



Case Study

# Learning Objects: *What Works*<sup>®</sup>

Using Modular Development for Content Reuse and Personalized Delivery

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November 2005

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## About this Case Study

Learning content management can be a tricky challenge for training organizations as the structure and processes are not as clearly defined as those in training administration (usually handled by the LMS). The business needs for content creation and management can be very simple, such as rapid content creation where PowerPoint is used as the authoring tool.

At the other end of the spectrum is the need to develop a structured approach to content development that enables more strategic use of content throughout the enterprise. This spectrum of content needs is illustrated in Figure 1.

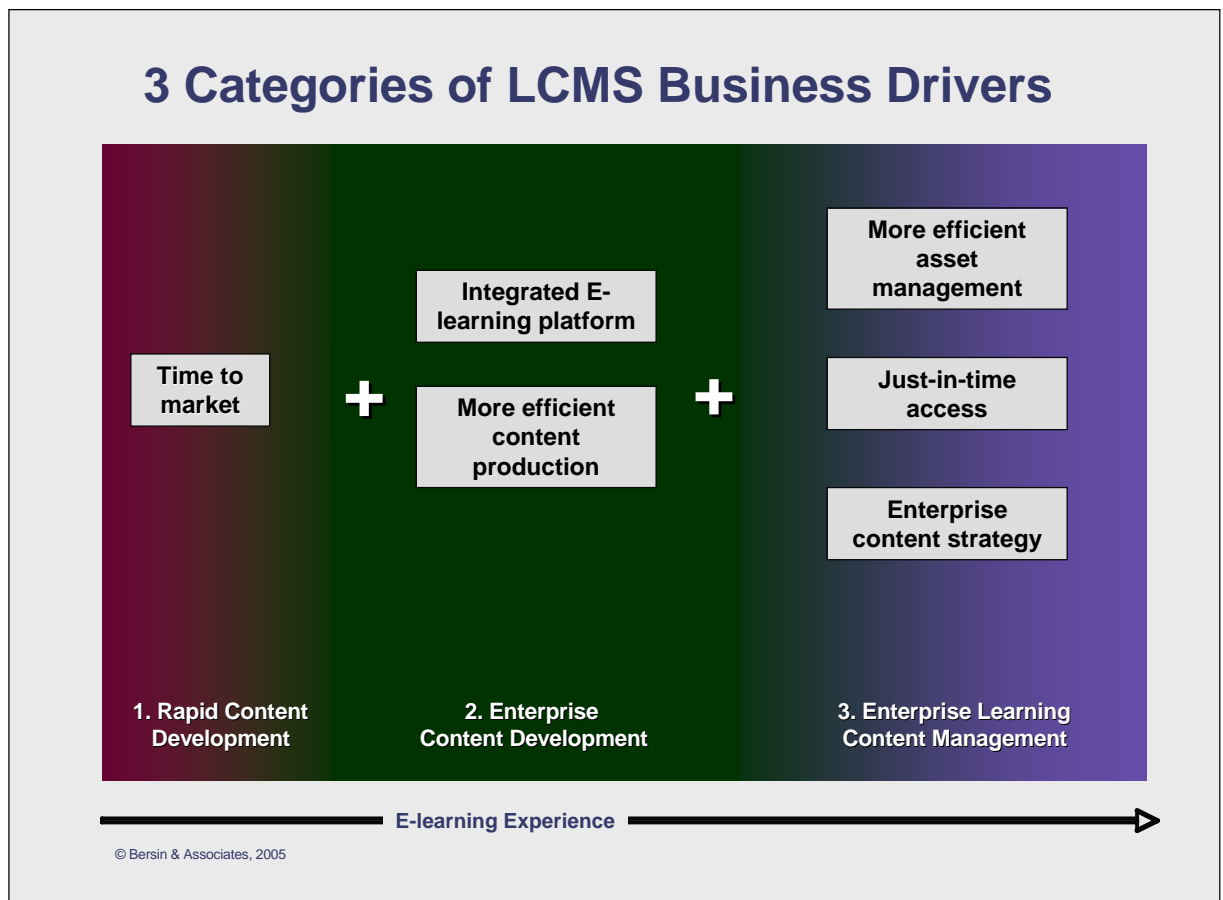


Figure 1: LCMS Business Drivers

In this case study, we take a look at the more strategic side of learning content management by examining the business needs of Greene Consulting. The company needed a scalable approach that enabled reuse and personalized delivery of content based on learner skill level. The case study will be useful for organizations considering a structured approach to their e-learning content development.

## About Greene Consulting

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Greene Consulting has been in the financial services training business since 1979. For 27 years, the company has focused on providing solutions for Wealth Management and Institutional Asset Management organizations, delivering many of its training solutions through its online portal, known as Skillmark. The company's solutions are designed to equip financial advisors with the knowledge, skills, and tools necessary to be more effective when face to face with clients and prospects.

Ultimately focused on helping professionals impact performance and production, Greene Consulting's solutions are a blend of technical knowledge and front-line sales expertise that enables professionals to be more "conversationally competent" when interacting with clients and prospects.

Greene Consulting's training solutions focus on the topical areas of Investment Planning, Estate Planning, Retirement Planning, and Insurance Planning. The company uses either a purely online approach or a blended approach that includes classroom time. It works closely with Financial Services organizations to help identify role-specific solutions that are unique for each company. This is accomplished by utilizing either off-the-shelf or custom tailored coursework, depending upon the client's needs.

## Content Management

In business for nearly three decades, Greene Consulting has made the transition from instructor-led delivery to CD-ROM courseware and has been offering Web-based courses for eight years, training thousands of learners per year.

The Director of Technology indicated that company need for a content management solution arose in 1997 when Greene Consulting first began migrating much of its in-class training content to the Web. Not wanting to build its own system for content development and management, the company selected WBT Systems, and now is running version 7.2.

The volume of content production (hundreds of hours per year) and level of customizations for each customer dictated the need for a repository to store and manage content objects. According to the Director of Technology, the company would not be able to support its current level of delivery and content management without a learning content management system (LCMS).

Feature	In Use
Content Authoring	No (desktop tools)
Content Assembly	Yes
Content Management	Yes
Content Reuse	Yes
Multiple-media Formats	No
Workflow	No
Content Delivery	Yes
Templates	No
Assessments	Yes
Administration	No (custom built)
Tracking	Yes

Figure 2: LCMS Usage by Greene Consulting

## Development Process

Similar to most other e-learning development groups, the majority of content development is handled by desktop authoring tools while the LCMS is used for a portion of the content development process. Typically, the development process involves creating the course structure inside the LCMS. The LCMS authoring tool is used for building content pages but is limited in the amount of interactivity that can be created. Macromedia and Adobe products are used to build media assets that supply additional interactivity. The LCMS authoring tool also is used to make customizations to off-the-shelf content.

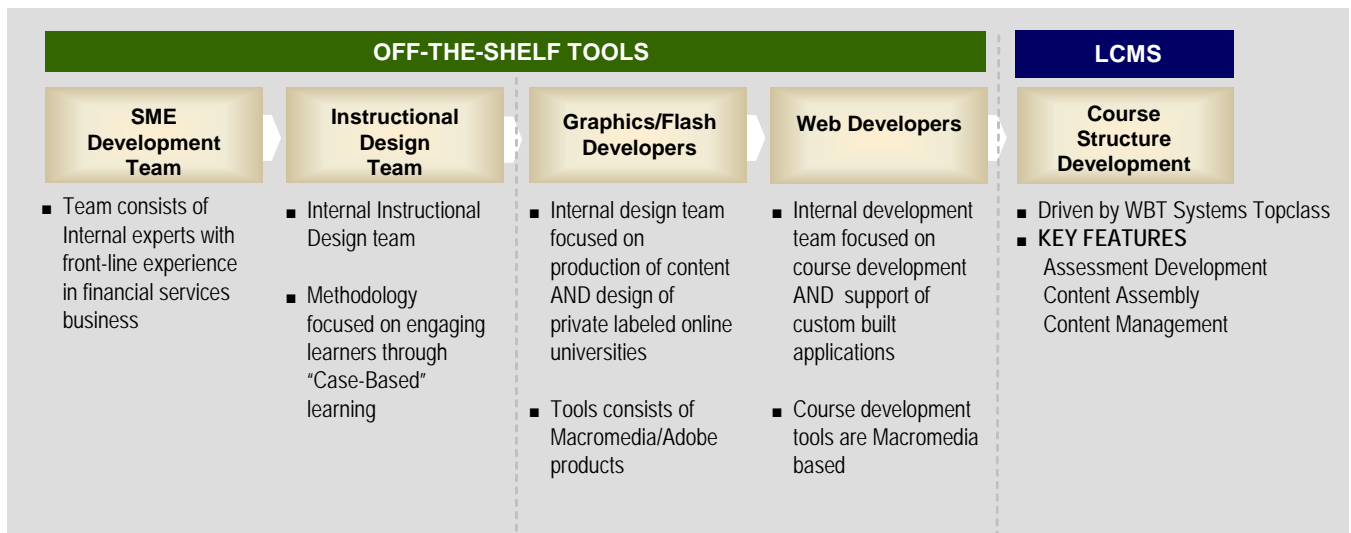


Figure 3: Content Development Process Flow

## Reuse and Repurposing

Using a learning object approach to content creation, the LCMS is used to catalog assets. Unlike most other development groups, Greene Consulting has been able to make extensive use of both content reuse and repurposing. A single content object, for example, may be used multiple times across different clients. By reusing the content object, it can be updated once with all changes reflected in the courses that use the content object. In other situations, the content object is customized for a client so it can be repurposed from the original content object and separately maintained if it needs to be updated.

The concept of content reuse has been a much touted benefit of LCMSs when they first came to market in the mid 1990s. However, reuse is usually practical in very specific instances in which learning objects are (1) self-contained, (2) need to be reused multiple times, and (3) are designed for reuse by limiting assumptions about the context in which they will be used.

The Director of Technology estimates that the majority of content is reused, which enables considerable streamlining of the development process across the hundreds of courses built with the system.

The more popular application of leveraging content repositories is recycling, in which a copy is made of the learning object so it can be modified for another course.

## Content Personalization

The LCMS has enabled Greene Consulting to leverage another advantage of object-based content, and that is personalization. Using personalization, the learner skips topics they already know. Through the use of pre-tests, post-tests, and remediation, the LCMS enables learners to reduce the training time investment while demonstrating their competency in the topic. Similar to content reuse, personalization is a capability that often is not leveraged in e-learning but can be useful for highly technical topics that require certification.

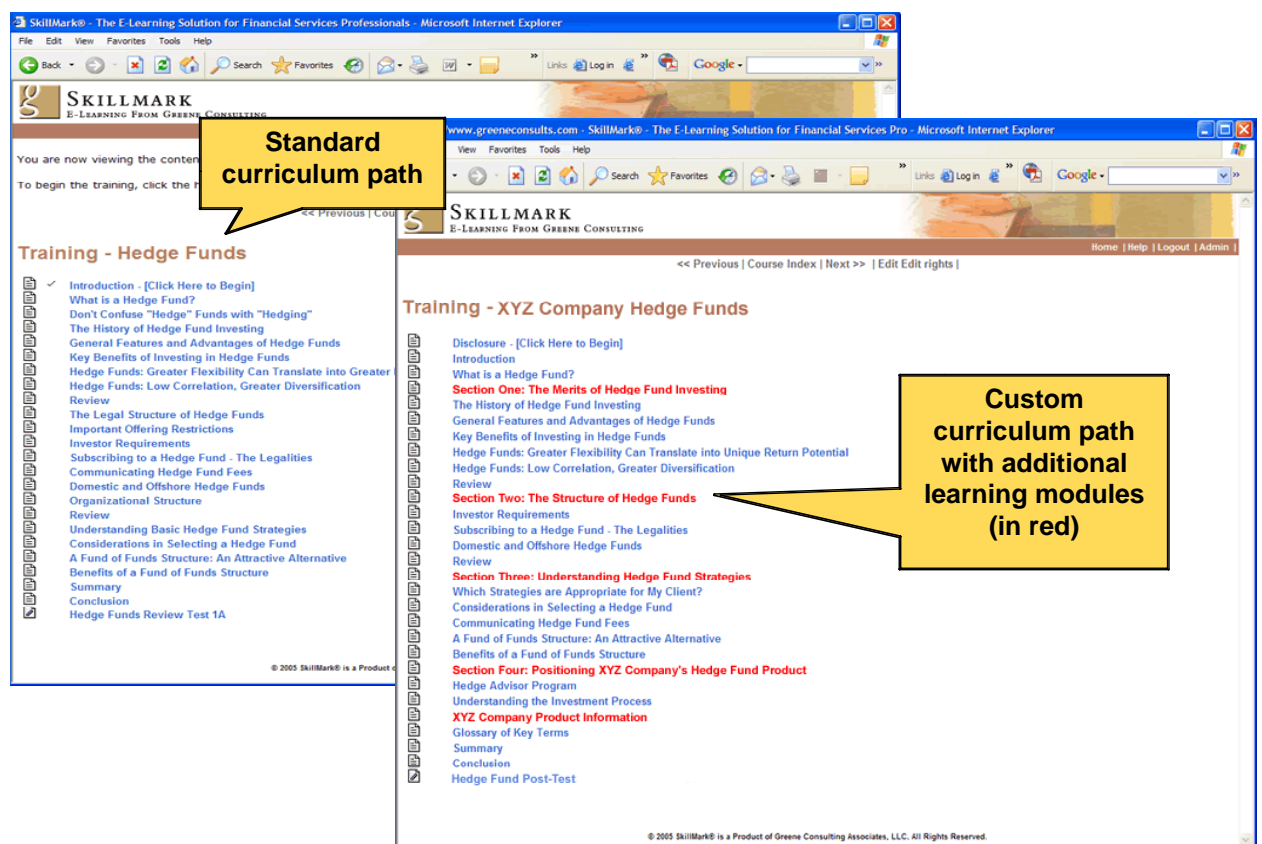


Figure 4: Creating Dynamic Courses with Learning Objects

LCMSs make personalized content easier to create but it still demands more discipline during the content authoring process than is required for linear content navigation. Commercial content, such as that provided by Greene Consulting, is an ideal application for personalized content. The instruction is of a technical nature and users come into the training program with varying levels of knowledge. The hours saved by skipping content that the learner already knows can be leveraged across thousands of learners.



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## Conclusion

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As discussed, Greene Consulting needed a technology to streamline the content management process through the use of a repository to store content for reuse and personalized delivery. Technical training, such as that provided by Greene Consulting, is well-suited to a structured, object-based approach that allows learners to enter the curriculum at a point that matches their skill set. Since the content supports thousands of users, the payoff of personalized content is quite large as it shaves training time for each learner.

Currently, personalized content comprises a small portion of all learning development with only 13% of LCMS users reporting that they use this feature<sup>1</sup>. However, organizations that begin modifying their development processes now are setting the stage for more flexibly, accessible, and personal e-learning further down the road.

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<sup>1</sup> "Learning Content Management Systems," Bersin & Associates, November 2005. Report available at <http://bersin.com/lcms>

## About Us

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Bersin & Associates is the only research and consulting firm solely focused on What Works® enterprise learning research. With more than 20 years of experience in e-learning, training, and enterprise technology, Bersin & Associates provides a wide range of services, including market research, best practices, benchmarking, vendor and product analysis, corporate workshops, corporate implementation plans, and sales and marketing programs. Some of Bersin & Associates innovations include a complete methodology for Learning Management Systems (LMS) selection and application usage, an end-to-end architecture and solution for training analytics, and one of the industry's largest research studies on blended learning implementations.

Bersin & Associates offers the industry's first enterprise learning research subscription, "*The Enterprise Learning Research Center*" (<http://www.elearningresearch.com>), which offers up-to-date research, product selection guides, white papers, and access to other experts online. This service enables corporate training managers, vendors, and consultants to make faster, better decisions about enterprise learning strategy, programs, and technology.

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## About This Research

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