MIS 523: LMS Systems by Jeanie Thomas and Mark Weiss

Table of Contents

Paper Purpose and Scope

The purpose and scope of this paper is to review Learning Management Systems literature and determine the types and use of systems on the market and determine future trends in the industry.

Literature Review/Investigation

Learning Management Systems (Course Management Systems)

Learning Management Systems (LMS) are software programs that are used to centrally administer classroom education or training events via the Internet. High end LMS are normally capable of providing a wide-range of management and education-related services. These services can range from personalizing content for the student, supporting web standards and portability, delivering content in a rapid fashion, supporting self-guided or self-paced courses of instruction, and providing centralized administrative controls over the course content.

An LMS can be used for many training or education tasks. These range from teaching a college course to corporate training for an organization. LMS have become a more popular option in industry. Although an LMS used for corporate purposes have different goals from one used in an educational environment, both types share common characteristics. These include incorporating the ability to manage a course calendar, creating and managing user roles (student/instructor), creating and generating reports, student and instructor messaging and notifications, grading coursework, roster processing, web delivery, and the ability to assess and test students. An LMS that is more tailored to the corporate environment also has the ability to identify skill gaps at the individual or organizational level, auto-enrollment of students, and placing students according to demographics (geographic, employment category, etc).

Learning Management Systems represent an almost $1 billion market that consists of more than 50 different system/software providers. The largest area for potential growth in the LMS industry is for small businesses

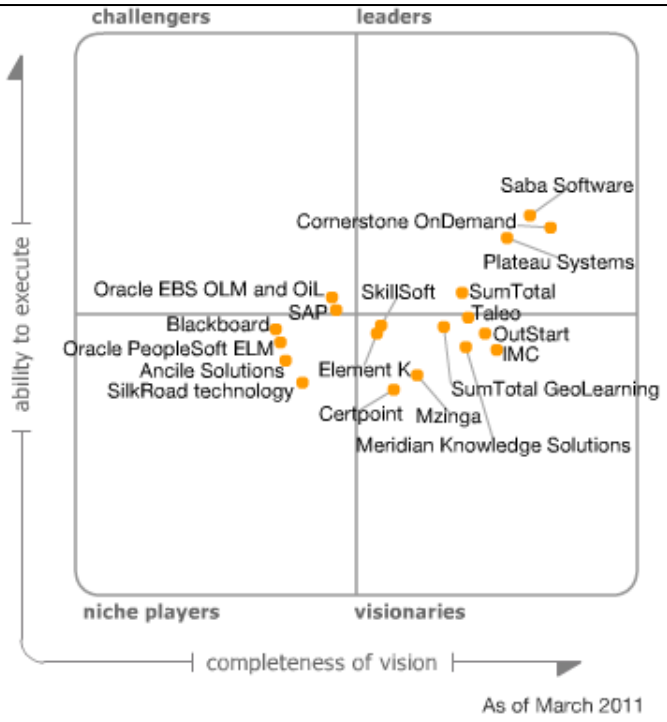
Magic Quadrant for Corporate Learning Management Systems (Freyermuth, Holincheck, & Otter, 2011)

The corporate learning system (CLS) market continues to mature and consolidate. This evolution coincides with a higher percentage of organizations looking to reduce the number of software providers within the human capital management (HCM) portfolio. CLS vendors have put together packages of core technologies, including learning management systems (LMSs), learning content management systems (LCMSs), virtual classrooms and multimodal course delivery. In addition, a number of the leading CLS vendors have built out or acquired other talent management functionality that includes performance, succession and compensation management capabilities.

Historically, companies have spent most of their budget on formal training, while the majority of training is taking place informally. This has led companies to believe they do not control the majority of learning in their organizations. In view of this information, vendors are broadening their social network offerings, social profiles, expertise location, wikis, blogs, discussion forums, tagging and ratings.

Buyers should focus on acquiring the most critical functionality now, while ensuring they're able to incrementally purchase additional modules for future initiatives. According to the Magic Quadrant, there are four market leaders: Cornerstone OnDemand, Plateau Systems, Saba Software and SumTotal. There have been movements among the leaders, but these four vendors have been listed in the Leaders quadrant since 2008. However, the market continues to evolve and consolidate, so there are a number of promising vendors and newly minted suite vendors, built through acquisition, that offer competitive solutions (see Figure 1).

Figure 1: Magic Quadrant for Corporate Learning Management



Leaders

Leaders must not only meet the market's current requirements, which are continually changing, but also anticipate future requirements. Vendors must articulate how they will address these requirements as part of a vision for an expanded CLS. Leaders have a track record of financial performance and an established market presence. Their installed bases give them a strong presence in the CLS market, and they demonstrate continued growth in customers and revenue. The market perceives Leaders as thought leaders, with well-articulated plans for product development, marketing and channel support. Leaders have the highest combined scores for Ability to Execute and Completeness of Vision. These strategic providers will continue to drive the market forward by broadening their CLS functions and integration. Buyers can expect that, as a group, Leaders will be considered part of most new product purchases and will continue to have high success rates in winning new business.

Challengers

Challengers have good product and service capabilities, along with a solid financial position. However, these vendors have generally been followers in functionality, user experience and other key developments in the CLS market.

Visionaries

Visionaries are forward-thinking vendors, but their performance has not given them a leadership position. These vendors are differentiated by their product innovation, but they have not achieved the completeness of solution or the sales and marketing success required to give them a high profile.

Niche Players

Niche Players either have not achieved a broad customer base or lack some of the modules available in a complete CLS. They lack a substantial presence in the CLS market. Some focus on specific industries or geographic markets, and their learning products are typically optional components of their more-comprehensive product offerings. The most significant challenge for Niche Players is to invest in making their learning products more robust, and in marketing them so that they become more competitive.

The Campus Computing Project 2010 (Green, 2010)

The 2010 survey highlights the continuing transition in the higher education market for Learning Management Systems. Campus CIOs and senior IT officials reported that their institution uses Blackboard as the campus standard LMS has dropped from 71 percent in 2006 to 57.1 percent in 2010. Blackboard major competitors have gained market share during this period. The number for Desire 2Learn is up fivefold, from 2.0 percent in 2006 to 10.1 percent in 2010. Moodle market share increased from 4.2 percent in 2006 to 16.4 percent. Sakai has grown from 3.0 percent in 2006 to 4.6 percent.

Linked to the campus LMS strategy, 70.3 percent of the survey participants agree/strongly agree that mobile LMS apps are an important part of their campus plan to enhance instructional resources and campus services. However, mobile apps are in the early stage of deployment. The campus movement towards mobile apps reflects trends in the consumer market. Students expect their institutions to provide the resources and services they enjoy as students.

Point/Counterpoint: Learning Management Technologies: Enterprise System or Consumer Good? (Kim & Fritz, 2009)

This video compared and contrasted approaches in the use of learning management technology in higher education. There were two different models discussed, a LMS is centrally provided versus a consumer model where faculty are encouraged to use a wide variety of available web 2.0 tools (blogs, Facebook, and Twitter). The interesting points from this video:

- LMS' most value to students is having access to viewing grades during the course and the ability to take quizzes and other assessments online.
- How to provide effective academic analytics?
- How can the technology raise student's engagement and awareness?
- How do we continue to support LMS In the era of shrinking budgets?
- LMS should be considered as middleware.
- Web 2.0 can be used in actively engaging students through blogging.

Comparison and Evaluations of LMS

Blackboard (Freyermuth, Holincheck, & Otter, 2011)

Blackboard, founded in 1997, is a public company headquartered in Washington, D.C. The company is best known in the higher education industry. It has a growing installed base in the corporate market, predominately in the U.S., especially within the public sector. The design center for its offering is social learning, where instructors and learners interact and share information. In this regard, it differs from other CLS vendors, whose heritage is often based in learning management, which focuses on tracking and administrative tasks. Administrative functions are provided by partners that integrate with Blackboard using Blackboard Building Blocks. The company also offers Blackboard ProSites, a SaaS product for small organizations (usually less than 500 employees). In addition to the Blackboard Learn and ProSites, the company offers Blackboard Transact, Blackboard Connect, Blackboard Mobile and Blackboard Collaborate. The collaborate platform was expanded in 2010 with the acquisitions of Elluminate and Wimba. Blackboard reported revenue of $447.3 million for the 12 months ending 31 December 2010.

Strengths

Blackboard provides an intuitive system that allows instructors and learners to interact with each other and engage in structured social and informal learning. Customers indicate that the initial implementation and deployment and training are Blackboard strengths. Users commented on the ease of uploading, updating and distributing custom learning content in a wide variety of formats, including documents, audio and video.

Cautions

Support for administrative functions, such as registration, scheduling and tracking, needs to improve for Blackboard to meet the needs of more-demanding administrators and to build the system into a complete CLS. Blackboard has had success selling at the departmental level; a high percentage of the references in the survey stated that they have not integrated Blackboard with their existing HR systems. The company needs to dedicate more resources to building better brand awareness outside higher education. Blackboard has had success growing its business in the public sector, but still has limited penetration in the private sector.

Desire2Learn Partners with Cengage

Desire2Learn (D2L) Incorporate, founded in 1999, is a leader in providing innovative eLearning solutions to academic and other leading organizations around the world. The focus is on research and development and service and support for their clients, and products lead the market in innovation and client satisfaction. (Discover Desire2Learn). D2L has partnered with Cengage learning to integrate Cengage digital content and solutions with D2L learning suite. (Discover Desire2Learn)

Blackboard Vs Moodle

According to an evaluation completed by Brunel University, they determined, in the UK, the clear alternative is Moodle. Overall the two packages were comparable. Blackboard was better at quizzes, surveys and file management. Moodle was better at communication and database tools. (University, 2010).

AT CSU Channel Islands, the Learning Management Evaluation Committee was charged with recommending the future learning management system (LMS) for the CSUCI campus. (CSU, 2011). Faculty committee members piloted spring courses in Blackboard 9.1 and/or Moodlerooms with the intent to identify which system would best serve the needs of CI faculty and students. After eight months of examining both options, the committee recommended that Blackboard 9.1 be selected as the sole learning management system. These recommendations were based on pedagogical tools, vendor support, and financial reasons. Both students and faculty felt that it was easier to transition from the current system, Blackboard 8, to Blackboard 9.1. Because Moodle is structured so differently, some students and faculty experienced frustration as they learned how to navigate the system. The majority of faculty and students agreed that Blackboard 9.1 provides the necessary tools for teaching and learning. In addition, the Blackboard Company was more responsive to resolving issues and the system was more reliable with no outages. At first glance, Moodlerooms appears to be less costly but when all the real costs are examined Blackboard 9.1 is actually less expensive for the first two years. (CSU, 2011).

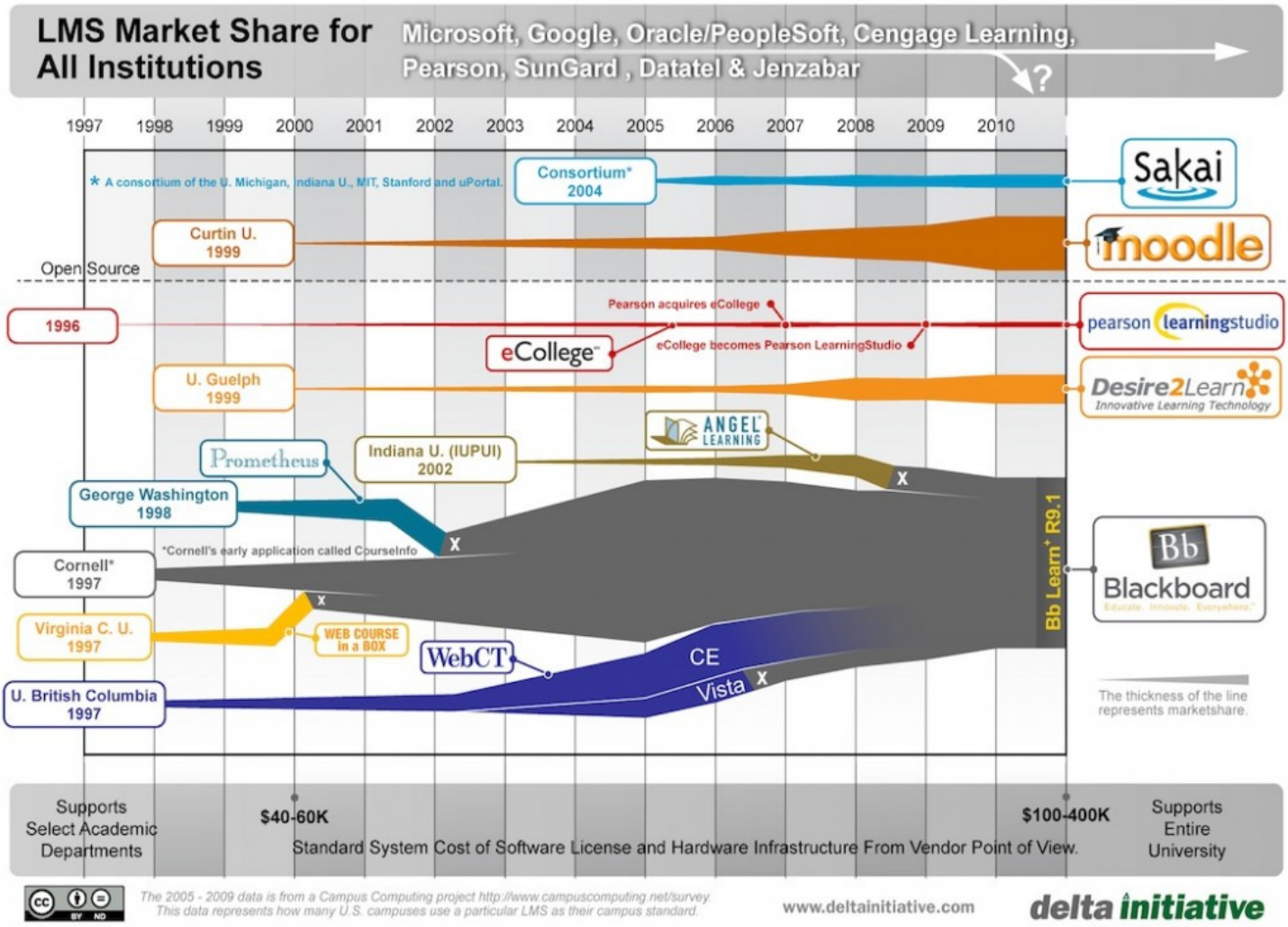
The majority of faculty in the pilot rated Blackboard 9.1 higher for teaching and learning tools and ease of learning to use the system. Students also preferred Blackboard 9.1 and many noted that the transition from 8 was easy for them. Increased functionality and stability were also factors. (CSU, 2011).

Blackboard Vs Sakai

Colorado State University was using Blackboard Campus Edition version 8 and the vendor was no longer going to support the product after a certain date. (Scott, January). So they decided to evaluate upgrading to Blackboard new release or adopting an open source LMS for an institution of their size. They determined that open/community source is not free; it requires more human capital and need commercial support to ensure system integrity. There was also a huge one-time cost to convert course content from Blackboard to Sakai. (Scott, January.

Analysis and Discussion

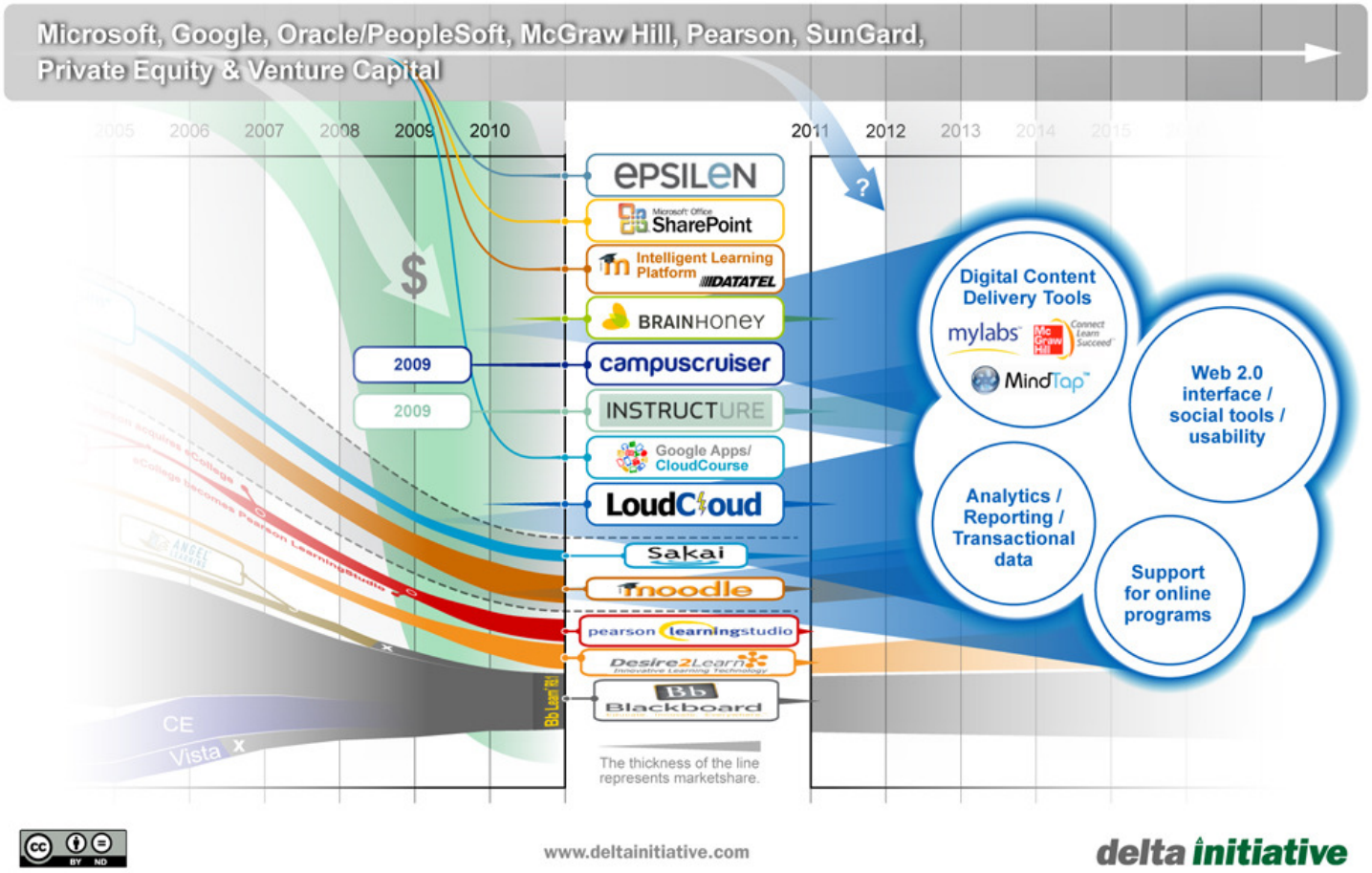
While Blackboard seems to be the platform of choice, given the original research results, there is other research that is quite contrary.



The LMS market is continuing to mature and evolve over time. As can be seen in the figure, Blackboard has been the dominating player in this arena for quite some time, however, other such as Moodle and Desire2Learn are picking up steam and gaining market share. The initial shares were gained when other platforms such as WebCT, Angel Learning, and Prometheus were absorbed (mostly by Blackboard). Complementary technologies were the targets for their (Blackboard's) acquisitions as apposed to major rivals. While these acquisitions have increased Blackboards' market share, the increasing complexity is causing some users to decide to try something different. It is very possible that ne players may emerge into this market over the next several years and/or existing players may begin to gain shares from Blackboard as technologies continue to improve and expand.

These changes, as well as the changes in what the customer's want, such as, more Web2.0 and 3.0 advances, greater reporting flexibility, and more engaging learning resources for the students' themselves are all in the pipeline over the next several years. The analytical data component is becoming an increasingly important aspect of LMS as well.

State funding in some areas has become more about progress than enrollment numbers in some states. As this trend continues to increase, analytics will become a more important aspect of LMS in the very near future.



As can be seen in this figure, there are many new entrants into the market, and likely will be many more over the next few years. Private investment and outside capital are beginning to pour into LMS solutions, as their importance in the marketplace becomes increasingly more documented and validated. (Phil Hill)

Synthesis

LMS is definitely a technology that is going to continue to evolve over time. As business and educational needs change, so to will the LMS marketplace. Blackboard is still the number one contender, which most other competition used to follow as an example. However, there is a growing trend towards new approaches and newer technologies that are not just learning systems, but also analytical tools as well. The environment that LMS is moving into requires all of these things, in addition, to being able to keep students engaged in what they are needing to learn.

New entrants into the marketplace are coming, along with private capital to fund their efforts. Technology, especially Web technologies are increasing in scope and expectations and any player in the market will have to embrace and change to meet them head on if they wish to survive and prosper.

References

Course Management Systems. (n.d.). Retrieved November 30, 2011, from Tech-FAQ: http://www.tech-faq.com/learning-management-system.html

CSU. (2011). *Learning Management Systems Evaluation Report.*

Discover Desire2Learn. (n.d.). Retrieved December 3, 2011, from Transforming teaching and Learning: http://www.desire2learn.com/about/

Freyermuth, J., Holincheck, J., & Otter, T. (2011). *Magic Quandrant for Corporate Learning Systems.* Gartner.

Green, K. C. (2010). *The Campus Computing Project 2010.*

http://www.campuscomputing.net/sites/www.campuscomputing.net/files/Green-CampusComputing2010.pdf

Kim, J., & Fritz, J. (2009, November 5). *Point/Counterpoint: Learning Management Technologies: Enterprise System or Consumer Good?* . Retrieved December 3, 2011, from EDUCAUSE: http://net.educause.edu/ir/library/pdf/LIVE0914ccp.pdf

Scott, R. (January). *Learning Management System Futures at CSU.* Colorado State universtiy.

University, B. (2010). *Brunel University Virtual Learning Environment.*

Hill, Phil. "Emerging Trends in LMS/ Ed Tech market." August 4, 2011. Retrieved December 5, 2011 from http://mfeldstein.com/emerging-trends-in-lms-ed-tech-market/