

Once the root problem in Web site management is addressed through the use of XML, key benefits occur:

- **Consistency**

- Information is a primary asset of an organization. But managing information assets can be complicated. The same content that appears on the Web site may also appear in a printed publication or in a PowerPoint™ slide show; it may have originated in an email or a press release; or it may be available in HTML, PDF, and Word™ formats. In all these cases, the information must remain consistent, accurate, and reflect a positive public image. XML guarantees that consistency since all content comes from a single source regardless of where it appears or in what format.

- **Integrity and Longevity**

- Perhaps the greatest benefit of XML derives not from how information is distributed today, but how it is preserved for tomorrow. Every organization has experienced problems with data trapped in proprietary, obsolete, and unusable formats — software that is no longer supported and technologies that have been left behind. XML, however, is open standard and independent of any programming language or device, so its lifespan is not tied to specific hardware or software. With XML, information is maintained separately from its distribution format, which ensures information integrity and longevity.

- **Workflow Management**

- An XML-based Web site offers a better approach to information management concerns. By standardizing the format of Web content, streamlining the workflow involved in its production, and automating its distribution and maintenance, XML eliminates much of the administrative overhead and uncertainty associated with Web site management. A more efficient Web site management system, based in XML, translates to improved responsiveness and better services delivered from the site. Information can be updated more easily and consistency is guaranteed.

- **Productivity**

- An XML-based Web site allows for smarter use of human resources and IT skills. Some characteristics of XML, such as re-usability of content and automatic creation of outputs, lead to streamlined business processes that in turn produce significant time and cost savings. The automation of tasks and elimination of workflow redundancies increase the productivity of an organization's IT workforce. Their time can then be allotted to higher value projects that deliver a greater organizational return-on-investment. In addition, low maintenance costs make a Web site more sustainable over time.

Figure 4 illustrates an example of the benefits in converting to an XML-based framework. The example is taken from one of the five New York State agencies that participated in CTG's XML Testbed in which they developed prototypes and business cases for converting their Web site to XML.

It demonstrates how the Office of Cultural Education, New York State Department of Education designed its prototype to:

- **Standardize its content in a single-source document**, which ensured the integrity and consistency of that content since it resided in only one place.
- **Generate multiple delivery formats** for different appearances and uses of that content on the Web site.
- **Streamline the workflow** associated with content creation and Web page delivery since most of the work is done automatically via XML.

### Figure 4. Benefits of Converting to an XML-based Framework