

APPENDIX 21. CREATING THE MAGIC OF INFORMATION

CREATING THE MAGIC OF INFORMATION: A private sector information industry comment

Written by Paul G. Zurkowski
Founding President of the Information Industry Association and
Member of the NCLIS Group of Experts for This Assessment

INTRODUCTION²²

The United States National Commission on Libraries and Information Science (NCLIS) draft report, "A Comprehensive Assessment of Public Information Dissemination," is a masterful and cogent job of mustering the facts and good arguments relative to government and government perceptions of what must be done to make its information available to the public in the Internet age.

Unfortunately, it is but half the job facing the decision-makers in trying to decide on the future of these activities.

As the founding president of the Information Industry Association, beginning in January 1969, I had the benefit of working with senior executives of this industry for more than 20 years in helping shape its evolution as a major component of the American economy. It was the leaders of the on-line information industry, Roger Summit with Lockheed Information Services and Carlos Cuadra with System Development Corporation On-line Services (the distribution part of the information industry), their data base suppliers (the production part of the information industry) and the retail part of the information industry made up of information retailers, people skilled in utilizing existing information services to meet the needs of their customers, which together popularized on-line access to value-priced information services worldwide and were the forerunners of the internet age.

Unfortunately, the business lessons learned from that period forward have largely been lost on the Internet generation, which, ironically, itself grew out of the information industry's work and experience. For purposes of this discussion, the information industry's particular experience in dealing with government information marketing efforts is essential to crafting elements of the solution to the problems. This report seeks to identify and mobilize those elements.

However, the Commission's draft report avoids even a discussion of the lessons learned by the information and publishing industry. We need to combine government experience reflected so effectively in this draft report, and the information industry's experiences and resources, in order to achieve the results this report seeks.

Some of these issues are high lighted in the following "Ten Commandments for the Internet Age."

²² Available at <http://www.nclis.gov/govt/assess/assess.appen21.pdf>. This appendix was last revised on December 5, 2000.

TEN COMMANDMENTS FOR THE INTERNET AGE

1. Thou shall be more sensitive to information as a wealth-generating vehicle.

If there is no prospect of economic gain involved with making information content available, there will be fewer jobs and less wealth generation. Information capabilities are one of this nation's most potent exports. Content is to wealth generation in the Internet age, as raw materials were to wealth generation in the industrial age.

2. Thou shall recognize that information has value in direct proportion to what is at stake in a decision

My most favorite quote is from one of my most favorite information guru Chris Burns: "Information content is not homogeneous or all of it of equal value, and it must be target-marketed."

Three examples of pricing methods used in targeting a market are:

a. Value pricing.

For content that has a specialized and time-sensitive value to a niche market.

The services of the Bureau of National Affairs in Washington is but one example of a company successfully specializing in acquiring government information in a timely fashion utilizing all manner of media to make it available to not only its specialized markets but the public at large on an exacting time basis (The regular reporting of Bureau of Labor Statistics figures so critical to the national economy, is one example of BNA's offerings). Value pricing allows the information company to determine what the value of its services is to its customers. Can the information be garnered elsewhere in the time required? What time and resources are saved by the delivery of its information? A lot of things get factored in to setting a value price, little or none of which is cost of production.

b. Commodity pricing.

For content that serves broad sectors of the general public.

In the book publishing industry there is a pricing system tied to cost of production called the theory of thirds: one third for the cost of producing the information product, one third for marketing and distributing the information product and one third for return on investment, taxes and profits. A premium may be added for popular authors whose followings may permit a slight bump in the bookstore price. Library purchases often guarantee the financial and distribution success of the product. The pricing of a commodity leaves little flexibility for the publisher.

c. Marginal pricing.

For content being distributed to achieve social goals, assisting the handicapped, educating the have-nots, etc.

In this case, only marginal costs of providing information to a user are included in the price. It is important, therefore, that government understand what government information relates to what market, for if it tries to treat all information as appropriate for marginal pricing or even in some cases

commodity pricing, Gresham's law will apply. The marginal price will tend to drive goods priced otherwise out of the market, with the result that major segments of the economy are poorly served and wealth-generation based on innovation, timeliness and effective marketing will be voided.

3. Thou shall recognize the benefit to the public of publishing rather than "privishing" an information service.

Jim Adler's Congressional Information Service was innovative and incredibly working with the staffs of more than 250 congressional committees and subcommittees in order to gather the daily output of the Congress (hearings, reports and all the output of Congressional Committees other than the Congressional Record) organize it coherently and make it available to the world in microfilm with on-line search tools. In addition, at a time when the Library of Congress was considering discontinuing its microfilm publication of all congressional bills and resolutions the Congressional Information Service took over their publication at a cost to consumers less than a third of the price offered by the Library of Congress. This was possible by virtue of CIS's marketing effort, which more than quintupled the market for the product. Mr. Adler tells the story of his marketing of a book while employed by a publishing house. His boss said he hadn't published it but had "privished" it. There is a significant difference.

4. Thou shall look to the private sector for significant innovation.

When the Congress first passed the income tax laws, two New York University law professors set out to publish the tax laws and regulations. They found that by the time the books had been printed there already were numerous amendments. What to do? They severed the bindings, punched holes in the pages, added pages to incorporate the amendments, new regulations and changes in the law and produced the first loose leaf tax service under the name Prentice Hall (the maiden name of each of their mothers) a service that faces a lot of competition today.

The on-line revolution was led by two pioneers, Roger Summit of Lockheed and Carlos Cuadra of SDC, who sweated through the software, marketing, storage and retrieval problems for a vast array of databases, including, incidentally, NTIS, for distribution on-line through the application of ARPAnet's packet switching capabilities. Their biggest contribution was to wrench users out of their trained incapacity to use online tools. They are excellent examples of the innovation required. Without their 20-year efforts at this unprecedented undertaking, the Internet would have been much slower in its rise to dominance.

Examples of private sector innovation abound. Find-SVP is but one of a very large group of companies providing "retail" access to the information resources accessible in print and on-line which rely on skilled librarians to sharpen the customer's focus on the exact question for which the customer seeks an answer and to expertly search the relevant knowledge base.

Software designers developed the software by which many information producers arrayed their information content to be accessible online as well as in print. Where do you think HTML came from?

The Information Industry Association, which organized this plethora of exciting and innovating companies, helped industry, the public and government recognize and deal with this group of highly creative and independent companies as a new industry. IIA's efforts helped facilitate the sharing of experience and the growth and expansion of the industry.

5. Thou shall not assume a monopoly position in the distribution of government information.

Access to government information is maximized by assuring competition in its distribution. No single entity can imagine all the appropriate means and formats and marketing approaches needed to make information available to all with a need for it in our complex economy.

The first full-text collection of legal case opinions was created by Mead Data Central in the form of a service called Lexis. They later added a full-text service called Nexis for news information. Lexis has had a far-reaching impact on legal education and the practice of law. In education Mead focused on training law students in the use of their system, which paid off as these young lawyers started asking their new employer law firms to subscribe to the service. West Publishing was several years behind in introducing its Westlaw service, because of a casebook mind-set. West's home office in Minnesota even carried the words "Law Books." West did not immediately see or react to the market Mead developed because Mead's product did not significantly affect the market for law books. Now the legal market is the beneficiary of a high level of on-line competition. If the government had created and marketed this product at marginal cost levels, neither of these premiere information publishers would have been able to enter the market or to apply value pricing to its services—to the severe disadvantage of the legal profession.

6. Thou shall seek to learn the marketplace lessons of other-than-government information undertakings.

In the financial markets area important information is being spun off of transactions in the market. (This information is necessary to the making of very important decisions and is priced accordingly.) Each of the stock exchanges is served by a wide variety of information services packaging and distributing information vital to the operation of our national economy and published by private corporations. The stock exchanges, which themselves have obvious information skills and capabilities, have found it in their own best interest to facilitate the financial information services offered by such companies as Dow Jones & Company, several McGraw Hill companies and many, many others.

In the case of McGraw-Hill, its bond information service developed a major innovation when it provided the information in ink-print and on-line because they found that that is what their clients wanted and would pay for. The conventional wisdom at the time was that on-line information would kill the market for ink-print products. Reaching that profitable decision involved a significant investment in market research.

7. Thou shall encourage private sector firms to develop information search tools.

In the legal field, a good example is Shepard's Citation Service. A turn of the 19th century capability serving lawyers and courts is a service, which relates every case to every case cited in a decision, whether it was affirmed, distinguished or overruled. Shepard's Citation service is a classic example of a private sector firm getting control over a large collection of information in order to serve a specific niche market with a less than full text information tool essential to the operation of that market segment.

In the scientific field, Dr. Eugene Garfield, at the Institute for Scientific Information, applied the citation concept developed by Shepard to the complex field of science research and publishing. It proved to be a significantly less expensive way of identifying relevant research in the literature since it did not involve abstracting each article but tagged important information by typists typing the journal article title in a citation mode. Garfield also was able to diagram an area of research by identifying

what research cited what articles ultimately identifying the lead piece of research by the number of articles citing the lead article. This diagramming capability also identified all the participants in a particular area of research—to the ultimate gain of our scientific apparatus and the general public.

To get a new and unprecedented product off the ground took clever deep-pocket marketing strategies. Such a service won't evolve for E-government subjects unless incentives and legal protections are provided.

A contrary experience was that of a company that sought to index the Congressional Record on a daily basis for early morning same day delivery. Experts who regularly read the Record in their jobs were sought across government and the private sector each to abstract a segment down to every discrete entry in the Record in early pre-dawn hours daily. This level of abstracting eventually became too costly to maintain.

8. Thou shall honor Article I, Section 8 of the U.S. Constitution.

Our founding fathers placed a high value on copyright. It grew out of their revolutionary era experience with England's Crown Copyright. The PIRA²³ of that era (please pardon a private sector concern about the power of government in this critical area) was the Stationers Company, which was authorized by the King to grant Crown Copyrights to publishers. A Crown Copyright was necessary for a publisher to publish. The first newspaper in the colonies was the Boston Newsletter (Readex Corporation memorialized this historic event by providing me a copy of their microfilm collection of early American newspapers which leads off with the Boston Newsletter). When the Boston Newsletter supported the Boston tea party, the Stationers Company labeled it a seditious newspaper and revoked its Crown Copyright and its right to publish. This was such a piercing fact of revolutionary life that the founding fathers took care of the problem in Article I. Since the freedom of speech and press provisions waited for the Bill of Rights, you can appreciate the significance they attached to their copyright solution to the Crown Copyright problem.

The copyright provisions of the Constitution were considered key benefits of the revolution because they took copyright away from the government and gave ordinary citizens ownership of the products of their minds. This concept seems right for our time as well.

An equity argument can be made as the basis for providing protection to private sector companies, which develop search tools, which may not rise to the level of copyrightability. Some attention should be given to a national unfair competition statute which would encourage innovation in these areas by protecting the innovator against someone standing on his shoulders and stealing his work product (reaping where he or she hasn't sown).

9. Thou shall forget the Public/Private Partnership idea.

Information content is a unique, but real, economic good. The public/private partnership idea has outlived its usefulness in efforts to sort out a government/industry relationship to deal with this unique economic good. A first step would be the creation of a business relationship based on mutual respect for each other. Secondly, it must be recognized that incentives are needed in order to mobilize the totality of resources available in this country. Just reading this NCLIS report makes clear the country faces a huge challenge and all parts of the economy need to be melded together to meet the challenge.

²³ The Public Information Resources Administration (PIRA), proposed by the Commission.

If the national goal is to provide information directly to affected communities of citizens, one way to do so is to seek out and rely on companies which have created a market for information and are currently serving a specific targeted community. It's being done in the library community where the community served by specific libraries benefit from access to government information. Devise, or call on private sector firms to devise, incentivised ways to funnel the government information to populations in the markets they serve. These efforts can be redundant if the right incentives can be worked out. Government must recognize that these functions cost real money and that incentives to invest the money needed to do the job are necessary. Putting government capital at risk behind a government marketing scheme should not be considered. For most market segments there are a multiplicity of information services capable of implementing workable dissemination schemes. These are not public-private partnerships but simply good, day-to-day business relations. Make them a fact of life, rather than an idealized public-private "partnership." Few business experts recommend a partnership as the best vehicle for economic activity.

Does the government label computer manufacturers or other hardware and software or communications companies "public/private partners" when the government purchases computers, software or communications services to enter, organize and use the Internet to disseminate information?

10. Thou shall not directly engage in government marketing of information.

The use of tax money by government personnel undisciplined in market-place factors and experience to do what the private sector has experience doing and is engaged in doing is inappropriate and unconscionable from a taxpaying information company viewpoint. Nor is it appropriate for a government-funded entity to be proprietary about its tax-supported information content to the extent of excluding or limiting private sector marketing and distribution efforts. The partnership idea seems to grow out of a kind of dog-in-the-manger attitude: "This is our information and we must control it." It isn't a question of the rights of government ownership, but one of accomplishing the most effective dissemination.

The role of government should be to ensure the operation of a fair, open and competitive information marketplace so as to ensure that all citizens participate and benefit from its expansion and the wealth the activities generate. In fact, this concept of a fair, open and competitive marketplace, including the Internet experience, is a concomitant element of the ascendancy of democracy worldwide.

How best can government and industry profitably reach out to the growing worldwide market for information, both privately and publicly generated and disseminated?

Certainly these are some of the considerations, which should not just appear in, but also be a driving force of the NCLIS report.

CONCLUSION: INFORMATION IS MAGIC!

Businesses like the Lockheed, SDC, Institute of Scientific Information, Shepard's, Bureau of National Affairs, Congressional Information Service, Dow Jones, McGraw Hill, Mead Data Central, West Publishing (some of which have changed ownership over the years) and the whole information industry deserve the confidence of the government and the American people based on their awesome wealth-generating capabilities, all in the service of specific niche markets across the United States and the world. Each of these companies has demonstrated that the right information at the right time is

magic for the person or business who can find it, recognize it and capitalize on it. They are experienced in creating this magic from all manner and means of information. That is the basis of wealth generation in information. Incorporation of their capabilities in support of the mission of this report is imperative if it is to be successful.

The information business is an ever-expanding universe. Government should fully tap into its capabilities to accomplish its creative and distribution objectives, but a better meeting of the minds in this field is required to create the climate within which that can happen.

It is imperative that private information services become an integral part of the government and Internet paradigm.

Toward that end, a major private sector conference focusing on content as an economic good should be held to assist in completing the second half of this report.

Thank you for allowing me to share these thoughts with everyone who is persevering in efforts to identify and achieve the best of all possible results in this area. Thank you for your continued diligence.

In this connection, I recommend that a major conference be held focusing on ways to harness private sector capabilities in disseminating government information content. Many, many information and Internet companies have things at stake in this arena and need to be encouraged to focus on how they can use their entrée and good will in their targeted markets to help facilitate the government's important dissemination mission. I personally organized such a conference from which was born the Publisher Copyright Clearinghouse, in that case the private sector publishers and information companies. There clearly is a need for as comprehensive a statement of these capabilities to match up with the current statement of government information functions already present in the report. A conference is one tool to get those capabilities to surface in support of this mission.

There is both energy and expertise in the private sector without which you will not do as good a job of getting information out to people in a form that is useable, as you would like. It would be foolish to try to do the job without that energy and expertise and it would be inappropriate to try to duplicate it in the public sector. That's called reinventing the wheel.

Thank you for allowing me to share these thoughts with everyone who is persevering in efforts to identify and achieve the best of all possible results in this area. Thank you for your diligence.