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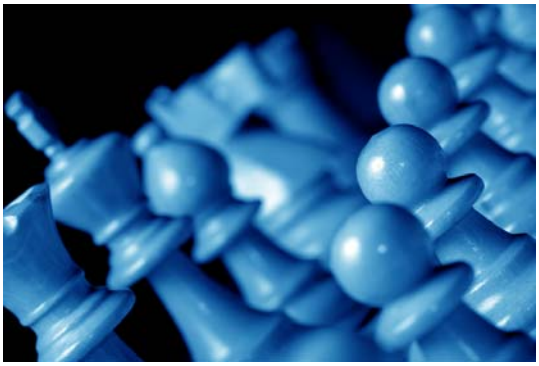

LCMS, not just a Technology: It's a Strategy!

A Chapman Alliance White Paper

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Abstract: Learning technologies haven't reached the same status as other business systems because most of the focus, to date, has been on automating existing training practices rather than leveraging learning content to meet broader organizational objectives such as developing new lines of business, easing the pain during a merger, training channel partners and customers, sharing content across lines of business, etc. Learning Content Management Systems (LCMSs) have the potential to be recognized as true business systems...if learning professionals leverage LCMS technology to support organizational objectives.

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Introduction

Learning systems, although considered mainstream in many organizations, still have not reached the same lofty status of mission-critical business systems such as Enterprise Resource Planning (ERP) systems, Human Resource Information Systems (HRIS), or the ubiquitous Customer Relation Management (CRM) systems. So, why haven't learning systems reached their full potential and claimed high-profile status within business ecosystems? Perhaps the root cause is learning professionals. Could it be that we haven't been asking enough of our learning systems?

Here are some questions we typically ask when creating a learning technology strategy:

1. How can we use learning technology to centralize training and make it accessible from a single point of access?
2. How can we provide secure access to training courses, whether taught in a classroom or online?
3. How can we automate tracking and record keeping?
4. How can we keep track of compliance and certification completions?
5. How can a learning system manage resources (instructors, rooms, equipment) used in training?

Although these are good tactical problems to solve, few of these questions really hold learning systems directly accountable for solving mission-critical business objectives. To truly move our learning systems into the category of mission critical, here are the questions we **should** be asking:

1. How can we use learning technology to decrease cycle time for deploying training from inception to delivery?
2. How can we increase speed to competency, making our organizations more nimble to adapt to rapid changes in the way we do business?
3. How do we leverage learning to create new business opportunities?
4. In a time of frequent mergers and acquisitions, how can we use learning to rationalize business practices across a new enterprise?
5. How can we align the use of mission-critical content across lines of business and departments?
6. How can we use technology to capture and maintain expert knowledge, whereby increasing our company's intellectual capital?
7. How can we use learning to directly enable our employees, partners, and customers to perform better?

The key to achieving greater accountability (and visibility) requires a paradigm shift in the way we approach learning. First, we need to change our emphasis from using technology as a

means of automating the administrative aspects of learning, to focusing more fully on the strategic value of the learning content itself. While there are few examples of training departments leveraging learning content to impact business objectives, there are many examples of sales department using customer content to impact business objectives. For example, consider which of the following offers the greatest strategic impact when using a CRM: (1) automating the administrative functions associated with the sales process (keeping track of number of phone calls, tracking activity), or (2) synergistically leveraging information about customers and potential customers to most effectively manage pipeline and sales cycles. Content, whether customer information or critical learning content that serves a business purpose, is what gives a company its competitive edge and allows it to meet organizational goals and objectives. Training professionals need to learn to use learning content as a strategic asset.

To achieve greater accountability and visibility:

- *First, we need to focus on the strategic value of learning content.*
- *Secondly, we need to move to a content-centric model of learning.*

Learning Management Systems (LMSs) have been instrumental in streamlining training tasks, such as managing compliance/regulatory training; delivering libraries of off-the-shelf content in many areas such as leadership development and desktop application training; and automating training registration and record keeping. While LMS technology goes a long way to support many training functions, it often falls short of putting proper emphasis on "content" as the most important function of the training department. Content developers and contributors must still work through lengthy cycles to submit content to the system for general distribution. Content creation becomes a peripheral function performed outside the training department's key system.

By contrast, Learning Content Management System (LCMS) solutions are ideally suited to create content-centric learning strategies, supporting multiple methods for gathering and organizing content, leveraging content for multiple purposes, and operationalizing content for mission-critical purposes. LCMS technology can either be used in tandem with an LMS, or as a stand-alone application for learning initiatives that require rapid development and distribution of learning content.

Once we shift our focus to the strategic value of learning content, we can also shift the way we view, structure, and deploy learning content. In older content development models, learning content is systematically created and structured as courses used for specific learning purposes, which limits the value an organization can derive from learning content. In short, this explains why learning technologies, to date, have not achieved the same status as ERP, HRIS, and CRM solutions. In contrast, a content-centric model of learning allows greater flexibility to leverage learning content – strategic assets – and powerfully connect learning activities with bottom-line business objectives.

The purpose of this paper is to share tips and techniques from organizations that have achieved success using Learning Content Management Systems (LCMSs) to deploy content-centric learning strategies and elevated learning to new levels of mission criticality.

LCMS Content Touches Many Parts of the Business

Think about all the business systems used in your organization. As a learning professional, do you regularly access systems that are NOT training systems? The answer is likely "yes." However, if we asked the majority of people in your company if they regularly access training systems, the answer is likely "no."

Unlike training systems, ERP systems are accessed on a regular basis by accountants, managers, manufacturing staff, and many other professionals who may not even know what "ERP" stands for, and who do not associate themselves with an Enterprise Resource Planning department People use ERP software in different parts of the business, working together (often without even knowing how they are working together) to help the company meet its broader objectives.

Ideally, when your LCMS solution and content-centric learning strategy are in place, people across the company will create, share, and consume learning content, even though they don't know what "LCMS" stands for, and don't work in the training department. Consider the following real-world, before-and-after examples to observe this ideal in action.

Decrease Cycle Time

Change is constant in modern business. Gone are the days when a training department could spend months carefully analyzing, planning, designing, developing, testing, and delivering large, monolithic courses. Take a look at the following example.

Example:

Industry:	**Telecommunications**
Situation:	Each part of our business seems to be making big changes, and all at the same time.
Before:	"Our training department has become a major bottleneck. The latency of creating formal training courses is directly impacting the speed at which our business can operate (and not in a positive way). If we continue down this path, the lines of business will become increasingly frustrated. In fact, some of them have already started going around our group, creating and delivering their own training, threatening any possibility to leverage learning as a strategic asset. What we need is greater 'agility' to keep up with the demand."

After:	"By establishing our new strategy, we are asked to do the impossible and keep up-to-date on content supporting multiple lines of business. So far we are delivering on the impossible. We have successfully engaged subject matter experts across the business as ad-hoc content developers, with our central training group orchestrating the effort. The biggest question looming on the horizon is 'what if our business model changes again?' Because we have spent time re-engineering both our content-strategy and learning technology (LCMS), we are in a stronger position than ever before to keep pace with the business now and in the future."

The change this company underwent was not instantaneous, nor was it simply solved by licensing a new software application. Adapting to the speed of change is often a common driver that leads a training department to seek out better, more efficient methods to keep pace with the rest of the company. They had a few early successes in areas such as concurrent training with new product offerings and teaching new procedures and processes. However, they also experienced a few glitches along the way, specifically keeping content from overlapping and providing uniform consistency across learning content.

Increase Speed to Competency

Keeping training current with rapid changes is a challenge for every company. For companies that still create large courses, rather than modular learning, the problem is exacerbated when training needs expand beyond internal staff to partners, resellers, and even customers. Best practices have shown us that delivering content in modular formats focused on enabling competencies increases speed to competency. For example, companies achieve greater learning and economic value from a learning module that focuses on how to calibrate a piece of X-ray equipment, versus a lesson buried in a larger course on "radiology." Modularizing learning (1) decreases time from content inception to delivery, (2) provides learners with the right level of training at the right time, (3) creates reporting on who is trained on specific, job-related tasks, and (4) allows reusing and repurposing of content for different learning configurations and audiences.

Consider the following example:

Example:

Industry:	Manufacturer of Business Equipment
Situation:	The company primarily sells through an extensive distribution network of partners and resellers.
Before:	The company needed to teach and continually retrain 11,000 learners in their dealer network with a limited staff of 20 full-time trainers. Most classes were taught onsite as instructor-led workshops and, in addition, the staff provided personal phone-based assistance directly with resellers. Problem: The training staff could not keep pace with the demand, resulting in frustrated customers who had to wait for onsite training.
After:	The company created a blended learning platform, populated with modularized, learning content that could be used for (1) structured, self-paced learning, (2) on-demand performance support, (3) elements as part of classroom events, and (4) shared resources to supplement phone-based inquiries. In the first six months of implementation, the team was able to service and reach twice the number of customers as with previous methods of delivery (without increasing the size of the staff). They also found that 2/3 of their partners access the learning content on a regular basis, which suggests significant "brand loyalty."

The combination of decreased content development cycle time and increase in speed to performance can result in direct, bottom-line impact on businesses in terms of cost reduction. Metrics measuring the impact of training can be quite impressive. To illustrate this point through stunning metrics, the winner of this year's Training Technology in Action awards (TIA Awards) in the category of Learning Content Management Project of the Year was the U.S. Joint Forces Command Joint Warfighting Center. By deploying a content-centric strategy, they measured savings of $50 Million (from April 2007 – November 2008). By using modular design, they cut courseware development costs from $34,000 to $10,000 per finished hour (70% reduction). More information about this case study can be found in the November 2008 issue of Training Magazine.

New Business Opportunities

Business units are generally classified as either a "cost center" or "profit center." By definition, a cost center is a part of an organization that is funded as an expense to the company, although it may indirectly contribute to overall profitability. On the other hand, a profit center is a business unit responsible for generating revenue, and hopefully profit for the company. Training groups most frequently are considered costs centers and during difficult times may be the first to experience reduction in budget, layoffs, etc. because indirect profitability is sometimes hard to translate to bottom-line figures.

Example:

Industry:	**High Tech, Computer Software**
Situation:	The company creates training for internal staff that includes best practices use of company-branded software to solve real-world problems. Customers began asking for similar training.
Before:	A customer education department was created to develop both instructor-led and e-learning materials to service external learners. As a profit center, the customer education group created a vast portfolio of saleable courseware, generating profit for the company. There was considerable overlap in development efforts. Content was often first created by internal training and then re-formatted for external use by customer education. Then came an economic downturn and the company had to make cut backs considering both internal training (cost center) and customer education (profit center).
After:	Fortunately, the company decided to use the economic slump to synergistically merge the two groups and work toward a more content-centric approach, eliminating redundancy in development and creating a single, unified process for design, development, and delivery of reusable, modular learning content.

The example above shows that even in difficult times, learning technology can help solve specific business problems and also continue to create new business opportunities. There are many other cases where content has been used in creative ways, bringing in new business. For example, one financial services firm decided to create training on how to manage their retirement portfolio (e.g., when to use ROTH IRA's, balancing 401K investments, etc.). Although they didn't directly sell training to customers, they were able to track direct linkages between those who signed up for the training and then later opened new accounts. Just another example of how to (1) leverage excellent learning content for multiple audiences, and (2) connect training to the bottom line.

Transitional Learning for Mergers and Acquisitions

In the news, we regularly read about new mergers and acquisitions. How can a content-centric learning strategy make M&A transitions smoother? Consider the following example.

Example:

Industry:	**Banking**
Situation:	One large bank acquired another large bank. The merger created a new entity of nearly 150,000 employees. One of the first charters was to map organizational efficiency.
Before:	Both banks already used LCMS technology independently. Both had well-defined strategies for not only storing courses within their infrastructure, but also making sure that all company best practices, procedures, policies, product information, and even leadership development modules were up to date in their systems. As the acquisition took place, business analysts working on the mapping exercise realized that their task became much easier because the learning systems inside each organization helped them compare and contrast policies and practices.
After:	They used the mapping exercise to create a master training program to acclimate learners from both sides of the acquisition, resulting in a much smoother transition.

Although this example illustrates the strategic importance of a content-centric approach, behind the scenes the company also benefitted by decreasing cycle time and increasing speed to competence. The companies' learning content repositories served as real-time, operational manuals for company-wide operations. As you might imagine, the learning system became increasingly visible as an important business system.

Sharing Content across the Broader Enterprise

The following example illustrates what can happen when learning content extends across the enterprise and links other groups (such as documentation) to further leverage enterprise content.

Example:

Industry:	**Computer Software**
Situation:	The company has content across many different groups and divisions including documentation, help desk support, etc.
Before:	Departments with similar types of content worked independently to create deliverables for their own audiences. Documentation was created in isolation, as was the development of training (instructor-led, e-learning, etc.).
After:	The company created a single-source strategy to centralize and standardize learning content from multiple divisions. Content is stored as discreet learning objects, such as a paragraph of text, a chart, or a diagram, that can be linked with other learning objects to create courseware in a variety of modalities, including print-ready manuals. The company has: • Published 60 to 70 training manuals per year covering more than a dozen major products. • Created online learning in up to 10 languages in a matter of weeks (as opposed to months or even years) by reusing learning assets that had already been created to support training manuals.

Lesson learned: Develop a content-centric strategy that incorporates content across the entire enterprise; not just content owned by the training department.

Capturing and Retaining Expert Knowledge

One very important aspect of the content-centric approach is planning for content from a variety of sources. This is one major difference between centering your strategy around a multi-lateral learning content management system approach versus using a top-down, administrative learning management system approach. LMS's do a great job pushing content out to a geographically dispersed workforce, but may not recuperate valuable information from the users of the system. Consider the following example.

Example:

Industry:	Pharmaceutical Company
Situation:	The company has a large portfolio of structured learning courses (both instructor-led and e-learning) available from a company-wide learning portal. The training group was asked to provide learning about new, related biotechnologies to keep staff up to date on what's happening in the industry.
Before:	Their first attempt was to create formal courses of several different biotechnologies of interest. This worked fine in the beginning, but they quickly realized that information on the biotechnologies is changing on a daily basis and the courses required constant updates and maintenance. Researching biotech and updating the courses became such a major task that Training found it difficult to keep pace with their standard training requests.
After:	The company decided that for this initiative, they will use a content-centric strategy and, for the first time, allow direct user-generated content within their learning framework. They inventoried the company and found a central subject matter expert for each of the requested biotechnologies. Now, SME's can create and modify learning content from their own desktops. The process works very well and content is continually up to date.

This is just a small example of capturing and retaining expert knowledge. In other companies, SME's can use the LCMS to store diagrams, plans, blueprints, and many other learning assets. Every time a procedure is documented it can become a learning asset in the central repository. As workforce demographics change, using a content-centric approach can be an excellent way to capture knowledge before we lose experts through attrition.

Seven Steps to Creating an Content-Centric Learning Strategy

In this section of the paper, we will address how to start or improve your strategy.

#1 – Organize your Learning Content with Business Impact in Mind

The first order of business is to gather content that may currently exist in content silos; content that may be trapped on someone's desktop or across a number of web servers. After you have assessed the content, you can begin to associate the content with different training purposes. For example, you may need to organize content for (1) a specific learning purpose, (2) an

entire group or department, or (3) the entire enterprise. Create a content repository for each of these purposes, and place the content into the proper repository.

Learning Content Management System (LCMS) technology is ideally suited to create a well-organized repository. Beyond simple content organization, LCMS's have out-of-the-box features and functionality that will operationalize your content-centric learning strategy. Here are just some of the functionalities you can expect to find in an LCMS:

1. **Accepts content from multiple sources.** Dedicated content developers and even part-time content contributors can work in their tool of choice, using tools such as Word, PowerPoint, rapid authoring tools, graphics tools, etc. Content can be uploaded to the central repository from anywhere a web connection can be found.
2. **Metadata tagging.** As content is imported into the system, it can be tagged for optimal search and reusability. For example, you can add keyword tags, language used, topic, content owner, audience, etc.
3. **Automatic navigation controls.** LCMS solutions are a staging mechanism for any type of learning content. In short, there is no need to create next and back buttons, nor a table of contents for a course. The LCMS will do this automatically.
4. **Delivery player.** Once content is sequenced (often using a simple tree view), content can be previewed and deployed when ready. The ease of assembling and deploying content for different audiences helps decrease cycle time by creating new, derivative works from a core set of learning assets. For example, you can derive customer education courses from an internal training content initiative, thus opening a new business opportunity.
5. **Tagging content for different delivery methods.** Learning objects can be tagged for specific output configurations. This is what allowed the computer software company to create content that appears both as part of an e-learning course and for inclusion in a paper-based training manual.

This is just an overview of LCMS functions that will help you gather and organize content, leverage content for multiple purposes, and most importantly, operationalize content for mission-critical purposes. The process does not need to be time consuming. A recent study reported that the average time to implement an LCMS and establish a base repository of learning content is 20 - 40 days, as compared to an of average of 120 – 180 days to implement a Learning Management System (LMS).

#2 - Position LCMS as the Center of your Learning Strategy, Automating Development and Delivery

Remember that engaging in a paradigm shift takes much more than choosing a new technology. Everyone on the team must completely understand the strategic value of placing "content" at

the center of your learning platform. Each new learning initiative can be measured against business objectives by asking critical questions:

1. Can we decrease cycle time for this project? Can we base the learning on existing material or create the material that it will decrease cycle time for future projects?
2. Can we increase speed to competency? Can we test for prior knowledge? Can we shorten the delivery cycle by making some modules mandatory and other optional?
3. Is there a new business opportunity with this initiative? Can we approach content development so that content is also useful to our customers, partners, etc.?
4. Can we draw on content from other divisions of our company? What content do they have that will help us? And, what content do we have that will help them?
5. Can we create content in such a way that it could be simultaneously used for instructor-led training, e-learning, synchronized PowerPoint slides, manuals and other print-based materials?
6. What best practices, procedures, and policies can we capture that will benefit the business as a whole?

Learning Management Systems (LMS) still play an active role in administration of learning such as managing classroom events, compliance tracking, reporting, etc. LCMSs and LMSs, both components of a broader learning platform, work great in tandem to tackle both strategic and tactical needs. However, with the paradigm shift, emphasis should be placed more fully on the LCMS given the increased ability this provides an organization to align learning with strategic business goals.

#3 - Modularize Learning

The concept of learning objects has been around for many years. Training professionals have been creating and storing content in small chunks (text, media, etc.) which can then be clustered into 5 to 15 minutes modules.

There are several key reasons for keeping content modularized:

- Small modules of content can be assembled and deployed almost instantly without having to create an entire course (e.g. 4 – 8 hours in length)
- Modules can be used as entry points from dynamically generated table of contents
- Modules can be updated and maintained without pulling remaining learning content offline
- Modules of 5 – 15 minutes make natural entry and exit points for bookmarking an online course.
- From an instructional perspective, modules can cover a single enabling objective. When clustered with other modules, they can work as pre-requisites for accomplishing a terminal objective.

#4 - Move Training Closer to the Point of Performance

Modularizing learning also provides another benefit. Learning content can be used as part of a larger, structured course or as just-in-time help at the point of performance. Using traditional authoring techniques, the training professional constructs courses page by page to create a course. Then, to create just-in-time learning, he or she cuts out the desired content from the larger course, pastes it into a new mini-course, and then publishes it through the learning system. With a content-centric approach, the learning content already exists in the repository (and is not encumbered by embedded navigational controls). To create new just-in-time help, the training professional simply reuses the learning content and creates a new derivative version. Any changes to the learning will be automatically updated in both locations.

Just-in-time learning is another way to bring visibility to centrally located, reusable learning content.

#5 - Benchmark Metrics on Decrease in Cycle Time

Do you know your current cycle time for creating and deploying learning? How about maintenance time for keeping existing content up to date? While most people don't have these training statistics readily available, you probably have a good idea of how long it takes from the time a training need is expressed to the moment it officially becomes a course (ready for delivery). Even new rapid learning methodologies address only part of the cycle time issue, which includes front end analysis, planning, requisitions for training development, and a myriad of other tasks prior to actual development.

To gather metrics on decreased cycle time, start by estimating the cycle time on your last 10 training development projects. Use this data as a benchmark to measure the success of your content-centric approach to learning.

You will notice that some projects, such as a major software rollout or a leadership development curriculum, may have lengthy cycle times when first developed. However, when it comes to updating and delivering content for minor rollouts, you will see huge decreases in cycle time. In addition, decreased cycle times can be achieved once there are many "reusable" modules in the system and you identify patterns for reusability, such as creating multiple, derivative versions of courses for different audiences.

#6 - Benchmark Metrics on Speed to Competency

Do you want to show the impact of learning on performance in a big way? Metrics on speed to competency are one of the absolute best ways to show the strategic value of learning content. Think of the credit union example used previously. If you can demonstrate that training is being delivered most efficiently, leaving workers to focus on their daily job functions, your learning system will enter the upper echelon of business systems. The LCMS will show performance against skill gaps and also how long learners spend at each level of their learning experience. You will be able to report with confidence on the impact of learning. And because the LCMS enables development of modular learning, these assets can be used for contextual, on-the-job performance support as well.

#7 -Encourage Reusability

As you read through the mini-case studies and examples above, you will quickly see that organizing the content alone is not enough. You also need your training team to completely buy into the strategic value of content and once your strategy is in place, you need to educate the rest of the organization on the possibilities that exist. To illustrate, in most organizations the training department or decentralized training group has little influence to create a new product offering. They may not see the opportunity to create new revenue streams by converting learning content for internal staff to content for customers/partners. You may need to be the champion for change in your organization.

In the example of two banks merging, no one might have noticed that the learning system encapsulated best practices, policies, and procedures in easily digested formats unless someone (from training) pointed it out to the M&A team at the right moment.

And in the computer-software company example, someone had to spearhead the concept of centrally locating content from multiple divisions, or the connection may not have been made.

Conclusion

Learning technologies can be used for much more than automating the administrative aspects of learning. The time is right to ask our learning technologies to do more – much more - and by so doing, we can elevate the status of learning system to new levels of visibility and mission criticality. We can learn from those who have been successful at decreasing cycle times, increasing speed to competency, finding ways to leverage content to create new business opportunities, sharing best practices across companies and throughout our own enterprises, and capturing and retaining knowledge as a valuable asset for our organizations.

The challenge is to think of learning as transactional and not as a one-way communication from the training department to learners everywhere. Learning systems grow, adapt, and change with the business needs of our organization, which are reflected in training needs. In order for learning technology to become mission critical, it must be seen as completely transparent and allow users to focus on strengthening their overall business...not on the business of creating training alone.

About the Author

Bryan Chapman is Chief Learning Strategist at Chapman Alliance; a provider of research-centric consulting solutions that assist organizations to define, operate and optimize their strategic learning initiatives. As a veteran in the industry, he has over 20 years experience and has worked with such organizations as American Express, Shell, Kodak, Sprint, Sharp Electronics, Honda, IBM, Microsoft, Avon, UNICEF, The Food and Drug Administration, U.S. State Department, and many others to help them optimize learning efficiency through the use of innovative learning techniques and technologies.

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