

Choosing to implement XML for your Web site occurs within a larger context that involves your entire organizational structure and business workflow process. The technical implementation of XML, like all IT initiatives, does not occur in a vacuum. With this in mind, this section outlines some key factors to help keep that bigger picture in view when implementing XML.

Note: CTG's publication, *Making Smart IT Choices: Understanding Value and Risk in Government IT Investments*, contains a wealth of information and guidelines for evaluating IT decisions. Use it as a resource for more detailed examination of the points outlined below. Specific references to *Making Smart IT Choices* and other CTG publications are provided where appropriate below.

Know Your Environment

Implementing XML is a technical undertaking, but it occurs within a larger organizational environment that contains many layers including:

- **technical infrastructure** (hardware, software, networks),
- **business processes** (how work gets done, workflow for getting content to the Web)
- **organizational setting** (executive sponsorship, stakeholders, warrants, mandates, accountability/ownership issues), and
- **program, policy and politics** (information use, information sharing, confidentiality, regulatory, statutory, best practice.)

Figure 5. Layers of Complexity Surrounding Government IT Initiatives.

Understanding the overall project from these multiple perspectives will guard against applying a technical solution without first understanding the full context within which the solution must live. Implementing XML for Web site management may require a change in how people work, the tools they use, or the functions they perform. Changes to these areas may require a policy change or an organizational change. This type of change may require executive support and sponsorship. The success of the XML implementation depends on the successful implementation of these personnel, policy, and management commitments.

Making Smart IT Choices provides several "tools" to help you gain a better understanding of this complex environment. Two of the tools that were particularly useful during the XML Testbed project are:

- Strategic Framework, which helps you to identify the resources, partners, and innovations that can contribute to a successful XML implementation.
- Stakeholder Analysis, which helps you to identify the individuals and groups who are affected by or have influence over your XML initiative. Every project needs a careful assessment of stakeholders in order to understand who cares about it, how they can affect it, and how they will be impacted by it.

Build an Effective Project Team

Using XML for Web site management impacts major job functions such as content developers, content reviewers, and Web developers. The people performing these functions bring unique perspectives to the overall workflow and business process. Ensuring that team members come from each of these functional areas provides a full perspective on the current environment and what needs to be changed for the new environment.

Creating a representative team is the first step; creating a shared vision among its members is the next step. Once again, Making Smart IT Choices offers a helpful tool called the service objective, for creating this shared vision. A service objective is a structured way to express the goals of a project. The process of creating a commonly understood and agreed upon service objective often reveals differences in thinking, different assumptions, and conflicting perspectives that all must be discussed and resolved before the service objective statement is complete. The process will help to bring a team to common understanding and helps them work toward a common goal.

Designate a Project Manager

A project has little chance of success if it is not recognized as a legitimate project within the organization. Assigning a project manager — that is, someone with project management skills, and not just the technical team leader — is critical to establishing this project legitimacy. The project manager ensures the project stays on track and remains focused by:

- holding team members and users to commitments;
- ensuring the necessary executive support is solicited, communication plans are developed and used, and a task plan and project scope are developed and monitored;
- keeping the project organized and focused on the final goal; and
- settling conflicts within the team and sorting out competing priorities.

Plan and Analyze as a Team

Project planning and analysis involves everyone on the team, not just the project manager. The project manager may guide the work, but everyone should participate to gain the benefits of the various perspectives and areas of expertise that the team members provide. Knowing your stakeholders, understanding your risks, creating risk mitigation plans, and setting up the evaluation criteria should be done as a team. Part 2 of Making Smart IT Choices offers many tools and techniques for group facilitated activities that assist in organizing this analysis.

Analyze your Business Process

The "process" of studying the way work is done is called business process analysis or process modeling. The study of business processes, or workflow, is a very important part of understanding how organizations do their work. (See Making Smart IT Choices, Process Analysis for more details.)

One of the best ways to document and analyze a business process is by talking to the people who actually carry out the work. How does the content get from the author to the Web site? Who is involved and what are the decision points within the process? What are the business rules governing the process?

Through facilitated discussions, a work process can be documented using graphical representations or models to formulate a collaborative view. These graphical representations (or models) of business processes allow organizations to learn more about the specific steps within a process: what tools are used, what information is created, and what information is changed along the way. This baseline knowledge allows organizations to understand and potentially measure existing processes and to consider alternative ways of improving or changing them. If the business process analysis reveals underlying problems, implementing XML should not be expected to solve all those problems on its own.

Focus on the Business Goal

One way to keep the business perspective in sight is to continue using the service objective as a guide and to ask pertinent questions such as:

- What outcome do you expect?
- How will the stakeholders be impacted? Will they be impacted?
- What is the business case for this initiative? Have you developed one yet?

If you do not have a business case, you should develop one that details the costs, benefits, and risks associated with this initiative. Chapters 3 and 4 of Making Smart IT Choices focus specifically on preparing and presenting a business case. Even though the case is being made to use XML for Web site management, the emphasis should not be on its technical features and functions. Use language that emphasizes the business advantages of XML such as **opportunity costs**, **streamlined processes**, **quicker turnaround time**, and **content consistency** rather than technical XML jargon.

Gain Executive Support

Executive management is a key stakeholder in any organizational initiative, so gaining their support is a critical success factor. One of the project manager's first tasks is to determine where to gain this support. The business case may be the mechanism used to solicit and ensure executive support. And because leadership often changes

and priorities shift, executive support must be continuously monitored. In this case, the team's communication plan will help maintain consistent support and interest in the project. It may also be helpful to find someone who can "champion" the project at the executive level. This champion does not necessarily need to come from within the team; it may be a manager who sees the value in the overall project for the organization and can promote those benefits.

In addition, everyone on your team should be able to discuss the progress being made. The project manager can spearhead this by creating bimonthly briefings that team members can use when speaking to their various colleagues. Since a project such as this crosses organizational boundaries, it is important for each team member to discuss the value in terms meaningful to their division, department, or unit. This ability is a direct result of participation in the shared vision and project analysis.

You can refer to CTG's newsletter article in Innovations 2003, **CTG Leveraged Innovative XML Solutions**, and to Return on Investment In Information Technology: A Guide for Managers, for examples of how to discuss the value of XML in business terms to your executives.

Start Small, Think Big

As pointed out earlier in this guide, transforming an entire Web site to XML can be a daunting task. So, start out small by converting a small section of your Web site to XML. This approach gives your team the opportunity to explore and learn. From this first step, you will then be able to apply the knowledge gained to expand and enhance the XML implementation.

Consider a "Modest/Moderate/Elaborate" approach to the overall project, which allows the project manager to balance the team's ability with organizational support for the effort. (CTG's publication, *Opening Gateways: A Practical Guide for Designing Electronic Records Access Programs*, offers a thorough explanation of this approach in its "Program Design Tool" section.) Also refer to CTG's Web site of XML resources, www.thexmltoolkit.org, which contains code samples and explanations based on the modest/moderate/elaborate approach(see Figure 6; click on figure to display a larger image).

Figure 6. An Example "Modest/Moderate/Elaborate" Approach.