Technology exhibits at ALA

A look at what's new

by Tracey DePellegrin

With 825 companies exhibiting at the Washington, D.C. Convention Center during ALA 1998, just finding the technology-centered exhibits was easier than I'd anticipated. Many of the vendors peddling computer software, automated library catalogs, scanners, and anything hi-tech had floor displays that were, simply put, huge.

Consider **UMI**, who won an honorable mention for the Kohlstadt award and for the best Island Booth. Their elegant two-story display highlighted SiteBuilder, which allows customers to build their own Web interfaces for UMI's ProQuest Direct®. Adorned with renditions of the Mona Lisa and Van Gogh's "Sunflowers," the exhibit's theme was "Create Your Own Masterpiece," complete with projected slide graphics of art images morphed into one another, juxtaposed with words such as "Content."

"We strived to make sure it was still ADA-compliant," said Ann Curtis, exhibit manager for UMI. "The space on the second floor was repeated on the lower floor, and we had a workstation at wheelchair height." Curtis explained that they were one of few vendors who used professional presenters. "It frees up our product managers to do one-on-one demos and talk to customers."

With only a few days to cover the exhibit hall, it was virtually impossible to learn the goings-on with automation vendors. But innovations and trends seemed obvious in several areas: digital archives and related technology, full-text databases and article providers, customizable interfaces, and using the electronic environment to better serve and understand patrons and users.

Digital archives

An increasing number of vendors are providing equipment, expertise, and interfaces designed for creating, storing, and retrieving digital images as digital libraries and digital archives become all the rage. Many of the best products seemed to be the result of collaborations between software vendors, publishers, content experts, and customers.

Minolta had an impressive looking display of several scanners. Launched at ALA, the PS 7000 Face-up Book Scanner features a large scan area of 17" X 23". The demonstration went flawlessly as the scanner processed a page of music notation. The scanner, which costs about $17,000, has an optional support cradle that permits books to be opened to an angle of only 90 degrees for scanning, in an effort to protect brittle spines and bindings.

Sirsi demonstrated Hyperion, its new digital media archiving system. One useful feature of Hyperion was its integration with the Sirsi Unicorn® online library catalog, where a patron is able to search a phrase and retrieve, for example, a bibliographic record with hypertext links to a media file, including video clips, recordings, photographs, or document images. The user can click a link and view or listen to the media file, depending on its format. Another noteworthy feature demonstrated at ALA was the system's ability to help a user navigate a complex collection. Hyperion displays a classification hierarchy that a patron

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can use to browse documents in a collection. The system also has the ability to display portions of a report, whereby a user can click a link and view a particular chapter, for example.

Research Libraries Group (RLG), a not-for-profit membership organization, is an interesting example of collaboration between content providers, audience, and technical experts. RLG representatives demonstrated an impressive version of their not-yet released image library, the AMICO (Art Museum Image Consortium) project. The project involves a group of 23 museums who have contributed images of their holdings to a digital image library.

At the end of August 1998, 17 institutions of higher education will begin a one-year test to study the AMICO image library as an academic tool. RLG built the initial testbed database of some 20,000 images and descriptive text, and has extended its Web-based search system, Eureka, to handle images. During the fall of 1999, RLG plans to offer subscription access to an expanded set of licensed museum images and related resources, of which the AMICO library will be a key component.

Not to be outdone, **UMI** announced the Digital Vault Initiative. UMI is scanning and converting from microform to electronic format their vault-stored collection containing thousands of books, newspapers, periodicals, and other materials.

Scanning of the 5.5 billion page images began in May and will continue over the course of several years. UMI reported that "The first phase of the Digital Vault Initiative will focus on UMI's collection of early English literature, including nearly every English-language book published from the invention of printing in 1475 to 1700. This collection, begun in 1938 as UMI's first microfilm project, includes such works as Chaucer's *Canterbury Tales*, Culpeper's *The English Physician*, and Shakespeare's renowned *First Folio* edition of 1623."

Chadwyck-Healey demonstrated The Digital National Security Archive. Chadwyck-Healey digitized the National Security Archive, which totals over 200,000 pages of documents, including presidential directives, memos, meeting notes, independent counsel reports, briefing papers, White House communications, e-mail, secret letters, and confidential memoranda. The frame-based Web interface combines about 20 searchable fields, yet remains visually appealing and well-designed.

The product, projected to be available this fall, promises to be a valuable information resource; Chadwyck-Healey reported that the National Security Archive has gained a reputation as the "most prolific and successful user of the Freedom of Information Act." From any point in the interface, users can read introductions and view photographs, perform a search, or view a glossary, chronology, and bibliography. From the demo, it appears that each index to a particular collection will include a view of multiple thumbnail photographs for the collection. I viewed several photos from the Cuban Missile Crisis photo archive.

Finally, for help in creating a digital library, call **Progressive Technology Federal Systems, Inc.** (PFTS), in Bethesda, Maryland. "We build digital libraries and provide turnkey integration," said PTFS President John Yokley. Yokley pointed out that PFTS has expertise in both the technology behind digitizing images as well as library-related issues. When I viewed a demo for a customized digital library using the *St. Louis Post Dispatch*'s database of articles, the online help was well written and showed an awareness of user needs and habits.

Providing digital full text

As many libraries aim toward the full text of articles online, some vendors are capitalizing on the glut of information as a problem even greater than scarcity of information. The most confusing aspect of evaluating the full-text providers was that most representatives I spoke with indicated that their products were innovative, which wasn't always as obvious to me. Search mechanisms are developing so rapidly that searching multiple indexed fields or hav-

ing hypertext links in a bibliographic record, for example, aren't unique features but a requirement for consideration.

Ironically, in an industry where content is so highly valued, packaging and image seem to be out in front when it comes to my first impression of many vendors. Many touted themselves as "full text" providers, when after some probing I learned that a large percentage of some vendors' databases were only available as abstracts and still had to be ordered through a document delivery service; or I found their interfaces to be counterintuitive or confusing.

Some vendors work with software engineers, librarians, and human factors specialists in producing well-honed interfaces that transcend the buzzwords of "user-friendly" and "cutting-edge" to provide the user with tools to access information effectively and efficiently. Other vendors appear to get lost in a mire of features and forget about what users really want, need, and like. Still, many full text providers are forging ahead.

Columbia International Affairs Online, known as CIAO (http://www.ciaonet.org), was launched in August 1997 with support from the Mellon Foundation. CIAO, from Columbia University Press, offers a subscription-based Web interface whose concept promises to help scholars make the transition from paper to electronic publishing. Columbia University Press touts CIAO as a venue in which scholars can present work in various forms and stages of development, thereby decreasing barriers to publishing "ideas" and increasing feedback from colleagues during the process of writing and creating scholarly outcomes.

The interface is sophisticated, with well-placed design elements and an effective use of color. Their concise online user survey is a much-appreciated rarity in querying users about the impact of CIAO on their work. Finally, CIAO provides access to the full text of books online, a much-talked-about step toward the future of electronic publishing.

Ovid Technologies, which also had a huge, impressive looking display, boasted that it delivers the full text of scientific, technical, and medical journals via one database called Journals@Ovid. Ovid offers several well-designed interfaces, including a Java client, VT-100, and a Web Gateway. The representative spoke authoritatively about Ovid's

ability to track usage statistics and authenticate, using passwords or IP addresses, areas of increasing concern for libraries. Seamless linking from citations and reference footnotes in an article to other articles allow users to find related information or view related topics. Other distinctive features of Journals@ Ovid include links to a journal issue's table of contents, plus overviews, reference, and figure links for every article—all of which aid user navigation.

"Get More of the Who, What, When, Where, & Why" boasts century-old **H. W. Wilson** about their full-text references. From the looks of it, Wilson is trying to be all things to all people. They provide full-text abstracts on the Web, CD-ROM, magnetic tape, or—through "information partners" like SilverPlatter—OCLC, UMI, Dialog Corporation, and Ovid Technologies; "E-Connection," an online source for library-related trends, reviews, and tips; breaking news flashes in the library community; and a pretty thorough product support section on their Web site.

Wilson's display and their shopping bags bearing the theme "Celebrating the future, Commemorating the Past" is appropriate as they celebrate 100 years in business, but I somehow left their exhibit a bit overwhelmed.

Paying more attention to users' changing needs
The Web is old hat. Virtually every organization has a URL and many libraries have online catalogs via the Web. But some innovations appeared among the technology exhibits at

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ALA. Many software vendors offer customizable interface options for library catalogs and databases, including the flexibility for customers to radically change the look and even the functionality of search mechanisms. Likewise, a few vendors are providing interfaces and material in multiple languages.

And an increasing number of governmental organizations are realizing the benefits of the electronic environment and seem to be marketing their content to libraries in an effort to increase the reach of information.

CARL Corporation was one of a few vendors I spoke with who was not only cognizant about but proactive in terms of interface design in multiple languages and sensitivity to readers with special needs "Access for all" is one of their themes, in fact. Their Web OPAC, CARLweb, accommodates large print display and works with text-to-speech synthesizers.

CARLweb also allows users to toggle between English and another language without losing the search context, with individual libraries able to customize translations. Their language translation interface has been developed to support any language, including non-Roman alphabet languages such as Chinese, Japanese, Korean, Thai, Russian, and Arabic. CARL reported that they are also developing a Unicode database option to store data in the vernacular from publications in non-Roman alphabets.

According to a recent issue of the online newsletter, *@CARL,* "This development will greatly extend the range of materials which can be stored, indexed, and retrieved; it will have a direct impact on research libraries, on public libraries who serve multilingual populations, and on CARL's database products, such as UnCover and Dialog@CARL, CARL databases ultimately will include bibliographic records from all non-USMARC formats, as well as tables of contents and article level data from serials and journals of all languages."

The Galileo Reading System by **Robotron,** is an image scanner that reads the material aloud in what their literature describes as a "high-quality" voice. It can read items at up to two pages per minute in English, French, and Spanish. As with their other products, Galileo is designed by Robotron, who develops products primarily for the vision-impaired.

The **U.S. Geological Survey** (http://www.usgs.gov) had a small booth set up to promote their digital National Atlas (http://www.atlas.usgs.gov/).

"In 1970, we published the **National Atlas,**" said Jay Donnelly, Project Manager. "It was 400-pages and cost $100. Now, we're publishing the digital *National Atlas.* It shows broad distribution and patterns across the country, and is a good way to access information most people don't know about." The National Atlas' Web site points out that the version published in 1970 was designed primarily for educators and government organizations.

With the proliferation of Web-based access, the new version is designed for "individuals who own powerful home computers." As such, the Atlas' creators have gone to great efforts to understand their users. "We've tested prototypes on focus groups," said Donnelly, "and are looking for perspective federal and private sectors partners." The site also features a detailed user survey that probes for user preferences about map themes (for example, biology, energy resources, history, social and cultural information) and possible uses (produce dynamic maps that change over time, measure distance and determine area, select and use my own map symbols).

The digital version includes maps illustrating the distribution of birds, complete with images and songs. Users can watch a series of satellite images that illustrate vegetation growth in the lower 48 states during 1995. Still in development, the atlas will include data on soils, boundaries, volcanoes, and principal aquifers. Crime patterns, population distribution, and incidence of disease will also be included in the altas. ■