

SITUATION

The existing process relied heavily on manual XML coding by skilled writers. While effective in small batches, this approach introduced several inefficiencies at scale:

Manual XML creation was time-consuming and error-prone.

- Inconsistent formatting and structure led to publishing issues and rework.
- Highly skilled XML authors were spending more time on syntax than on content quality and compliance.
- Late-stage quality checks meant that issues were often discovered too late in the publishing cycle.

This defense contractor needed a solution that would not only streamline XML production but also elevate the role of its content experts—allowing them to focus on quality assurance, compliance, and content integrity.



"Ictect has a unique Microsoft Word-based template approach for creating/editing technical documentation in compliance with MIL-STD-40051. This can be very helpful to authors, editors, quality assurance personnel, document reviewers, and others involved in the technical documentation process. Employees of large and small defense contractors, as well as government employees can benefit from this tool."

Pushpa Merchant
CEO

Crescendo Solutions, LLC.



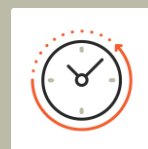
SOLUTION

To address these challenges, our team partnered with the defense contractor to implement a structured content solution inspired by *Ictect's Intelligent Content* software and the principles of *MIL-STD-40051*. The core of the solution was the development and deployment of Word-based XML templates — a user-friendly, standards-compliant authoring environment that enabled structured content creation without requiring deep XML expertise.

Key Features of the Solution

- **Template-Driven Authoring**
We designed Microsoft Word templates that embedded XML structure and logic directly into the authoring environment. These templates guided writers through content creation, ensuring compliance with *MIL-STD-40051* while eliminating the need to write raw XML.
- **Standardization and Repeatability**
The templates enforced consistent structure, terminology, and formatting across all documents. This repeatability reduced variability and ensured that all content adhered to the contractor's documentation standards.
- **Automation of XML Output**
With intelligent tagging and embedded schema rules, the templates automatically generated valid XML behind the scenes. This eliminated manual coding and significantly reduced the risk of syntax errors.
- **Shift in Authoring Focus**
By removing the burden of XML syntax, lead writers were able to focus on content quality, accuracy, and compliance. This shift elevated their role from coders to reviewers and quality assurance leads.
- **Early Validation and Error Detection**
Built-in validation tools allowed writers to catch structural and content issues early in the process — before documents reached the publishing stage. This proactive approach reduced rework and improved overall document quality.
- **Faster Turnaround and Lower Costs**
The streamlined workflow enabled faster content creation and reduced the need for specialized XML developers. This translated into lower production costs and faster delivery timelines.

RESULTS



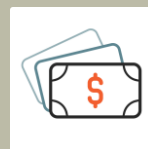
Improved efficiency of document creation



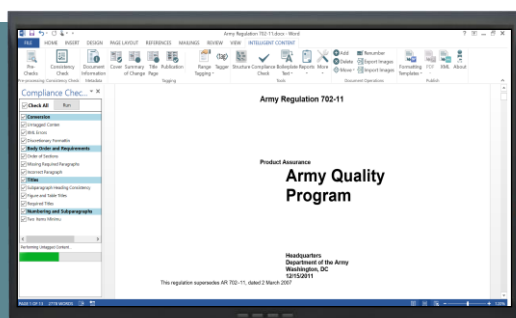
Faster onboarding of new writers and better Scalability



Over a 60% improvement of overall quality



Reduce costs with less need for XML specialists



...it's a great product. It contains many checks (inconsistencies in capitalization, hyphenation, enforced style rules, generates various lists, and so forth) and the software improved the accuracy and quality of the publications."