FORGET USABILITY, GIVE ME RELIABILITY

Speed is Everything

The one international truth of Web usability is that faster is better. Each advance in Web services; each leap in processor speed, modem, and Ethernet speed; and each new billionth Web page uploaded makes people less tolerant of slowness.

Unforgivably long load times are usability problems in the extreme. Design, features, and over-concentration on click-streams—the clickable path that a user takes to get to the required information—can cause designers to lose sight of overall Web site reliability. With almost any interface, users given a choice would choose speed over features they are unlikely to use.

This evidence is not merely anecdotal; research and evidence bear out this claim. As early as 1968, researcher Robert Miller outlined his rules for usability time limits (quoted in Nielsen, pp. 42-44):

- 0.1 seconds: maximum time at which a user feels that a system is responding "instantaneously."

- 1.0 seconds: maximum time for a user's flow-of-thought to remain uninterrupted.

- 10.0 seconds: maximum time for keeping a user's attention focused on a system dialog.

Applying this to the Web, Nielsen showed 25% to 30% of users bailed out on a Web page 40KB in size. A simple reduction in image size (the only change) resulted in only a 7% to 10% bail-out rate (Nielsen, p. 50). How many library users have walked away from the catalog while a keyword search spins? How many reference librarians have retreated to the telnet catalog because it is more reliable?

Uptime is the Only Thing

Uptime is the percentage of time that servers and services are available.

Speed is nothing without uptime, which is the percentage of time that servers and services are available. System and data integrity provide the backbone to any online service. No one cares about gigabit Ethernet capabilities if the servers on the other end are only available 90% of the time. Whether a library provides its own servers, leases them, or outsources them, the library should place a premium on server reliability. Discussing the myriad of options available—RAID protection, fault tolerance, server clustering, distributed computing, and so on—is outside the scope of this report, but optimizing services means optimizing servers.