A Field Guide to

- Learning
- Management
- Systems
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For more information on LMSs, visit the <u>Learning</u> Circuits website.

While there are several definitions

of a learning management system (LMS), the basic description is a software application that automates the administration, tracking, and reporting of training events. However, it's not that simple. A robust LMS should be able to do the following:

- centralize and automate administration
- use self-service and self-quided services
- assemble and deliver learning content rapidly
- consolidate training initiatives on a scalable web-based platform
- support portability and standards
- personalize content and enable knowledge reuse.

More important, an LMS should integrate with other enterprise application solutions used by HR and accounting, enabling management to measure the impact, effectiveness, and over all cost of training initiatives.

Because so many factors are involved in the decision to purchase an LMS, the market frustrates buyers, making it nearly impossible to compare suppliers. For example, high-end options don't ensure quality, and some lowend solutions provide quick and easy-to-install versions that handle basic functionality but don't offer everything your organization may need in the future. Adding to the confusion is the high rate of mergers and consolidations within the LMS market.

So how can organizations make smart purchasing decisions about learning management systems? Although every implementation is different, both at the back-end installation and at the logic and requirements level, there are some common factors to address when evaluating the right LMS for your organization.

A 2009 Learning Circuits survey on LMSs asked respondents to identify the most valuable features of an LMS. Here's what they had to say.

- Analytics, 17.3%
- Assessment and testing, 42.5%
- Authoring, 19.7%
- Course Catalogue, 28.3%
- Certification, 18.9%
- Collaboration tool integration, 15%
- Compliance tracking, 46.5%
- Content management, 29.9%
- ERP/CRM integration, 8.7%
- Learner-centered, 39.4%
- Manager approval, 19.7%
- Reporting, 52.8%
- Security, 14.2%
- Standards, 18.1%

Product features

It's easy to let the technology determine how your organization will use its learning management system. Therefore, it's important to clearly define and prioritize requirements before shopping in order to find the right LMS that will meet your organizations initial core requirements, as well as grow to meet subsequent requirements in the future. Once you've determined how you plan to use the LMS, you can match product functionality to your requirements.

To that end, the following functional requirements are recommended:

Integration with HR. LMSs that aren't synchronized with HR systems miss the boat. When systems are integrated, a human resources employee can enter a new hire's information into the HR system, and the employee is automatically signed up for training tailored to his or her role within the company.

Administration tools. The LMS must enable administrators to manage user registrations and profiles, define roles, set curricula, chart certification paths, assign tutors, author courses, manage content, and administer internal budgets, user payments, and chargebacks. Administrators need complete access to the training database, enabling them to create standard and customized reports on individual and group performance. Reports should be scalable to include the entire workforce. The system should also be able to build schedules for learners, instructors, and classrooms. Most important, all features should be manageable using automated, user-friendly interfaces.

In addition, the system should be able to identify employees who need a particular course and tell them how it fits into their overall career path, when it's available, how it's available (classroom, online, CD-ROM), if there are prerequisites, and when and how they can fulfill those prerequisites. Once learners complete a course, the LMS can administer tests based on proficiency requirements, report test results, and recommend next steps. In that capacity, LMSs are instrumental in assuring that organizations meet rigid certification requirements in such vertical markets as healthcare, finance, and government.

A 2009 Learning Circuits survey on LMSs asked respondents to identify the drivers for implementing an LMS at their organizations. Here's what they had to say.

- Centralize management of learning activities, 66.7%
- Deployed with larger ERP/CRM system, 5.7%
- Drive revenue w/in training department, 11.5%
- Manage logistics of instructor-led training, 23.1%
- Measure costs, 10.3%
- Measure employee performance, 13.8%
- Measure training satisfaction, 18.4%
- Measure training usage, 29.9%
- Track regulatory compliance, 28.7%

Content access. This involves the medium (e.g., classroom, CD-ROM, online, etc.) in which the content is delivered, the method (e.g., instructor-led, self-paced, blended) in which the content is delivered, the languages in which the content is delivered and to whom the content is being delivered (e.g., employees, customers, partners, etc.).

Content development. Content development encompasses authoring, maintaining, and storing the learning content. This is where the issues of authoring-tool compatibility, version control, and re-usable learning objects are considered.

Content integration. It's important for an LMS to provide native support to a wide range of third-party courseware. When shopping for an LMS, keep in mind that some LMSs are compatible only with the supplier's own courseware, and others do little more than pay lip-service to learning content standards. An LMS supplier should be able to certify that third-party content will work within their system, and accessing courses should be as easy as using a drop-down menu.

Skills management. Skill assessment and management capabilities revolve around learners assessing their competency gaps. Skills assessments can be culled from multiple sources, including peer reviews and 360-feedback tools. Managers must be able to determine whether results are weighted, averaged, or compared to determine a skill gap. Businesses also might use this feature to search their employee base for specialized skills.

Assessment capabilities. It's a good idea to have an assessment feature that enables authoring within the product and includes assessments as part of each course. Evaluation, testing, and assessment engines help developers build a program that becomes more valuable over time.

Adherence to standards. An LMS should attempt to support standards, such as <u>SCORM</u>. Support for standards means that the LMS can import and manage content and courseware that complies with standards regardless of the authoring system that produced it. Beware: Unless the supplier certifies that the content will work on your LMS, plan on additional expenses.

Configurability. If an organization needs to completely re-engineer its internal processes to install an LMS or employ expensive programming resources to make changes to the LMS, then it's probably not a good fit. Also, it's helpful if IT and designers can access the LMS behind the scenes; they need to set processes and standards based on company policy. To make some systems IT-and user-friendly, some LMS providers have user groups or customer advisory councils that provide insight into installing or upgrading systems.

Security. Security is a priority in any data system containing employee information and proprietary content. Security measures typically include passwords and encryption.

Open Source LMSs

There is a growing market demand for open source learning management system products. Here's a look at the top two tools currently on the market.

Skirting senior management

If you don't make a persuasive business case to senior management early, you'll have a hard time getting their signatures on the purchase order.

- Moodle is a free, open source course management system (CMS) used by educators. You can download and use it on any computer you have handy (including webhosts), yet it can scale from a single-teacher site to a university with 200,000 students. Moodle has a large and diverse user community with more than 330,000 registered users, speaking over 70 languages in 196 countries. www.moodle.org
- Sakai is a free and open source product that can be used to create online collaboration and learning environments. Many users of Sakai deploy it to support teaching and learning, ad hoc group collaboration, support for portfolios and research collaboration. Sakai is built and maintained by the Sakai community, which is actively developing new Sakai tools.
 www.sakaiproject.org

Costs and pricing models

When you shop for an LMS, you'll find that there are a number of pricing models and options. Ultimately, it comes down to whether you want the LMS hosted or installed.

- **O Direct purchase model.** The software is purchased, installed, and managed in-house.
- **Third-party maintenance model.** The company buys the software and installs it on its own data platform, but the maintenance and upgrades are managed by the LMS vendor or another third party.
- Software as a Service (SaaS) model. the company buys the software, but it is housed and managed remotely by a third party and administrators, content builders, instructors, and learners access the system over the Internet.

At first glance, your decision to go with one pricing model over the other may seem obvious. However, when you study the options closely, your choice becomes more complicated. In determining which model is right for your company, you must get the IT professionals involved to help map the company's technical capabilities and needs. More important, the software license is only a portion of the investment. All LMSs will require additional consulting, technical configuration, and administrator training. Here are questions that will help you choose the best pricing model for your needs.

- Does pricing address consulting fees, training fees, and annual maintenance costs?
- Do you have special security requirements?
- How much technical support do you require?
- Are future upgrades and system components included in the initial contract?
- Does pricing include the addition of future users?
- Are there adequate agreements for service and support levels if the supplier merges or is acquired by another company?



LMS Buying Blunders

Skirting senior management

If you don't make a persuasive business case to senior management early, you'll have a hard time getting their signatures on the purchase order.

Failing to spell out your needs

If you don't clarify the technical environment and cultural issues that an LMS must deal with, you're likely to end up with a product that doesn't do what you need it to.

Comparing apples and oranges

Be aware that several tools that are marketed toward LMS buyers aren't LMSs.

Excluding IT

The IT team will ask the right questions to help you make costeffective decisions.

Focusing on price

Insisting on an excellent cost/benefit ratio for your LMS investment is wise; measuring your best options merely on purchase price is not.

Overlooking scalability

Scalability results primarily from open multi-tier architecture; Your IT team knows what that is.

Ignoring interoperability

Beware LMSs that only work with their own embedded authoring tools or content.

Overlooking track records Find a supplier with customers that look like your company.

 Selecting customization instead of configurability
 Custom code is an enemy of flexibility, scalability, and efficiency.

Procurement and implementation best practices

Many resources—articles, analyst reports, and supplier white papers—offer guidance on how to select and implement an LMS. Here are some suggestions collected by culling through the many documents.

Determine the learning strategy

A learning strategy should reflect how learning programs are delivered to the people who need them to accomplish business goals. Consider the target audience—learning preferences, locations, and resources available to them. Corporate goals and objectives should also be defined and the strategy aligned to them. Also take into account budget constraints.

Determine the learning architecture

Basic LMS functionality—administration, tracking, and reporting options—combined with expanded utilities—assessments and course authoring—is typically referred to as a learning architecture. Some questions to consider when developing your e-learning architecture are

- Do you need content development tools?
- Do you require a competency module that helps define skills gaps for building individualized learning plans?
- Is there an e-commerce piece?
- Will you build links to additional company or external information sources?
- Does a synchronous online component enable e-mentoring and the creation of online learning communities?
- Do you need online assessment capabilities?
- Will you need to connect to external communities, such as suppliers or customers?

Create detailed functional requirements

Once you have established the goal, the next step is to develop micro-level descriptions of the project. Generally, this requires a functional requirements specification (FRS). The FRS provides a detailed list of questions and answers to keep you and the supplier on track. It includes specific end-user requirements, technology requirements, interoperability requirements, glossaries, references, and so forth. For best results, be sure to get input from multiple people on your FRS. Remember: If you don't know what you need, a supplier will "have" what you need.



A 2009 Learning Circuits survey on LMSs asked respondents to identify the biggest challenges to implementing an LMS. Here's what they had to say.

- Content integration, 37.5%
- Customization, 46.6%
- Employee buy-in, 35.2%
- Integration with legacy systems, 26.1%
- IT buy-in, 9.1%
- Management buy-in, 21.6%
- Standards, 12.5%
- System maintenance and administration, 33%
- System performance, 25%
- Vendor management, 23.9%
- Vendor selection, 14.9%

Research LMS companies

Do research on each potential supplier. In addition to the information that is typically available on their websites, research and comparison reports may also be available from industry analysts, such as IDC, Gartner, and the META Group.

Issue a request for proposal (RFP)

The RFP should be prepared based on the learning strategy and learning architecture. Each requirement should be as specific as possible so that the LMS supplier can respond directly to the requirement rather than provide a general response. However, don't indicate priorities of requirements, otherwise the supplier may favor specific requirements to suit the RFP. In addition, request a proposed project plan that includes implementation timelines.

Pat Alvarado, an independent consultant, recommends that the RFP review team establish a rating system that all can agree upon. Each rating should also include both positive and negative impressions. In this manner, quantitative measures of the ratings are supplemented by impressions of each criterion. Also, the team should focus on the core or highest-priority requirements. If even one of the core requirements cannot be immediately met by the LMS, that LMS should be eliminated from the list. The result of the review should lead to a short list of vendors.

Schedule demos

After the proposal review is complete, meetings and demos should be scheduled so that the suppliers can answer specific questions and demonstrate the claims they made in the proposal. This process will help clarify what functionality is included out-of-box with minor configuration changes and what part requires customization beyond the quoted price.

Demand pilots and prototypes

Always try before you buy. Most e-learning providers offer a trial period: However, the supplier may want to limit the trial period to a few weeks and availability to a small number of employees. It takes several months to get everyone on board and test the tool in real-life conditions. If you're in a geographically dispersed or large decentralized company, you may need a larger test population and more time than they offer.

Popular LMS Providers

ACS

www.acslearningservices.com



Blackboard

www.blackboard.com



Blackboard

Certpoint

www.certpointsystems.com



Cornerstone OnDemand

www.cornerstoneondemand.com



GeoLearning

www.geolearning.com



Learn.com

www.learn.com



Meridian KS

www.meridianksi.com



Mzinga

www.mzinga.com



Oracle iLearning/PeopleSoft http://ilearning.oracle.com

Oracle iLearning

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Saba Software/Thinq www.saba.com



SAP

www.sap.com/services/education/e-learning



SumTotal Systems

www.sumtotalsystems.com



TEDS

www.teds.com/products/lms.htm



WBT Systems



