Editorial

Hybrids in search of a hothouse

Over the past forty years, we have seen the information industry flourish. Success has come as a result of the cultivation of knowledge and its delivery. The fields have become rich with information crops. We have changed the nature of the search for information. Before, the quest was conducted in a nomadic manner. We were guided by *memories* of where food had been found before. The hunt was marked by biblio-graphic and indexing landmarks whose location and existence were tribal memories handed down from father to son.

During the fifties, we harnessed the oxen of data processing. We increased produc-tivity and saved time. During the sixties, we introduced the plow of computing. In the seventies we learned to fertilize with increasing capacious memory devices. We extended the consumption of knowledge by online distribution techniques. The eighties saw the intensification of production with other media, and the nineties promise to widen the marketplace through networks and other exotic plants. *Surely we can feed the world.*

For years we *have* fed a staggering variety of information products to an eager (?) public. We published in print and exploited other technologies with film packages that remedied the space consuming properties of the print counterparts.

Next, we were cajoled and bullied into online interactive distribution methods fol-lowed by the latest packaging revolution, the compact disc. We are peeking cau-tiously into networking as the next step.

We are told that there are 4,000–5,000 databases; seed stock without limit. We plant much but we profit from precious little in our systems. Even the largest of our farms offers only a fraction of the total goodies and the crops are harvested in a very selective fashion. If we can believe the statistics, only some hundreds of the databases we offer are consumed in any quantities. Is everything else broccoli?

In our haste and in our pride, we seem to have forgotten the lessons learned by the good farmer to diversify, to conserve, and to harvest with an eye to the future. To labor the analogy, what about the seeds?

Database exploitation has followed a monotonous pattern:

1) Some new technology is introduced.
2) We wait for a sufficient time to allow the technological application to 'mature'. In other words to become risk-free.
3) We employ the technology, but make little effort to adapt the database content

to meet the attributes the market demands.

4) We fumble around with pricing structures so that we can be sure that we have exploited the technological advantages under the sometimes doubtful pretext that we have added value.

5) We wait until the *next* technology is presented and repeat the process.

I suggest that database producers and operators of technology-based services have got to break this pattern for the reason that it is going to fail tests of economy and user acceptance.

The duplication and replication of database content in a variety of media has resulted in the meager profitability status of the smaller alternates. Unless there is something totally unique in a small database, it will be placed in a second tier of selection, serving as a safety factor for an extensive search. Small databases *do* find a home in omnibus services, but cost benefit analysis will not allow this state of affairs for very much longer.

In the early fifties, when automation dawned on the information world, the tools were limited. Data processing technology forced information into eighty character formats. These restrictions were overcome with imagination. Coding schemes were devised, inverted file structures were used to compress information. We made do. Now the problems of small database survival require us to apply the same kind of imagination.

One solution lies in hybridization. The agronomist has learned to look at plants in terms of their unique attributes. One plant may have a low yield, but is adapted to climatic conditions. By hybridizing such a plant with one with high yield, a hardy and productive crop may be achieved.

As it happens, plants are apolitical. Permission is not necessary, nor cooperation a factor in the botanical world. Databases *are* political. Self-interest is constantly at work with perceived national and corporate needs defeating logic.

In the agricultural situation, a cold winter can force the hybrid solution. In the information industry, 1991/1992 was one of the coldest in our history. We are seeing consequences of these adverse conditions in the form of mergers and acquisitions. This strategy works. When only *one* plant is available, the factor of choice is eliminated.

If we are to maintain the diversity and richness of our information resources, we need a hothouse to provide the hybrids. We *can* hybridize technologies. By integrating online and compact disk media, we can minimize the deficiencies and maximize the advantages of the two techniques. And, if we can foster cooperation among database producers, we can produce hybrid databases that will adapt to economic realities and provide for abundance. We can hybridize the increasingly abundant distribution channels that await only the innovative thinking we used to apply before this became a *business*. Before we were so focussed on the 'bottom line' that we forgot to take a chance once in a while.

Other disturbing trends leading to integration of service while limiting choices are emerging, but we will leave these to a future editorial. 'Where there is no vision, the people perish.'

A.W. Elias