ONLINE DATABASES

BY CAROL TENOPIR

Trends in End User Searching

TO ONLINE SERVICE providers, the end user market has long been the holy grail. In 1989 Roger Summit, then president of DIALOG, said DIALOG hoped within the next five years that "end users will account for some 60 percent of our customers and will grow to between 20 and 25 percent of overall usage."

In 1986 Bill Marovitz, who was president of the BRS online system, described the library market as pretty much saturated, with the end user professional at home or in the office providing the real potential for online growth. And, I hate to admit it, even I said, "I have no doubt that end user searching will someday replace searching by a trained intermediary" (Online Databases, *LJ*, March 1, 1983, p. 471ff.). Today I would have to say "coexist with," not "replace."

For 25 years end user markets have been notoriously hard to reach for several reasons:

- not many end users knew what online searching was;
- not many end users had the equipment to go online;
- not many end users were willing to learn how to search;
- and, not many end users were willing to pay for online information.

Except for the last point, in the past few years the landscape has begun to change. Millions of Americans use computers at home, work, or school; the incentives and opportunities to go online have increased greatly.

Emerging trends

My analysis concerns the commercial research online systems, excluding web surfing and mostly bypassing online systems such as CompuServe or America Online (AOL), which are aimed primarily at the consumer searching from home. Rather, I focus on DIALOG, LEXIS/NEXIS, Dow Jones, et al. My purpose is not to list every single new product and system innovation but just to mention a few examples.

In this branch of the online world, five major end user trends have emerged this year: web versions; end user systems through the library; integration of information sources; the rethinking of proprietary software solutions; and specialized focus/customized products.

Weaving tangled webs

The move to the web proceeds from a simple notion: If you can't bring the users to the system, bring the system to the users. The Internet, specifically the World Wide Web, is the one online option that has expanded enormously. Commercial online providers took note and nearly all introduced web versions this year.

Using the now-ubiquitous web browser interfaces, versions of FirstSearch, Searchbank, EBSCOhost, and many other online systems can be accessed via fee-based web sites. Most of these are too new to be fully evaluated; DIALOG, Information Access Company (IAC), and Dow Jones announced their forthcoming web versions at the Online World Conference in late October, while ProQuest Direct's web version and RLG/RLIN's Eureka on the web each went up in October. Other services such as The Library Corporation's NlightN began as and continue to be purely web products.

Web versions are popular because not only do they catch the latest trend, they overcome platform problems and use the standard Netscape Navigator or similarly familiar web browser interface. UMI expects the new web version of its ProQuest Direct to be the most popular version. OCLC says 13 percent of FirstSearch users now use the web version that was introduced last February.

Reliance on web versions already has shown some downsides, notably slow response time. Not surprisingly, performance tests at the University of Tennessee systems office show databases loaded on a local server provided much better performance than accessing databases on the Internet, especially where full text or images are involved. Response time during afternoon working hours is particularly slow.

While this slow response time will be remedied eventually as the overall Internet infrastructure improves, some major universities don't want to wait for the telecommunications industry to act. A consortium of universities has announced plans to develop Internet II, a parallel universe just for research universities (see InfoTech, *LJ*, November 1, p. 21).

Another web downside involves the limitations of HTML, which makes it harder to provide customized features and sophisticated search engines, and thus may mean lower functionality for the first versions of web products. Companies will be using Java, plug-ins, and other emerging web enhancements to improve the first generation of web products.

Access via the library

Most people expect searching on the web to be free, since their organizations may absorb the costs or they forget that they pay monthly bills to their Internet service provider or AOL.

Because typical information users aren't accustomed to paying much for information, they certainly don't like paying each time they walk into the library or read an article. A DIALOG spokesperson characterizes user pricing resistance to the six-month-old ScienceBase product as "sticker shock."

For years, libraries have served to subsidize costs and maximize access. The corporate library may get its budget from the various departments it serves, but the end user usually has not had to pay directly for services.

Successful end user search systems have taken this lesson to heart.



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FirstSearch led the way, others have followed. IAC SearchBank, EBSCOhost, ProQuest Direct, and FirstSearch have been successful in large part because the library or information center—not the direct user—pays, or the cost is spread throughout the organization.

Integration takes a village

The experience of web versions and libraries subsidizing costs suggests that successful online systems must appear to be easy to use, must look familiar, and must be inexpensive (or free) to the end user. Still, users must decide when to log on to a formal online system, when to search for web sites, and when to ask for help. The next logical step is to provide systems that can integrate all of these information sources.

I call this trend "it takes a village" because Engineering Information's Village best represents it ("Moving to the Information Village," Online Databases, *LJ*, March 1, p. 29–30). Ei Village is a virtual search environment where all types of information resources come together. It won the 1996 Information Industry Association and *Online Access* magazine's HotShots award for Best Science/Technology Service.

Visitors to the village are provided easy access to the best web sites, according to topical divisions, to the Compendex bibliographic database, to full-text documents, to human experts in all branches of engineering, and to both human engineering professionals and librarians.

Added value consists of the easy-to-follow interface, the logical organizing of information, the selection of best web sites, and the integration of all types of formal and informal information resources.

In addition to Ei Village, NlightN offers access to web sources and a variety of bibliographic and full-text databases. Information professionals within all types of organizations are (or should be) making such integration a model for end user searching.

Where have all the GUIs gone?

Last year, one of the hottest trends was proprietary search software with graphical user interfaces (GUIs). GUIs introduced in 1994, 1995, and 1996 haven't gone away, but they are no longer the hottest new thing.

Proprietary GUIs can fully exploit the features of databases offered by an online system; colorful and appealing, they incorporate system documentation and help screens. In the past 18 months, GUIs such as DataTimes (EyeQ), Profound, NewsNet Baton, SciFinder, and others have mostly garnered favorable reviews. NewsNet reports that new users almost always prefer Baton and its GUI, while experienced searchers want to search in native command mode.

GUIs pose two main problems. The first is "iconitis." It may be difficult to find an icon that represents such sophisticated concepts as "start a current awareness search" or "modify a search that retrieved too many." While we can all recognize a trash can or a stop sign, some icons are less clear.

The second problem is the inconvenience of loading all the different proprietary software. If you are accessing or providing access to only one or two systems, it isn't much of a problem. But different proprietary software for every online system to be searched creates the same headaches that plague CD-ROM searching.

Recognizing the consumer

The last trend is the recognition by online services that end users have jobs other than online searching, and many appreciate targeted products that give them just the information they need with a minimum of fuss.

Custom DIALOG, DIALOG QuickStarts, and LEXIS-NEXIS QuickChecks are series of products targeted to very specific user groups. The software chooses the databases and the type of presentation of the most useful data. Sometimes this trend is joined with the web trend—giving us products such as DIALOG's ScienceBase and BusinessBase, Dow Jones's DowVision, and LEXIS-NEXIS's new Advantage.

A variation on this trend is to "Get them while they're young." Special services and pricing for students is not a new idea; many of the major online systems have had educational programs for years. But these programs are being reassessed and often expanded.

DIALOG, for example, has just announced a flat-fee academic plan to complement its longstanding classroom instruction program. LEXIS-NEXIS is launching a new program called Academic Access next month. Also, many systems offer discounts to academic institutions.

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In the home market, CompuServe and AOL introduced new interfaces and sanitized online services aimed at kids. CompuServe just launched an ultrafriendly version called WOW!, which offers the Kids' View online service especially for eight- to 12-year-olds. Although Dow Jones isn't aiming its new Business Center on AOL at children, just being present on AOL will make it more visible to a consumer market.

Still searching

Traditional online systems are still trying to reach the elusive end user market. The potential market is closer than ever, as more people appreciate what online searching is and know its value and have the desktop equipment to go online. DIALOG says it hasn't quite reached the 60 percent goal it set in 1989, but across all of its product lines about 50 percent of users are end users.

But selling to individuals remains difficult and costly. All the traditional online services still rely on information professionals to help bring end users to online searching, by evaluating and selecting services, by negotiating prices and subsidizing costs, and by providing training and search assistance.

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