Learn how to find the right LMS platform for your needs, objectives, and budget. This white paper helps you ask useful questions so you can find the right solution. In addition, the paper compares the common requirements of startups, enterprises, and educators.

The white paper then looks at the core functionality of five leading LMS solutions – Moodle, Totara, Docebo, Blackboard, and SumTotal. You will improve your understanding of issues such as scalability, ease of customization, and reporting, so you can make an informed decision on how to choose the right LMS. Finally, the white paper discusses the advantages of various LMS development strategies – such as customizing an existing solution vs. building a new one from scratch.
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INTRODUCTION

The e-Learning market is growing rapidly, and it is easy to see why. e-Learning saves businesses at least 50% when they replace traditional instructor-based training, while e-Learning can reduce instruction time by as much as 60%. As a result, corporations now report that e-Learning is the second most valuable training method they use.

In addition, IBM reports that e-Learning helps companies boost productivity by up to 50%. For every $1 a company spends the estimated average productivity gain can be as high as $30.

More and more organizations, including startups, enterprises, and educational institutions, are looking for a suitable platform to support the education of their employees or their customers.

However, choosing the right platform can be difficult. There is no single leader in the LMS sector, and solutions do not always align with user requirements. In many cases, organizations choose to customize an existing platform or create their own through, for example, outsourced development.

This white paper is a guide to finding the right LMS for your sector and needs. The paper discusses the merits of customization and development from scratch, and puts five competing platforms head-to-head: Moodle, Totara, Docebo, Blackboard, and SumTotal, which together occupy around 80% of the market share.
CRITICAL QUESTIONS TO ASK YOURSELF

There are many LMS options to choose from, making a direct comparison of the available platforms a time-consuming, complicated process. As a result, the best place to start is with a focus on your organization and the things you need to achieve. Ask yourself the following questions:

1. **What are our primary business objectives?**
   
   First, look inward at your organization and the people you need to educate. By understanding your most fundamental needs, you can narrow the available LMS options. Your company size, target audience, ideal time to market, and whether you need branding or white-labeling will all play a part in your decision-making.

2. **What is our budget?**
   
   While some LMS solutions have no licensing fee, every implementation comes with a range of costs. These include installation, configuration, training, support, and maintenance. According to Tagoras, the average first-year cost for a company-hosted LMS implementation ranges from $22,000 to $102,000. Deciding on your budget in advance allows you to look at the scale of usage and specific LMS platforms available to you.

3. **What will our return on investment be?**
   
   If you are a startup, your return on investment will be the monetization of your courses and resources. Projecting your potential sales can help you understand the likely return you will achieve. For other organizations, benefits of an LMS include better management of resources, a more flexible method of teaching, and more efficient delivery of course materials.

   You may decide to increase your investment over time. In fact, 45% of current LMS users are increasing their investment this year.

   When determining your initial investment, consider the potential return you will see from an LMS implementation, as well as the potential cost of the absence of high-quality learning at an early stage.
4 Which features do we require?

Before examining the features available in different LMS platforms, consider which features you need. You may require simple support for delivering online courseware, or an integrated, blended learning platform that allows you to combine asynchronous training with tutor-led elements. Many platforms also offer video on demand (VoD) integration, live video streaming, and integrated conferencing and communication tools. Make a list of your feature requirements in order of priority.

5 Will our LMS be compliant with industry standards?

LMS platforms use a range of different protocols, and it is important to consider compatibility when making your decision. Ultimately, solutions that meet defined standards like SCORM and Tin Can will allow you to freely move your data across different platforms.

SCORM is a standard for e-Learning that structures the collection of learning data. However, both SCORM 1.2 and SCORM 2004 are largely dependent on online connectivity. Developed more recently, the Tin Can API (sometimes called the “Experience API” or “xAPI”) defines standards for collecting and tracking learning events on any platform, anywhere, which is ideal for a blended learning environment.

6 What is the true total cost of ownership?

The costs of implementing an LMS go beyond simple licensing. Once you have selected an LMS, you will need to carry out its implementation or seek the help of an experienced vendor. You may also need to consider how your LMS integrates with your existing infrastructure, including your Education Management Information System (EMIS), Membership Management System (MMS), Human Resource Management System (HRMS) and the like.

Later, your LMS will become a mission-critical system that instructors and students depend on. As a result, you will need ongoing support, which may incur additional costs. 28% of organizations that switch their LMS do so as the result of
inadequate support⁴. To avoid this, ensure that you can access fast, responsive support when you need it.

What are the risks of a proprietary solution?

When you choose a proprietary LMS, you will typically have restricted access to the source code, or none at all. In this case, you will be locked-in to a specific vendor and dependent on that vendor long-term. If the vendor goes out of business or arbitrarily decides to increase license fees, it may become prohibitively difficult to change providers due to the high switching costs.

In summary:

✔ Consider the features you require and order them by priority.
✔ Define your budget early on in the decision-making process.
✔ Account for long-term costs, including support and how easy it is to make changes.

When choosing an LMS, consider:

- Costs and expected ROI
- Functionality, features, scalability and design
- Compliance with industry regulations
- Compliance with your existing IT infrastructure
- Compatibility with other enterprise solutions (CRM, ERP, CMS, accounting)
- After-sale technical support
UNDERSTANDING YOUR REQUIREMENTS

While your LMS requirements are as unique as your business, similar organizations share the same priorities. Startups, enterprises, and educational institutions each have different requirements when it comes to an LMS platform, and the right LMS depends on the nature of these requirements.

Startups

Startups include companies aiming to build and resell an LMS and content publishers looking to sell courses in a customized solution. These companies, which often need to brand or white-label an LMS, take advantage of innovative features like gamification and augmented reality, and develop courses around niche subject matters – anything from cheese-making to creative writing.

For these businesses, primary goals include monetization, a short time to market, and control over intellectual property rights (IPR). In addition, startups include small businesses that need to train employees and customers as efficiently and affordably as possible. These companies may benefit from a cloud-based LMS that offers flexibility and does not require an initial installation and deployment investment.

Enterprises

Seventy-four percent of companies currently use an LMS for managing and maintaining their e-Learning. Typically, they want to improve staff qualifications, increase productivity, increase employee loyalty and retention, and reduce training costs. According to a survey conducted by Capterra, roughly 80% of respondents representing the corporate/non-academic market for LMS platforms use their solution for internal training and skills certification. A smaller percentage of companies use their LMS for compliance and onboarding, and even fewer use their LMS for external purposes, such as training clients or selling courses to others.

Corporations use a wide range of LMS features. Personalized learning allows users to “pull” content and define their own learning paths. Video content helps present information in an easily digestible way, while augmented learning introduces virtual reality to place course projects and 3D models into a physical environment.
In addition, the availability of a reliable Application Programming Interface (API) like SCORM or Tin Can introduces new opportunities for tracking learner progress and performance.

**Educational Institutions**

Educational institutions require an open, learner-centered, and collaborative learning environment. They are looking for strategically priced systems that meet their institutional standards (for highly agile, interoperable systems) and user expectations (to have mobile-friendly, personalized, customizable, intuitive, and integrated systems designed to enhance student learning). In addition, educational users often have strict requirements when it comes to the security and privacy of students and copyrighted course materials.

An LMS brings several key benefits to education. Seventy-four percent of teachers say an LMS is a useful tool to enhance teaching. In addition, institutions experience significant benefits, including reducing the cost of training while increasing the flexibility they provide to students by allowing them to use their own devices.

In summary:

- Startups need to balance price with innovative features, easy monetization, and a short time to market.
- Enterprises need effective learning with accurate skill testing and reporting.
- Educators need to create a flexible, collaborative, and social environment for learning.

As you refine your requirements, start preparing a shortlist of potential vendors:

- List every vendor with an LMS that meets at least 50% of your requirements
- Ask for a demo version of the LMS to see how well it fits your organization
- If no LMS meets 50% of your requirements, consider developing a solution from scratch
- Refer to a consulting company if you require additional resources and expertise that is not available in-house
COMPARING LEADING LMS PLATFORMS

Five of the leading LMS platforms are Moodle, Totara, Docebo, Blackboard Learn, and SumTotal. They can be compared on several criteria, including their like-for-like features and suitability for startups, enterprises, and educational institutions.

**Moodle (Open Source, Free License)**

**Sectors**  
Moodle is built on a highly customizable core and has been adapted for use across education, business, non-profit, government, and social sectors. Moodle is designed to provide educators, administrators and learners with a single robust, secure, and integrated system to create personalized learning environments.

**Scalability**  
Almost 50% of Moodle installations are utilized by groups with more than 500 members.

**Personalization**  
A Personalized Dashboard allows users to organize and display courses, and to view current tasks and messages at a glance.

**Collaboration**  
Collaboration tools include forums, wikis, glossaries, and more.

**UI**  
Custom themes are quick and easy to install.

**Analytics**  
Most of the reporting within Moodle is designed to help teachers manage individual courses. Functionality to help administrators understand course usage comes with an additional cost. The Overview Statistics plugin produces site and course reports, while Engagement Analytics provide information on student progress.

**APIs**  
Moodle supports SCORM 1.2, while a plugin can add support for SCORM 2004. Some Tin Can support is available with the Tin Can API Launch Link.
plugin and Tin Can Learner Stream\textsuperscript{20} plugin.

**Price range**  
Moodle does not come with any license fees\textsuperscript{21}. However, organizations need to consider the cost of hosting, support, and administration.

Moodle boasts an estimated 76 million end-users\textsuperscript{22}. For the most part, this popularity comes from the free and open-source nature of the platform.

In practical terms, enterprise sector users will need to invest sizable resources into their implementation, supporting users over time, and developing the detailed reports that are required for meaningful business decisions. Moodle is a particularly good fit for startups looking for an affordable way to start in e-Learning.

A well-known illustration of Moodle’s success in the education sector is the Open University of the UK. The educational establishment currently utilizes the platform to support over 200,000 users\textsuperscript{23}. The Open University is a distance learning and research university, and is one of the largest universities in the UK for undergraduate education\textsuperscript{24}. The majority of OU’s students study off-campus, with 250,000 students enrolled, and more than 50,000 students located overseas\textsuperscript{25}.

**Totara (Open Source, Subscription-based License)**

<table>
<thead>
<tr>
<th><strong>Sectors</strong></th>
<th>Targeted at the corporate and government markets\textsuperscript{26}. Used by a variety of organizations from large blue-chip companies to small SMEs and the third sector\textsuperscript{27}.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scalability</strong></td>
<td>Proven scalability to upwards of 200,000 learners\textsuperscript{28}.</td>
</tr>
<tr>
<td><strong>Personalization</strong></td>
<td>Individual learning plans, Personalized Management Reporting Dashboard, and more\textsuperscript{29}.</td>
</tr>
<tr>
<td><strong>Collaboration</strong></td>
<td>Includes a range of tools such as chat, wikis, and forums to support informal and social learning\textsuperscript{30}.</td>
</tr>
</tbody>
</table>
Comparing Leading LMS Platforms

UI
Create a fully responsive environment for any device including the ability to configure different menus and the look and feel for each audience, with support for localized terminology.\(^{31}\)

Analytics
Custom Report Builder allows you to build custom reports on users, course progress, and competency achievement across your business.\(^{32}\)

APIs
Totara supports SCORM 1.2 and AICC\(^ {33}\).

Prince Range
Subscriptions begin from approximately $2,950 for 500 users, to $29,950 for 250,000 users.\(^ {34}\)

Totara is a distribution of Moodle with a focus on corporate learning. Its features are tailored to the needs of corporate environments, with performance management, HR integration, and support for an organizational structure.

For educational institutions and startups, many of these features will be of little to no use. However, for enterprises, they are valuable additions that make the proven, reliable Moodle platform more appropriate for corporate use and reporting.

Docebo (Proprietary, Commercial License)

Sectors
Primary Docebo users are small, medium, and large enterprises.\(^ {35}\)

Scalability
Up to 100,000 users.\(^ {36}\)

Personalization
Includes customized layouts and language personalization features.\(^ {37}\)

Collaboration
Web conferencing, ILT-Classroom Training, real-time collaboration, gamification.\(^ {38}\)

UI
Branding and white-labeling capabilities (logo, colors, layout
customization)\(^{39}\).

**Analytics**

Default and custom reports to monitor and track performance\(^{40}\).

**APIs**

Docebo supports SCORM 1.2\(^{41}\), SCORM 2004\(^{42}\), and Tin Can API\(^{43}\).

**Price Range**

From $2,300 per year for 50 active users. Active user licensing ensures organizations only pay for active users, not an estimated number\(^{44}\).

Available as a cloud-hosted Software-as-a-Service (SaaS) solution, Docebo is tailored to the requirements of corporate customers. It includes flexible customization, language personalization for distribution across the entire world, and features to encourage use, including gamification.

It is a standout choice for **enterprises**, although some may find the lack of self-contained on-site governance problematic. Meanwhile, the **education sector** can make extensive use of collaboration and communication features. However, a solution focused on the needs of educational organizations may be a more appropriate choice.

Finally, for **startups**, it takes careful consideration to decide whether Docebo’s features are worth the licensing cost when compared to free alternatives.

<table>
<thead>
<tr>
<th><strong>Blackboard Learn (Proprietary, Commercial License)</strong></th>
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<tbody>
<tr>
<td><strong>Sectors</strong></td>
</tr>
<tr>
<td>Higher education, schools, further education. New offers for all business sizes(^{45}).</td>
</tr>
<tr>
<td><strong>Scalability</strong></td>
</tr>
<tr>
<td>Blackboard Learn is highly scalable. A Blackboard Collaborate online session supports up to 1000 users at a time(^{46}).</td>
</tr>
<tr>
<td><strong>Personalization</strong></td>
</tr>
<tr>
<td>Language personalization and Home Page customization based on your priorities and preferences(^{47}).</td>
</tr>
</tbody>
</table>
Comparing Leading LMS Platforms

**Collaboration**
- Announcements, Chat, Discussions, Mail, and Blackboard Collaborate – a suite of collaboration and conference tools\(^{48}\).

**UI**
- A choice of themes\(^{49}\).

**Analytics**
- Blackboard Analytics allows you to analyze data from students, programs, staff, and operations\(^{50}\).

**APIs**
- Blackboard Learn supports SCORM 1.2 and SCORM 2004 up to the 4\(^{th}\) edition\(^{51}\). Blackboard Learn also supports Tin Can and full SCORM compliance with Blackboard Release 9.1 SP6 featuring Rustici SCORM player\(^{52}\).

**Price Range**
- Blackboard Learn prices are not listed or available on the Blackboard.com website. The Blackboard.com website does offer contact information to request more information on Blackboard Learn solutions\(^{53}\).

As of July 2014, Blackboard serves approximately 17,000 schools and organizations. It holds the highest share of the education market, with 75 percent of colleges and universities and more than half of K-12 districts in the US using its products and services.

For the education sector, Blackboard Learn combines easy, intuitive learning for end-users with detailed analytics for tutors and faculty. Its strong focus on education may be off-putting to users within the enterprise and startup settings, who may prefer a broader offering as well as more support for hierarchies and organizational structures. However, extensions allow third-party developers to create customizations and extensions for Blackboard Learn through open APIs and web services.

**SumTotal (Proprietary, Commercial License)**

**Target Sectors**
- A “talent expansion” system with e-Learning components. Aimed at private and public sector organizations, including global enterprises and midsize organizations across dozens of vertical industries\(^{54}\).
Comparing Leading LMS Platforms

**Scalability**
Built with enterprise-grade architecture, SumTotal will scale with your organization. Currently, its average customer has 17,000 employees.""}.

**Personalization**
Includes dynamic catalogs and learning recommendations to keep content tailored to users, extensive widgets that allow you to integrate external content, and personal dashboards for at-a-glance information.

**Collaboration**
Communities of practice, document libraries, blogs, activity ratings, and feedback through Social Learning.

**UI**
Widget and theme-based landing pages that can include external content and enable unique experiences for different audiences.

**Analytics**
Includes built-in advanced reporting for tracking completions, scores, and overall impact. Also includes scheduling and delivering of reports over email.

**APIs**
SumTotal supports SCORM 1.2, SCORM 2004, and AICC.

**Price Range**
For 250 or fewer users, SumTotal Maestro starts at $57 per user annually. For more than 5,000 users, annual cost drops to $26 per user.

SumTotal is described as a “talent expansion” platform, combining performance management and assessment with learning management. The platform serves hundreds of industries across 156 countries. Over 45 million people depend on SumTotal to provide corporate learning and HR functionality, including many Fortune 500 companies.

With its enterprise-grade architecture and extensive reporting options, SumTotal is an ideal fit for the enterprise sector. However, startups and the education sector are unlikely to require the extensive HR and talent management functionality that this platform includes.
In summary:

- Moodle’s free licensing and open-source code are highly attractive features, but additional costs may be incurred if you need commercial support from, for example, Moodle-certified partners.

- Totara strikes a good balance between open-source code and commercial support, and the platform has the proven scalability of 200,000 users.

- Docebo’s cloud-based deployment streamlines implementation and may prove cost-effective. However, some organizations may prefer to keep their data and learning systems in-house.

- Blackboard Learn is highly tailored to the education sector, but the platform may not meet the requirements of startups and enterprises. Since Blackboard Learn is an expensive platform, educators may alternatively choose Moodle, Totara, or Docebo.

- SumTotal offers impressive scalability and a powerful feature set that covers various aspects of talent and performance management. However, these features are largely irrelevant for startups and educational institutions.
PROJECT IMPLEMENTATION OPTIONS

In practice, not all organizations find a commercial solution that is a perfect fit. As a result, 25% of companies use multiple LMS platforms to cater to their varied needs. Some companies go further by modifying an existing LMS or building a customized LMS system designed around their requirements.

While the project workflows for all three scenarios are similar, the cost and complexity of development from scratch is significantly higher. Requirements to modify an existing LMS or build a customized LMS include all of the following:

- Architecture enhancement
- Development
- Testing
- Deployment and integration
- Staff training

As a result, this type of development is largely restricted to companies aiming to sell their own LMS to third-party organizations, or those who are unable to find at least 50% of their desired features in existing software. You may require the expertise of an external specialist to help you understand which features you could achieve on the foundation of existing platforms.

In summary:

✔ It is not always possible to meet your requirements without custom development. Ideally, you should expect at least 50% of your requirements to be met by an existing solution.

✔ Development allows you to create an LMS that is the right fit for your organization.

✔ Any development requires specialist experience and expertise, but development from scratch is significantly more expensive.
CONCLUSION

An LMS promises big benefits, but the path to value is different for startups, enterprises, and educators. The first step in finding the right solution is understanding your own requirements – from your primary objectives to the total cost of ownership and potential return on your investment.

As you have seen, each of the five LMS platforms compared in this white paper address those requirements in different ways.

Moodle remains the leading option for the majority of users, particularly educational establishments and startups operating on a limited budget. It balances a substantial range of useful features with no license costs. Competing LMS platforms are tailored to specific industries, and, providing they fall within your budget, they are likely to meet even more of your requirements – providing everything from communication and event management to fully featured talent management (SumTotal).

Of course, every organization is unique. The reality is that there is no one-size-fits-all solution for e-Learning. As a result, some organizations find themselves unable to find the features they require without customization or a custom-built solution.

By utilizing the seven key questions above and the provided appraisal of the five leading solutions, you can narrow the choices available to you and make an informed, intelligent decision about the future of your organization’s learning platform.
HOW DO I GET STARTED?

1. Prioritize your business needs
   Answer the seven questions above to improve your understanding of your requirements and what you hope to achieve with an LMS.

2. Make a prioritized feature list
   Decide on the features that are most important to you – the ones that will deliver the most value to your organization.

3. Pre-select your solution(s)
   Using your list of requirements and features, compare the available platforms and build a shortlist of your options. This list may include several LMS solutions, or just a single one. Sometimes, you find that no solution delivers 50% of your required features. In this scenario, custom development may be the best option.

4. Find a reputable consultant or vendor
   Finally, contact LMS experts to help you refine your requirements and find the most appropriate solution for your needs. You might consult with the vendor, or, if you need additional support, customization, or development, hire an independent consultant.
ABOUT OXAGILE

E-Learning software development has been at the core of Oxagile’s service offerings for the last 5 years. Since then, Oxagile has been able to successfully deliver over 30 e-Learning projects to Fortune 500 companies, educational establishments, midsize businesses, and startups around the world.

Our special forte is also in complementary fields such as Online Video and Real Time Communication, which is critical for implementing powerful, highly engaging multimedia and/or webcast functionality in any modern Learning Management System (LMS).

Further, Oxagile employs a dedicated front-end team whose job is to ensure a seamless, intuitive user experience across desktop, tablet, and smartphone devices. As mobile web usage keeps going up, modern learning software must harness the responsive design model to meet the new user demands.

We are already trusted by such high-profile clients as Massachusetts Institute of Technology, DeVry University, CDSM, Sanako, Cardiff University, and others.

For more information about Oxagile’s expertise, please visit www.oxagile.com. To discuss your LMS requirements, click the button below, and an e-Learning expert will get back to you ASAP!

GET A FREE QUOTE


3. Brian Westfall, Market Research Associate at Software Advice


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