

Current Comments

SCI in the Transition to the
On-line Era. Providing Equitable
Access and Pricing to Large and
Small Users Presents
a Real Challenge.

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The pricing of information products is best described as problematic. Basically the price of a product is a function of the number of buyers who share the cost of its production, distribution, and marketing. It follows that the larger the group of buyers, the lower the price. However, it also follows that the larger the group of buyers, the more diversified the product must be.

With an information service, some of this diversification takes the form of product improvements. Over the years, ISI® has changed the *Science Citation Index*® (*SCI*®) to meet the needs of its growing number of users by improving coverage, currency, typography, and even binding methods. Another form of diversification has been the creation of new ways to obtain the information offered. An early example of this was the development of our selective dissemination of information (*SDI*) service, *ASCA*®, as another way to use *SCI* data. More recently, there has been an accelerating demand for on-line access to *SCI* data.

Adjusting prices to reflect product improvements is a thorny problem. But it is almost simple compared to pricing "repackaged" versions of the same service. We found this out recently when we restructured the components and cost of the *SCI* service. The price restructuring had three major purposes: (1) to reflect the addition of a number of important improvements; (2) to make

SCI accessible to more users; and (3) to more equitably share the costs of *SCI* data among those who search the data base on-line and those who use the print form. With objectives like these, it is no wonder that a revolutionary approach was needed.

Under our new policy all subscribers will receive the *SCI* bi-monthlies, annuals, and corresponding five-year cumulations. This will result in a price decrease for those who normally buy cumulations, an increase for other subscribers. Formerly, however, the package would have cost \$30,500—\$6,100 per year—over the five-year period. Under the new structure the total cost will be lowered to \$22,500—an annual rate of \$4,500. In addition, *SCI* subscribers will receive reduced rates for searching *SCISEARCH*® (*SCI* on-line). Non-subscribers to *SCI* will pay a higher rate for on-line searches. We believe that this change is necessary in order to create a situation in which all users of the *SCI* data base pay their fair share.

Let me now talk about some of the specific improvements and changes that will be made.

During the entire history of *SCI*, there is one improvement that the scientific community has badgered me for relentlessly. In the Citation Index section, all cited articles are listed only by *first author*. This policy does not prevent a user from quickly learning who has cited that particular paper or book. But

if you want to find out how often a particular author has been cited, you must have a complete bibliography of his or her papers. You can use the Source Index section to find out what most of these papers are, but this may involve a search of 10 to 20 separate annual volumes of *SCI*. Suffice it to say we will add almost 2.6 million cross-references to the Citation Index section for 1980 to eliminate the bulk of the tedium involved. Furthermore, we will indicate in the cross-references the number of times each paper has been cited.

Another complaint we have received over the years concerns our policy of truncating source authors' names. For example, the name "Eisenhower" was formerly truncated in our Source Index as "Eisenhow." Now the full last name will be listed in the primary entry. This improvement in our Source Index will rid it of many ambiguous entries. Verification of citations can now be done for names of any length.

We also made an improvement in our organizational index for *SCI*. This listing is now arranged geographically rather than alphabetically by organization affiliation. There will also be an alphabetical cross-reference entry for each organization. For example, if you want to know what has been published in Yugoslavia in 1979, simply turn to the "Y" section and you will find all articles published in that country. If you want to know what has been published in Helsinki, Finland, turn to the section for Finland, locate the city alphabetically, and find all articles published at any institution in that city.

To make just these changes, we would have had to raise the basic subscription price. For that matter, in this inflationary period, we could have justified a price increase without any

changes. Yet we have made the improvements *and* included the five-year cumulation.

Almost half of our customers already buy the cumulations, so this new policy will mean substantial savings for them. Under the old price structure each five-year *SCI* cumulation (including Permuterm[®] Subject Index) cost \$13,000. Starting in 1980 we have raised the price of *SCI* \$1,000 per year. Even if the full amount of the increase is counted toward the cost of a cumulation, the subscriber pays only \$5,000 *vs.* \$13,000. Realistically, however, a good part of the \$1,000 increase—perhaps as much as 50%—should be allocated to the improvements and inflation. Thus, the amount of the increase for the cumulation is as little as \$2,500 or less over a five-year period.

In a sense, our decision to include the cost of the cumulations in the annual subscription price is similar to automobile pricing. Each year certain items change from optional equipment to standard. Manufacturers do this because what was once a luxury has become essential. Since so many of our subscribers now purchase cumulations, and many others would like to, we feel it is now time to make cumulations a standard part of the *SCI* subscription price. By doing so we are able to spread their cost over all users, thereby reducing it to a point where it is possible to include cumulations as a regular feature of *SCI*. This price change should help make the cumulations available to small as well as large libraries.

I think this policy will be welcomed by librarians and scientists, particularly those from developing countries. They have often faced administrators who have not under any circumstances permitted the purchase of five-year cumu-

lations. Through our grant program, which applies to all libraries in developing nations, these librarians will now be able to purchase the *SCI* (and the cumulation) at 50% of the regular price.

One result of this change, which we feel is quite important, is that now all subscribers will have three complete copies of *SCI*. They will receive six bimonthly issues each year, as well as the annual. At the end of a five-year period, subscribers will also receive the five-year cumulation. Each set is complete, containing a full Citation Index, Source Index, Permuterm Subject Index, and Corporate Index. This should be useful, especially for large institutions, which will be able to put copies of *SCI* in departmental libraries where more people will have access to it.

Another major feature of the 1980 *SCI* package will be the reduction of the cost of on-line searching for our *SCI* subscribers. We felt that this change was long overdue, since our print subscribers, in effect, pay for the creation of the *SCI* data base. This basic data base involves costs in excess of \$10 million a year. From it a number of information services are produced.¹ For example, *Current Contents*[®] and the *SCI* are two types of printed services provided. We also produce several purely computer-based services such as *ASCA*, *SCISEARCH*, and ISI tapes. Until now, the pricing of computer services has included only those incremental costs directly associated with computer operations and overhead. Print subscribers, on the other hand, have paid not only printing costs, but also the basic cost of developing the data.

There was one major reason why we priced our services this way. The prevailing attitude in on-line searching is that one only pays for what one uses.

This has always seemed grossly unfair to me, and as a result, we are trying to equal the balance somewhat with our new policy. Print subscribers will now be able to access the data base on-line much more cheaply than non-print subscribers.

Our *SCI* data base, *SCISEARCH*, will be mounted as a virtually private file both on Lockheed Information Systems, where it has been available since 1975, and for the first time on Bibliographic Retrieval Service (BRS). The addition of BRS will make the file available to even more users. The regular price for on-line searching for non-subscribers to *SCI* will be \$120 per hour. *SCI* subscribers will be able to search for \$30 per hour plus normal telecommunications and off-line printing charges. For those subscribers without terminal access to *SCISEARCH*, or for those who wish to have ISI conduct on-line searches for them, we will perform searches at a rate of \$45 per hour, plus, of course, telecommunications and off-line printing charges. For non-print subscribers, the searches will be priced at \$150 per hour. I might add that even at that hourly rate the cost of any given search is extremely low. The average on-line search of *SCISEARCH* cost about \$3 in 1979. In 1980 I expect the cost to be less than \$2.

Despite what we consider to be vast improvements, many smaller libraries may simply be unable to incorporate the *SCI* price increase into their budgets. In such instances, these libraries may be qualified to receive reduced rates through ISI's grant program.² Price reductions are awarded to libraries in a wide range of categories. For example, small hospital libraries, small non-academic research organizations, departmental libraries, and two-year colleges are all served by the grant pro-

gram. Interested subscribers should write ISI, Grant Administrator, for applications.

All *SCI* subscribers should have been informed in August, by letter, of our plans for 1980. Before that we contacted hundreds of subscribers for their views. If in the process your librarian was not consulted, I hope you will understand the magnitude of the communications problems involved in such a decision.

I have always taken great pride in ISI's sensitivity to the needs of the library and scientific communities. We

believe our new *SCI* policies enable us to fill the information needs of the greatest number of people in these communities. Although it will cause a budgetary increase for some subscribers, it will also mean a substantial decrease for those who would have bought the cumulations at extra cost as well as those who use *SCISEARCH* extensively. Since our new policy is indeed revolutionary, I realize that it will take some time for everyone to recognize its validity.

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REFERENCES

1. Garfield E. Everything you always wanted to know about ISI data bases but were afraid to ask. *Current Contents* (45):5-17, 7 November 1977.
 2. -----The ISI grant program. *Current Contents* (18):5-6, 2 May 1977.
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Attention, German Subscribers!

As readers of *Current Contents*[®], you may be interested in an upcoming program on television in the Federal Republic of Germany. "Bilder Aus Der Wissenschaft" will devote a segment of its November 28th show to the historical development of ISI[®], the *Science Citation Index*[®], and the scientometric applications of our data base. Examples will be drawn from German science. The program will be broadcast at 9:45 p.m. on the first German channel.

Unsere deutschen *Current Contents*[®] Leser werden sich sicherlich für eine Sendung interessieren, die demnächst im deutschen Fernsehen übertragen wird. Am 28. November schildert "Bilder Aus Der Wissenschaft" die historische Entwicklung von ISI[®], vom *Science Citation Index*[®] und die wissenschaftlichen Anwendungen unseres Datenspeichers. Beispiele beziehen sich vor allem auf die wissenschaftlichen Bemühungen in der Bundesrepublik. Die Sendung wird um 21 Uhr 45 im ersten deutschen Programm übertragen.