, and third-party content are very important to those who select LMS solutions. By supporting these standards, LMS vendors acknowledge that they are equally concerned with this issue.

2. Open model for interoperability with third-party e-learning content

While this is akin to item #1, there is a further concern by end users that the LMS seamlessly run content libraries that they may already be using in-house — or are considering. LMS users don't want to offer this content in isolation. Rather, they want to make it part of the organization's blended learning environment. Asking whether an LMS is standards-compliant doesn't fully answer this question. What end users would rather know is that someone, somewhere has already built a bridge to pass performance data and bookmarking between the third-party content and the reporting engine of the LMS. RFPs often specify specific libraries. Some of the libraries they ask specifically about most often include: NETg, Element K, MindLeaders, etc.

These powerful systems have long been hailed for their ability to bring administrative efficiencies to training departments.

3. Freeform, ad hoc, customizable reports

While LMS users appreciate the fact that most LMS products have robust reporting engines, one of their biggest concerns is being able to pull the information they need, when they want it, and how the want it. Most do not want to be locked into a fixed reporting model. They want to freely browse data and create their own report templates using either built-in customization tools or standard report applications such as Crystal Reports, Cognos, etc. Most RFPs specify that the LMS user would like to be able to perform this task by themselves, without having to go back to the LMS vendor to contract for additional services.

A majority of LMS implementations require at least some interaction with other business systems.

4. Strong classroom management capabilities with full resource/instructor management

Most of the LMS products covered in our research have built-in, instructor-led training functionality. A few years ago, this was the main reason to purchase an LMS — to automate record keeping for current training methods. Even with the proliferation of blended learning models, do not underestimate the importance of how the LMS will fit with traditional training methods. RFP writers acknowledge that classroom management is still a primary consideration.

5. Experience and planned process for ERP/CRM (plus other business systems) integration

A majority of LMS implementations require at least some interaction with other business systems. The most likely scenario is that you will want to batch enroll users without re-keying information contained in a company ERP (e.g., PeopleSoft, SAP, Oracle, Lawson, etc.). When writing an RFP, be sure to be as specific as possible about how you would like this integration to work. You can explain the data flow without having to technically describe "how" the data will be moved from one system to another. If you are like other RFP writers, this is an area you will most likely need to address when creating the business requirements section of your RFP.

6. Pre-integrated content development and/or content management capabilities

In most cases, not all of the content will come from third-party sources (off-the-shelf courseware and/or custom development). Upwards of 80% of organizations plan on creating at least some of their own e-learning content. As part of LMS due diligence, it is important to find out which tools you can use to create the content. An LMS doesn't have to have its own set of built-in authoring tools to meet your needs. In fact, many organizations create content using desktop authoring tools (such as Flash, Dreamweaver, Authorware, Trainersoft, Lectora Publisher, etc.). However, some organizations are looking for a turn-key solution that covers both authoring and learning management. There is no right or wrong answer. If you are planning on creating any of your own content, at any time, it is critical to define how this is to be done early in the selection process. This will give you the opportunity of finding systems that interoperate with your desired authoring tools and/or LCMS.

7. Extended "performance management" functionality, such as competency management, regulatory compliance tracking, 360-degree evaluation, OJT tracking, etc.

Many RFPs outline performance management characteristics needed beyond e-learning launching and tracking — and beyond classroom management. However, others don't envision this area as being a feature of the LMS; rather, they might use other tools for this purpose. It is important to understand

how you intend to use this functionality before making it a business requirement for choosing an LMS.

8. Quick, efficient implementation

What is quick, efficient implementation? This could be the topic of an entire research study, yet it seems to be a critical aspect of most LMS RFPs. Often, the completion dates for the project are specified in the RFP and not based on what is possible. Metrics about average implementation times can be found in the LMS Benchmarking section of this study.

9. Reasonable price

Prices for LMS solutions are all over the map. There is no real standardized pricing model for calculating how much an LMS should cost. Therefore, you should expect to see a fairly wide array of bids when fielding a proposal. To assist in finding systems that align with your budgetary requirements, we have included suggested list pricing for several LMS implementation scenarios, including: 500 learners; 10,000 learners; 25,000 learners; and 100,000 learners. Even if your scenario doesn't quite match, you can use this information to observe relative pricing among candidate systems.

10. Financial viability of the LMS vendor

A few years ago, during the technology boom, this only occasionally popped up in LMS RFPs. Now, questions about vendors' long-term financial viability seem to be rather commonplace. It is not unreasonable to ask for this information to aid in making your selection. Another good place to check out the financial viability of a potential vendor is to check their records at Dun & Bradstreet's Web site. See www.dnb.com (paid service).

Again, this is not a definitive list of everything you should look for when considering an LMS. But, it does help to know what many companies consider prime issues to be covered when creating an RFP.

High-Level Steps for Your Selection Process

With so many LMS choices, the process of selecting a system can be mind boggling if you move too quickly to comparing systems feature-by-feature. We recommend using a more top-down, systematic approach: First, rule out systems that won't meet your needs (create a short list); then, create an evaluation tool to further narrow the list. We've put together an approach that can be used to avoid confusion and quickly identify a system that will meet your needs.

Analyze strategic, instructional goals

We recommend assembling an e-learning or blended learning strategy committee. Include representatives from the different divisions, departments, or lines of business that will be most affected by the new initiative. Hold a series of meetings and circulate documents that establish the objectives and priorities of the project. Try hard not to allow the discussion to lapse into a list of LMS functionality; rather, focus on broad directives. For example, if your organization is considering measuring employee performance at the competency level, discuss what you hope to achieve. Answer some basic questions about the feasibility of doing this. For example, who is going to document job skills for each position in the company? Who maintains the competency lists? How do we verify mastery of a competency? Is it through testing, on-the-job performance records, annual review information, or perhaps all of the above? Notice that these questions have very little to do with technology and more to do with process.

The purpose of these meetings is to create a master learning strategy, defining the scope and purpose of each major component.

Generate a list of 10-20 critical, highly differentiating factors

After the learning strategy has been adopted, the natural tendency is to start throwing around names of LMS systems or developing extensive prioritized feature lists. This is not a good idea (not yet anyway). The group will quickly become frustrated with the selection process. Rather, try to define 10-20 of your most critical needs. Crafting statements around this will quickly filter out unwanted systems — ones that won't meet your needs. For example, we know of a company that was looking for an LMS to supply learning content to two different geographic locations. One of their operations was in Korea and the other was in China. They determined they were looking for a system that could handle multi-byte support (required to display both Chinese and Korean fonts and character sets). By filtering out systems that didn't support multi-byte characters, the company quickly eliminated about 50% of the systems they were considering.

The critical needs statement should be written in terse, unambiguous, declarative sentences. This list need not be lengthy, but it should include qualifications for your most critical needs. You should be able to keep the list to between 10-20 items. The best pre-qualification checklists include highly differentiating items, as long as they are critical ("must haves") to the success of your project.

Here is how the critical need was written for the aforementioned client:

The learning management system must be capable of supporting multi-byte Chinese and Korean font sets in the primary learner interface with a built-in schema allowing non-technical administrators to translate the interface. High preference (not required) will be given to systems that are commercially available (already translated) in both Chinese and Korean.

Once you have created a list of these highly differentiating features, the list can be included as a pre-qualification checklist at the beginning of your RFP. In this particular case, several vendors disqualified themselves before wasting their time — and the time of the reviewing company — because their system simply did not support multi-byte character sets.

Develop a short list of LMS solutions that meet all (or nearly all) of your most critical needs

Using the critical needs list as a guide, you can now systematically narrow down the list of LMS solutions to a more manageable size, considering both primary and secondary needs in addition to other considerations such as recommendations from colleagues, existing company partners, and your personal interaction with LMS companies. You can use the online LMS selection tool and comparative grid tool to further narrow down your list. Most companies try to narrow their list to 5-10 companies in preparation for issuing an RFP.

Develop "use cases"

The next step in the process is to create an evaluation tool to further refine your short list. The most common mistake made by companies in this area is to simply invite the LMS vendor in to give a general demonstration of their system. While demos are helpful, they won't automatically tell you what you need to know. The approach we prefer to use is to create a well-defined "use case."

Simply stated, an LMS use case is a list of action-based tasks that will demonstrate the system's ability to meet your specific needs. A use case describes a "day in the life" of an LMS user. What will they be doing with the system most often?

Invite in selected LMS vendors to demonstrate how their system matches with your use cases. Use cases can be sent to vendors prior to any demonstration sessions. The use case serves as the demonstration script for the meeting. Instead of showing you only their bells and whistles, the meeting will productively focus on the somewhat mundane tasks and connectivity issues you will be facing with your project — without wasting your time, or the time of the vendor. Each item in the use case can be more objectively assessed (perhaps even scored) to determine which vendors to include as final candidates for the project.

Note: this step may also be completed after the RFP process if you'd like to collect product and bid information before further narrowing your list.

Create and send RFPs to qualified candidates

If you followed all of the steps above, you now have a pretty good idea about which systems will most likely meet your needs. These are the short list candidates to include in the final selection process. Because of the use cases, the vendor also now has a good idea about what your project is about and how their system matches up with your requirements. The business requirements, as well as the critical needs checklist, will not be a surprise to them. Grade responses and choose a modified short list of systems that have the best proposal for your project. With proposals from vendors in hand, now it's time to grade the proposals and further narrow down the list. Many companies (depending on size and resources) try to narrow the list to two or three vendors at this point. Create an LMS "sandbox" for hands-on testing. With a very short list of LMS candidates, you can request that the vendor set up a sandbox for hands-on testing with the system. The "use case" document can be used once again for validating and double-checking that each system meets your needs. We recommend actually having sample users (learners, course schedulers, instructors, administrative users, etc.) try out the system for themselves. This is a great opportunity to get their feedback on how the system "feels" to them — helpful support information beyond simply making sure the system has a specific feature. Although this information is subjective, it will be extremely valuable in making your final determination. After you know that a system will technically meet your needs, who better to provide usability information than a focus group of test users?

Select a system, drawing on all available resources, considering all factors. It's time. You now have the information you need to make a decision. You can compare bid prices, subjective feedback from your focus group of users, proposal grading, etc., to make that final decision. The negotiation and contracting phase can now begin.

A use case describes a "day in the life" of an LMS user. What will they be doing with the system most often?

20 Questions to Analyze Critical Needs

The following 20 questions can be used as a work aid when meeting with an e-learning strategy committee. Answering these questions as a team can help you streamline your search process when using the LMS selection tool.

1. Do you have the resources to locally install an enterprise e-learning solution, or would you be more comfortable using an externally hosted solution?

The answer to this one question alone can dramatically change the dynamics of your search process. There are LMS vendors that specialize in "hosting." The have set up a wide variety of hosting services. They are used to dealing with IT from a hosted perspective. Please be aware that 67% of organizations choose to locally install their LMS on their own servers, using their own IT resources, while 33% opt for hosting. The advantages of hosting include: quicker set-up, amortized payment schedule (annual licensing, as opposed to up-front payment), and less burden on an organization's IT staff. The advantages of locally installed solutions include: up-front cost is often lower over a long term (fee up-front, only 15-20% maintenance fee for follow-on years); and users have more control over their own environment and their own interoperability.

2. Do you plan on internally creating at least 80 hours (seat time) of e-learning content across the entire enterprise each year?

Answering this question will quickly let you know if you should look for an LCMS (learning content management system) functionality when looking for systems. If your organization plans on not creating any e-learning content — or only a few hours of content per year — then using desktop authoring tools is going to be the most cost-efficient method. However, if you really do plan on creating 80 hours or more of e-learning content, you might consider looking for a system with either built-in LCMS functionality or a system with strong third-party relationships with LCMS providers. An LCMS provides an enterprise publishing model for centrally locating learning content (avoiding the content silo syndrome) and offering enterprise reusability of learning content. An LCMS becomes a cost-effective solution as the publishing needs for an organization grows. Note: Most of the LMSs in our research have either built-in content management capabilities or alliances with third-party providers. However, some do not.

3. Are you already using, or have plans to use, e-learning content from third-party e-learning providers (such as SkillSoft, NETg, Element K, Syntrio, etc.)?

Take an opportunity to inventory e-learning content already used in your organization, across all departments and divisions that will use the LMS. It will save you time and money to find systems that have already tested interoperability with your specific learning content. This will help you avoid problems with having to broker a relationship between your content partners and your LMS partner.

4. Do you have plans for dispensing learning in languages other than English?

It is a good idea to document your need — or lack of need — of providing learning portal interfaces in other languages. Just because your company operates in multiple countries doesn't automatically mean that you will create learning portals in each language. Many multi-national organizations do business in a specific language and don't have this requirement. If you do have a need to

deploy in other languages, this can be a highly differentiating feature to quickly narrow your search. Many LMSs make it possible to translate their interfaces to a variety of languages, while some already provide translated versions. You want to find a system that fits with your current and future plans (at least a three-year event horizon).

If you have a need to create Japanese, Chinese, Korean, or any other learning portals that require multi-byte support (the ability of the system to display advanced character sets), it should be immediately noted. This one characteristic will narrow your search and rule out systems that don't meet your needs. In addition, be careful to look for systems that provide additional means of localization, such as handling foreign currencies, time zones, etc.

5. In addition to e-learning, do you have plans to manage classroom instruction (registration, tracking, etc.) through a central scheduling system?

Most companies consider this a core part of an LMS, but don't take it for granted that this feature will be used. For example, does your company already have a classroom management system in place? It is possible this function is already being managed by another system. Document the needs of every group that will use this functionality. To what extent? Do they need wait-listing, facility/room scheduling, instructor scheduling, equipment scheduling, notification, etc.? It is very important to understand what role the classroom management scheduling component plays in your broader learning strategy.

6. Do you have a well-defined plan for tracking learning at the competency level?

First, consider the following: Competency management and skill-gap analysis are frequently requested features in an LMS system. However, many organizations that insist on having this functionality never use it. It is a paradox. Most trainers are enamored with the idea of tracking progress at the competency level. Truth be told, this is not difficult to do with the technology available. In fact, most of the systems covered in this study do an excellent job in this area.

There is a bigger issue at play here. Most organizations do not have well-defined competency maps or skills defined for every position throughout the organization. In most cases, there is no one tasked with keeping this information up-to-date. There are some very enlightened organizations that will be fully capable of implementing competency management out-of-the-box. For the rest of us, it may be a desire or goal to do at some time in the future. We recommend that you not treat this as a technology issue; rather, as a discovery exercise to assess your organization's maturity level in measuring or moving toward measurement of performance in terms of skills/competencies. Also, consider the following: If you do have a well-defined competency model, how much training content do you already have in place to cover the broad spectrum of required skills?

Implementing a full skill-gap analysis model is very doable. Not only has it been done; it has been done very well. Take this opportunity to assess where you are now and where you hope to be in the next three years. Make a complete plan for implementation beyond just selecting an LMS that supports competency management, skill-gap analysis, succession planning (based on skill-gap analysis, etc.)

Most trainers are enamored with the idea of tracking progress at the competency level. Truth be told, this is not difficult to do with the technology available.

7. Do you have a mandate to perform regulatory or compliance tracking of enterprise learning?

As part of your due diligence in this area, determine if you have a common system for tracking regulatory compliance. Do you measure compliance in terms of credit hours? Or is compliance measured through certification testing? Or both? Other issues to consider include: Do you require a system that notifies learners of expired certifications (perhaps on an annual basis)? How long must you keep archival performance records? These are highly differentiating issues to help narrow down the list of possible LMS providers.

8. Do you have plans to merge your e-learning practice with a knowledge management initiative?

Knowledge management is a nebulous term that means several things. What does it mean to you and your organization? For example, we know of a company that created a database of just-in-time learning models. The company wanted to make the just-in-time learning topics available through the LMS system and associate specific topics with structured learning courses. The just-in-time system was created using Documentum. This type of information will help you narrow your LMS list quickly. You can use the LMS selection tool to find systems that have actual experience providing this level of interoperability. At the time of this writing, only 11 of the 52 systems in this study have tested at this level. It doesn't mean you have to choose one of these 11 systems, but it will realistically allow your team to decide whether to go with a system with this experience or choose another vendor (without experience) to take on this project. This is very helpful to the decision-making process.

9. Beyond e-learning delivery, do you see the system as a primary method for human capital management (conducting performance reviews, using for hiring decisions, etc.)?

LMS systems have evolved over the years, adding functionality that was previously only found in HR systems. You have a critical decision to make: Do you expect this functionality to be embedded in your LMS solution? Are you already providing this functionality through other systems? What should the interplay be between LMS learner performance data and other systems? Or, would you prefer to have all of this functionality in a single, turn-key solution?

10. What percentage of the training will be tracked for performance data?

What level of reporting is needed to satisfy the needs of your enterprise-wide learning initiative? Not all LMSs are created equal when it comes to collecting and reporting performance data. Some LMSs only collect composite scores, while others capture information such as test item analysis data and latency (time spent on different sections of the course) — some even trap mouse clicks. What level of data capture and reporting do you need? Tip: Too many companies choose LMS solutions without considering their record keeping needs. As part of your business requirements phase of the selection process, we recommend that your team spend some time defining the exact data requirements for the system. This can be as easy as creating a flow chart of who needs data and when; or creating specifications for reports in a word processor. Simply open a blank page and make a bulleted list of information needed. This is excellent material to use when creating your use cases.

11. Do you hope to facilitate collaborative interaction among learners or make the system a place to engage in self-paced learning experiences only?

This might appear on the surface to be an easy question: "Of course we want collaboration among learners." However, it might surprise you to learn that many corporate users are often reluctant to use collaborative tools such as discussion boards, chat, learner-to-learner e-mail, etc., because of fears of creating time wasting activities. How often do you find a truly productive discussion board? (Okay, sometimes; but these are probably the exception, not the rule.) Too often organizations simply indicate that they want collaborative tools with no strategic or instructional purpose for using them.

This is quite the opposite in academic online learning scenarios, where collaboration is not only encouraged but made a part of an academic curriculum. Learning can be enhanced through communication with other learners as part of homework groups, team projects, etc.

Choosing collaboration for corporate learning should have equal clarity. There are many possibilities to use collaboration with purpose. When asking this question, look for that clarity and ask critical questions about how collaboration can be used to strengthen your learning environment (and not be a waste of time).

12. Do you have plans to use live, virtual classroom sessions as part of your overall e-learning strategy?

Many organizations already have virtual classroom and/or virtual meeting software in place, such as Adobe Breeze, Microsoft LiveMeeting, WebEx, Interwise, etc. Some groups are already actively using these for the purpose of distance education. It is worthwhile to map the use of virtual, instructor-led events into your overall learning strategy and determine how this must fit into your learning management system platform. Many LMS vendors have already formed partnerships with the leading virtual classroom/live meeting providers. If you have a system in place, we highly recommend looking for vendors with single authentication log-in (meaning the learner doesn't have to log-in twice — once for the LMS and another time for the virtual session).

There are also systems with advanced capabilities to track completions and even some systems that will record learner responses to questions asked during the live session.

The important thing is to map your live session learning strategy into the broader blended learning environment.

13. In order for the project to be successful, is it necessary for the learning system to communicate with central employee records found in an ERP system (e.g., PeopleSoft, SAP, Lawson, etc.)? At what level?

Too many organizations make these critical decisions too late in the selection process. This should be established right up-front. Is your desire to have employees — who are already recorded in the company-wide database — automatically registered as learners in the LMS? If yes, are you okay with doing occasional "batch" enrollment — creating a CSV file of all employees from the ERP system, then importing the data into the LMS? Would you prefer this process to be automated (e.g., updates occur automatically at 1:00 a.m. every day)?

Now the tough questions: If someone is registered at the LMS level, should the system automatically synchronize their record, automatically adding them to the ERP database? If so, how does your IT staff feel about training processes generating employee records? And, the most important question to answer, what data actually needs to be passed from system to system? It would be a great idea to map this out with the entire team. Be sure to include IT representatives in the discussion — regardless of whether you plan to use a locally installed, behind-the-firewall solution or have the LMS externally hosted (which could impose different data passing issues).

14. Is it part of your plan to charge for consumption of learning material, either through e-commerce transactions (such as a credit card purchase), subscription pricing, or through departmental charge-backs?

Unless you resell e-learning content, you may not consider e-commerce to be an important issue. However, there are other aspects to consider. For example, does your organization keep financial records about who uses training (i.e., departmental charge-backs)? Are you required to keep records for training used from third-party vendors? This is all part of e-commerce.

15. Who are the potential users of the system, and what is the technological infrastructure to reach those users?

Where are they located? How many geographic locations exist in the enterprise? You must get a clear picture on how the LMS will fit into the technical infrastructure of your organization. If you are running an extremely large deployment, it may make more sense to run mirrored versions of the LMS on multiple servers. Not all LMSs do this well. Some have better configuration for multiple site delivery. What if you want to use a local ISP provider in South Africa to host your LMS? Does the company have local support? This is not something you want to discover later in your specification process.

16. Do you need to deliver training to some people who may be offline — not connected to the central system?

Sounds rather simple, doesn't it? The truth is that this is a highly differentiating characteristic when selecting an LMS. Only a handful of LMS products do this well, so if this is defined as one of your critical "must have" needs, then your selection process is narrowed very quickly. One caution: You should be prepared to use the system's own brand of content development and/or content management capabilities to take full advantage of this. Being able to download and play content offline, then synch the performance data back to the LMS at a later date usually means you have to use your LMS system's content management tools. Some vendors are making headway with delivering third-party content in an offline mode, but this is still difficult to do.

17. Are you planning an enterprise-wide corporate university as a single point of access or a series of departmentally maintained learning portals with different business needs (requiring multiple domains)?

This information is simply derived by defining how many different learning portals are needed in your organization. If the plan is to have one main learning portal that has a common look and feel, and every department and division are expected to follow the same workflow (e.g., manager approval required for class enrollment), then this is really a non-issue. However, the chances are good

that different departments will want to customize the learning portal for their particular needs, showing only the courses that apply to their learners, adding their own logo, selecting their own color scheme, creating new layouts for the learning portal page, creating their own notification templates, creating their own performance reporting templates, etc. If this sounds like your organization, you would be better served to key on systems that support multiple domains from a single implementation, allowing for customization for each derivative version of the learning portal.

Describe 5-10 use cases of how someone might interact with the system (e.g., from learner, instructor, and administrator perspectives). Another appropriate task for an e-learning strategy committee is to create common "use cases" that reflect the needs of all groups. A use case is simply a document describing how typical users (learners, event schedulers, instructors, administrative users, etc.) interact with the system, described in terms of action-driven tasks. By using the discipline of creating use cases, you will get a clear picture of how other groups in your organization intend to use the system, setting the scope for the range of functionality required.

18. Can you describe 5-10 use cases of how someone might interact with the system (e.g., from learner, instructor, and administrator perspectives)?

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19. Do you have buy-in from all stakeholders on the project?

This is a question you should continually be asking throughout the selection process. Are all of the appropriate departments, divisions, and/or lines of business represented? Are we also keeping focus on the learner experience? It may not be feasible in very large organizations to have representatives from all groups; however, it is quite doable to include them as reviewers of documents such as an organizational learning strategy document, LMS use cases, and the final RFP document.

20. Do you have sufficient budget to establish an enterprise e-learning platform?

Far too many companies de-emphasize this information until the very end of the LMS selection process, only to realize that the bids are too high to be actionable. We recommend doing research on prices of systems during the front end of the analysis process. As a consumer of this LMS service, you have full access to the pricing estimates that can be found in each LMS profile for a variety of scenarios, including: 500 learners; 10,000 learners; 25,000 learners, and 100,000 learners. This should give you a fairly good idea of how LMS solutions might price for your specific scenario. For estimating budgets for an LMS initiative, we suggest looking at the range of prices and not the average. For those with budgetary limitations, you can also use your pricing tolerance as a filtering agent for narrowing down prospective candidates.

Writing a Use Case for Evaluation Purposes

A well-defined use case can serve as the road map for your LMS test drive.

The phrase "use case" is frequently spoken by computer programmers. They invent "use case" scenarios to determine how end users will make use of the programs they create. Use cases are created very early in the development process, often long before coding begins. At the end of the development process, use cases are utilized as test scripts to see if their original goals and objectives have been met.

Similarly, "use cases" can be employed as an evaluation technique for finding the right learning management system. Far too often, organizations get caught up evaluating systems based on their features and functions only. Focusing on these areas only paints part of the overall picture. It is like buying a car based exclusively on the fact that it (1) has automatic transmission, (2) has a CD player, (3) gets over 30 miles per gallon, (4) has a large trunk, etc. What about the test drive? How much does that factor into your decision to buy a specific car?

A well-defined use case can serve as the road map for your LMS test drive. What makes this even more important is that your LMS will have multiple drivers (users). The primary purpose of the "use case" is to describe a day in the life of typical LMS users. A secondary purpose is to make sure that everyone on your team has a consistent vision of what the LMS must do — before you even consider doing due diligence with a specific LMS solution.

The process for creating your use cases is — in reality — quite simple:

Step 1: Make a list of all the different types of people who will interact with the LMS. There are more users than just the learners and LMS administrators. Although the needs may be quite different from organization to organization, here are some roles that are typically included in a use case:

- Learner perspective
- Classroom scheduler perspective
- Content developer perspective
- Instructor perspective
- Training manager perspective
- IT/Systems integrator perspective
- Supervisor perspective

Step 2: Put yourself in the role of each type of user and ask, "What do I want and need from the learning solution?" Be careful not to get caught in the LMS feature trap again. Rather, focus on the needs. For example, an administrative user may have a strong need to automatically circulate specific reports to senior executives on a regular basis. Using the example, it may be worthwhile to document what specific data items are needed as well as understanding who needs the information, and when.

Use Case Statement (good example)

Create an ad hoc report showing overall usage statistics for the previous 30 days, including:

- Courses completed
- Courses started but not completed
- Course distribution by department
- Total time used by all learners

Set up a distribution list for the newly created ad hoc report and set a time for automatic generation and distribution.

Feature Listing (bad example)

- Notification engine
- Automatic routing of reports
- Ad hoc reporting capabilities

Step 3: For each user type, document the use cases as a series of action-oriented

steps that can be either demonstrated during an LMS demonstration or discussed as a service requirement during an LMS demonstration, or performed as part of a test drive.

Step 4: Circulate the list to other members of the team and to representative system users. Update the use cases as needed until there is complete consensus among the group.

Step 5: Create an evaluation form to grade the system during LMS demonstrations and for hands-on testing. Because the statements are action-generated, they can easily be evaluated by representatives of the various user groups. In short, this is the system test drive. This makes it possible to grade such things as "ease of use" or "intuitive design" that are nearly impossible to judge using a feature-by-feature comparison alone. Note: Feature examination is an important part of the process as well. By using both feature comparisons and use-case walkthroughs, you will have a much clearer picture of how the LMS will work for you.

Step 6: Invite the LMS vendor to demonstrate their ability to meet the needs of your defined use case. You can send the vendor the use cases ahead of time to use as a demo script for on-site and/or virtual presentations.

Step 7: Actively use the use cases as a primary part of the selection process. The use case will help you understand how the system will meet your needs and quickly expose any areas of weakness or issues requiring work-arounds. Here are some tips to make your use cases more effective:

- As resources, time, and circumstances permit, have representatives of the actual target audience evaluate their own section of the "use case" document.
- Use cases do not need to be lengthy to accomplish their objectives. In fact, most effective use cases may only be 4-6 pages in length.
- Focus on things that users will do 90% of the time. This may seem a bit mundane, but it is important to assess workflow in the system.
- You can grade each section of the use case using a Likert scale, but remember to continually ask the question, "Was this easier or harder than it was with the previous system?" Reassess at the end and perhaps rank each system according to each section of the use case.
- There is nothing like hands-on testing of the LMS solution. Ask the LMS vendor for a sandbox demonstration (providing a live version of the system for you to use and test for your own purposes). The use case document provides an excellent checklist of things to test, rather than turning users loose on the system.
- You can choose systems to include in the final analysis based on features and functions, but do not make your final selection until you have completed your evaluation through use cases.

There is nothing like hands-on testing of the LMS solution.

Creative Ways to Reduce the Cost of Your LMS

Small organizations aren't the only ones looking for a low-cost LMS. Business units within a large organization may require their own system. Associations and nonprofit organizations of any size are often limited in the amount of funds they can allocate to e-learning infrastructure. Resellers of e-learning courses may be looking for a simple LMS to create a corporate university. Even large organizations with impressive training

budgets may be searching for a low-cost solution if their LMS needs are simple and limited to core functionalities.

Organizations of all types and sizes have found novel ways to reduce their LMS costs. The following case studies present strategies and ideas to help you achieve similar savings.

Smaller Organizations

Smaller organizations often feel overlooked by LMS vendors. We commonly hear this complaint at trade shows and conferences. They feel that LMS vendors have been targeting companies with large workforces and deep pockets. The truth is that there are solutions for smaller budgets. There are also ways for smaller organizations to dramatically reduce the cost of their LMS.

An organization with about 250 employees had allocated $150,000 for an LMS. Through self-discipline and creativity, they were able to get a system for less than $13,000. They accomplished this impressive task by focusing on solutions with just enough functionality to meet their needs. In addition, they considered banding together with similar companies to share an LMS license. They also considered the possibility of leasing instead of buying a system. They considered the short- and long-term costs of a hosted solution.

In the end, since the organization has a good information technology department, they seleced an "out-of-the-box" solution they could install, configure, and maintain internally. The purchase of such a system substantially reduced the overall cost of the LMS, since vendors charge substantial fees for installation, configuration, etc.

The organization found itself with a staggering $137,000 left in its training budget; these funds could be allocated to course libraries, authoring tools, and new content.

Business Unit in a Larger Organization

Although many LMS vendors target large multinational organizations thinking they'll get licenses for large implementations, many large organizations are actually composed of independent business units. These units may be in different geographic areas or may be responsible for specific products or services. Although the organization may have 100,000 employees, the business unit may be much smaller and may have control over its own training budget.

A business unit of a large multinational technology company was looking for an LMS to help train its software engineers. The selection committee was comprised of individuals who were very comfortable with software and, accordingly, wanted every possible feature an LMS could deliver. Feature scope creep was quickly ruining any chance they had of finding a low-cost system.

This business unit certainly had the technical skills to purchase an out-of-the-box solution, but management decided they'd rather not allocate their valuable IT resources to installing and maintaining a system. They then considered a hosted solution to avoid staffing costs.

Before finalizing their decision, they decided to investigate what systems other business units within the company had purchased. In their survey, they discovered that some of the systems in place could support multiple domains. In other words, the LMS could provide a custom interface and catalog of content for employees of one business unit and a different interface and collection of content for another business unit. Although the systems in place elsewhere in the company didn't provide all the functionalities they had hoped to purchase, the cost of extending

an existing license to include their division cost a fraction of what it would have cost them to license their own LMS. The cost savings were so overwhelming that the selection committee had little trouble convincing management that this was the route to take.

Associations and Nonprofit Organizations

Associations and nonprofit organizations are unique industries with their own culture, language, and processes. These differences create distinctive challenges and opportunities. For one, budgets in these organizations are often limited. In addition, employees are often valuable volunteers with special training needs.

A nonprofit, environmental organization was in the market for an LMS. Their intent was to provide their custom-built courses on good environmental practices to businesses through a training portal. Traditionally, this organization has generated its revenues through dues collected from members and through public donations. They were now hoping members and businesses would pay to take these online courses, thus generating a new stream of revenue. They estimated that the revenue from this initiative would eventually pay for their LMS, but they had no funds for the initial licensing fees.

They contacted may LMS vendors and eventually found some who were willing to accept a low up-front cost and then collect royalties for content delivered. For the environmental organization, this was a low-cost and low-risk solution. The more they would sell, the more revenues they would make. And if they sold less, they would pay less.

Since the LMS was to be hosted by the vendor, no servers of other infrastructure needed to be purchased and no human resources needed to be allocated to maintaining or configuring the system. For the LMS vendor, the prospect of making sufficient royalties seemed quite good since the vendor believed in the organization's cause and felt the courses would be popular. This arrangement resulted in a low-cost solution that could benefit both the customer and the vendor.

E-Learning Resellers

Some e-learning providers are resellers of courses developed by other companies rather than developers of their own courseware. For example, resellers may provide IT training from one vendor, soft skill course from another vendor, and desktop software courses from yet another.

A training company that specialized in classroom-based training on basic business skills decided it wanted to expand its services and provide e-learning to its clients. Rather than develop their own courses, the company decided they would resell third-party courses available from a number of commercial content suppliers.

By becoming a reseller of commercial courseware, the training company could generate revenues from the fees its clients would pay to access the training, as well as royalties from the courseware company. The only challenge was to find an LMS to run the courses.

For the most part, the training company's needs were simple. Most of the reseller's clients needed limited LMS functionality such as the launching and tracking of online courses and the generation of simple reports. A small number of other clients, however, required more sophisticated functionalities such as human capital management, 360-degree evaluation tools, advanced collaboration, or virtual classroom tools.

The reseller considered getting a license for an LMS containing these sophisticated features even though most of their clients would never tap into the system's potential. Unfortunately, the cost for such a system was outside the budget. As a solution, the reseller decided to adopt a hybrid solution of two LMSs.

The reseller partnered with one vendor who provided a simple hosted LMS that provided the basic features most of its customers needed. The LMS partner was willing to accept low-cost set-up fees in exchange for royalties. For clients that needed sophisticated features, the reseller partnered with a second LMS supplier. The costs for this second LMS was higher, but the reseller could pass the higher fees on to customers requiring such features.

Large Organizations

Organizations with budgets of less than $100,000 aren't the only ones considering low-cost alternatives. Even the largest and most affluent organizations may not wish to spend a large amount of money on an LMS when their business requirements are limited.

A well-known business consulting firm was looking for a simple LMS with basic functionalities. Since they had a very large workforce, they considered building their own LMS. They assumed that since many LMS vendors used a price-per-registered-user model, it would be much less expensive to build their own system. As an added bonus, if the product turned out well, they could license it to clients, recouping the cost of development and perhaps generating additional revenues.

Unfortunately, they had little time to build their own system. After consulting with the IT department, the training department estimated it would take more than a year to develop a system. The needed an LMS within the next three months in order to launch a large training initiative.

Some members of the LMS selection committee were adamant that the company should still focus on developing a system in-house. By allocating extra personnel, a simple LMS could be launched in approximately six months. Others on the committee wondered whether their IT department could meet this deadline and still produce a stable and functional system. Besides, why build something when so many good products already exist?

After much deliberation, they reached a compromise. The firm decided to buy a simple, low-cost system as an interim solution. If they later decided to build their own LMS, the small cost of a basic system would not be a large loss. One key requirement, however, was that the system they would purchase would need to export learner transcripts and data records to their proposed in-house solution.

In researching potential systems, the firm discovered there are modular solutions that allow you to start with a low-cost core and extend the functionality as needed. These systems appealed to all members of the selection committee. Proponents of the plan to build a system in-house liked the low cost of buying just the core module. This would allow more funds to be allocated to developing an in-house system later on. Proponents of buying a system were thrilled as well. If the core module worked well, there would be little need to build a system. The firm would simply purchase additional modules as required.

After a few months with the new low-cost LMS, lobbying to build a system in-house lost its intensity. The system cost a fraction of the

price of purchasing a large, enterprise-level system. The system was also being used within weeks of selection. The training initiative the firm had planned went ahead without a hitch.

Things to Remember

- Focus on key functionalities and avoid feature scope creep
- Consider sharing the cost of the license with other companies
- Consider extending an existing license within your organization to include more than one business unit
- Propose new pricing arrangements, such as royalty sharing, with vendors
- Consider leasing an LMS
- Consider buying just the core functionality of a modular LMS

The common thread that runs through these case studies is the creativity these organizations showed in finding the right solution. In selecting an LMS, you should consider more than simply selecting a system with the right features. Spend time investigating pricing options, partnerships, and other ways to lower costs.

Avoiding Feature Scope Creep

Although low-cost learning management systems exist, many organizations still end up having difficulty finding a system with stronger functionality that matches the allocated budget. One reason they may fail in their search for an affordable system is that these organizations may approach only the largest and highest-profile LMS vendors. Another reason costs are often higher than expected is that organizations often have difficulty identifying and focusing on their key business requirements. The following is a tale we hear often.

Feature Scope Creep

A large financial institution wanted to license a learning management system. This organization required a simple e-learning portal that would provide online courses to its 10,000 learners. In addition, the company needed a system that could manage classroom-based training. Member of the selection committee had to read that the average three-year cumulative price for a locally installed LMS managing 10,000 user is approximately $357,000, and they were hoping they could find a solution for less.

The organization assembled an LMS selection committee to identify a list of functionalities needed in the system. As is often the case, the committee ran amok, adding all kinds of business and technical requirements. By the end of the process, they had specified that all content must run on a PDA. They also required 360-degree evaluation, even though they already used a 360-degree evaluation program with their HR system. The committee decided they also required advanced learning object technology, although their primary plan was to create a small number of courses. Finally, they wanted telephone registration for courses automatically linked to the database, although no one was quire sure how they would ever use this.

Since the committee had identified the institution's requirements, they drafted a request for proposal and sent it to the most popular names in the LMS industry, without first checking to see if the vendors could match their needs. A few weeks later, the vendors' proposals arrived. The cost of the proposed systems ranged from $1.2 million to $2.3 million. The LMS selection committee couldn't understand why the prices seemed so high.

Spend time investigating pricing options, partnerships, and other ways to lower costs.

The financial institution contacted us to help explain what went wrong. Our analysts identified the problem: feature scope creep nearly ate them alive. This happens in far too many projects.

Would you buy a car this way?

For many years, automobile manufacturers marketed their cars' basic characteristics such as the strength of engines, smoothness of the suspension, elegance of the chassis and upholstery, and exemplary safety record. Recently, manufacturers realized that the number of cup holders in a model car seemed to influence the purchasing decision of some new car buyers more than just about anything else. For these customer, the more cup holders, the better. The vehicle may be noisy, the seats less than comfortable, and the construction unreliable, but as long as the driver and every passenger has a plethora of cup holders hidden away within easy reach — ready to provide constant hydration — the car stands a good chance of leaving the showroom floor.

The cup holder discovery helped spawn a new wave of features in the automobile industry. There are now automobiles with integrated tents that expand when the back hatch is opened. There are automobiles that automatically lower their windows just a crack when the door is closed so the inside pressure remains constant and passengers don't experience the discomfort of having their ears pop. There are cars with built-in compasses, cars with a port to dock a laptop computer, cars that talk, cars with built-in flower vases. Cars with television monitors. Cars with cigar humidors. The list goes on and on.

These aren't useless features. For someone who loves camping, a car with a tent high above the wet ground might be a great feature. And yet, few of us pick a car by sitting down and writing a wish list that looks like this:

- Cup holders
- Keyless entry
- Wind direction indicator
- Flower vase

Most of us still select a car based on key requirements such as reliability, safety, size, fuel economy, and price. For the most part, feature scope creep doesn't play a large part in car selection. It may make us select a deluxe model with tinted windows and a CD player over a standard version of the same model, but we generally focus on key functionalities when choosing among various car vendors.

This is often not the case when choosing a learning management system. Many organizations become convinced during the selection process that they require as many features as possible. Although their learners could register for a course using a browser, doing so using a telephone is just too appealing to ignore. Although the organization doesn't have a mobile workforce, using personal digital assistants (PDAs) such as Palm Pilots and Pocket PCs becomes a must-have requirement.

Just as the tent is a valid feature for drivers who often go camping, LMS features such as the ability to view e-learning content on a PDA are valid requirements for some organizations. In the medical field, for instance, a growing number of medical practitioners have begun using PDAs to access training and performance support information while visiting patients. These organizations are willing to

pay a premium for such a feature because it is a key business requirement. For most organizations, though, good basic LMS features are all that are required.

We're part of the problem

In some ways, Brandon Hall Research has played a part in creating the problem of feature scope creep, although we didn't do it intentionally. We study many LMS products, large and small, and catalog the laundry list of features available in these systems. In our LMS reports, we often include the full list of features available across many systems. This list includes many features unique to specific systems as well as features that are common to most, if not all.

The real intent of the feature list is to help companies identify their needs. In addition, we hope these lists of feature help our readers get a sense of what is available off-the-shelf, as opposed to features that would require costly custom development to acquire. However, human nature causes us to want everything. The result is that when organizations create RFPs to license an LMS, they too often cut and paste the entire list into their RFP. Vendors then price the development of each feature their LMS doesn't have into the cost of their proposal, thus inflating the price considerably.

Our LMS KnowledgeBase includes a Web-based, database-driven LMS Selection Tool. The tool can greatly reduce the time required to create a personalized short list of systems that fulfill you business and technical requirements. You simply enter requirements and specifications that are important to your organization, and the LMS Selection tool returns a list of products that might fit your needs.

List of Products Currently Included in Our Learning Management Systems Research

- Allen Communication Learning Portal (Allen Communication Learning Services)
- Cornerstone OnDemand Enterprise Suite (Cornerstone OnDemand Inc.)
- CourseMill LMS (Trivantis Corporation)
- DOTS - Dynamic Online Training System (WebRaven Pty Ltd)
- Ed Training Platform (Strategia)
- Generation21 Enterprise (Generation21 Learning Systems)
- GeoMaestro (GeoLearning Inc.)
- IBM Lotus Workplace Collaborative Learning (IBM)
- InfoSource (InfoSource Inc.)
- Intellinex LMS 6.0 (ACS Learning Group)
- IntraLearn XE (IntraLearn Software Corp.)
- iPerform (Integrated Performance Systems)
- Isoph Blue (LearnSomething Inc.)
- KnowledgeBridge (Websoft Systems Inc.)
- KnowledgeHub (Element K)
- KnowledgePlanet On-Demand Learning Suite (KnowledgePlanet Inc.)
- +Learn Enterprise Learning Management System (Compendium Corporation)
- LearnCenter (Learn.com)
- LearnerWeb (MaxIT)
- LearnFlex (Operitel Corporation)
- LMSLive (Wizdom Systems Inc.)
- Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)
- mGen Enterprise (mGen Inc.)
- NetDimensions EKP Bronze (NetDimensions)
- NetDimensions Enterprise Knowledge Platform (EKP) (NetDimensions)
- On-Tracker LMS (Interactive Solutions New Media Inc.)

- Oracle Learning (Oracle USA Inc.)
- OutStart Evolution LMS (OutStart Inc.)
- PeopleSoft Enterprise Learning Management (ELM) (PeopleSoft (Oracle))
- Plateau 4 Learning Management System (Plateau Systems)
- Saba Enterprise Learning Suite (Saba)
- SAP Learning Solution (SAP America)
- Siebel Learning (Siebel Systems)
- SSA Learning Management (SSA Global Technologies Inc.)
- SSElearn Portal (SSE)
- Syntrio Enterprise LMS (Syntrio)
- TEDS (TEDS Inc.)
- TeraLearn LCMS (TeraLearn.com Inc.)
- The Learning Manager (Worldwide Interactive Network Inc.)
- TM SIGAL (Technomedia Training Inc.)
- TopClass LMS (WBT Systems)
- TotalLMS (SumTotal Systems Inc.)
- TRACCESS (TTG Systems Incorporated)
- Tracker.Net (Platte Canyon Multimedia Software Corp.)
- Training Partner 2005 (GeoMetrix Data Systems Inc.)
- Training Wizard MX/SST (Gyrus)
- TrainingOffice Audit (Novasys Information Services Ltd.)
- Virtual Training Assistant (RISC Inc.)
- Vuepoint Learning System (Vuepoint Corp.)
- WebMentor LMS (Avilar Technologies Inc.)
- XStream RapidShare LMS (XStream Software Inc.)
- Xtention Learning Management System (Xtention Inc.)

Note: The list above represents the products included in this research as of October 2006. New products are continually added.

Where to find more information about buying an LMS

www.brandon-hall.com/publications/lmskb/lmskb.shtml

Learning Content Management Systems (LCMS)

Some of the largest and most successful e-learning initiatives use a learning content management system (LCMS). Where a typical LMS might simply track and organize learners and training, a full-fledged LCMS is designed to manage the creation, storage, reuse, and delivery of e-learning content from a central object repository — everything from conception to delivery.

Learning content management systems make the creation of content more efficient, avoid redundancy, and they help all team members — professional developers, subject matter experts, and authors — collaborate more effectively.

Introduction

We believe that when LCMS technology is appropriately applied and matched to an orchestrated e-learning strategy, with a complete instructional design plan for designing and using learning objects, great efficiencies can and will be achieved, such as (1) rapid and productive content development efforts, (2) seamless collaboration among subject matter experts and course designers, (3) the ability to make instantaneous, company-wide changes to critical learning content, (4) the ability to create multiple, derivative versions of content applicable to different audiences from senior management to line-level workers, (5) access to find and reuse learning content just-in-time and just enough, and (6) ultimate reusability of content by making it available through a wide array of output types such as structured e-learning courses, CD-ROM courses, learning material available from a Palm device or PocketPC, print-based learning for use in classroom settings, etc.

Points of Pain

One of the best ways to assess your need for an LCMS is to consider the reasons LCMS solutions were invented in the first place. We call this list the "Points of Pain." The list represents some of the key drivers that indicate you might be looking for LCMS technology to solve e-learning development and delivery problems. If you are experiencing one or more of the points of pain, it may be worth it to consider the use of an LCMS.

1: Can't keep pace with the volume of content needed

On average, it takes about 220 hours of development time (including analysis, design, scripting, storyboarding, media production, programming, quality assurance testing, etc.) to produce one single finished hour of e-learning courseware. If the content is highly simulation-based, the average ratio goes up to 750:1. The numbers are often much higher when content is developed by individuals, rather than as teams in an e-learning publishing model. Learning content management systems contain templates for rapid development and allow content to be assembled from multiple sources. When used appropriately by medium to large development teams, they can help significantly reduce the amount of time needed to produce courseware because of enterprise-wide reusability, productivity tools, and most importantly, the fact that you can focus on building interactive learning experiences and not on programming e-learning courses from the ground up.

2: Inefficiencies of developing content on the desktop

With standard desktop authoring tools, you most often find yourself creating more than just learning experiences. Often you engage in creating navigational control schemas,

adding additional learner controls (such as collaborative tools, bookmarking, note taking, etc.), making sure your courseware conforms with industry standards and specifications, and generally creating courses manually. In addition, using desktop tools doesn't allow you to take advantage of groupware functionality such as centrally located reusable media assets, workflow tools to manage the development process, content archiving, etc.

3: Lack of macro-management of overall development process

When you get to the point that you are producing hundreds of hours of online learning per year, especially with larger teams of developers, the process control can become chaotic. Many of the LCMS systems have advanced workflow tools to assist in managing time lines, ownership of learning objects, automated assignment boards, an automated process for handling bug reports, and archiving tools. Some systems are role-based, meaning that individual developers will only have access to tools applicable to their role, such as a graphic artist who logs-in and sees a list of graphic specifications and can post completed graphics to an asset management utility.

How many times have you gone looking for a piece of content (created a few years ago) that you know would fit the bill for a new need but haven't been able to find it?

4: Previously created content is difficult to find and use

After many years of developing e-learning content, you amass a large repository of media objects, composite learning objects and test questions. If courses have been created in their entirety using desktop authoring tools, content is often not tagged, labeled or organized for ease of retrieval. How many times have you gone looking for a piece of content (created a few years ago) that you know would fit the bill for a new need but haven't been able to find it? This often results in the duplication of effort by forcing you to recreate new material because you couldn't find existing content.

5: Need for repurposing content (multiple, derivative versions)

Many organizations have caught the vision of creating different versions of the same content for different audiences; e.g., a detailed product knowledge course scaled for use by sales professionals versus an overview course for senior management. The most common method for doing this in the past is to make a copy of the course then modify the content. The problem with this approach is that each time you create a new derivative version, you have more content to update and maintain. Many LCMS products allow you to make new versions of the course without duplicating content. The system only stores the content objects that change from version to version.

6: Content created for one delivery format is not usable in another format

When establishing an e-learning initiative inside a company, it doesn't take long to realize that similar content is being used in other areas of the business, such as documentation, classroom instruction, engineering, etc. Although LCMS products still fall short of full content management solutions, they can bring you a lot closer to the goal of re-purposing content for output beyond e-learning, such as print-based instruction, documentation, and for devices such as Palm, PocketPC, etc.

7: Difficulties of creating adaptive learning using traditional authoring tools

Dynamic pretests can literally save thousands of hours of time spent in training by constructing tests that will allow learners to demonstrate their mastery in specific topic areas, thus having the content scaled to

match only the learner's needs. You can certainly use desktop authoring tools to create a dynamic, prescriptive pretest. However, the process often requires the content developer to have advanced experience in the authoring tool, using complex variable and branching strategies. Dynamic pretesting is somewhat of a common feature among most LCMS solutions. Because they use learning object design, it is relatively easy to create new topics, associate them with specific test questions, and let the system automatically create and manage the adaptive learning delivery.

8: Inconsistencies in delivery standards

Standards are now becoming somewhat transparent in e-learning development. Many desktop authoring tools have the ability to output conforming to AICC or SCORM specifications. However, standards are in a constant state of migration with new variations of the standards appearing each year. As you amass a large collection of e-learning courses, how do you plan on migrating the level of standards compliance? Desktop authoring tools embed calls and commands inside the exported applications. LCMS solutions often provide a method to make sweeping changes to the logic and delivery of e-learning at a more global level.

9: Difficulties of frequently changing content

If you are managing one to 10 e-learning courses, it's probably not too difficult to make changes to the content using standard authoring tools and then re-compile the courses. However, when you are managing 50+ courses with hundreds of discrete learning objects, "changeability" becomes a major issue. We recently monitored one major company that managed 3,500 changes to their e-learning content in a one-month period. The changes were made quickly and efficiently using LCMS technology.

10: Problems with manually attaching authored content to an LMS

Testing an e-learning course's interoperability with an LMS often requires authoring a course and then manually launching it from the LMS. Often, even modified courses need to be retested to make sure the record keeping, bookmarking, etc., are working in each new version. This can consume many person-hours if not kept in check. With an LCMS, once you achieve interoperability between the LCMS and LMS, you can make changes to navigational schemas, learner preferences, add new content, etc., without effecting the communication between the e-learning content and the LMS.

A Process for Assessing Your Own LCMS Needs

LCMS enterprise solutions have numerous feature sets. As we reviewed the systems, we found ourselves desiring a system that embodied all functionality contained across all systems. But, there is no such system on the market. We found that some excelled in specific areas such as workflow, pretesting, ease of content development and/or supporting a wide array of output formats.

The biggest mistake you could make is to send out an RFP containing every feature set ever created in an LCMS application. The net result will be that no system will meet all your needs.

We recommend focusing on your own most critical needs, developing a profile of approximately 10 to 20 needs, then beginning your search by ruling out systems that don't match your strategy. As you key on systems that match these needs, you'll then be able to refine the search based on more detailed functionality. This will help save a lot of time in the identification and selection process.

Here is a process we use at brandon-hall.com for identifying enterprise technology:

- Analyze strategic goals
- Develop "use cases" — all stakeholders — three-year event horizon
- Generate list of critical needs (10-20 only)
- Generate full list of needs and prioritize
- Short list technology candidates (pre-qualify)
- Create and send RFPs to qualified candidates
- Grade responses — throw out "red flag" candidates
- Select target partners

Top Ten List of Requirements

What are the most common business and technical requirements for people selecting a learning content management system? Based on our research, the following are the top ten things people want:

1. Novice-friendly, rapid development content authoring and/or content assembly tools
2. Well-defined model for importing Microsoft documents — PowerPoint and Word
3. Supports a wide variety of popular third-party content authoring tools such as Flash, Authorware, Dreamweaver, Lectora, Trainersoft, etc.
4. Strong adherence to standards and specifications (SCORM and AICC)
5. "Tested" Interoperability with third-party LMS
6. Well-defined model for reusing and re-purposing "learning objects" to create multiple, derivative versions of the same course, for different learners.
7. Adaptive learning through dynamic pretesting
8. Support multiple output types (most requested are print documentation, PALM, PocketPC and just-in-time help)
9. Revision control, archiving and file management
10. Workflow management

List of Products Currently Included in Our Learning Content Management System Research

- chalkboard LCMS (Chalk Media)
- CURSUM (CURSUM)
- eLogic Learning's eSSential (eLogic Learning)
- ePath Learning ASAP+ (ePath Learning Inc.)
- eTrainCenter (Creative Logic Solutions)
- FirstAlign (FirstAlign Inc.)
- ForceTen (Eedo Knowledgeware)
- Galbraith Media LCMS (GeoLearning)
- GeMS SWIFT (Gemini Performance Solutions Inc.)
- Generation21 Enterprise (Generation21 Learning Systems)
- iPerformance (Any-3 Ltd.)
- Knovada Knowledge Systems LCMS (Knovada Knowledge Systems)
- KnowledgeBridge LCMS (Websoft Systems Inc.)
- learn eXact (Giunti Interactive Labs S.r.l.)
- Lecando LCMS (Lecando)
- Lumenix PI Developer (Handshaw Inc.)
- MOS Chorus (MindOnSite Integral Coaching SA)
- OnDemand Knowledge Pathways (OnDemand Software)
- OnPoint CourseManager LCMS (OnPoint Digital Inc.)

- OutStart Evolution 2006 (OutStart Inc.)
- OutStart Studio (OutStart Inc.)
- QMIND (QMIND Inc.)
- Saba Enterprise Content Management (Saba)
- SAP LS (SAP America)
- SmartBuilder (Suddenly Smart)
- SNAP! Studio (Percepsys Inc.)
- Strategia (Strategia)
- Techniq (Vitalect Inc.)
- TeraLearn LCMS (Ask International)
- Thinking Cap Studio (Agile.Net Inc.)
- TopClass LCMS (WBT Systems Ltd.)
- TotalLCMS (SumTotal Systems)
- Vuepoint Learning System (Vuepoint Corp.)
- Xtension LCMS (Xtention Inc.)

Note: The list above represents the products included in this research as of October 2006. New products are continually added.

Where to find additional information on buying an LCMS

www.brandon-hall.com/publications/lcmskb/lcmskb.shtml

Live E-Learning/Web Conferencing Software

People often equate e-learning with self-paced courses. Powerful e-learning technology exists, however, that allows people to learn and collaborate in real time from anywhere in the world. These software applications go by many different names, including live e-learning systems, virtual classrooms, synchronous training systems, live online learning systems, and Web conferencing systems.

Most of these systems provide video conferencing features as well as the ability for presenters to share applications on their desktop. Many live e-learning systems even contain the ability to record live sessions for later viewing.

These powerful software platforms provide great foundations for training, business communications, brainstorming, and teamwork.

Introduction

Some technologies are geared exclusively towards learning. Learning management systems (LMS) for instance, track a learner's progress through courses and curricula and provide reports to training administrators. The LMS may manage classroom bookings and waiting lists. Learning management systems may provide skill-gap analyses to help learners identify what they know and what they do not. The LMS may contain succession planning features to help an organization find the right candidate to replace a departing employee. The LMS may include 360-degree evaluation capabilities to present a more comprehensive evaluation of a person's strengths and weaknesses with the goal of identifying and providing the correct training to address shortcomings in different abilities. But, regardless of the richness and variety of its features, the learning management system remains a technology geared toward learning.

Live e-learning/virtual classroom/Web conferencing systems provide excellent infrastructures for training. But, unlike learning management systems that are geared exclusively toward training, live e-learning systems can provide powerful infrastructures to address many business requirements:

- **Training**: Live e-learning systems provide an excellent way for an organization to have its experts teach a geographically dispersed group of learners. In addition, live e-learning systems enable real-time collaboration between students, often allowing them to break out into smaller "rooms" to discuss and share ideas.
- **Sales**: Web conferencing systems provide an excellent way for sales teams to present information to prospective buyers. Unlike recorded product demos that provide no opportunity for the viewer to depart from the "script," a product demo using Web conferencing allows the prospective customer to ask to see specific features demonstrated. In addition, using video during such a session can provide important face-to-face contact, leading to a more personal business setting.
- **Communications**: "It sure would be great if our VP could join us on this critical meeting. Unfortunately, she's away on business until late next week. "Using Web conferencing, no one is ever unavailable due to being in a different physical location. If your VP can access the Internet, she'll be able to participate in this critical meeting. Many Web conferencing systems also allow sessions to be recorded for future playback. So, if a key team member can't be present for a meeting due to scheduling conflicts, that individual can at least view the session at a later date to be kept informed of what occurred.

- **Knowledge capture and management**: Meetings can often produce excellent ideas. But unless those ideas are captured and made available, many great ideas will simply die away with no chance of being implemented. Many Web conferencing systems provide the ability to record sessions for future playback, helping organizations capture the ideas to help them reach fruition.
- **Brainstorming**: We are, in essence, a social species. Our sophisticated language skills allow us to easily share our thoughts and opinions with colleagues. Our tasks may be checked off our "To Do" lists when secluded in our offices, but our ideas are often born through discussions with colleagues. Web conferencing sessions allow this interaction to extend beyond geographic boundaries.
- **Teamwork**: A Team is traditionally defined as a group of people with complementary skills, located in the same geographic place, assigned to a common project. Web conferencing software removes the need for team members to work side-by-side. Team members can now be selected on the basis of the skills they will bring to a project rather than their place of residence.

Web conferencing software can be a powerful tool when applied to training, sales, communications, knowledge management, brainstorming, and teamwork. As an added benefit, this type of software can lower operating costs by reducing travel and lodging expenses and reducing long-distance telephone costs.

How Live E-learning Is Being Used

For a good example of how online training is being used, consider the fictional case of Marty Weiss, who chose to get his CCNA certification through Cisco Systems' online certification course, which uses KnowledgeNet. His first class changed his entire outlook on online training. He became a believer that quality instructional and presentation details could be given in this format. His positive opinion of online training was reinforced when he passed the Cisco CCNA certification. After only three weeks of courseware and four days of personal study, Marty was able to pass his CCNA exam.

People tend to like the idea of live, online training. However, it does present a problem for those who cannot tie themselves down to one precise date and time per class. Everyone has time constraints, and sometimes people are not willing or able to rearrange their schedules. For this reason, requests for online (rather than live) training is common. The record/playback function available from some vendors can be very useful to these students.

Live e-learning is commonly used in blended learning, where several different delivery mediums are used to fulfill a learning objective. A typical example is one where prerequisites to a course are taken in a self-paced mode, and then a live, online course is used. Another example could entail an initial classroom experience to kick-off a curriculum with follow-up gatherings through a live, online format. Live e-learning systems are quite popular for sales or channel training, particularly with organizations whose products have short product life cycles and the sales force or channel are geographically dispersed.

Live e-learning systems have a number of common features that influence the use of the system. For instance, one common feature of many systems is two-way audio over a network or voice-over IP (VoIP).

Web conferencing software can be a powerful tool when applied to training, sales, communications, knowledge management, brainstorming, and teamwork.

This feature is often accompanied by instructor controls, hand raising, audio tuning utilities, and other features to manage the use of the audio. For users who are only interested in a short Web conference and are using a phone bridge, these features can complicate the interface and serve as a distraction. For users who are conducting an extended online learning course, this feature can provide a tremendous cost savings and may be the most important instructional component. Let's look at a couple of other common features of live e-learning systems and how they are typically used.

Application sharing is a feature that has grown in dependability and popularity over the last few years. It is commonly used to demonstrate software applications for the purpose of user training or sales demos. Not as common today, but with great future potential, is the use of application sharing for team-based projects. An example might be using a project management software application in real time by having key people involved in the project add to the timeline in real time.

Recording, editing, and play-back of live sessions has also grown in popularity. Sometimes the most important content that comes from a training session are the questions and information that flows from the participants. Recording and editing of live sessions not only captures the instructor's content, but it can also capture the contributions of the participants.

Polling is an excellent way to draw information out of the participants that can add a great deal of information to the content presented. Most of the systems now have polling features that allow for a variety of questions and for that information to be shared with the participants.

Streaming video of the instructor, video conferencing, and video content are all being used more as bandwidth and infrastructures grow. Many have found that with good audio, the video of the instructor is not as critical, but content-related video continues to be a growing demand of live e-learning systems.

Interactivity among participants and private messages to the instructor are effective ways to answer participant questions that might not have been asked in a classroom-based course. These tools and others all add to the growing effectiveness and use of live e-learning systems in the corporate, education, government, and private sectors of our economy.

Finding the Right System

An organization looking to purchase learning technology such as a live e-learning/Web conferencing/virtual classroom system can easily be overwhelmed with the available choices. Making matters worse, sitting through product demos and sales presentations can lead a person to feel that the systems are very much alike and contain only subtle differences. The truth is, although there are features that are common to nearly all systems, there are also features that are only found in a small number of products.

The key to selecting the right system is to identify the features that are important to your organization, create a short list of systems and invite vendors to demo only the products that meet your requirements. Here are some features to consider when selecting the technology that is the right fit for your organization.

Popular Features for Synchronous Instruction

- Facilitator can lead class in Web surfing/tour
- Whiteboard
- Application sharing (one-to-many)
- Yes/No polling, surveys or questions
- System/connection check prior to session start
- Multiple facilitators
- Facilitator can allow interaction among participants
- Multiple-choice polling, surveys, or questions
- Participants can interact in public/private text chat
- Customizable user interface for co-branding, etc.
- Pre-recorded sessions
- Participants can raise hand
- Participants can "step out" temporarily
- Recording of whiteboard interactions for later viewing
- Tool is available as hosted ASP solution
- Password protected session access
- Full access and functionality behind corporate firewalls and proxy servers
- Voice-over IP audio conferencing (multi-way, full duplex)
- Online self registration
- Group (batch) enrolment
- Tracking and reporting of enrolment and attendance data
- Video using standard USB camera
- Application sharing (many-to-many)
- Web-based scheduling and registration
- Automatic e-mail notification to participants
- Can limit class size
- Exporting of report data (Excel, etc.)
- Participants require Web browser only
- Audio check prior to session start
- Multiple access levels for different types of users
- SSL user log-in encryption
- Tracking and reporting of assessment/ evaluation data
- Can integrate with e-commerce
- Custom reports
- Tool is available as locally installed solution
- Full product functionality is available with low-bandwidth (28k) connection
- Content encryption
- Management of multiple time zones
- Virtual breakout rooms
- Editing of recorded sessions (trim, combine, etc.)
- Threaded discussion/e-forum for post-session interactions
- Countdown clock indicating remaining time in session, break, etc.
- Online notebook for participants
- SCORM-conformance
- AICC compliance
- IMS metadata tag-compliant
- Compliant with Section 508 guidelines
- AICC certified
- SCORM certification

Top Ten List of Requirements

What are the most common business and technical requirements for people selecting a Live E-Learning/Web Conferencing system? Based on our research, the following are the top ten things people want:

1. Hassle-free, preferably "no plug in" learner desktop
2. Zero (or close to) minimal downtime or interruptions
3. Ease of working with PowerPoint as source material
4. Full array of dynamic marking and highlighting tools for use by instructors
5. Single authentication of learners when launched from an LMS

6. Utilities that allow learners to post questions during the session (and get feedback)
7. Sending attendance records to learning management systems
8. Floor controls for learner feedback and interaction
9. Robust application sharing (with minimal lag)
10. Full featured whiteboard capabilities

(NOTE: We didn't mention voice over IP (VoIP) – still too problematic for most users.)

List of Products Currently Included in Our Live E-Learning/Web Conferencing Systems Research

- 3D4M (3Dsolve)
- Adobe Breeze (Adobe)
- Akiva WebMeeting (Akiva)
- Arel Spotlight Application Suite & Integrated Conferencing Platform (ICP) (Arel Communications and Software Inc.)
- CBOX (Winnov L.P.)
- Centra7 (Centra Software)
- CollabWorx SRTC (CollabWorx)
- ECP Connect (Interwise)
- Elluminate Live! (Elluminate, Inc.)
- HP Virtual Rooms (Hewlett-Packard)
- IBM Lotus Virtual Classroom (IBM)
- IBT Live Collaboration (time4you GmbH communication & learning)
- LearnLinc — part of the iLinc Suite (iLinc Communications)
- Live Classroom (Horizon Wimba, Inc.)
- Microsoft Office Live Meeting (Microsoft)
- PictureTalk (Pixion, Inc.)
- Vcall Web Conferencing (Vcall)
- Videum Conference Pro XP (NTSC/PAL) (Winnov L.P.)
- Web Conferencing Pro: Seminar (Raindance)
- WebDemo (Linktivity)
- WebEx Training Center (WebEx Communications Inc.)

Note: The list above represents the products included in this research as of October 2006. New products are continually added.

Where to find additional information on buying live online learning systems

www.brandon-hall.com/publications/lelkb/lelkb.shtml

Simulation Development Tools

Online simulations have been touted as the next big wave in training, and for good reason. Learners generally prefer training simulations because they offer complexity, realism, and an opportunity to practice new skills in a risk-free environment. Administrators like training simulations because they result in more motivated students and (perhaps most importantly) higher retention rates. If they're such a win-win solution, why aren't training simulations being used more often?

In the past, simulation training and related content was often extremely expensive and time-consuming to create. Now, however, there are powerful and easy to use simulation development tools available to use on a desktop computer to create simulation content.

Introduction

With traditional e-learning becoming more mainstream, learning practitioners are now positioning themselves for the next, significant movement in the use of technology in learning — namely — simulations! Of course, simulations have been around for many years in a variety of forms, from large scale flight simulators, to role-playing simulations in the classroom, to computer delivered simulations, and, most recently, high fidelity simulations that can be delivered through cyberspace.

Most people don't know these tools exist or how they can help reduce costs or improve learning. The companies who provide simulation tools are often relatively small with very little marketing or exposure, yet some of the greatest innovation of the learning market is taking place in this area.

Common Considerations

- **Sort out systems that comply with your specifications — SCORM, AICC.**
  As standards continue to evolve, it is important to understand which tools are compliant/conformant with the standards and which ones are not.
- **Check for interoperability with your Learning Management System.**
  Find out if the vendor has done any interoperability testing with you specific LMS.
- **Determine if "Plug-ins" are an issue.**
  Because simulations are considerably more robust than standard-fare e-learning course, many require a plug-in or thin client to run the simulation.
- **Check Cross-Platform Capability**
  Can the simulation run on the platform needed — PC, Mac, UNIX.
- **What is the simulation vendor's area of specialization?**
  Does the vendor specialize in the area you are focusing on — software simulation, hard/soft skill simulation, pre-built, custom, etc.?
- **What is the vendor's level of "traction"?**
  With the e-learning simulation space being so fragmented, it is sometimes difficult to determine who the "leaders" are. There are several different measures to determine the leaders, such as market share, brand recognition, etc. Consider this an additional data point in determining some of the market leaders: ask the vendor to list their Top 3 competitors.
- **Check to see if the company specializes in your vertical sector.**
  It can help you identify specialists.

Administrators like training simulations because they result in more motivated students and (perhaps most importantly) higher retention rates.

Performance Data

Simulations make it possible to monitor performance in context of the simulated environment — beyond Web-based exams such as multiple choice, true/false, and fill-in-the-blank questions. Determine which products will measure performance at the following levels:

- **Composite Score**
  Simulations generally allow learners to make choices throughout the simulation. Likewise, a majority of systems allow you to apply a score for each choice (based on the context of the simulation).
- **Score for Each Task**
  Simulations generally allow learners to make choices throughout the simulation. Likewise, a majority of systems allow you to apply a score for each choice (based on the context of the simulation).
- **Completion Status (Pass/Fail)**
  Because of the complexity of scoring a simulation, some systems rely on a simple pass/fail system to determine success. Or, in other words: Did the learner successfully make their way through the simulation with the desired outcome? Also, because e-learning standards and specifications have minimal definition for things like scoring by task, collecting a pass/fail score is the easiest way to make a simulation system compliant with standards.
- **Duration**
  This is simply a measure of how long the learner engages in the simulation. This is a very useful data item to determine average "seat time" for a simulation.
- **Date Last Accessed**
  Does the system record the date of the last time the learner logged in to the simulation?
- **Start Time**
  What was the actual clock time on the computer at the start of the simulation?
- **End Time**
  What was the actual clock time on the computer at the end of the simulation?
- **Record of Steps Performed Incorrectly**
  This doesn't fit every simulation model, but the idea is that if the simulation can keep track of "mistakes made" by the learner, this information can be used by instructional designers to teach, reinforce, and model expert behavior in preparation for future attempts at the simulation (or similar scenarios).

Top Ten List of Requirements

What are the most common business and technical requirements for people selecting simulation tools? Based on our research, the following are the top ten things people want:

1. Approachable tools that allow somewhat-novice developers to create simulations in minimal time.
2. Templated approach that makes "simple things simple and complex things possible."
3. Products that don't require you to create simulations at the "stick" level
4. Built-in performance data tracking capabilities (since most LMS products don't have a good model for tracking simulation progress)

5. Realistic modeling of simulated environments (i.e. software application, person-to-person role play scenario, simulating technical equipment, etc.)
6. Efficient playback over the internet, without requiring high-speed internet access. Customers are willing to sacrifice some fidelity to achieve web-based delivery.
7. Instructionally sound output
8. Varying levels of feedback controlled through a control panel interface.
9. Runs in different modes: demonstration, guided practice (with feedback), freeplay, and testing modes.
10. Low cost

List of Products Currently Included in Our Simulation Research

- Active Learning Suites (ATeL LLC)
- AeSP — Adacel eSimulation Platform (Adacel Technologies Ltd.)
- Assima's Simulation Suite (Assima)
- B727 Part Task Trainer; A300 Part Task Trainer; DC8 Part Task Trainer; Desktop Simulation Training System (DSTS) Simulation Framework; Client Server Internet Simulation Technology (CSIST) (inXsol)
- Biographix ISLE (Biographix Corporation)
- CallMentor Learning and Performance System, including SalesMentor, ServiceMentor, CoachingMentor for Sales and CoachingMentor for Service (Ulysses Learning)
- Capstone Business Simulation® (Management Simulations Inc.)
- CaseLearn (eLearnia)
- Coaching Experience, Sales Experience (ExperienceBuilders LLC)
- Convergys (Convergys)
- Creating Client Value CoPilot (Sales); Marketing CoPilot; Strategy CoPilot; Online Diagnostic and Mastery simulations (Imparta Ltd.)
- datango knowledge suite (Datango AG) DemoShield ; Expo Walkthrough (InstallShield)
- Enlight Adaptive Learning Suite (ALS) (Enlight)
- Epiplex Process Training Suite (Epiance)
- Expert Author (Knowledge Quest)
- Firefly (KnowledgePlanet)
- ForceTen (Eedo Knowledgeware)
- Forio Broadcast Web Simulation Development Software (Forio Business Simulations)
- GoVenture Entrepreneur; GoVenture Stock Market; GoVenture Small Business; GoVenture Personal Finance; GoVenture Financial Literacy ; GoVenture Investment; GoVenture Micro Business; GoVenture Lemonade Stand; GoVenture Simulation Designer (Mediaspark)
- i-Canvas (EDT Learning)
- Imp Character Development Kit (ICDK) (Extempo Systems)
- KDCalc (Knowledge Dynamics)
- Knowledge Comm (NETg)
- KSTutor (Knowledge Solutions)
- KTB Platform (SMG)
- Macromedia Captivate (Adobe Systems Incorporated)
- Marketplace (Innovative Learning Solutions)
- Mini-MBA in Strategy and Finance (PriSim Business War Games)
- MultiGen Creator (Multigen-Paradigm)
- NexLearn SimWriter (NexLearn)
- NGRAIN Producer; NGRAIN Mobilizer (NGRAIN)
- OnDemand Personal Navigator (OnDemand Software Inc.)

- Peformance Simulation Technology (Indeliq)
- RapidBuilder (XStream Software)
- RBITS: Reality-Based Interactive Training Software (core simulation playback engine); ISEE: Interactive Software Emulation Environment (software emulation extension to RBITS); DIVAS: Decision Integration Visualization and Assessment Support (decision/environment modeling/simulation application for modeling multi-parameter resource allocation or other decision challenges, built on RBITS core); FloCharter (authoring tool); SceneFramer (3-D authoring suite); QA Suite (Visual Purple)
- RealCall (SIVOX)
- Redwood Development Platform (Redwood e-Learning Systems Inc.)
- RWD Info Pak Simulator (RWD Technologies)
- SAP Tutor (SAP)
- SimBionic ; SimVentive (Stottler Henke Associates)
- SimBLs; TOPSIM (Tata Interactive)
- Simentor (Access Technologies Group)
- SimMastery (CompeteNet Inc.)
- Simulated Role-Plays for Soft Skill Training (SIMmersion LLC)
- SkillSim™ Simulations (SkillSoft Corporation)
- SoftSim 2006 (OutStart Inc.)
- StarTrainer (Knowlagent)
- STT Trainer (Kaplan IT Learning)
- T3: Task Training Tool for SAP Basic Navigation (LTC: Luttrell Training & Consulting Inc.)
- TEDS SimCorder (TEDS)
- ToolBook Instructor (SumTotal Systems Inc.)
- TurboDemo (TurboDemo)
- Veepers IDE (Pulse)
- VeriSIM 3.0 (VeriSim Ltd)
- ViewletBuilder (Qarbon)
- WinGEMS (Metso Automation)

Note: The list above represents the products included in this research as of October 2006. New products are continually added.

Where to find additional information on buying simulation tools

www.brandon-hall.com/publications/simkb/simkb.shtml

Tips for Creating a Request for Proposal (RFP)

Developing a request for proposal (RFP) might be the most important thing you can do when purchasing outside services. Some people, when they think of RFPs, picture lawyers and lawsuits. Others consider RFPs to be just another kind of insurance policy. It's true that organizations use RFPs to protect themselves from bad deals, but there's a much more important reason to develop an RFP process: It lets potential vendors know up front that your foremost concern is the level of customer service you receive.

RFPs are a lot of work, but they're worth it. If you're planning on purchasing a large-scale learning technology product such as a learning management system (LMS), learning content management system (LCMS), or live e-learning/Web conferencing system that you hope to use for five years, it makes sense to find the vendor whose product matches your needs as closely as possible. It's certainly tempting to take shortcuts. Industry gossip, anecdotes and conversations over lunch might give you some ideas on where to start, but it's unwise to risk thousands or even millions of dollars on the basis of a few personal stories. Buying enterprise-level learning technology is much different than using Consumer Reports to choose a lawnmower. You need to be know exactly which vendors meet your specifications, with no guesswork involved.

In this section, we've provided an introduction to the ground rules of developing an RFP. While we specifically focus on an e-Learning topic — developing an RFP for a learning management system — much of the advice in this report applies to other types of purchases, too. Our goal is to help your organization implement a process for developing smart and thorough RFPs.

What Is a Request for Proposal (RFP)?

In many respects, the large number of learning technology products available has created a buyer's market. In other words, the marketplace holds greater supply than demand, so buyers are the ones in charge of the buyer/supplier relationship. When buyers are in control, competition among vendors increases.

This competitive environment has a dual advantage: It motivates end-user organizations to be smarter buyers, and it encourages suppliers to provide better products and services. A competitive marketplace also gives end-user organizations the opportunity to be selective about who they buy services from. Since there are so many choices, buyers can set high standards of quality and service.

That said, the selection process is still challenging — especially in cases where the quality, breadth and depth of services varies greatly among vendors.

How can organizations narrow the list of possibilities before contracting for services? How can they make sure they end up with the quality they demand? One way is to request proposals. A request for proposal is a written document that outlines specific requirements suppliers must meet in order to win the buyer's business.

Among the many reasons organizations write formal documents requesting proposals from vendors are:

- to identify and select the most qualified vendors;
- to ensure that all suppliers have an equal opportunity to provide services;
- to outline the terms of a formal working agreement that holds both the buyer and the supplier liable to certain terms and conditions.

What format should I use to create an RFP?

You should write RFPs in the technical report format or the technical proposal format. Technical reports and proposals cover a broad range of business and technical subjects. Examples include scientific reports, corporate technical reports (typically following internal guidelines), progress reports, trip reports, laboratory and research reports, accident reports and financial reports. Many of these convey the status of a program, project, task, study or other organizational effort. Others are written in response to specific needs and situations.

Readers of technical reports and proposals generally expect to find certain information, such as summaries, conclusions, recommendations, analyses, supporting facts, proposed costs and contract terms. They expect the tone to be business-like — not officious or bureaucratic, but objective, factual and honest.

What needs to be included in an RFP?

Requests for proposals are distributed within an organization and are generally not meant for the public. RFPs typically contain a statement such as: "This document is confidential to XYZ Company and may be used by the addressee only in responding to this request for proposal. Responses provided to XYZ Company will be kept strictly confidential." Some RFPs have limited distribution outside the parent organization — for example, to a small number of subsidiaries.

RFPs usually begin by describing:

- The business opportunity;
- The background of the buyer;
- Instructions for writing a proposal;
- The basis upon which the opportunity will be awarded.

The remainder of an RFP contains:

- The proposed duration of the contract;
- The scope of the services;
- Requests for client references;
- Requests for additional information;
- Contract terms and legal agreements (for example, assignments of intellectual property and non-disclosure agreements).

Like most technical documents, RFPs almost always contain a title page or cover page. This page should include the organization's name and contact information, the purpose of the RFP, the proposal due date, and the legalities of copyrights and confidentiality. Here's an example of an RFP cover page:

The XYZ Company
2221 Westmore Blvd.
Hampshire, PA 45008
(603) 245-7824

Request for Proposal for the Implementation of a Learning Management System
Proposal due December 15, 2007

This document is confidential to the XYZ Company and may be used only by organizations responding to this request for proposal.
Proposals provided will be kept strictly confidential.

Since an RFP addresses legal issues — such as service levels, deadlines, activity report requirements and invoicing procedures — the document must be accurate, clear, concise and complete. The writing style and format of an RFP should adhere to the following ethical guidelines:

- Avoid being imprecise or ambiguous.
- Do not understate or bury the negative side of the opportunity.
- Do not overstate the positive side of the opportunity.
- Do not exclude — either by intention or by ignorance — any necessary information.

- Do not copy ideas, data, illustrations or quotes without authorization or without giving credit.
- Do not doctor data or include false or misleading data.
- Do not cloak or downgrade the buyer's responsibility for achieving results.
- Be clear about which parts of the opportunity are based on speculation and which parts are fully substantiated.

In short, it's important to communicate information truthfully, clearly and economically. As the author, you must satisfy the reader's need for information, not your own need for self-expression. Ultimately, the writer is responsible for how well the audience understands the message, including the legal parts. That's because someone could bring a product or service liability claim against your organization for information that is defective and leads to economic loss or physical harm. Because an RFP leads to a legally binding relationship, it's important to have an attorney review it.

Testing RFPs before they are distributed to potential suppliers is a good idea. By showing the document to a variety of readers, you'll figure out whether it's readable and easy to understand. Often, you'll find places where you assumed readers knew more than they actually did. Objective readers can question unclear language, evaluate how people read the document, and discover ways readers may misuse the proprietary information in the document.

Who Should Write the RFP?

The RFP should be written by whoever will be in charge of the purchase. This person could be the project manager for the entire strategic initiative or the manager of a smaller part of the initiative. Whatever his or her title, the RFP author should be someone in a position of authority who has decision-making power and who understands the project well. In most cases, the author of an RFP has had experience buying products or services from various providers and managing contractual relationships.

How much research and analysis should I do for each RFP?

If you're writing an RFP, make sure you do enough research so that you're comfortable communicating the project scope, the service levels needed and other related requirements. In the case of a learning management system, learning content management system, or live e-learning/Web conferencing system, your research should cover the technical requirements and network architectural requirements. You should also have a clear understanding of what information about potential or existing suppliers is necessary to build an effective partnership (i.e., company experience, operating philosophy, system compatibility, etc.).

Probably the most important research is visualizing and planning the project. Visualizing the result of a project requires much more than just understanding what expectations need to be met by the vendor. It requires a detailed understanding of how the project improves key business or organizational activities.

An essential step in the RFP process is to identify the project's key stakeholders. While stakeholders are people affected in some way by a project, key stakeholders are those who will ultimately determine whether the project is a success or a failure. They often include the customer, boss, project sponsor, project manager and members of the project team. If various key stakeholders

have different visions of the project's result, the project is doomed to fail before the RFP is written. Ensuring that everyone in this group has the same vision of the end result requires an up-front investment in time and research.

Remember that key stakeholders are your clients, and your mission is to help them succeed. If you find that key stakeholders aren't providing clear information about what the results of the project should be, it's probably because you're not asking the right questions. A vital skill for project managers is to be expert interviewers. Their questioning skills need to be so good, in fact, that they're able to elicit information that people might not have even thought of yet.

Once the key stakeholders have agreed on the results they want to achieve, they should write a results statement, which includes the following items:

- Project title
- Starting date
- Due date
- Project manager
- Project description (what, where, and by when)
- Prioritized list of desired results (deliverables, outcomes and accomplishments of the project)
- A statement detailing how the project meets the organization's strategic initiatives and outlining which organizational results will be most improved by the project
- A list of key stakeholders

You should also do enough research to determine which factors are most important for your project's success. There are three factors that affect every project:

1. Quality/scope
2. Time
3. Costs

Prioritizing these constraints can be confusing, but it's important to understand and manage them early in the RFP process.

Quality and **scope** are inextricably linked. Quality refers to the level of excellence devoted to the project, while scope designates the size of the project and its features. The **time** constraint clarifies how long the project will take. The **cost** constraint clarifies the resources needed to implement the project.

There are trade-offs between these three constraints. As one becomes a priority, it may require a sacrifice from another. For example, a large project that needs to be completed fast — and with high quality — will typically have a higher cost. A project that has a tight budget, yet requires high quality and a large scope, will take more time to complete. A project with tight time and budget constraints will require a trade-off in features (scope) or quality. The best RFPs balance these three constraints.

Finally, it's important to involve team members in identifying potential "hot spots" on a project. Hot spots are factors that could cause problems or even failure. When you involve the whole team in this activity, you get the benefit of each person's expertise and knowledge. Don't leave this activity up to contingency planners alone. No single person can provide the knowledge and insight provided by a team.

Sample RFP Template

It's possible to write an RFP without a template. However, it is extremely helpful if you have one to work from. Because most RFPs include the same types of information, the sample outline provided in this report could serve as a generic template for just about any RFP.

What should each category of the template include?

The example that follows is specifically tailored for the design, development and implementation of a learning management system RFP. For more specific examples of what each category should include, refer to the sample RFP in Part 2.

I. Introduction

- Overview of the company
- Overview of the opportunity
- RFP goals

II. Instructions for responding

- Bid submission and award notification
- Number of copies, submission deadline and timeline
- Confidentiality
- Questions and answers

III. Basis of award

- Quality of service and track record of results
- Service orientation and project management skills
- Financials (statement of work and pricing)
- Implementation and transition plan
- Innovation and management information services

IV. Proposal duration

V. Additional considerations

- Liabilities
- Audits
- Confidentialities

VI. Scope of services, service levels and related requirements

- Strategic partnership
- Measurement and evaluation
- System and software compatibility
- Quality and performance guarantees
- Invoicing
- Activity reporting
- Project team
- Continuous improvement
- Other

VII. References

VIII. Award duration

IX. Contract terms

Appendices

A. Assignment of intellectual property and nondisclosure agreement
B. Request for information
C. Standard contract terms and conditions

Should the RFP include my organization's vision and business requirements?

Almost all RFPs contain information about the buyer's vision and business requirements, along with basic background information. This is important because an organization's size and type of business offerings can often narrow the list of possible RFP respondents. If the organization is enormous and offers a product that nobody can live without, many vendors will realize they don't have enough resources to take on the job. If a buyer serves college students and only partners with nonprofit organizations, only a specific set of respondents could reply to the RFP.

RFPs should include the following types of business information:

- Organization name and contact information
- Size of organization
- Major business and primary activities
- Estimated market penetration (when applicable)
- Financial model (privately owned, independent company with shareowners)
- Intellectual property that is proprietary or trademarked
- Mission, vision and values

Will the RFP affect the organization's business plan?

RFPs are the foundation on which buyer/supplier relationships are built. Often, after an organization uses the RFP process to select a provider, the two organizations begin a long-term relationship. As the relationship evolves, the two businesses refine how they work together and learn how to assist each other in ways that go beyond the scope of the RFP. This can lead to major changes in an organization's business plans.

Sometimes merely implementing the RFP is enough to change the business plan. For instance, in the case of selecting an LMS provider, the process of implementing such a far-reaching software system will change the costs of learning within the organization, which will change the overall budget. When the overall budget changes, business plans will likely change.

How far into the future should I be thinking?

First, consider the time it will take to understand the project that the RFP will serve. What are the project goals? How does the project relate to the organization's mission, vision and strategy? These are questions you'll need to answer before writing the RFP.

Second, calculate the time it will take to write and distribute the RFP. This usually takes about two weeks.

Third, decide how much time you want to give vendors to respond to the RFP. Remember that they'll need enough time to study the RFP and to share it internally. This process could take years if you're developing an RFP for an incredibly difficult project that has never been done in the history of the world. For less complex projects, vendors may need only a few weeks. Legally, there must be enough time for all vendors to have an equal opportunity to respond. For major projects, allow a minimum of six months.

When the time needed for project planning, RFP development and distribution, and RFP response and selection are added together, an RFP author should be thinking many months in advance.

Is there a matrix to help me evaluate the proposals submitted in response to the RFP?

Every RFP contains specific requirements that respondents must meet in order to win the business. Thus, the requirements built into the RFP can become the standard by which you evaluate written proposals.

Unfortunately, most RFPs describe service and performance requirements in paragraphs of text instead of in lists or rating scales. For evaluation purposes, you could add a rating scale to each item in the RFP. The scale could be as simple as "weak, moderate, strong" or it could be more elaborate. Even a simple scale will add a degree of objectivity to the proposal evaluation process.

For certain types of RFPs, research reported in magazines and journals can help you spot the best criteria for evaluating proposals. For example, if you're looking for the most

appropriate LMS provider, reviews found in training-related magazines would be a good source of information. You can even borrow the criteria found in the product reviews and reformat it into a matrix or rating sheet.

What is a request for information (RFI)?

RFPs are designed to request proposals from vendors, but not all vendors respond by sending a proposal. In fact, very few vendors respond to RFPs that promise little compensation. On the other hand, many vendors respond to RFPs that promise lucrative opportunities. Some vendors may choose not to respond to a particular RFP, but they do want to receive RFPs for other opportunities within the organization. In that case, they may want their company information to stay on file with the buyer.

From the buyer's perspective, an RFI is a good way to gather information about as many vendors as possible. With a regularly updated database of potential suppliers, buyers increase the probability that they will find the best vendor for the current project or for future ones.

The RFI is usually included in the appendix of the RFP. There are typically five sections:

- Company information
- Service offering
- Operating philosophy
- Experience and references
- Related questions

Often, vendors have brochures, pamphlets, media kits and other types of materials that are already written. If this is the case, RFP authors can ask for those materials in addition to the information they've requested in the body of the proposal.

In Conclusion

With so many training products and services available, how do you go about making an educated choice? How can you be sure that the tool, system, or service you are considering is the best match for your needs?

This report has focused on the importance of identifying your business and technical requirements. You should not be purchasing a tool or system solely because someone you know uses that product. What may be right for one organization may be completely wrong for another.

Taking the time to systematically identifying your business requirements will provide many benefits:

- You'll save money by not buying more than you need
- You'll obtain technology or services that will provide what you need for a longer period of time
- Your expectations will be managed, which will lead to better relationships with vendors

Most importantly, making educated, informed buying decisions will provide you with the tools, systems, and services that will drive learning, innovation, and success within your organization.

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