The Library of Congress, the world’s largest library, faces significant challenges in making the transition to a world with increasing amounts of digital information, says a new report from a committee of the Computer Science and Telecommunications Board, National Research Council. While the library has the potential to build collections and provide service in the new environment on a scale never before possible, it must act quickly to address strategy, management, funding, and staffing issues that threaten to render the institution second-rate among today’s digital libraries.

The library’s mission is to serve the U.S. Congress and the nation by building and maintaining the most comprehensive collections of the historical and cultural record. These collections directly support the work of Congress and contribute in immeasurable ways to the national political, intellectual, and cultural life. To maintain that role, the library must continue not only to handle artifacts in traditional media, such as the printed book, which will play a dominant role in archiving information for decades to come, but also to collect and preserve electronic books, newspaper Web sites, digital music, and other forms of electronic information. So far, the library has engaged in ad hoc experiments and pilot projects, but has not developed a broad strategy or the necessary capability to accomplish this tremendous task.

"If the Library of Congress does not make significant progress, it will become a book museum that houses a collection of priceless materials, and the energy of cultural exploration and discovery will fade from its halls and go elsewhere,” said committee chair James O’Donnell, vice provost and chief information officer at the University of Pennsylvania, Philadelphia. "It must build a new system for acquiring and preserving materials that includes digital information, especially materials that were born digital."

The current processes for adding a work to the library’s collection, including registering and depositing items with the U.S. Copyright Office (a unit within the Library of Congress), remains focused on physical artifacts such as books, videotapes, and compact disks. It urgently needs a new system for digital objects that is integrated with the well-established system for acquiring and archiving physical formats. This is an essential step toward creating a truly functional, contemporary library, the report says.

The organizational structure of the Library of Congress was designed to handle materials in traditional media. The committee recommended that the library create a new position, deputy librarian for strategic initiatives, to assist the leadership in formulating strategies to effectively incorporate information technology. An information technology vision, strategy, research, and planning group should be established, along with a technical advisory board whose members are drawn from outside the library.

The library also should foster a culture of innovation and learning among its staff. To accomplish this goal, Congress must significantly increase funding for staff-training opportunities, the report says. The library also should encourage staff involvement in professional organizations to promote learning and establish teams of people with different skills to promote further technical development at the institution.

A lack of an adequate technology infrastructure is a contributing factor in slowing the library’s transition to collecting new forms of information, the committee noted. Computer networking and security capabilities at the Library of Congress, for example, lag behind not only the commercial sector but also other not-for-profit research libraries, and must be upgraded.

Involvement with the wider international community of professionals that deals with technology issues in today’s cultural institutions is lacking, the committee said. It urged the library to become more involved in outreach activities with colleagues in the United States and abroad, as well as industries such as publishing, entertainment, and computer software. Industry has been increasingly involved
with libraries and is producing and storing digital information. Outreach efforts will have a powerful and transforming effect on the organization and its ability to serve future generations, the report says.

Among the library’s pilot projects, the centerpiece has been the National Digital Library Program. The program’s goal is to digitize 5 million items already in the library’s collection and to make electronic information available through the Internet. This undertaking demonstrates that the library can recruit appropriate personnel to handle digital information. The next challenge is to build a much more ambitious program worthy of the name "National Digital Library," which can be accomplished by incorporating more kinds of digital material and building on a much larger scale. Both of those tasks can be achieved only if the library works in partnership with a broad range of institutions, the report says.

While personnel wrestle with how to process massive amounts of electronic information, digital preservation raises issues that cannot be addressed by a single institution. The library must take the lead and work with electronic publishers and the R&D community to resolve legal, economic, and technical questions that relate to digital works. Further, the library should establish contractual arrangements with a set of publishers and distributors of significant digital content, the report says. These relationships will enable the library to conduct experimental pilot programs for storing and maintaining digital information off-site as well as at the library.

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