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Computer-Based National Information Systems: Technology and Public Policy Issues.
September 1981

I approached reading the 1981 Computer-Based National Information Systems policy assessment more like reading a historical artifact than a relevant policy document. Because its text covered policy implications of rapidly evolving computer information systems, this document undoubtedly quickly lost relevance. From a 2005 perspective, the concerns covered in this text have proved amazingly accurate. The text list privacy concerns, the need to spur innovation, and even America's rapidly growing information-based economy. However, instead of focusing upon the things that these researchers got right, I believe it to be more interesting to examine where they went wrong.

Many of the technical concerns mentioned in the document such as the "software bottleneck" are directly attributable to the documents underestimation of market power in the information industry. The authors were extremely concerned with the need to somehow coordinate information system development to insure that all of the systems would work together. Incompatibility is still a major concern, but work around solutions were developed to mitigate such problems – although some efficiency is lost. This is an example of how the computer industry has proven to be extremely proficient at finding solutions to the roadblocks that its industry faces. Moreover, at least from my perspective, the information market steamrolled through many of the privacy concerns that were mentioned, and it seems that present policy makers are in the process of catching up to technical capabilities.

While it did consider increased data accessibility, the assessment failed to recognize that as computers became cheaper and more powerful, individuals would have the hardware and software to take advantage of the government's databases.   The assessment's authors seemed to believe that complex data usage would require a highly skilled individual and industry support. The personal computer would allow individuals to access and use data in ways previously only available to large corporations and agencies. Through the personal computer, individuals have been able to access private, government, and especially public information in highly innovative ways.

In closing, the most disturbing part of the assessment was three of the four topics that they listed secondary concerns:
    1. Computer Crime
    2. Transborder Data Flow
    3. Information Gap
    4. Computer Software Protection
The first, third, and fourth concerns are issues that are of extreme modern day concern while the second concern has become a relatively moot point because of the world-wide-web. While the National Information Systems assessment does offer some observation, the conclusions did not stand the test of time making the text seem to be almost naïve.

Unfortunately, I do not know much about the state of computer science during the early 1980's, so I am unable to determine whether the assessment failed to consider and emerging aspect of computerized information systems. It would be of interest to obtain a recent publication of a similar technology assessment in order to observe how Congress changed its views on computerized information.