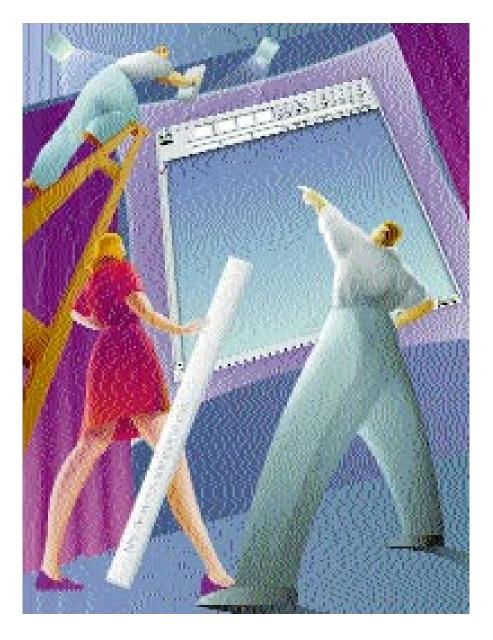
Teamwork Behind the Scenes

By Sally Atkins and Peggy King

Building a World Wide Web site is both process and product. The dynamics of the former have much to do with the success of the latter.



eginning last year, organizational World Wide Web sites began to pop up out of nowhere, and the trend continues unabated. Suddenly Universal Resource Locators (URLs) are displayed on billboards, all sorts of printed publications and television. Although these Web sites may appear to have sprung up overnight, in every organization at least one team is working to provide all the disparate skills it takes to create a such a presence.

Internal teams that develop Web sites typically cross traditional organizational boundaries. Many organizations also build a second team that includes a virtual company, a collection of smaller companies that have come together to assist in building the site. This group may include representatives of an Internet service provider (ISP, which hosts Web sites as an outsourcing service for IS departments), advertising agencies (sometimes called "cyberagencies") that employ interactive marketing specialists to pursue Web projects and contract with technical experts in Hypertext Markup Language (HTML), Virtual Reality Markup Language (VRML), Common Gateway Interface (CGI), the scripting language Perl, the Web programming language Java, open systems networking and a variety of other skills. Of course it's important that the virtual team from outside the organization work closely with the internal team.

In general terms, there are two good outcomes of building an organizational Web site: process and product. The primary purpose of the site may be to sell, to publicize and promote, to educate or a combination of these three. Regardless of its purpose, the secondary benefits of developing the site come from the interactions that take place when members of the organization work together to make decisions about what kind of electronic window they want to open to the outside world.

As part of this process, those who join a Web-building team may be rewarded for their efforts with an opportunity to view their organization from unfamiliar perspectives. Graphic artists get a bird's-eye view of how the computer wizards work; system administrators learn about content development; IS departments learn how much thought goes into advertising, direct marketing and public relations campaigns; and the people in marketing find out why technical support people have to come in on weekends.

Organizations vary in how they go

about selecting a team to participate in Web site construction. Our survey of such projects showed a continuum of involvement. About half of the teams were still in the midst of launching their sites. On one end, the American Association of Retired Persons and American Express brought together people from throughout their large organizations. Most of these people had never before worked together.

In the middle were organizations in which one department drove the Web project and selected who outside that department would participate. The Web site project of Consumer's Power, a gas and electric utility, was directed by its corporate communications department.

At the opposite end were projects driven by a single person. In such a case, it helps when that person is highly placed. The Web champion at home-building company JM Peters happens to be the president.

The following profiles should enlighten some of the unexpected challenges and hoped-for benefits of putting a Web team together and to work.

AARP http://www.aarp.org

ne of the largest organizations in the United States, the American Association of Retired Persons (AARP) represents 33 million Americans over age 50, many of whom already use AARP's online services on America Online, CompuServe and Prodigy. Web site planning within AARP started over 15 months before the home page appeared early this year. Two related groups—the Internet planning group, which put up the Web site, and the online services group, which is responsible for AARP's online services—chart the course for AARP's presence on the

Members of both of these groups vied to be on the Web team. In forming the organization's Web site construction team, Joel Raeser, coordinator for the Internet planning group and an AARP department director based in Washington, DC, wanted coworkers who were fascinated by the Web. "I looked for the people with a real passion and then put them together to see how their areas of expertise could be blended," says Raeser.

A year after the project was started, over 50 employees from groups within AARP—including the IS department (known as MISO), media relations, membership, research, programs, field services and publications—were working together. Each group brought in its own outside help as needed. For example,

the media relations group brought in an advertising agency with Web experience.

To develop its own technical expertise, MISO worked with one outside technical contractor who collaborated with department members to transfer the skills needed to develop and administer IS's Alpha Web server from Digital Equipment Corp. To begin learning about Internet security, MISO members talked with representatives from Marketplace MCI, an electronic commerce venture from the telecommunications provider, about safeguards that will be needed before the organization can begin to use its site for electronic commerce. "We decided early on that we would need to develop internal capacity to administer and develop our Web site, because it will become such an important resource to us," says Raeser.

To that end, AARP currently uses

Uunet Technologies of Fairfax, VA, as

its ISP but hopes to diminish the amount
of outside assistance when people within the organization learn to administer
the site. Each department that plans to
put content on the Web site is encouraged to appoint a person as its resident
page administrator. On the content side,
each contributing department sends
members to an editorial board. This
board had reviewed all of the documents
(including a few written in Spanish) that
were accessible when the site first went

Although much of AARP's content has to do with coordination of volunteer efforts, areas of advocacy and newsgroups, its first goal for the Web site was to have it be useful in preparations for the biannual convention to be held this summer in Denver. "We want to be a catalyst for assisting with the convention," says Nancy Cohen, the group's head of conventions. AARP's home page includes information on who its sponsors are and what they will be sponsoring at the upcoming convention. It also includes hotel and tourism information about Denver. Members can't yet register online (that capability should be available by the Minneapolis convention in 1998), but there is a printable copy of the registration form in the convention area of the Web site.

As a benefit of being a primary convention sponsor (the highest level), each sponsor gets a click-on icon on the AARP home page, which leads straight to its own home page. To date, primary sponsors include Buick, Chevrolet, General Motors, the AARP auto and homeowners insurance program from ITT Hartford, Kellogg's, AARP's group health insurance from Prudential and Viadent. Raeser and Cohen both believe that this hot-key access to sponsors is a precursor to providing full-scale electronic commerce once the organization develops the in-house expertise to implement transaction-level security.

American Express http://www.americanexpress.com

merican Express also created a diverse internal team to develop its Web site, despite the fact that each major product division is run like an autonomous business. The company already offers a form of electronic commerce, an online account service that integrates its product offerings through America Online. This service allows customers to look at charges,

But because the Optima card, the Green Card and Travel Services all have separate advertising and marketing programs, the challenge for American Express has been to speak with a single voice on the Web site. The company decided not to try to do too many things on the site at once. Rather than integrate all the product divisions, as it had in the AOL service, American Express first pursued a specific affinity group—college students—with a specific product—the entry-level Green Card. The group even called this program "American Express University." Students obviously were a group likely to be Web users.

The Web team that devised this strategy consisted of inside marketing people and members of the US Interactive new media marketing group, based in Philadelphia. American Express built an internal team for fulfilling electronic mail requests for credit cards and answering other Web inquiries; it has had to be flexible in staffing the effort to meet the Internet culture's demand for instant service. The size of the fulfillment staff has grown to 12 times the team's original estimate.

US Interactive took American Express through the process of developing its Web marketing strategy and provided design leadership. The internal team focused on technical support and customer service fulfillment.

Now American Express is growing beyond the base focus on college students. Recently, it has expanded the Web site to include its Phone Card product, as well as a pointer to the customer service application, which is password-protected and accessible on AOL only.

ale Dowers, president and chief operating officer of JM Peters, a subsidiary of Capital Pacific Holdings in Newport Beach, CA, is a technically savvy top executive who is dedicated to using technology to give his company a competitive advantage. JM Peters is building 16 home communities in southern California, six in Nevada, four in Arizona and nine in Texas. There are 440 floor plans for these homes. After attending an executive seminar at Silicon Graphics, Inc. (SGI), Dowers decided that JM Peters needed a powerful Web server to host a site capable of storing and playing back VRML files of each floor plan. Other home builders had Web sites that would allow prospective buyers to download JPEG compressed image files of floor plans, but JM Peters would be the first to give

Consumer's Power http://www.cpco.com

onsumer's Power, located in Jackson, MI, and serving the Detroit metropolitan area, is the fourth largest combination gas and electric utility in the United States. A subsidiary of the multinational CMS Energy, Consumer's followed its parent company's lead by contracting with the same virtual company for assistance in constructing its Web site.

Steve Lapedus, head of corporate communications at Consumer's, spearheaded the project. He contacted Carol Kamm, president of Allen Creek Associates, a consultancy in Ann Arbor, to serve as the project leader. Kamm was on the board of directors of Allied Internet, an association of small Internet-related businesses also based in Ann Arbor. "After my initial meeting with Stephen, I presented him with the idea of working in conjunction with Allied Internet," says Kamm.

Each of the Allied Internet member companies played a role in developing the Consumer's Web site. The largest of these was Quorum, which did the graphic design and put a team of four to work on reformatting Consumer's existing content into a form suitable for the Web. Lapedus estimates that about 70 percent of the Web page content came from existing materials.

Every major page on the Consumer's

site has a search button, and there's a get-back button for every outside site with a link to Consumer's. A company called Interconnect incorporated a database search engine into the site and designed a search interface form for both Consumer's and CMS. A consultant from Argus Associates designed the overall information architecture and navigation for both sites and then took the content for the each and organized it into navigable structures.

Despite being the project of one department, the content in Consumer's Web site represented the entire company. The corporate communications department intended it to be a way for all four

them the next best thing to being there—a virtual walk-through.

SGI put Dowers in touch with the Web Factory, a San Francisco-based reseller, which in turn contracted with Scan Systems of Costa Mesa, CA, to do both the creative and technical work in VRML required to bring Dowers' vision to the Web. The project began last fall with the ambitious goal of having 360 Web pages of VRML files by the end of January 1996. Although Scan Systems had far fewer pages ready by that date, JM Peters has already begun to publicize its Web site by putting its URL on printed advertisements and on AOL and CompuServe. In the first six weeks that its site was advertised, 15,000 hits (accesses) were recorded.

The Web Factory did more than supply JM Peters with a high-end Challenge S server from SGI. The reseller also served as project manager and handled all parts of the content that did not require VRML expertise. According to

Matthew Roche, a new business development manager at the Web Factory, the main work consisted of "repurposing" JM Peters' existing content, most of which was in the form of printed photographs. The Web Factory graphics team changed the resolution, distilled the graphics files and placed them in a .gif format that would keep the picture quality sharp, even though the resolution was down to 72 dots per inch. A separate company was hired to shoot new images to use as QuickTime Virtual Reality (.qvr) files.

Although JM Peters hosts its own Web site, employee involvement in developing the site has been minimal, despite the enthusiastic sponsorship from top management.

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of its marketing groups (core gas marketing, strategic gas marketing, core electricity marketing and strategic electricity marketing) to take their key messages to the public. "If we put our URL on the bill envelopes, a potential 1,600,000 customers will know where to find our site," says Lapedus. "Our goal is to save our customers, and anyone else who sees the site, money on their energy bills."

When the four marketing groups began working together, they discovered that there was no unifying look, feel or voice to the utility's various promotional materials. "When we put all of our marketing material together in one place, we found many disparities," says Lapedus.

"Building the site gave us opportunities for cooperative marketing that rarely exist in the physical world." Before the site went live at the end of 1995, people from 10 different groups at Consumer's had contributed content.

Soon after the launch, four additional departments wanted to get involved. The latest project is to gather requirements for what these departments will need from a Web site.

Departments within an organization frequently vary in both readiness and ability to pursue a Web project. At Consumer's, the IS department was on the sidelines during Web site construction. One of the reasons that almost all of the technical assistance came from outside the utility is that corporate communications wanted to move more quickly than IS was prepared to respond.

Security was the Internet issue that most concerned the IS department. Because its staff did not yet have a person who knew how to build a secure firewall to protect its proprietary data, IS preferred not to host the site internally. Instead, Consumer's is using virtual host service provided by IC.net, its ISP. According to Kamm, IC.net is working closely with the IS department on capacity planning issues and helping the department decide when to begin hosting the site on its own server. \mathbf{IT}