
New Frontiers for Information Sources and Information Gathering

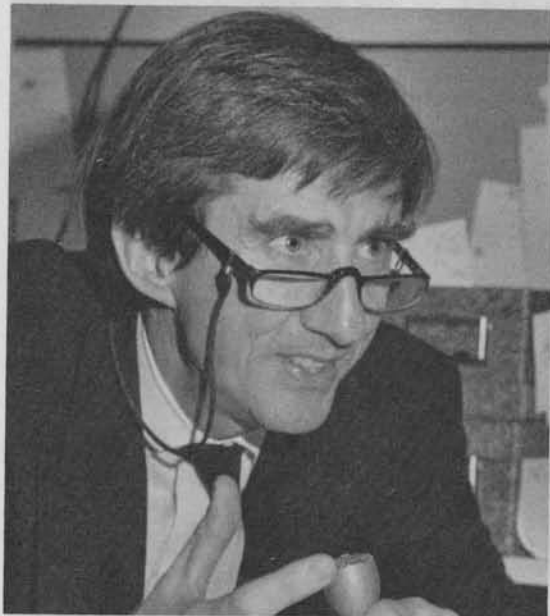
Matthew Lesko

As I set out to predict dramatic changes in information and data collection, please remember that if I could foretell the future I would not have to earn my living getting information for people. So with this disclaimer, here are some thoughts about how the Information Age will change, and I intend not to focus on CD-ROM at all.

The new frontiers I envision are both macro and micro in nature. This is to say that they will impact both on industry and the individual. So if you are connected with the information business as either a scout or a supplier, these trends will affect you.

Trend 1: New Information Generators: State and Local Sources

I place state and local government first because it is the biggest and most significant new frontier. In the past, the federal government has had virtually no competition as the largest information supplier worldwide. Now governments at



Matthew Lesko granted a radio interview during the Wednesday night party at the Forsyth County Library before he delivered this speech sponsored by the Reference and Adult Services Section on Thursday morning.

both the state and local level are going to compete for this title. What is accelerating this phenomenon are two additional national trends:

- the shift in leadership from the federal government to the state and local levels;
- the slowdown in domestic market growth for most companies causing executives to seek out new and more targeted market segments to sell their products.

These national trends are evident everywhere. Consider the financial situation. The latest figures from the Bureau of Economic Analysis show state and local governments as a whole enjoyed a *surplus* of over sixty-one billion dollars last year, while the federal government drowned in a two hundred billion dollar deficit. Many governors, notably in Virginia, Massachusetts, and Pennsylvania are trying to solve economic and social problems with new ideas and are able to attract top notch people to government. As a result, these states and others are in the forefront of collecting data in diverse new areas. As more of these sophisticated information systems develop, the data will become available to the information industry for next to nothing.

The majority of the states are making money in large measure because they are attempting to solve stubborn social and economic problems. In contrast, the federal government is getting deeper in the red and continues to retreat from domestic dilemmas. Even with the political hoopla over conquering the nation's drug epidemic, most policy-makers in Washington believe that the heart of the solution lies at the local level with parents educating their kids on how to "say no." No federal money has yet been earmarked for more information and analysis into the real causes and potential remedies.

The bullishness of state and local government is clearly evident in the availability of demographic information. Population data are more current and often cheaper and easier to obtain locally than from the federal government. Some State Data Centers actually give away the same information for which the U.S. Bureau of the Cen-

sus charges several hundred dollars. Directors of several state labor divisions tell me that they give marketing executives *free customized industry data* for as many as two hundred zip codes in three surrounding states on IBM PC compatible floppy diskettes. This sort of cooperation is reminiscent of how the federal government used to operate. Furthermore, much of the data are collected by the states and eventually distributed by the feds. Given the bureaucratic lead time, this means you can actually get your hands on data from a state a year or two before it is available from Washington.

As the market for anything matures, it produces more segments. How things have changed from the days when Henry Ford said his automobile came in any color as long as it was black. Now every company from bathroom towel manufacturers to ice cream makers are keenly aware that different regions of the country are attracted to different colors and flavors. As products and markets mature, marketers will demand more sophisticated clues for identifying new segments. And this will require more detailed data, which often can be found at the state and local level. State data bases are on the rise; already they can generate such specific localized information as county cancer incidence rates and the names and addresses of all men over six feet tall who wear glasses.

Trend 2: Intelligence on Company Executives

By the end of the decade it will no longer be adequate to piece together a marketing and financial profile on one's competitors. Although it can be difficult to uncover pertinent company information, the task has become easier as more firms specialize in corporate snooping. As executives devote more time to analyzing competitive information, they will begin to realize that it represents only a part of the intricate puzzle and that often this type of intelligence is hopelessly outdated. To compete effectively, executives will have to begin to *anticipate* what their competitors' plans are, and this requires understanding the backgrounds of key corporate managers. If financial information on a competitor is all that's necessary, then the Russian KGB would only have to go to the Government Printing Office once a year to buy a copy of *The Budget of the United States*. The Soviet Union would not need an army of agents stationed in Washington to monitor policymakers in order to anticipate their future moves.

Another interesting national pastime that complements this trend is the country's fascina-

tion with the lives of prominent individuals and celebrities. Radio talk shows, NBC's Entertainment Tonight and *People* magazine are all indicators of this. Also, the depersonalization of our society has increased our desire to know more about the people around us. If you were going for a job interview, you could probably find out the interviewer's salary, or another hypothetical case, discover to whom your neighbor owes money.

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Trend 3: Reliance on Experts

Growth in the computerization of data will actually lead to an increased reliance on individual experts for information. This may sound elementary but it seems unavoidable. No doubt computers have solved many information problems. This powerful technology has been a godsend in terms of handling vast amounts of data. However, computers are ill-equipped to discern what stored information is useful.

Several decades ago only a select few were able to get their material into print. Now, anyone with a copier machine can be a publisher. People from all corners of the country are now copyrighting material which hungry computers are eager to store and index. Now when unsuspecting researchers tap into data bases for help on a given subject, out spews fifteen hundred citations. The researcher now has a bigger problem than at the outset; he does not have the time to read all the citations, let alone dig up all the articles. My contention is that it takes approximately seven telephone calls to track down an expert in the field who reads all the journals and reports and can steer you to the more relevant information. Furthermore, if an expert is approached in the right manner, more often than not he will delight in sharing his knowledge for free.

Another disadvantage of many data bases is that much of the information is simply copied from outdated printed material usually derived from traditional sources. Conventional sources represent only a small fraction of available information, and primary reliance on them can leave a decision maker out in the cold. Each year major publishers produce approximately fifty thousand books and one publisher in the U.S. Government, the National Technical Information Service

(NTIS), generates over eighty thousand annually. Even if you are aware of NTIS resources, you are still missing the boat. A report by the U.S. General Accounting Office claims that NTIS only gets twenty per cent of what it should have. Experts will play a greater role in helping us find pertinent information that never finds its way into a computerized index.

Experts are also better prepared to help us deal with the future. The faster the world changes around us, the faster traditional published sources and those in bibliographical data bases lose their value. Most experts worth their salt will be able to tell you what is going to be in the literature or data bases next year, because they are aware of what is in the pipeline.

This method of using experts for answers that won't appear in the literature until the future will accelerate another trend: teleconferencing, electronic forums, or remote bulletin boards. This online communication with experts has the potential of achieving growth rates that were once attributed to online data bases.

Professional forums are an ideal way for one to tap into an expert, or a group of experts, without having to search the country by telephone and interrupt experts during their busy day. Here is how a forum works. Let's say you are a young veterinarian in the middle of Iowa trying to treat a three-legged dog for the first time. You dial up an online forum for vets and pose the question. Within the next day or two, the vet is likely to have free advice from several veterinarians who have dealt with similar cases. This shared expertise represents a tremendously efficient use of resources. You get the answers, almost immediately, without having to wait for the next annual meeting or the *Journal of Veterinarian Medicine* to carry an article on the subject. All this time saved will enable us to work on unsolved problems rather than to reinvent the wheel.

Trend 4: More In-House Research and Fewer Information Brokers

The future of gathering information will reside with the in-house researcher and the small information broker. As companies become more sensitive to the importance of information, they will be more likely to invest in a specially trained group of managers than to hire services from outside. More important than the cost effectiveness in such an exercise is the knowledge savings. I mean savings as a way of keeping knowledge in-house. What a company does when it hires an information broker is to pay him to get smart about the company's industry or market. Typi-

cally, when an industry or topic is researched, only a small amount of the data collected are actually used to satisfy the client's request. Much of the time is spent cultivating contacts and sources within the industry who did not have answers for the one pressing topic under investigation, but could be helpful for future research problems. If the person doing the initial research was in-house, the answer to the next question probably would be easy to find, because the institutional memory accumulated in-house remains in the company. It would be similar to having an outside company do your research and development; certainly it's done, but not very often.

This, along with the fact that growth in service companies suffers from diseconomies of scale, is why the outlook is not bright for large information brokerage companies. As these service companies grow, their overhead grows disproportionately higher, their quality suffers, and they are forced to charge more for their services. Such diseconomies of scale work well in those industries where there are strong unions, or a lot of hocus pocus, like doctors, lawyers, and high priced management consultants. I doubt many information brokers will reach that level because so many organizations such as public libraries give so much of it away. Consequently, it will be next to impossible for mega-brokers to achieve adequate growth. However, small brokers who can keep their overhead and personnel count down can be very effective and profitable in the market.

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Trend 5: Crisis in the Library

The library faces a challenge and opportunity to become the most critical component in an organization. However, most libraries are not staying in step with the information explosion because they are reluctant to acquire new skills required for solving more difficult and advanced information problems. Libraries which refuse to change and adapt will be relegated to serving only the archival function in the community or organization. This is certainly at odds with where the Information Age is headed.

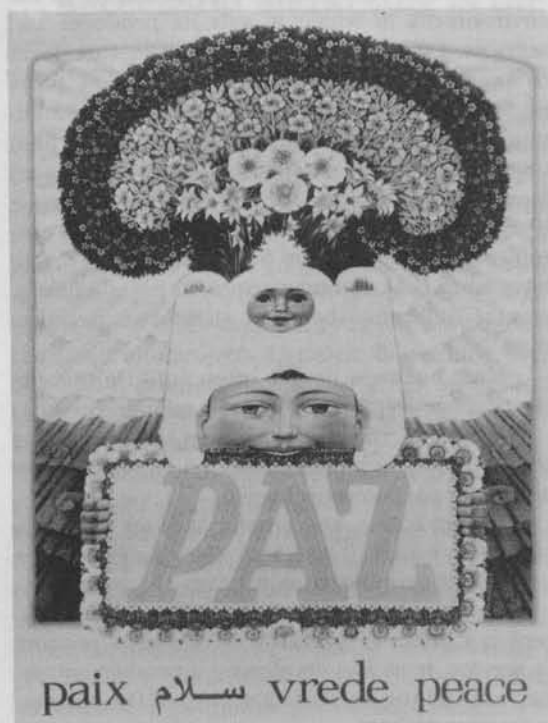
Libraries will only regain their importance if they become the "Information Center" serving

decision makers who must deal with what is going on today and tomorrow. Traditional library sources and skills fail to serve this constituency well. Even computerized data bases are mostly filled with information about yesterday. The library must learn how to use non-traditional resources, experts, and the telephone as well as how to present information. This requires learning a whole new set of skills. The archival and passive skills of the past will have to be replaced with more active communication skills in the future.

When are these seeds of change actually

going to take root? Most all of them are already evident to some degree or another. The bigger question remains, "When will these trends be commonplace and no longer beacons of the future?" My guess is, these changes will be incorporated into our daily information gathering efforts by the end of this decade. The only thing that remains constant in our lives is change, and this is true in the Information Age. The winners will be those who can identify new frontiers and take advantage of them before everyone else does. I hope this article starts you on your way. 

Brrrrr... warm up your winter with a cozy book from the library



Posters for Peace was created by four international artists for the Children's Book Council. Full-color, 18" x 24" posters by Mitsumasa Anno (Japan) (left) and Felipe Davalos (Mexico) (right) are part of a four-poster set that includes one poster each by Mitsumasa Anno (Japan), Leonard Baskin (U.S.A.), Felipe Davalos (Mexico), and Lisbeth Zwerger (Austria). For a full-color brochure that includes price and ordering information, send a stamped (1 oz. postage), self-addressed, #10 envelope to: CBC, P.O. Box 706, 67 Irving Place, New York, NY 10276.