E-Metrics Profile

Introduction

E-metrics refers to the measurement of electronic resources and services. Businesses use them to evaluate the effectiveness and activity on their websites. Libraries use e-metrics to evaluate resources such as databases, online catalogs and e-books as well as services that include off-campus access to the library. Examples of e-metric data include the number of log-in sessions, article downloads and web page views. E-metrics allow organizations to understand what resources and services are being used, how often they are used, and who is using them.

Literature Review

Much of the literature discusses the various e-metric projects that have been created within the last ten years. Major projects include the Association of Research Libraries (ARL) measurement model, the 2003 revision of the National Information Standards Organization (NISO) Z39.7 standards, format standards of vendor reports from Project COUNTER (Counting Online Usage of Networked Electronic Resources), and identification of electronic library performance indicators from the European Commission's EQUINOX project (Kyrillidou, 2005/2006; White & Kamal, 2006).

Pesch (2004) summarized the efforts of these projects in a presentation focusing on libraries, publishers and aggregators. He recommended that librarians and vendors need to be actively involved to ensure the standards process is reasonable and attainable. Shim and McClure (2002) used the ARL project’s results to examine vendor usage statistics. They
recommended for libraries to focus on high impact databases, collect local data, maintain aggregate statistics and organize the e-metrics process.

Benefits of e-metrics for libraries have been discussed. Taylor-Roe and Spencer (2005) explained how e-metrics help highlight trends and inform strategic decision making. This sentiment is also echoed by Bertot, McClure, Davis, and Ryan (2004) who introduced EMIS, a web based instructional system to help librarians with e-metrics.

**Use of E-metrics in Libraries**

Libraries obtain e-metrics through vendor reports or local efforts. Vendor reports can be emailed to libraries or accessed online with a password. Local efforts means that the library itself will collect the data. This includes performing a Transaction Log Analysis (TLA) which may include information such as visits, page views, click-throughs from the library's website. A library's proxy server may reveal statistics on IP addresses of users and turnaways, number of users denied access (White & Kamal, 2006). Collecting and analyzing data can be time-consuming, but there are web analytic software programs that assist with this process. Some examples are the free Analog and the relatively inexpensive WebTrends. Also available are electronic resource management software programs like Ex Libris's Verde that can store usage data along with information about licensing and costs. These management programs can be very complex and are still being developed (Webster, 2006).

Examples of areas where e-metrics help libraries are in library management, collection development, and public relations. Library managers can review the usage statistics on electronic journals and compare costs to help make decisions and negotiate with vendors. E-metrics can also provide ways for librarians to analyze their collection to see what subject areas
are weak. For public relations, data such as workstation or off-campus log-ins can show library use even if the gate counts and book circulation numbers are down (White & Kamal, 2006).

**Challenges**

One of the challenges for vendors and libraries is how they are going to collect and analyze e-metrics. If there is no consensus of the definitions of e-metric elements or format of reports then comparing data will be extremely difficult. The ARL's project on e-metrics from May 2000 to December 2001 addressed this problem. It looked at three areas of measurements (information content, information services and technical infrastructure) and developed a measurement model (ARL, 2002).

For vendor reports there is Project COUNTER's standards that define what should be collected and the format of the report itself. But libraries should not just depend on vendor reports because they may want information that is not included. The use of alerts, stored searches and other personalized applications are either not reported or counted differently among database vendors (Blecic, Fiscella, & Wiberley Jr., 2007; Webster, 2006). Another good reason for local efforts to collect and maintain e-metrics is that vendors may go out of business or have some access restrictions (White & Kamal, 2006).

Recent challenges include the introduction of Open URL links and federated searching. These applications affect how searches or sessions are counted, and so Blecic, Fiscella, & Wiberley Jr (2007) recommended that librarians must pay attention to new innovations and how vendors treat them.

**Conclusion**

E-metrics can provide libraries with valuable information about their electronic resources and services. Organizations such as ARL and NISO help define the measures and recommend
what should collected. Librarians, however, need to be involved and maintain their own e-
metrics process to ensure the data is properly collected and analyzed for their purposes.

Reference:


