PUTTING THE IDEAS ALL TOGETHER

This report has examined ways a library can report the use of the resources and services the library offers electronically, including measuring the use of the library's Web site, its online catalog, virtual reference services, digital library systems, and the array of electronic resources licensed from external providers.

No single definitive formula can be applied universally for measuring the use of electronic resources and services. Libraries tend to provide these services in different ways, infrastructures vary from one library to another, and levels of complexity differ greatly. One size, or one solution, does not fit all.

In each of the main areas of electronic involvement, this report describes the various options and approaches that might be implemented to extract the maximum level of use information. These options are not meant as a cookbook of ingredients to follow literally. The level of effort put into gathering, reporting, and analyzing use statistics should be proportional to their value in decision making. Creating statistics for their own sake is an unjustified use of time and resources.

A library might consider setting up processes to gather the most extensive set of raw usage data possible, but be selective about how much of that data is analyzed. Use data cannot be recreated if it is never collected. You can't go back in time to observe prior use of the system unless prior use was recorded in system logs. Since disk space is relatively inexpensive, system administrators can be fairly aggressive in the amount of activity they choose to log. The real work lies in the analysis of the raw log files or other use data. With plenty of raw data available, library administrators can make decisions about which areas of use need to be reported routinely and which may need in-depth analysis.

Over time, you can see from the current trends and initiatives that librarians can eventually expect that knowing the amount of use for electronic resources will be more straightforward.

Measuring the use of externally provided electronic resources is the most complicated measurement operation. The systems that libraries can create to capture the use of externally hosted resources are complex and not entirely accurate. Any hope for a more rational approach lies in more comprehensive reporting of use statistics by the providers of information services. With the pressure being exerted by groups such as Association of Research Libraries (ARL) and International Coalition of Library Consortia (ICOLC), and if individual libraries consistently add this requirement in their contracts as conditions for purchase, then libraries will likely see significant improvement in vendors' reporting.

In many ways, measuring the use of electronic resources is easier than measuring use of physical materials. Electronic resources reside in environments that can be programmed to automatically document their use in ways that are not possible for books or other physical objects, which require human intervention to track. Libraries, though, have a longer track record in measuring use of traditional products and services than electronic ones.

With the expected advances in authentication, digital rights management, and personalized Web services, significantly more data will be available that correlates users with the resources they access. The current Web environ-

ment where most users remain anonymous will likely evolve to one where users carry their identity with them as they navigate among Web sites. Although this trend may raise some concerns related to privacy, the trend suggests that the quality of library usage data will improve.

Libraries are evolving a few degrees at a time toward a more virtual environment. Few industry leaders predict libraries will ever become completely virtual, but librarians can expect to address an ever-increasing amount of electronic content and a steady rise in the portion of electronic services. These trends raise the stakes of providing statistics that accurately measure the level of use for electronic content and services.

This report focuses on the measurement of electronic use. Although an important task, measuring electronic use is only the beginning of a broader agenda that many libraries are taking toward assessing collections and services to determine the quality of library performance.