

Trends in Learning Content Management

by Bob Little

Introduction

In the corporate world at least, organizations believe that financial measures indicate – and determine - their state of health. This has tended to mean that firms favor accountants over human resources (HR) professionals – and helps to explain why HR professionals find it a lot harder to get onto companies' main boards than do accountants.

However, a business is not solely defined by its balance sheet. It is also defined by its workers. Indeed, it can be argued that, as technology develops and its application becomes widespread throughout the business world, it is the quality of a firm's workers – in terms of their knowledge, skills, competencies and attitudes – that determines whether or not that firm will be successful.

In Western economies at least, 'knowledge working' is now key to organizations' future prosperity. So keeping those knowledge workers abreast of the latest developments and techniques in their field is becoming increasingly important. This is where technology-delivered learning is proving its worth.

It used to be said that one of the advantages of eLearning over conventional, classroom-delivered learning is that, unlike courses in which the personality of a tutor or instructor colors the learning message, it provides consistency of message. Nowadays, learning technologists and learning designers recognize that this is only partly true.

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Personalization & Contextualization

Thankfully, advances in technology coupled with advances in understanding of the process of learning are helping to replace 'one size fits all' eLearning programs with learning materials that take account not only of the learner's learning needs and preferences but also of the way in which the learner needs to access the learning materials, the learner's location and even the learner's particular culture, language and learning preferences. This is known as the personalization and contextualization of learning materials.

Moreover, the application of technology can help to identify and improve an organization's workforce. It can do this via making learning and performance support materials available – electronically – at the point of need. Increasingly the 'traditional eLearning' experience is enhanced by providing, for example, a mobile access to the learning materials.

Talent Management

It can also provide the systems to underpin this 'learning content' and ensure that the content is not only made available at the right time to the right people and in the way that the learners prefer to receive it (the personalization and contextualization of learning) but also monitor, assess and analyze the learners' responses. This allows organizations to build knowledge and competency maps of their workforce; identify skills gaps and take steps to develop appropriate staff so that those skills gaps are filled (skills gap analysis, succession planning and 'talent management').

This technology can be further refined to apply to designing learning materials that will be used across cultures and by people of varying abilities within these cultures. Here, the key is to provide consistency of message although the content of the learning materials and the way in which they are delivered to individuals will vary.

The key to providing this consistency of message is to consider contextualization and personalization. This means taking time to understand the learners' likes and dislikes; their learning styles and learning preferences and their habits as well as their particular language and culture.

Consequently, developing user-centered learning solutions which can be adapted to an individual's learning needs is a key objective for the EC and its constituent states. In the few years, European learning delivery technologists have developed mobile learning via wearable computers; enabled the interaction of learners with remote coaches via mobile technology and virtual worlds, and made increasing use of serious games and simulations.

"In terms of the learning market, three main trends are emerging," commented Fabrizio Cardinali, chair of the European Learning Industry Group (ELIG) – the Europe-wide professional association and pressure group – and also CEO of eXact learning solutions, the learning and mobile content management solution provider.

Informal & Customized Learning Experiences

"Everyone is placing greater emphasis on increasingly informal and personalized content and learning experiences. This is producing increases in 'just-in-time', informal, personalized, customized pieces of learning content, combining to produce 'just-in-time', informal, personalized, customized learning experiences.

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Localized Delivery

“Second, we are seeing the increased use of mobile and location-based content delivery,” he added. “This means that learning is becoming localized and personalized. People receive learning materials tailored to their particular need at that time. These learning materials are delivered to where they are and take into account their background and personal needs as well as the type of delivery device they have and the technology to which they have access.

New Digital Marketplaces for Education

“The third trend we’re experiencing is the growth in informal access to learning via portals and software-as-a-service (SaaS) systems, which could generate new digital marketplaces for education, revolutionizing the way we deal with learning resources online - a little like YouTube and iTunes have done for music and video assets in this new millennium,” he said. “This means that the learning content can now be customized by the learner rather than the developer or producer. Learners download and use this material or even use it ‘on the fly’ using new devices such as the iPod Touch or iPhone’.

“Over the last five to ten years, we’ve seen the method of delivery of learning materials change from the ‘single turnkey platform’ to an open, interoperable, two-tier model. In this model, content is produced and managed by external systems, such as authoring tools and learning management systems (LMSs), and this interfaces with learning content management systems (LCMSs) to deliver the learning materials to learners,” Cardinali continued.

“Now, with the development of digital marketplaces, this two tier system has become a three tier system. Between the LMS and LCMS tiers is a tier of learning content traders and brokers.

“So learning content publishers and providers use an LCMS to produce the content, while consumers of the learning are accessing it via LMSs/ virtual learning environments (VLEs) – increasingly via open source systems such as Moodle and Sakai. In the middle, you find a network of content providers operating as ‘learning clearing houses’. They take content, version it, deliver it and track it once it has been delivered.”

ePortfolios

The future for ‘learning’ is likely to focus on personalization, perhaps with everyone accessing and updating their lifetime ePortfolio - encompassing their backgrounds, competences, the learning objects they need and so on as well as documenting their continuing professional development. That ePortfolio would be available, as necessary, for potential employers, professional bodies, academic institutions and so on.

“So today’s learning platform should be a learning services architecture where, in addition to the learning content creation and delivery, you can read and write people’s portfolios,” commented Cardinali. “This means that you can use this architecture to engage in talent management by spotting and then plugging the gaps in people’s knowledge, skills and competences in order for them to progress and meet their organization’s needs.”

As this longer term scenario develops, current trends in learning delivery revolve around chunking learning content to learners and then monitoring learners’ responses to this content in terms of, say, competencies, delivery devices, areas of interest and so on. This aims to help the right people develop the right competencies by supplying them with the right information in the most appropriate way at the right time.

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Rapid Authoring Tools

In the last few years, the production of eLearning content seems to have been revolutionized by the advent of ‘rapid eLearning’ – in other words, the development of authoring tools which allow learning content to be authored in-house relatively quickly and easily. Producing eLearning content ‘rapidly’ by in-house subject matter experts has provoked criticism over possible quality deficiencies in terms of instructional design – since those designing and developing the learning materials are not necessarily experts in learning theory or instructional design.

As far as learning technologists are concerned, Cardinali believes that: “Today’s big challenge facing providers of corporate learning materials is how to enrich existing standards for learning content publishing and distribution such as SCORM – especially adding web services protocols to content packages making the learning experience richer and more personalized. The ‘Common Cartridge’ initiative from IMS is an excellent contribution to this issue, and there are many other evolutions in the standards space addressing this next step in digital content publishing and distribution.

“Other challenges relate to how to develop web-based services to search, query and retrieve repositories of learning content – and the MIT’s OKI initiative is a good example of one approach to this issue.

“We need an extended standard related to content packaging and providing services to education – both in the academic and corporate sectors,” said Cardinali. “We also need to be able to harvest and distribute learning content – not in a single, turnkey system but via an open architecture.”

Nonetheless, while some eLearning content is still being produced by instructional design professionals, a growing proportion of this content appears to be being produced by subject matter experts using rapid authoring tools.

Efficiency & Re-usability

Irrespective of how today’s eLearning content has been produced, the important issues are to ensure that this – and all - content is used efficiently; that the learning process is well managed, and that the content is stored in a way that makes it easily re-usable in other learning materials if required. Moreover, developing the learning content rapidly is not as important as ensuring that this learning material is able to be adapted rapidly to learner’s needs – bearing in mind the growing importance of personalization and contextualization in learning.

This raises another contemporary issue within the eLearning community: the relative merits of using open source systems.

Open Source Systems

According to Cardinali: “The debate is not about open source versus open standards but, rather, it’s about an open mind. The real debate is not between ‘free’ or published content; nor is it about free or vendor-developed software systems. Rather, it is about vendor compatibility – thus giving buyers freedom of choice to pick and choose and then combine components to make a best of breed system that fits the buyer’s requirements exactly.

“In years gone by, eLearning systems were proprietary,” he added. “Buyers couldn’t combine elements of different systems to cope with their different requirements regarding assessment, competency, formal and informal learning curricula and so on.

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Nowadays, standards such as those from IMS, SCORM and so on mean that buyers can choose the components they want in order to build a learning platform.

“I would advocate having a best of breed LCMS working behind an LMS or VLE because I believe that this gives you the most efficient and effective systems architecture.”

Increasing globalization is putting pressure on organizations. They know that they have to invest in their workforces if they want to compete in today's global markets. They can't rely on purely keeping their prices competitive in order to survive. Rather, they need to continue to develop the skills and competencies of their workforces – in order to compete with the up-skilling of economies such as those of India and China. So this means that they must invest in better corporate education and innovative ways to manage their legacy materials for training and performance support.

Since organizations are having to become increasingly international – if only because they have to compete with multinational firms within their own national economy – it is important that learning providers should offer content that has a worldwide relevance and applicability. In that way, they can help companies to develop the skills and talents that their workforces need in order to be increasingly successful in the markets operating within the global economy.

About the Author

For over 20 years, Bob Little has specialised in writing about, and commentating on, corporate learning – especially eLearning – and technology-related subjects. His work has been published in the UK, Continental Europe, the USA and Australia

eXact learning solutions

eXact learning solutions, formerly Giunti Labs, is a leading online and mobile learning content management and digital repository solutions provider, offering a wide range of tools and services for content development, management and delivery, covering:

- Multi-language bespoke learning content production
- Content management and digital repository platforms
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- Consulting and professional services

The company has over fifteen years of experience and more than 100 clients worldwide. Our technological innovations allow enterprises to improve their organizational performance, and achieve significant reductions in business costs.

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