Conference Report

Association of Information and Dissemination Centers
1982 Spring Meeting

Introduction

In volume 1, number 6, Information Services & Use brought to its readers the major papers of the ASIDIC semi-annual meeting held in the Fall of 1981. We are pleased to announce that the speakers at ASIDIC's 1982 Spring Meeting have also agreed to publish their papers in ISU. An excellent summary of those presentations has been produced and appears in the following pages. ISU acknowledges with thanks the President of ASIDIC, Dr. Rita Lerner, who granted permission for this early disclosure of the work of the ASIDIC group, and Don Hawkins, editor of the ASIDIC newsletter, who produced the summary.

Identification of issues and views

Margaret (Peggy) Fisher, of LINK Resources, Inc., stressed that information is meant to be used and re-used. To supplement extensive original research, LINK re-formats information, packages it, sells it, and hopes that users keep on using their products. If there are too many restrictions and caveats on using information, the providers will be out of business. Value lies in user creativity—what counts is timeliness, relevance, and orderliness. The information provider is analogous to the automobile dealer selling a vehicle. When the vehicle is used in a profit-making venture, the dealer does not get a part of the revenues, nor is he responsible for shortcomings of the business. Many information providers may have a fear of the electronic age. What is the value of information when it is buried in a database along with a lot of other information? Its value lies in the use of the information, its analysis, etc. Questions change; repetition should not be feared because very few questions can be answered by exactly the same information.
LINK, a market research firm specializing in electronic information and media services, is acutely aware of the concerns of the information industry, including:

- government agency competition,
- surcharges on fee-based services,
- losing title to the provider’s data by electronic capture of it,
- acceptance of new technology,
- monitoring use (which is probably impossible),
- multiple copying.

Information brokers want databases in new subject areas, better mapping of results across existing services (especially business-oriented information), and merged bibliographies. FIND spent $175,000 on online searches last year, answering 10,000 questions for 6,000 users, and using eleven systems.

Ms. Fischer gave an overview of the information-brokering business. Large fee-based services have large corporations as their clients. Much of their business comes by phone, largely from marketing and R&D departments. Brokers are generally MBAs, lawyers, etc. Their fees are usually about $75/hour. Medium-size brokers are usually librarians. 20%-80% of their clients are in large corporations, 20%-50% are in government, and 5%-15% are in non-profit organizations. Fees range $25-$50 per hour. Small information brokerage firms are usually located near major cities. 61% of them use online services, and 80% of their clients are local or in the same state. Their fees are usually in the $25-$30/hour range.

In the information industry, the largest revenues are earned by source producers and distributors. They make data available over multiple channels, and the more successful they are, the more channels they use (excepting those that are directed towards closed user groups or specific job or industry services). In 1980, gross revenues in the industry were in the $1 billion area. LINK forecasts that this will rise to $1.6 billion in 1982 and $3.4 billion by 1985. The personal computer will play a major role in the information industry. There are 1.8 million of them today, and the software market for them is expanding rapidly. While most of them are used for business purposes, the home market cannot be ignored; about 2.5 million homes will have access to online information by 1985. The electronic information industry is mainly financial, but it is growing into a wide range of services, from tele-shopping and banking to news retrieval.

LINK recently did a study of the information industry and found the following growth figures:

<table>
<thead>
<tr>
<th>Category</th>
<th>1980</th>
<th>1985 (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference databases</td>
<td>63</td>
<td>206</td>
</tr>
<tr>
<td>Independent database providers</td>
<td>169</td>
<td>834</td>
</tr>
<tr>
<td>Credit databases</td>
<td>290</td>
<td>688</td>
</tr>
<tr>
<td>Financial databases</td>
<td>182</td>
<td>678</td>
</tr>
<tr>
<td>Econometric databases</td>
<td>89</td>
<td>402</td>
</tr>
</tbody>
</table>
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Revenues ($ millions)

<table>
<thead>
<tr>
<th>Category</th>
<th>1980</th>
<th>1985 (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real estate</td>
<td>35</td>
<td>99</td>
</tr>
<tr>
<td>Industrial databases</td>
<td>29</td>
<td>54</td>
</tr>
<tr>
<td>Law and government</td>
<td>26</td>
<td>121</td>
</tr>
<tr>
<td>Marketing</td>
<td>18</td>
<td>41</td>
</tr>
<tr>
<td>Sci-Tech</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>Demographic databases</td>
<td>11</td>
<td>54</td>
</tr>
<tr>
<td>News</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

The following are the main database users:

<table>
<thead>
<tr>
<th>Type of database</th>
<th>Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial and economic</td>
<td>Middle-level professionals</td>
</tr>
<tr>
<td>Econometric</td>
<td>Economists and executives in big companies</td>
</tr>
<tr>
<td>Stock quotes</td>
<td>Brokers and analysts, increasingly with personal computers</td>
</tr>
<tr>
<td>Market research</td>
<td>Analysts, marketing intermediaries</td>
</tr>
<tr>
<td>Chemical properties</td>
<td>End-user scientists</td>
</tr>
</tbody>
</table>

People want user-friendly systems, more detailed data, more pre-calculated figures, more cost-effective services, and more substances in chemical properties databases. It is important for databases to be timely, to have detailed coverage, historical depth, document-generation facilities, and producer support. Accuracy and reliability are taken for granted by users. End-users want detailed analytical data, regional information, flexibility of choice, timeliness, more company information, applications programs, the ability to merge outputs, and tiered (time-of-day or use-of-service) pricing.

Ms. Fischer stressed user-friendliness. It came up over and over again in LINK’s studies. The spread of videotex is one reason for the drive towards user-friendly systems. The personal computer is having a tremendous impact on the end-user market. Often, it is being used as an all-purpose terminal. Possible applications are tele-mail, tele-shopping, tele-banking.

Peggy’s talk was a fascinating overview of a fast-moving industry. It is clear that users are rapidly becoming more sophisticated, and—in order to survive—information providers will have to change and adapt their products and strategies to the marketplace.

The information producer’s point of view

Daniel Sullivan, of Frost & Sullivan, recounted some experiences with a database that was a failure. It was one of the first commercial databases and was available on magnetic tape in 1961. It contained announcements of US govern-
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ment contract awards in the defense area. It failed because it was useful to only a few users who were professional and aggressive. It was a capability, not a product, and required extensive user training.

Many people stop at capability, but capability is only the first step to a product. Mr. Sullivan feels that people wanting to sell an information product should approach ‘line people', not staff. You can sell to line people directly at a lower price; staff people get the capability at a higher price. You must become a soothsayer and make your database useful for forecasting. Frost & Sullivan began to prosper when they began to forecast and to prepare reports based on their forecasts; they were poor until then. The cause of most failures in the information business lies in the confusion between products and capabilities. So you should be glad when people want to re-package and re-use your product. It will then become more useful, and will have a wider application. The re-packager is not stealing; he is making information more useful and accessible.

The information broker's point of view

Andrew Garvin, FIND/SVP, pointed out that his company is one of the largest information retailers, with about 750 retainer clients. They have just become a producer as well because their database of market reports and studies is now online. By their definition, FIND does not either re-use or re-package information. They access over 300 databases through most available systems and pay about $250,000/year for online services. They usually forward offline prints to the requester exactly as they are received from the search vendor. In order to overcome the slowness of the mails, they have developed the FIND/SEND service in which they record the search on a floppy disk and transmit it electronically to the user's terminal, after which the disk is erased. They wrote about 300 letters to database producers and obtained permission to do this kind of transmission. They view themselves as an agent for the client. There is no control over what the client does with the results, but FIND thinks there is no re-use or re-packaging. Most of their searches are used for individual research projects. Clients are reminded of the law when they receive search output. Although FIND does not change the output in any way, Mr. Garvin suggested that it may be to the database producer's advantage to have the information re-formatted if this were done so that the end-user could use the information more easily. Since clients have trouble interpreting the output, FIND has prepared a guide to each database telling the user what the abbreviations are, etc. It might be better simply to re-format it so that clients would understand better.

The end-user's point of view

Stella Keenan, of Loughborough University, indicated that users are becoming more sophisticated, so that there is a growing demand for user-friendly systems.
Information must be provided when needed, as wanted, and in a cost-effective way. The old packaging is still there, but new technology is coming; users want timely, organized, relevant, and up-to-date information. We cannot estimate the amount of re-packaging that will be needed because of varied environments; however, it is certain that downloading will soon become a way of life. Ms. Keenan suggested that the machine-readable file is the product, and everything else is a by-product. Perhaps charges should be made for the by-products, not the product itself. When we buy a book, we don’t pay every time we use it. Books, however, are static and are not regularly updated. A database is dynamic and can be regularly changed or revised. A sliding scale of pricing encourages users to start using these sources. We need to worry about non-bibliographic databases (fact files) because there are more of them than of the bibliographic. There will be more inter-linked files, more interface programs, and more manipulation of data by the end-user.

Ms. Keenan gave a description of the UK videotex systems, such as Ceefax, Oracle, and Prestel. Oracle is a broadcast (teletext) system; Prestel is an interactive viewdata system using telephone lines; and Ceefax is a non-interactive system in which the information rolls by all the time. About 95% of the UK has access to at least one of these systems. They are used by both business and home users; Prestel is now available in some public libraries. Electronic shopping, such as ‘tele-banking’ and ‘tele-shopping’, is beginning to appear.

**Working groups**

The working groups considered the following three subjects, from which a draft ASIDIC position paper will be derived:

1. re-use and re-packaging that is and is not subject to fees;
2. elements on which fees should be based;
3. controls and procedures to regulate payment of fees.

**Group 1: Re-use and re-packaging that is and is not subject to fees**

Re-use is being done now, and it will continue. We should not limit users because the technology is available. Re-use is acceptable if paid for. Records should be attributed to the database from which they were taken. If they are edited, they must not be distorted or falsified. Contract changes are probably the simplest way to solve the re-use issue. There should be multi-tiered pricing for different levels of usage. Most users are honest and will pay if there is a simple mechanism to do so. A restrictive system will only cause users to attempt to circumvent it. This group did not agree on specific products to charge for, but did agree that any use not specified in the original contract constitutes re-use and needs to be approved and/or paid for.
Group 2: Elements on which fees should be based

A six-tier structure was proposed which covers most of the present situations:

(a) **Single user, single use.** This is the existing case for most uses. The 'single user' could be an individual or a department. Re-formatting, deleting, and editing would be permitted. Storage for archival reference would be permitted. Merging of output from several databases in a report is permitted. If the user is an intermediary, electronic transmission to the end-user is permitted, but a copyright statement should appear.

(b) **Single user, multiple use.** A user retrieves and stores a record in a private database. In this case, "user" means the end-user, not an intermediary.

(c) **Multiple user, single use.** This is the standard SDI case where records are transmitted to the user and may be batched for output as individual profiles for individual use. After processing, the records are purged.

(d) **Multiple user, multiple copy.** This provides for unrestricted use within an organization when multiple copies are made from a search, such as in the case of newsletters, bibliographies etc. Editing, combining, and deleting are permitted, as is electronic transmission, but not storage for re-use.

(e) **Multiple user, multiple use.** Within an organization, any use may be made of the information. This covers the usual tape lease arrangement, but it could also include large-scale transmission of records through a vendor.

(f) **Resale.** A contractual arrangement between producer and seller.

Pricing options could take the form of a usage charge based on time, hits, or a combination; a reproduction charge with a surcharge based on the number of copies distributed; or negotiated fees. At the conclusion of each search, before the print command, the vendor could supply the user with a menu of options, and the user would state the purpose of the search. The vendor will inform the user of the price of the search including surcharges. The pricing algorithm would be negotiated between the producer and the vendor. Producers could restrict the users' options if desired. The vendors will monitor the records transmitted. Over a pre-set threshold, 'multiple user, multiple use' pricing will apply.

The advantages of this approach are that users would have to state the purpose of their searches. Pricing could be automatic after that. The vendors could now get some of the multiple-use revenue; at present, this is not available to them. The disadvantages are that no real enforcement mechanism exists, and users will object to having to state their intentions for every search.

Group 3: Reporting and control procedures

Reporting and payment should be made to database vendors who will pass revenues on to the producers. Payments should be monthly. One way to control payments is to create a 'downloading format' which would have the charges associated with it. There could also be a 'reproduction format' with its own pricing structure. The vendors would be entitled to collect an administration fee from the user for this service.
The ‘information unit’ must be defined. For bibliographic databases, this is straightforward; with non-bibliographic databases definition is not so easy.

Whatever payment-system is established, it must be simple. Users do not want to write a plethora of letters, nor do they want a complex reporting and accounting mechanism. Users must be comfortable with the system. Most use is going to be as now—single user, single use. This should be the default; anything else should be covered by the system.