Global Enterprise Software Provider Accelerates Course Delivery While Reducing Costs with Learning Content Management Solutions

**Advanced CCC solution boosts productivity for 150-person team of global course developers**

For nearly 20 years, Copyright Clearance Center’s client has provided cloud-based enterprise software solutions to thousands of medium-sized and Fortune 500 organizations around the world. Users rely on the company’s solutions for planning projects, managing project costs, and analyzing resource performance.

“After deploying the LCMS from CCC, the company’s course designers reduced the time spent looking for existing content from 80% to 20% of their day.”
THE CHALLENGES

A key element of the company’s strategy was making sure its customers were able to make the most of its solutions. As the company expanded rapidly and the team grew to over 150 course designers, the company realized they had an urgent need for a more efficient process to create and update software manuals and other assets used in customer education and training.

Each course designer saved hundreds of Microsoft Word and PowerPoint course files, some of which ran several hundred pages long, to various storage systems (Dropbox, SharePoint, Google Drive, and device drives), causing discoverability and other issues. As a result, the shared storage requirements ran to approximately two terabytes. The distributed storage of documents made it difficult for designers to find files, images and screenshots.

Like Working in a Warehouse with the Lights Off

When developing new course material, designers had to start from scratch — recreating content that they knew existed somewhere in the company’s storage systems but could not be found — rather than simply adapting existing documents.

For example, when creating a new course, a designer might remember that a colleague previously wrote sections for a similar course. But since they couldn’t easily find the content, they had to just start over, wasting valuable time and money, and risking inserting errors into the recreated material. One of the designers referred to the situation as “working in a warehouse with the lights off.”

This also had a ripple effect when content appearing in multiple documents was changed. Updating that content required that someone find and update every document manually. It was clear that the design team needed an automated solution to scale their training content projects.

The financial impact of this discoverability issue was considerable. When creating new training content, course designers would typically spend 80% of their time looking for existing content or recreating the content that they couldn’t find. Only 20% of their time involved improving the documents to enhance customer training. In addition to working inefficiently and finding it difficult to collaborate, the designers were not always confident they were working with the most recent versions of documents.

Besides slowing down the process of delivering training materials to customers, the situation frustrated many designers. Retaining staff and maintaining morale proved to be an additional challenge for the management team as resources were forced to do the same work — over and over.
THE SOLUTION

To address this challenge initially, the company imported its course files into an Alfresco content management database. While this created a centralized storage system for all the documents, they identified a need for a higher level of organization to index the documents and the segments of content within each document to make everything easy to find.

Recognizing the need for an added layer of end-user functionality, the Alfresco team recommended integrating its database with a learning content management solution (LCMS) from its partner, CCC. The two companies have collaborated many times to successfully deploy content management solutions for a range of global companies.

The company’s project team appreciated CCC’s consultative and personal approach, spending a week with the designers to define and prioritize the pain points and document how the new LCMS needed to work. With many requirements unique to the needs of the company, the CCC team created a tailored approach to solve their specific issues rather than rely on an out-of-the-box solution. Best of all, the designers did not need to adjust to the requirements of a pre-packaged set of features; CCC adapted its customizable solution to conform to their needs.

After converting the course material from Microsoft Word and PowerPoint files to HTML, CCC then formatted each section of content within every document as an object file to create granular content segments. The team also applied metadata tags to each object and file, giving important structure to enhance both the content search and content authoring experiences. CCC also configured workflows with defined roles and responsibilities for creating, editing, and approving content.

THE RESULTS

With the new LCMS in place, the company’s designers can now easily find pertinent documents from which to adapt content for new courses. For example, if a designer wants to produce a guide for the French market, they can access content written in English, and automatically populate a pre-designed template with content written in French. From there, the system produces a PDF and adjusts the pixels within the specified layout.

And when changes to content, images or screenshots are needed across all documents in the database, the new global search and replace process is easy and automated. Course designers can automatically apply the changes across the entire document database since metadata tags identify where changes are necessary, taking manual work out of the process.

It's also much easier for designers to collaborate when working on course components that span the domain expertise of more than one resource. The new LCMS identifies the subject matter expert on each component, so when a designer needs to re-use or adapt a component managed by another designer, they know who to check with first.
Management Gains Visibility into Resource Productivity
The CCC team built additional functionality into the LCMS including integration with a third-party tool to verify that content complies with the company’s style guide. There’s also a system check to make sure images include descriptive text for visually impaired customers using screen readers.

The customer’s management team has also benefited from increased project visibility through the LCMS dashboard reports on designer productivity. Managers have new visibility on course development in progress, and they can track the workflows of each task to identify bottlenecks and intervene when necessary to speed things up.

Because the content creation workflow created by CCC assigns tasks to designers, the workflow identifies the appropriate expert to review and approve the content as well as the resource for providing legal approval. Managers always know where a particular project is held up and who can help break the log jam.

Support During System Rollout
CCC provided a major assist when the company wanted to roll out the LCMS and have all 150 designers give it a test run during a company conference. The CCC team first trained 20 super users to train the rest of the designers and serve as system evangelists. CCC also made sure the system had sufficient computing resources to handle 150 simultaneous users submitting the same commands all at once.

This test run, along with the training and the support of the super users, helped ensure designers were comfortable switching from using Word and PowerPoint files to using HTML files. The test run also gave them confidence that the new LCMS would deliver on their needs — to make it easy to find documents and store them securely.

Less Time Finding Documents Leaves More Time to Enhance Training
With the new LCMS fully deployed, the company accelerated the time to deliver training materials to customers. Designers also reduced the percentage of time spent during each project on finding and recreating existing content from 80% down to 20%. With existing courses providing much of what is needed for new courses, designers can now focus their efforts on enhancing training materials. This helps the company’s customers fully capitalize on the value of the software.

The company also benefits from integrations between the LCMS and other delivery channels such as the company’s website, content management system, and learning management system. Each channel takes feeds from the LCMS as the single source of truth — with confidence that the latest version of a document or image is accurate.

System Truly Pays Off During Bi-Annual “Big Bangs”
The designers particularly value the LCMS each spring and fall when the “big bang” occurs. That’s when major new releases of all applications are launched.

The designers produce thousands of course manuals during these time periods. By working in an HTML environment — and using the LCMS editor and collections tools created by CCC to assemble all of the content to produce the PDFs — the designers streamlined their process for creating and updating documents significantly.

As the client shared, the designer team is now “utterly and ruthlessly efficient in building course manuals!”