At one point in an episode of the campy Batman TV series of the 1960’s, Batman came up with an obscure fact about ancient Egyptian history. Robin looked at him, totally in awe, and said, “Gee, Batman, isn’t there anything you don’t know?” Batman replied (seriously), “Yes, Robin. A few things.” From the crystal ball to The Library of Congress to HAL, the computer in the movie 2001 A Space Odyssey, we seem to have developed something of a fanciful obsession with the concept of omniscience. Then, along came the Internet and the World Wide Web and that fanciful obsession has turned into a cross between an expectation and a demand as a birthright.

When we power-up and start surfing, we expect it (whatever “it” is) to be there. We have no patience for it not being there. Indeed, we take it as an affront from a technologically inferior organization if it is not there. This level of assumed access to information on the Web has already been demonstrated in interesting ways. Before the Web, FedEx spent considerable effort in promoting their package tracking software, which customers could install on their own PCs to contact FedEx’s computers and track their packages. That capability now, of course, also exists in FedEx’s web-site and is heavily used, there. The point is that FedEx never really promoted the website version. People just assumed that if FedEx had a website, they would be able to track their packages through it. I actually had my jacket on the other day, ready to leave my office to walk over to the library to get a copy of the latest Fortune 500 list for some work that I’m doing, when it dawned on me to see if Fortune Magazine had the list up on their website. They did (and it cut into my exercise for the day!)

The static content of website pages can provide a great deal of useful information about an organization. However, it is inherently limited in scope. It is also relatively constant rather than dynamic in nature. Pretty pictures and static text in website pages are much less than the tip of the iceberg. Those of us in the database field have been saying since day-one that hardware, software and networks are all secondary to the data. In the world of the World Wide Web, the real action lies in the ability to access an organization’s databases through its website. Current or potential possibilities abound and are endless. First, there is the simple query:

- Tracking a package through your shipper’s website.
- Reading a newspaper, magazine, encyclopedia, journal article, legal case, etc.
- Getting the latest stock quotes, sports scores, election results, etc.
- Checking your bank balance through your bank’s web-site.
- Checking the status of an insurance claim through your insurance company’s website.
- Checking the status of an order through your supplier’s website.
- Accessing your grades and other records through your university’s website.

Then, there are the more complex programs initiated through an organization’s website which must interact with its databases:

- Ordering a book through a virtual bookstore.
- Applying for and getting approval for a bank loan.
- Making a reservation at a restaurant or on an airplane.
- Placing an order with an industrial supplier.
- Applying for admission to a university.
- Shopping for an automobile.
- Looking for a job.

One of the intriguing entrepreneurial possibilities is the creation of the virtual enterprise, which is entirely Web-based. Amazon.com is a prominent example of this. Egghead Software is an example of a company that had a storefront retail presence but is giving it up to become a virtual enterprise on the Web.

Of course, along with the opportunities come the inevitable challenges:

- Privacy. You or someone authorized by you should be the only ones to have access to your data through the organization’s web-site.
- Security. An organization’s information systems environment must not be put at risk by allowing the public appropriate access to its data. This need has spawned the considerable sub-industry of firewalls.
- Performance. All of this new data access activity must be supported by an adequate hardware and network infrastructure.
- Competition. In the midst of dealing with the millennium...