

At the intersection of learning and ECM

American learning technology guru Bryan Chapman recently led a roundtable discussion on the challenges of integrating content across learning organisations. Dawn Poulos reports

Learning organisations can face challenges making their work available across the enterprise and integrating content maintained by other organisations. There's technology that can help, but what would best serve your situation? How have other companies updated legacy content strategies and technologies to support the learning needs of their staff?

Bryan Chapman, Chief Learning Strategist for the Chapman Alliance, recently released a white paper looking at these intersecting challenges through a series of business case studies.

As a framework for evaluation in the paper, Chapman outlined six stages of content management strategy for learning organisations. Meant as more of a progression based on need than a hierarchy, and used as a planning discussion aid, the stages are as follows:

Stage 0 Staff keep files on personal workstations.

Stage 1 Important documents are kept on shared network drives.

Stage 2 Access and version

control, such as through Microsoft SharePoint or Documentum.

Stage 3 Project-based content repository with workflow management, such as through a stand-alone learning content management system.

Stage 4 The use of protocols like WebDAV to link to external content management repositories that handle asset sharing.

Stage 5 Integration of content and workflow, with workgroup management and defined, but flexible, delivery channels.

STAGE	DESCRIPTION
0	Content stored on user desktops
1	Shared files on mapped (network) drives
2	Basic content services such as check-out/check-in and access control (e.g., Microsoft SharePoint, Documentum, etc.)
3	Project-based content repository with workflow (stand-alone LMS, possibly restricted to training applications)
4	Simple linking to external content management repositories, asset sharing (i.e., using protocols such as WebDAV)
5	Integrated content and workflow (communities of practice, team spaces, workgroups, contextual search to external content, defined delivery channels)

Chapman recently sat down for a wide-ranging public webinar with Mark Hellinger, president & CEO of Xyleme Inc, to take

audience questions about practical issues in content management. This summary of the questions and responses covers exchanges about stages of implementation, integration, format protocols and internal politics.

Q: On the Stages of Progression slide, I'm not seeing enterprise content management (ECM). Are you thinking of that as stage four?

Bryan Chapman (BC): "ECM is embedded throughout the stages of progression. When I created the maturity model here, I was looking at how training departments store their content, all the way from stage zero with no real storage, through well-integrated enterprise content management processes. Every department that has content management goes through a similar process. I think what the chart should show here, starting around stage 4, is that you start becoming aware of, and connecting to, content from other departments. That's where ECM comes into play."

Q: We are at the point where we are starting to put our enterprise content training together. We are



building our training modules using an LMS to house and distribute the content. We're at stage three in that most of it is just restricted to training right now, though in other groups I'm finding individually stored documents and pdfs. How do we integrate to stages four and five or do enterprise testing?

BC: "If you're creating training for your end users, marketing and sales can use those materials and training can even leverage existing pdf files. I'll go back to an old example; forklift training.

"What's interesting about forklift training is that there are certain safety concepts a learner needs to know before they go out and operate the forklift. They do not necessarily need to be highly interactive, because the interaction's going to come

through a mentored session on the forklift itself. So what they've done, using blended learning, is send out a pdf file and have them read it. It may be two pages long, talking about the safety procedures of operating a forklift.

"They follow it up with a small knowledge exam. They set that up as a prerequisite, such that the only way they can come to a mentored session where you learn to drive the forklift is after passing that component, and then they move on to actually driving it. So they use the pdf file as it is. But the pdf file can be the same in the company policy folder as it is in the training folder."

Mark Hellinger (MH): "We've been noticing that more and more of our clients are coming to us looking for a test-out model; prescriptive or adaptive testing. A lot of that hasn't been done

historically in the learning world, because the model for doing it is really SCORM 2004. I'd say we've seen a dramatic increase over the last six months, in terms of people coming and asking 'can I design my courseware, my program, in such a way that I have the ability for people to be tested?'

"And the objective of the testing is really to be able to test out of the things they don't need to do. There are a lot of monolithic approaches towards designing learning, where people have built these big courses, with modules and lessons, and forced everybody to go through them page by page, activity by activity. We've seen a dramatic increase in the ability for people to test out, and that's something that's important to content management strategy."

Q: On stages four and five, how do we politically pick that up?

BC: "If you're benchmarking yourself against the stages of progression, it's not like everybody's doing it right now and stage three really does quite a bit for most organizations. It means that a training department has the ability to reuse or adapt content for different purposes and, most often, the tools that are designated LCMS tools can do a nice job in that area.

"So the question was about how you politically move up to stages four and five. The idea is to get people involved. What you really need to do is open a dialogue.

"I'll talk about one software client I'm working with, where the driving force was that their documentation group, the people who were creating help for the system, and the training department all suddenly realized that they were writing slightly different versions of the software procedures. Sometimes they were conflicting. It was driven by a business issue, so they started working together.

“You can start by forming a content strategy taskforce. If you’ve got those standard operating procedures and you know who owns them, get them involved. Learning people usually go into this conversation with a ‘gimme, gimme’ attitude. They say ‘what have you got that we can use?’ I would say that, to be really successful in selling this idea to your organisation, you need the opposite attitude: ‘what can training do for you? We’ve got a lot of great material to share.’”

MH: “Part of the question is about connecting the training department to the rest of the enterprise. It’s really become fundamental that people look at their learning content, not in isolation, but how it can fit in to the rest of the enterprise.”

“What we see with our customers implementing LCMS is that the scale has tipped from ‘it might be difficult to get IT, or the ECM people, to buy into this, we’d be better off on our own’ to ‘if we can get those people, if we can be part of an overall strategy, we can get so much more value.’”

Q: Can you say how defining an information or content taxonomy fits into the steps?

BC: “I’m going to pick up on another question someone put in and tell you what one of my biggest fears is out there. So much industry talk is about web 2.0, how wikis and blogs are going to change the way we learn. I agree, but I’ve been in the learning technology industry for 20 years and it’s been our goal all along not to have content silos.

“What we try to do is centralize and share. With web 2.0 technologies, I love the way user-generated content can be changed on a moment’s notice. But if it’s segregated from the rest of our content, we are creating a brand new version of content silos.



“So this goes back to the question about taxonomy: I think that’s the solution. The idea is that if you have a nice taxonomy, it shares with the organisation what the training department feels is important and you organise information accordingly.”

Q: Can we use tools like Documentum to restrict asset access? The tool allows us to do some content that’s open to all.

BC: “Through the stages of progression, Documentum can be used for learning purposes, stage two-type implementation. Here’s why it’s not a stage three or four LCMS.

“An LCMS, by design, is a system that can present modular, structured learning. It’s based on smaller learning objects that are clustered together for a specific learning purpose. But it has a form of testing, like Mark mentioned adaptive learning on the front end, or it can even have questions based on specific modules. That’s where Documentum tends to fail.

“You can have structured content: you can create a channel or a stream of content. What

you can’t really do, or it has to be customised for this purpose, is things like assessment, or have awareness that there are learners out there. It can’t wrap navigation controls so that it will provide feedback and remediation based on problems with the learning, so if they’re not learning something they can go into a feedback loop. That’s a part it doesn’t get into.”

MH: “If you read the case study about Informa, and Bryan did a lot of research as part of the paper he developed there, the convergence is coming. So the ability to use a tool like Documentum for restricting access to information is part of this whole discussion where, historically, there’s been a very big separation between the learning content management space and the enterprise content management space. But tools on the ECM side, like Documentum, through a combination of APIs and newer technology are making it easier to integrate the two.

“If you take a look at the Informa case study, you’ll find there’s a lot of content they need to be able to provide, particularly media and images, or pdfs and other tools that

might be more performance support orientated, that Documentum can manage just fine. Integrating the two, having a common user and group management between your LCMS and your ECM, can really help a lot because the idea is really to be able to give people access to the information they need to be able to more rapidly develop training content.

“So this ability to mine content that’s elsewhere in the organisation, and with the ability to restrict it so only certain people are going to have access only to certain information, is really paramount to this discussion. And whether it’s Documentum or SharePoint, or some of these other ECM tools, the equation really comes down to ‘what does the technology really support in terms of integration? How can we share information?’”

Q: How do you integrate knowledge acquisition while still being able to capture results in an LMS? For example, reusable learning objects from an LCMS being delivered into a content management system.

BC: “Great question. So content can come from multiple sources. I think we’re moving away from a model in an organization where it’s just a few, key architect-designers that codify information so that it can be used for learning. If we’re learning anything from the web 2.0 movement, it’s this: you can have people who are not training professionals, and not training developers even, contribute to the process as subject matter experts. That information can either be used as it is for learning, or it can be designed into courses. Sometimes it can be hard to manage, because the information can be coming faster than you’re able to digest it.

“I think that the thing to look for is the way that you can actually use the learning content management store as your primary interface for receiving data. Then tagging it,

making it part of the repository, and, almost as a gatekeeper, making sure it doesn’t overlap too much with other content.

“I’ll give you one quick story, of a big oil company. They invited around 200 learners to contribute to a wiki with information about drilling practices and things like that. They left the invitation open and, all of a sudden, they had 7,000 authors that were writing content on best practices. They had to disseminate all this information. Right now, they’re trying to digest it and consolidate it into a central core, so that it can go back out to the learning population.

“A lot of LCMSs are up to the challenge, but some of them are still just dispensers of information, not recipients.”

“It’s really become fundamental that people look at their learning content, not in isolation, but how it can fit in to the rest of the enterprise”

MH: “What a number of our customers are doing is really integrating the whole process of getting subject matter experts to be able to contribute information by breaking down the size of that information. The historical practice where you give someone a chapter to write in a book, or a lesson to write, is being broken down into topics or smaller chunks of information.

“By breaking down the content acquisition process into smaller pieces, they found that they can have a central individual becoming sort of the quarterback and assembler of information, as opposed to having a small population of subject matter experts

who were tasked with writing a lot of the content.”

Q: If you link an assessment engine with Documentum, you can create an inexpensive LCMS solution in an environment that won’t spring for a big budget LCMS. What do you think?

BC: “I think it has to go with the stages of development, it’s really that simple. There are certain things you’ll be able to do with that, with Documentum and an assessment engine. I’ve even seen people connect their authoring tools to Documentum, and it works just fine. The stages don’t necessarily have to be lower or higher, it’s just a matter of understanding what you’re trying to accomplish.

“I’m thinking of the six case studies we’ve talked about over the course of these two content management strategy talks. Even in the Informa case that we’ve been referencing, Documentum is still part of the mix. It just handles its own domain. It handles the master project source files, it handles the team room aspect, the learning content management system – in their case Xyleme – and a lot of the detailed work that allows them to support multi-modal delivery. Documentum, just out of the box, or even with some customization, can support online learning or online display, or print.

“But when you’re looking at some of these other case studies, they’re putting out content in elearning, synchronized PowerPoint slides, job aids and other things, and their strategy would not be supported by a simple linkage like that. So I think it’s a matter of doing what you need to do with the right type of project.” ■

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