



CASE STUDY

GRADE SCHOOL CUSTOM PUBLISHING SOLUTION – CONTENT REUSABILITY, IMPROVED WORKFLOW EFFICIENCIES, AND TIME-TO-MARKET

BUSINESS CHALLENGES

Our client, a Fortune 500 educational publishing company, was experiencing a significant increase in customer demands for highly customized, made-to-order educational material for the fulfilment of unique learning and assessment goals per state and per school district. The client's legacy tools and workflow processes were inefficient and did not provide sufficient flexibility to rapidly accomplish the level of customization and the speed to market required to satisfy these custom demands. The client also had a strategic initiative to increase efficiencies through reusability by creating an asset data bank. This strategy could not be fully realized using the legacy systems in place.

The client was seeking to implement an XML-aware content management system (CMS) that would allow for smart storage and retrieval of reusable content, and provide an interface for the dynamic assembly and construction of new, made-to-order products from existing assets. Legacy content from InDesign templates would need to be imported into the repository to create an initial data bank, and an interface developed to allow a user to dynamically assemble new product configurations. The client also wished to deliver the assembled products to an InDesign Server to automate the process of applying design templates and auto-generation rules to generate the end press-ready products for production. The business objectives were to:

- Create a reusable data bank;
- Improve process and workflow efficiencies for the creation, dynamic assembly, and production of press-ready products;
- Significantly reduce the time-to-market to be able to meet demands for highly customized products;
- Develop a support and governance model to provide a more harmonized and standardized business process and support structure across the Division.

THE ARBORSYS SOLUTION

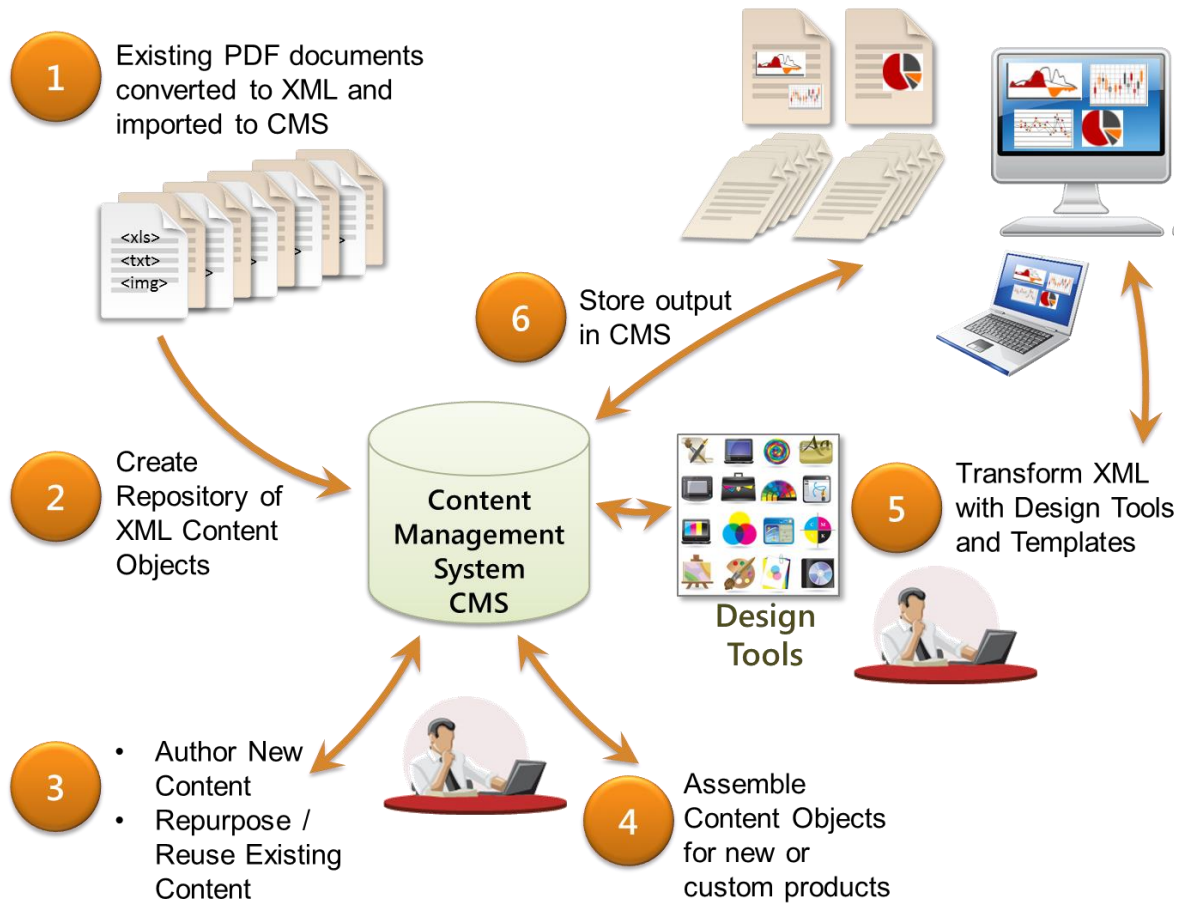
ArborSys collaborated with the client's key business and IT teams to design, develop, and implement an XML-aware CMS that met the client's needs. ArborSys worked jointly with the client to develop an XML schema expressing the known content components and their interrelationships. The CMS was integrated with an XML authoring tool to provide the functionality to create or edit XML content.

Existing assets were converted to XML files by mapping to the XML schema, "chunked" into XML components, and imported to the repository, while applying rules for automatically assigning metadata tags. ArborSys built a custom user interface to allow users to search, select, and dynamically assemble content into customized products. Users could request the press-ready transformation of the product from the application. The process automated the delivery of the assembled XML product content from the CMS to the design and layout tool server, where templates and rules were applied to generate and output the press-ready PDF files ready for production. The PDF file was stored back into the repository for final review and approval workflow, and the user notified when the request was satisfied.

The ArborSys team was engaged to:

- Develop and document the XML schema;
- Develop and document the technology requirements;
- Develop the detailed design;
- Configure and develop the custom application;
- Perform integration testing and support client testing and implementation;
- Develop the training plan, training materials, and conduct training for end users jointly with the clients' training team.

EMC Documentum was used as the CMS. Documentum DamTop, the digital asset management application, was customized to provide the user interface, and PTC's EPIC was used as the XML editor. Integration with Adobe InDesign server was implemented as a reusable Adapter, providing the automation of generating the press-ready products from the content stored within the CMS. The following illustrate the process flow and example of the assembly customizations.



Functionality included:

- Extensive User Interface customizations of the DamTop application to provide a WYSIWYG style interface;
- XML editor customizations and extensions to the Documentum integrations;
- Integration between Documentum and the Adobe InDesign server provided through an Adapter;
- Integration between Documentum and several desktop tools used by the legal team.

The engagement also included the migration of existing content assets to the target Documentum repository. ArborSys analyzed the client's existing print products to design and develop migration processes, and the import of content was supported through customizations to the XML Applications supported by Documentum. Qualification procedures and reports were developed to ensure accuracy. ArborSys worked closely with the client's technology team to execute and complete the migration, and all content was successfully imported prior to production roll-out of the application. An offshore vendor was used to perform the XML conversion of the existing products used for the migration. A number of existing publications were imported into the repository to create the data bank.

VALUE DELIVERED

ArborSys was able to design and deliver a solution that met the immediate and future needs of the client. The solution provided a repository of existing assets and an improved editorial process to reuse and dynamically assemble customized products. Time-to-market was dramatically reduced. The client was able to successfully use the tool to assemble, produce, and deliver several customized orders within a month of rolling the application into production.