Library Technology Reports www.techsource.ala.org

ACQUISITION OF E-JOURNALS

Moving from a print regime for journals into the electronic environment requires major alterations in publisher production and business practices. Publishers want at a minimum to maintain the level of revenue their print subscriptions have provided, especially since they need to continue to produce two formats for at least some time. They also want to recover the costs of creating electronic versions of existing journals.

Commercial presses also must show a profit. Even nonprofit professional societies want to do more than recover costs so they can improve member services.

New expenditures are required to add features that users or librarians may expect, such as alerting services, use statistics, and pay-per-view options. Data storage and transmission costs will increase over time as files grow larger and use increases. More dollars must be spent to incorporate new technology and to comply with standards.

Pricing models

Publishers have devised an assortment of models that combine several basic factors in different ways to meet their financial goals. The most critical element in the pricing scheme is the relationship the publisher decides to establish between the cost of the print and the online versions.

Publishers typically relate the costs of print and electronic subscriptions in one of the following ways:

- Online cost equals print subscription cost plus a surcharge for e-access. Add-ons for e-access normally range from 15% to 30% of print cost but journals from smaller STM publishers may range as high as 200% to 300%.
- Online is free with print subscription.
 - Many publishers follow this plan to assure libraries maintain print subscriptions, allowing e-access to be provided through journal gateways (such as SwetsNet, Ebsco Journal Service) or hosting aggregators, such as Ingenta. Some argue that publishers recover their e-development costs by raising the prices for print subscriptions.
- With an online license, customers may subscribe to print for a low add-on fee.
 - The deeply discounted 25% of cost for print subscriptions originally offered by Academic Press fell into this category.
- Print is free, but only available with an online subscription.
 - Libraries that have moved to an e-only model and do not want the expense of binding and storage may find themselves in the position of discarding paper issues sent automatically by the publisher, since deviating from the standard production and distribution process is costly at the supplier end.
- Print and electronic are priced separately, but vendors offer a discount for a combined subscription.

Prices for electronic versions depend on whether publishers want to maintain print subscriptions or to provide a strong incentive for customers to move to online access. The speed with which sellers want libraries to migrate online relates, in part, to how much creation of electronic format still depends on the print production process.

Publisher packages

Package pricing for all or part of a publisher's list of titles typically:

- Is computed on a base level of expenditure set by the publisher at a point in time that prevents libraries canceling even duplicate subscriptions to reduce costs before entering into an agreement.
- Includes either all the titles a library currently subscribes to in print or the
 publisher's entire list. When the package involves subscription to the entire
 list it becomes what Kenneth Frazier, director of libraries at the University
 of Wisconsin, calls the big deal, a term that has entered the lexicon of
 librarianship to mean slightly different things to different people.¹
- Limits the library's ability to cancel titles either by banning them altogether or by requiring that, to maintain the agreed-upon expenditure level, previously unsubscribed or new titles must be added to replace those canceled. If cancellations of print subscriptions are allowed, savings tend to be between 2% and 10%.
- Involves multiyear agreements that provide caps on both print and electronic subscription price increases. Publishers tout the reduction of print price increases from double digits to single digits (between 5% and 9%) through package purchases.
 - Libraries should recognize, however, that price increases for the online subscription add yet another percentage increment to the base that usually falls in that same range. Bundled journal price increases have still been higher than overall library budget increases, drawing funds away from monographs and support of serials not offered as packages.
- Seeks to lock in as the base for future renewals the initial base plus price increases during the term of the initial agreement.
- May not allow or make difficult the ordering of subscriptions through agents offering volume discounts and other services to libraries.

Package pricing also may have other features:

- Payments for noncontent elements
 - For example, when Elsevier was building the infrastucture for ScienceDirect, a full-time equivalent (FTE)-based platform fee was included as part of the standard pricing. Most librarians saw no particular benefit and no reason to pay Elsevier to add to existing abstracting and indexing services.
- Add-ons for backfiles not covered by the base agreement
- Extra charges for permanent access to material for the period licensed should cancellation be necessary

Negotiation

In a survey in the United Kingdom, librarians said they were not forceful enough negotiators.² Librarians are, in fact, more often reactive than proactive in relation to e-journal publisher proposals.

With regard to costs, many publishers' starting point is what they like to call their standard pricing model. Typically this model consists of a base price to which an increment is added for e-access. Proposals, especially to consortia or groups of libraries, offer a discount under specified circumstances.

Journal publishers normally suggest multiyear agreements with capped price increases in future years. Taking the high-minded position that they must be fair to all their customers, publishers say they cannot offer different terms to different libraries. But they do.

All elements of a publisher proposal are potentially negotiable. Before entering into negotiations, libraries should decide what would be nice to have, what is essential, and what they can afford. A realistic assessment of the long-term commitments also is critical.

Buyers should study the proposal carefully and analyze its structure, basic assumptions, and ultimate goals. Consider what interests the seller is trying to advance or protect. Think about whether the discounts or other incentives are meaningful.

Next decide how to frame what the library wants to accomplish in terms that allow the publisher reasonable success in meeting financial and other goals. Remember that the discussions must result in a win-win outcome. Concessions and discounts must produce a benefit for the seller.

The publisher wins, for example, by offering a discount to a consortium because group pricing eliminates the cost of marketing to individual libraries and brings in more income from more customers. Capping price increases as an inducement for multiyear subscriptions assures a certain (presumably acceptable) increase in income. Understanding the publishers' goals helps in negotiating terms, such as lower annual increases for longer contracts.

Sometimes a negotiating strategy may produce an unintended result. At the University of Illinois, for example, the library made a counter-proposal to an e-journal publisher to pay for more content rather than for a new feature. The idea was that the licensor would be satisfied so long as the bottom line payment was the same. Though imaginative, this gambit was essentially unsuccessful. Being assertive in negotiation, however, did result in cost avoidance and access to more content.

Everyone won. The library benefited (in the short term) since its costs were assessed under a transition pricing model that did not include the surcharge for the feature. The users gained since the first-year incentive of access to the publisher's full list continued through the agreement's two-year term. The publisher won by signing a large contract with a prominent university, giving it the opportunity to introduce the library's clientele to all its online journals.

The library's short-term benefits may vanish when the contract comes up for renewal. Higher new model pricing may apply, and the library will be reluctant to limit the new agreement to only the library's print subscriptions, since users are now accustomed to having access to the full list thrown in as part of the first agreement.

The example represents an attempt to deviate in a significant way from a publisher's model. Sticking to the basics of the vendor's proposal and manipulating them to the library's advantage within a range the publisher can tolerate is more likely to achieve positive results. For example, one library may decide that it can no longer support the cost of access to both print and electronic journals but that the transition needs to occur slowly over a period of years. The library can work out a long-term agreement that adjusts the annual price increase reductions over time to reflect a gradual elimination of dual format holdings.

Rejecting publisher pricing models altogether is an extreme form of negotiation. A library that is adamantly against noncancellation and base expenditure requirements that come with multiyear agreements may insist on signing only year-to-year agreements, negotiating price increases every year. Another may refuse on principle to allow the publisher to select the e-journals purchased by rejecting the big deal model and subscribing on a title-by-title basis. Instead of paying a lower per-journal price for the publisher's entire output or based on all its own print subscriptions, this library is willing to pay a higher per-journal cost for only the titles it regards as critical.

Though publishers set the terms of the initial offer as though the price is etched in stone, they want the library's business. Buyers may well be able to save by pressing for reductions of a few percent on the e-access surcharge or the price caps in later years of multiyear agreements.

Deadlines for decision are another place where publishers frequently attempt a hard-and-fast line. Vendor representatives may choose a time close to the end of the calendar year so the sale adds to their yearly bonus and also is counted in the company's annual sales figures. Though an end date is helpful in any negotiation to keep discussions from dragging on, library negotiators should remember that they need not necessarily be bound by the publisher's deadline.

Although a sales representative eager to wrap up a deal offers incentive discounts that expire as of a certain date, the library may need to conduct internal discussions, acquire more information, or just need more time to decide. When serious consideration is evident, the publisher's agent is unlikely to hold the library to an inflexible deadline and risk the loss of the sale.

Libraries also can be assertive on other fronts that yield leverage in the negotiation. Past performance is one such area. If serious and documented problems exist with performance either at other libraries (if this is an initial agreement) or at the negotiating institution (if this is a renewal), the library may want to use this point as a bargaining chip, perhaps to secure a price reduction.

Practical tactics

- Take the initiative. Make your own proposal to the vendor and map out a strategy.
- If you wait for the publisher to act, study the proposal carefully before beginning talks with the vendor.
- Ask for clarification in writing of anything you do not understand completely (easily done via e-mail).
- Do not waste time working with a vendor representative who is not empowered to authorize changes to the agreement or seems to have an imperfect grasp of its essentials.

The library should have a single person on the staff assigned to negotiate contracts with the experience, talents, and temperament for the job. The role of negotiator is unsuitable for someone who is unassertive, impatient, unimaginative, easily swayed, and uninterested in details. The last qualification is particularly critical.

Ideally, your representative should be comfortable working with numbers, have good interpersonal skills, and have an active interest in building and cultivating relationships.

Open, honest communication helps the negotiation process. Library negotiators should keep vendor representatives informed about internal progress toward agreement, the overall timeframe, and any creative financing under consideration. Listening carefully also saves time. At some point in every negotiation, nothing is gained by further discussion.

The negotiation process develops a relationship between the two parties that over time can lead to a more realistic set of mutual expectations. Negotiation between various members of the information-producer and library communities during the mid-1990s has already led to important changes in licensing conventions.

Libraries rarely sign nondisclosure agreements as part of licenses and can help one another by sharing strategies they have used in negotiation. Information exchange need not quote financial specifics but can point to general areas where vendors appear to be flexible.

Points to remember in negotiation:

- Take the initiative.
- Know what you want.
- Don't be afraid to ask for it.
- Understand what the seller wants most.
- Be realistic.
- Stick to your own timetable.
- Work for a win-win outcome.

Licensing: Not as hard as it once was

Before the mid-1990s, many publishers had had some experience licensing CD-ROM products. But when information delivery shifted from the controllable world of the standalone workstation and the local-area network to the wide-open world of the Web, they were less sure of what to expect. They were fearful of losing control of access to their content, envisioning journal articles passed on freely, click-by-click, to Internet users worldwide.

They also were considerably preoccupied by the realization that many people from all over a campus or within a public library service area could use a journal at the same time without additional revenue filling their coffers.

On university campuses they saw a near-future in which department and personal copies would be canceled wholesale. They imagined electronic copies provided via interlibrary loan replacing subscriptions in smaller libraries. And with good reason, they feared their technology costs might escalate faster than expected.

Because of these concerns, publishers constructed early e-resources licenses so as to be excessively protective of their own interests, taking little account of the needs of library-licensees. Publisher protections focused in particular on limiting authorized use and users.

For universities, typically not all members of the campus community were included as potential users. Publishers also placed limits on what users could do with electronic articles.

Many early licenses made no provision for walk-in users or remote access and banned sending the e-version of an article as an interlibrary loan. Not all licenses permitted readers to e-mail articles even to themselves, share them with research colleagues, post them on course websites for students, or include them in faculty-created coursepacks or online reserves.

Through dialog with librarians as part of the negotiation process during the mid-90s, publishers came to understand libraries' needs more clearly, as well as the value librarians place on reducing barriers to access. They came to see that prohibiting use by walk-in patrons is an unrealistic expectation, especially for publicly supported institutions. They also accepted that access from home, office, or dorm room is a critical benefit of online journals that must be a standard provision of license agreements.

Most licenses now routinely list walk-ins as authorized users and include remote access usually at no extra charge. In response to research university needs, many STM journal contracts also include independent contractors and research consultants.

Publishers are not normally as accommodating, however, about college and university alumni or the staffs of research parks that many universities have established on or near their campuses. Some libraries have nevertheless tried to negotiate privileges for alumni, and publishers also may be willing to discuss including a research park as a separate site for an additional charge.

Most agreements now allow users to e-mail, print, download, and store a reasonable portion of the article database. Sharing of articles with colleagues for research purposes is usually permitted, as well as use on faculty websites or for reserves so long as they are limited-access and secure. Putting articles in noncommercial coursepacks also is normally permitted.

Publishers remain resistant to the idea of using e-journals to satisfy interlibrary loan requests. After considerable lobbying on the part of librarians, a compromise supported by Elsevier has become fairly common, though by no means universal.

Many contracts now allow a print copy to be made from the electronic article that can be faxed or transmitted via the Internet. Publishers apparently think adding this layer of inconvenience to retard lending efficiency helps protect their interests. Libraries may be required to track the number of articles copied for interlibrary loan for an annual report to the publisher.

Vendors also have an improved understanding of requirements imposed on libraries by purchasing rules, particularly in government-supported institutions. Certain changes are now routine. Most publisher licenses still specify that the law of the state in which they do business will govern legal proceedings that may arise. But almost all will accept substitution of language specifying adjudication in the home state of the party against whom any proceeding is initiated.

Libraries should have absolutely no hesitation in suggesting changes to licenses they think they need. Much of the time they will be accepted with no objection. But some areas still present stumbling blocks in contracts, such as:

Perpetual access clauses

For practical and legal reasons libraries want to be able to own what they have paid for should they need or decide to terminate a license with a publisher. Many licenses still do not address this issue, and those that do may not specify terms that work well for libraries.

Library negotiators need to be clear about the form in which purchased data will be provided after termination and understand the cost to the library. Purchasers also should recognize that making use of a copy of previously purchased electronic information may require additional expenses, including writing software to search it.

Definition of sites

Libraries may have branches or other units separate from the main facility that they would like to have covered by the licenses they sign. Whether to include these without extra charges is often a sticking point in resolving license agreements.

The site issue is particularly problematic for large universities with branch or sister campuses geographically distant from the main campus that they want covered by the agreement. Vendors vary considerably in their approach to this issue. For example, one e-journal publisher may be willing to view the University of Illinois at Urbana-Champaign and University of Illinois at Chicago as one site since both are part of the same university, even though they have completely separate acquisitions budgets. Other publishers levy charges for each of the several branch campuses of a major state university only slightly discounted from the main campus price, even though electronic resources for all branches are funded from the central budget.

Licensors who want to confine use to only a small group of users see site definition through the other end of the telescope. They may use a modular approach to pricing, specifying a limited number of workstations as the basic cost unit and adding increments for each additional module. Libraries with a lot of potential users of the product may be unable to afford the total produced by the increments. Defining sites at what is the least-cost level for the library is often difficult and may not always be possible.

License terms that matter

All licenses contain standard paragraphs, called boilerplate, that employ essentially the same language, and these paragraphs are not usually problematic. Buyers should pay careful attention to certain other sections that also appear in most contracts, however, since these may have important consequences for the library and its users. License terms to focus on include:

Time provided to remedy a breach

Most agreements specify penalties for inappropriate use of the database, especially downloading of excessive amounts of material. Some publishers carefully monitor downloads at library sites. They quickly spot what they perceive as abuses and will terminate service if not satisfied that the library has taken appropriate action. Licenses may not specify a time for

the remedy of a breach and, those that do, may not make the grace period long enough.

• Terms of agreement, renewals, cancellations

The license specifies the beginning and end date of the subscription. These dates are normally the calendar year for journal publishers, though libraries may prefer their own budget or fiscal year. Contracts may require renegotiation each year or be automatically renewable under terms specified in the agreement. Purchasers should be certain they want contracts to renew automatically and, if so, they should ask for a clause saying that automatic renewal can be avoided by notifying the licensor at a certain (and sufficient) time in advance of the end date.

Escape clauses

Budgetary problems confronting libraries and the increasing cost of electronic information have heightened interest in having bailout clauses in multiyear agreements. Publishers resist including such clauses. After all, the logic of their agreeing to reduced annual price increases in multiyear contracts is that they can lock in revenue and avoid the administrative costs of renegotiation.

Looking at language for two such clauses illustrates a vendor approach versus a librarian approach and also how libraries can protect their own interests.

Vendor 1 escape clause license language:

Subscriber reserves the right to terminate this Agreement within thirty (30) days of release of the state of X budget for the fiscal period 2001/2002 or for succeeding years if such budget results in a loss of substantially all of the state financial support from which Subscriber intended to satisfy its payment obligations hereunder provided (i) that such termination is motivated by Subscriber's good faith belief that its state budgetary allotment for university library acquisitions is insufficient to satisfy Subscriber's obligations hereunder; (ii) Subscriber documents such belief to X's reasonable satisfaction, and (iii) alternative sources of funding are not reasonably available or expected to become available at the time Subscriber's payment obligation attaches. In such circumstances, Subscriber will promptly return and/or delete from all networks, file servers and similar data storage/data retrieval devices all Subscribed Content and Content licensed hereunder and document same to X's reasonable satisfaction.

Language proposed by librarians to Vendor 2:

Licensor acknowledges that the ability of X library to participate in the agreement is subject to and contingent upon the availability of funds appropriated by the state legislature or institutional budget processes. The Library shall make a good faith effort to obtain the funding to meet the obligations as set forth in this Agreement. The Library may terminate participation in this Agreement only at the start of a subscription calendar year (January 1) by giving the Licensor notification within (90) days prior to the start of that subscription calendar year. The Library agrees to pay to Licensor a termination fee of 2% of the portion of the then annual Database Fee.

Vendor 1 wants reserve the right to decide whether money is in the library's budget or available from other sources that might be used to pay

for continuation. The kind of documentation and the level of detail the vendor may require to be satisfied are unclear.

Termination also carries with it loss of material already paid for that is covered in a permanent access clause of the agreement. Libraries should seek major modifications in this clause.

The library in the second example recognizes that the vendor is due consideration for being willing to allow the early termination. Concessions to the vendor include specifying that the contract can only be canceled at what is the best time for the vendor (the end of the calendar year) and that substantial notice must be given as well as the payment of a penalty.

Failure to perform clauses

When publishers began licensing electronic journals the infrastructure for supplying them over the Web to large numbers of users was not well understood. Technical failures such as slow response time and server down time were common. These problems occur far less often now. Nevertheless, serious infrastructure failures still arise and may be even more difficult to remedy due to the growing complexity of delivering e-articles.

Libraries will want to build protections into licenses for rebates or other forms of compensation particularly for expensive offerings. Some famous interruptions of service have occurred in the last few years. When the Institute for Scientific Information launched its Web of Knowledge gateway, for example, customers had a continuous stream of loss-ofaccess incidents stretching over many weeks.

Communication both with the vendor and with their own users with regard to intermittent and varied database access failures is expensive for libraries, since it consumes large quantities of both systems and frontline staff time. Losses in faculty productivity also justify inclusion of license clauses quaranteeing libraries will be compensated for extended interruption of service.

In 2000 Oxford University Press journals were unavailable for several weeks when the server housing them at Manchester University was vandalized. This incident led to the appearance of clauses in licenses requiring vendors to stipulate that they were maintaining backup sites for their data.

Loss of content is another type of performance failure. Negotiators should include language specifying rebate terms if material is withdrawn from the database.

Perhaps the best known example of libraries receiving a consideration for lost content is the case of the nationally brokered license for Lexis-Nexis Academic Universe. Rumors of likely losses were circulating while this unprecedented agreement covering millions of users nationwide was under negotiation. When publishers did in fact withdraw materials from the database, participating libraries did receive proportionate rebates.

Unenforceable or unreasonable terms

Inexperienced legal counsel or excessively nervous management may result in requirements in licenses that libraries simply cannot meet. For example, one license (in this case for a reference book as opposed to an e-journal) specifies the exact amount of a database that can be downloaded by library users (as a percentage of the total). It also specifies that the library will assure that all material downloaded by users and stored on their machines will be deleted should termination of the contract occur. Ensuring that patrons delete parts of the database stored on their computers would be an impossible task for a library both from a practical standpoint and as matter of user privacy.

Obtaining agreement to strike these types of clauses is usually not difficult. Ironically, small, noncommercial publishers often have the most problematic licenses.

Although most suppliers have become more flexible in their attitudes toward licensing, particular types of suppliers have licenses that typically cause problems. Foreign publishers that do not adhere to American legal norms fall into this category. Products that are designed primarily for the corporate market also may have restrictive clauses on use and users that work poorly in the library environment.

• Provision for statistics on use

Though libraries want an array of usage data, some vendors do not provide them and resist writing this requirement into a contract except as a feature to be delivered in an indeterminate future. Some publishers make the valid point that industry standards for use statistics do not yet exist. Project COUNTER (described at the end of Chapter 3), offers a potential solution. If vendors can agree on a code of practice, as COUNTER proposes, they can go forward with sound investments in data production.

Library obligations

Each party to a license grants certain privileges and in return is entitled to expect the other party to meet certain requirements. Publishers require libraries to meet the following obligations:

Assure authorized use and remedy unauthorized use.

Contracts generally have wording that requires libraries to make reasonable efforts to assure that the database is used appropriately and to cooperate with the licensor if necessary to identify inappropriate use and see that it ends. Experience at the University of Illinois at Urbana-Champaign seems to indicate that not all that many publishers are monitoring their e-journal databases for incidences of excessive downloading.

The American Institute of Physics (AIP), however, is vigilant in guarding against inappropriate use. AIP has contacted the University of Illinois on several occasions when large chunks of a journal poured into a campus workstation. In these cases, the vendor disconnects the offending workstation, reports the problem, and reminds the library that the entire campus will be shut down if demonstrable action is not taken to remedy the breach within the time specified in the contract.

Faculty and network administrators are then called in to identify those who have access to the computer with the magic IP number. Sleuthing pinpoints the perpetrator and sanctions are applied that usually involve a stern warning to the graduate student responsible. The library duly reports its actions to AIP, and access is restored. The whole process requires many phone calls and e-mail messages extending over a week or more.

 Make users aware of their rights and responsibilities in relation to the database. Since users are more concerned with access to the database than with what they may or may not be allowed to do with the contents, libraries find fulfilling this responsibility in a meaningful way difficult.

Some libraries require the user to pass through an information screen that explains copyright law and appropriate uses of the material before accessing the database content. Others add license term icons next to the titles on their journal gateway pages that users can click to view key requirements. Some post copyright information on terminals or on the library website.

Library staff also should be aware of the basic conventions for the use of licensed material. Many librarians resist exposure to any information about licensing because they think it is too esoteric and technical to understand. Nevertheless, some libraries post full contracts for all licensed resources on the institution website at least in part to make them available to staff.

Where to find more licensing information

Several aids are readily available to librarians who want more experience with licensing. Many academic librarians and vendors engage in online solving of licensing problems through the listsery Liblicense-I. Yale University maintains the Liblicense website that explains licensing terminology and provides sample clauses for incorporation into agreements.

Several excellent sources of information are available both online and in print. The American Library Association (ALA) has published a handbook on licensing and negotiation called Licensing Digital Content: A Practical Guide for Libraries.3 John Cox, an independent consultant, furnishes a website of model licenses. The International Consortium of Library Consortia (ICOLC) has issued a set of preferred practices that address pricing and other recommended behaviors. ALA, the Association of Research Libraries (ARL), and state library organizations offer periodic licensing workshops.

Consortium and group purchase arrangements

Purchases through consortia or other groups have advantages to both publishers and libraries. Advantages for publishers are clear. Sales representatives can develop relationships primarily with the buyer representing the consortium rather than calling and visiting librarians at each member institution. This one-stop sales call is particularly helpful in large consortia whose membership includes smaller-sized libraries spread over a wide geographic area. And without consortium and statewide licensing, smalland medium-sized libraries would have little chance of obtaining journals packages at discounted prices.

The buyer for the consortium negotiates terms for the whole group and ultimately there is only one license, one invoice, and one payment (though the consortium staff has the task of invoicing members and processing payments).

Also, especially in consortia with small- and medium-sized participants, the publisher places journals in libraries that would never otherwise have been able to afford them. Payments contributed by these smaller libraries are new revenue, and users at these institutions are new customers who may demand continued access.

Liblicense-I, www.library.yale.edu/ ~llicense/index.shtml

Model licenses, www.licensingmodels.com

ICOLC preferred practices,

www.library.yale.edu/ consortia/ 2001currentpractices.htm The most important extension of this benefit occurs when a consortium agreement gives members e-access not only to those journals they subscribe to in print but also to all those held by other consortium members. Cooperation produces maximum payoff when all the publisher's journals are thrown in as an added incentive.

Librarians, especially at smaller institutions, agree that consortium purchasing is a valuable tool. Not all agree, however, that package deals are good for libraries or economically sustainable. Although deals bring in strong journals at ostensibly lower costs, they carry with them titles of lesser value.

In creating the package deal, publishers reckon that libraries will pay a little extra to receive a lot more. The OhioLink consortium argues that use establishes value and has published data to demonstrate that titles not previously owned are heavily used. Though titles not owned in the past are used, funding major publisher bundles is taking an increasingly large percentage of library budgets.

The ultimate effect is to crowd out the products of smaller publishers and drive allocation of funds within library budgets away from other types of materials, including monographs. Many in the library community are concerned that journals produced by smaller publishers and scholarly societies will not survive and that their death will impoverish library collections and researchers in specialized fields.

Practical considerations

Many types of consortia exist and their numbers have mushroomed over the last five years, largely because of the perceived benefits of cooperative purchasing of e-resources.

Consortia differ in funding base, types of membership, and mode of decision-making. Exactly how buying a resource through a consortium affects an individual library depends on those factors. For example, a multitype library consortium is likely to employ a chargeback, cost-sharing formula that results in a larger percentage of the cost of the license being paid by the larger institutions or by institutions of a certain type.

Charging big libraries more seems to make sense since use by their larger clientele and consequent benefit is probably greater. Formulas linking cost with potential use are only approximations of reality. They also may result in the larger institutions' subsidizing access for the smaller institutions.

Big libraries, particularly in statewide consortia, may be willing to accept this responsibility. When budgets are tight, however, even libraries with substantial budgets may find being supportive in this way difficult.

Though consortium cost-sharing algorithms that assign higher charges to big libraries appear logical and fair, they may assign prices that are significantly higher than the cost of an individually purchased subscription.

If the differential is high enough, large libraries cannot justify purchase through the consortium. The withdrawal of the big institutions may result in much higher costs for the remaining members of the group.

Libraries that are not part of an established consortium can join others to form a buying club. For this method to work, however, one library must be willing to provide the vendor with the advantages normally offered by consortium licensing: reduced marketing and sales effort, one license, and one invoice. The lead library would have to be responsible for the communication among the

members regarding the license as well as the actual negotiations. The organizer would also need to arrange for payment of the larger-than-its-share invoice, collecting contributions from participants beforehand or afterward.

Purchasing something through a consortium takes longer than purchasing on your own. The publisher is able to simplify life by having to communicate only with the buyer for the consortium, but that person still has to communicate with all the members about their level of interest in a given product, their response to the usually complex and opaquely worded proposal, and changes to specific license terms. Members may have different ideas regarding negotiating strategy.

Even relatively homogeneous groups of libraries must address important differences. Satisfying various needs slows final resolution. In addition, some members may have to settle for less than they want for the deal to go through.

In the Committee on Institutional Cooperation (CIC) consortium of Big 10 universities that includes the University of Chicago and the University of Illinois at Chicago, though all members are research libraries, two of the institutions are private and serve smaller populations than the others. Perhaps more important in terms of licensing, several of the large universities have branch campuses they want covered by negotiated contracts.

Though the issue is not relevant to all members, agreeing on pricing for additional sites may be an arduous process. For many reasons, deals in the CIC have sometimes taken as long as two years to finalize and have consumed large amounts of time and energy for all parties. But the expenditure of CIC library staff effort has produced \$16 million in savings for the consortium since 1995.

Buying products as a member of a consortium also may result in a subtle influence on a library's collection development priorities. Vendor timetables may not match the financial and decision-making schedules of some of the libraries in the group. This difference could result in a temporary shift of institutional priorities if libraries decide to go ahead regardless.

On the other hand, libraries should keep in mind that passing on a consortium deal in one year rarely precludes participating in the following year though joining after the deal is inked may require individual negotiations by the latecomer with the vendor.

Another potential downside of consortium buying for libraries is that they may drift away from core priorities as they respond to the constant flow of vendor proposals with enticing consortium discounts. Presumably, libraries will not buy resources they do not want or need just because a consortium deal presents itself, but they may choose to use always limited dollars to purchase consortium-offered products sooner than they might have in terms of overall collection priorities.

Also, since consortia attract vendor proposals, consortium buyers and e-resources officers at participating libraries may find themselves spending most of their time reacting to what is sent their way. They might find their time better spent concentrating on identifying the titles many members subscribe to individually where collaborative purchasing might result in lower costs.

Outsourcing licensing and negotiation

Consortium purchasing is only one instance of outsourcing of licensing and negotiation. Subscription agents have recognized that license management and negotiation is a logical business area for them to develop. Both SwetsBlackwell and Ebsco subscription services negotiate contracts on behalf of libraries, though they must be given power of attorney to do so.

New pricing scenarios

Electronic journal publishers are considering new pricing models. Since libraries are becoming more receptive to the idea of eliminating print subscriptions in favor of electronic access, paper copy expenditure levels make less sense as the basis for pricing structures.

Libraries may not be able to continue supporting the costs of package purchasing. An article this fall in the *Chronicle of Higher Education* reported growing numbers of cancellations of publisher bundles by major libraries, and a study commissioned by Ingenta last year suggests that the big deal strategy may no longer be sustainable.⁴ Publishers are recognizing, as they did when major cancellation programs began to occur in the late 1980s and mid-1990s, that a gap has developed between what they are charging and what libraries can afford to pay.

Publishers also expect e-journal production costs to rise. Consortium purchasing, with its lure of big contracts, has stimulated publishers to improve their products to beat the competition. Aggressive pursuit of the best authors is an added expense. Publisher rivalry also has resulted in the delivery of new kinds of information online and more powerful search and discovery mechanisms, including linking.

Continued improvements include topographical mapping, linguistic data mining, and visualization techniques to enhance search interfaces. Video clips, commentary, and files of raw data are already being used to some extent to enrich article content.

Improvements like these come at considerable cost. Publishers are recognizing that print subscription revenue can no longer support online development.

Pressures to find a new paradigm are increased by the economic downturn that has affected not only state-funded consortia and publicly financed institutions but the endowment income of private organizations as well. In addition, sources of funding that were created during the startup phase of introducing e-resources in libraries have largely disappeared. Internal reallocation has reached its limit, and special allocations from funding agencies and parent institutions are no longer available. Renewals of multiyear contracts are coming due with price increases higher than budget increments. Libraries may not be able to pay for agreements currently in place.

Given the increasing competition for library dollars, smaller publishers that have not fared well in the consortium license market are looking for a way to stay in the game and keep the giants from soaking up library acquisitions budgets. Even the giants are not sure they have the perfect model. At a conference on scientific publishing in 2001, Derk Haank (chief executive officer of Elsevier Science) discussed how the price of the journal *Brain Research* could be lowered for large institutions if small places were charged much less based on the expectation of lower use. He continued as follows regarding use-based subscription pricing:

What we are basically doing is to say that you pay depending on how useful the publication is for you—estimated by often you use it. That is

something very different from paying by the drink. I do not believe that paying by the drink is a suitable model; it is cumbersome for us, but it is also cumbersome for our contract partners—the libraries and universitiesand because, in science, the people who drink are not the people who are paying, it is a disastrous model as any bartender can tell you. So, we should have models where we make a deal with the university, the consortia or the whole country, where we say for this amount we will allow all your people to use our material, unlimited, 24 hours per day. And, basically the price then depends on a rough estimate of how useful is that product for you; and we can adjust it over time.5

A use-based model?

Relying on expected use as a basis for pricing is not a new concept. Owing to initial fears that online journals presented the opportunity for unlimited access with inadequate returns, publishers have typically built some kind of surrogate for use into their pricing models.

Besides providing a starting point based on current income, an institution's current print expenditure also serves as an indicator of overall use of a publisher's journals. Some vendors employ the size of the library's collection budget as a measure of the size of the population served. Aggregators and others use FTE-based pricing models or simultaneous users.

A few scholarly publishers invoke tiered pricing structures built on the Carnegie Classifications of Higher Education Institutions, reasoning that the highest ranked institutions will use their specialized materials more than schools with lower research and degree-granting profiles. Both publishers and libraries agree that these are at best primitive instruments for relating cost to actual use.

Librarians have been pressing for some time for the improvement of vendorsupplied use statistics, and some librarians support employing these data to compute costs. Many librarians believe these statistics can lead to equitable and affordable pricing. They also want reliable information to help in collection decisions, to report to funders, and to help them understand the research needs and behaviors of their patrons.

Many problems need to be solved before usage-based pricing can be widely implemented. The biggest difficulty is the current state of vendor-generated statistics, especially the lack of industry-wide standards for collection, reporting, and validation. Project COUNTER, an idea based on collaborative discussions between publishers and librarians in the United Kingdom, has emerged to develop standards for use statistics. (its plan and progress are described in Chapter 3.) Assuming this project succeeds in establishing the necessary standards, some significant barriers still exist to implementing use-based pricing.

A basic assumption (shared by Elsevier's Haank) is that heavy users can afford to pay more than institutions that use materials less heavily. Many members of both publishing and library communities believe that libraries with large budgets can afford to pay more for access to critical journals than libraries that are less well-financed.

Librarians in large research libraries know, however, that their budgets are subject to the same vicissitudes as less well-funded libraries. Moreover, they have stewardship responsibilities central to their mission that quickly absorb the dollars in their seemingly generous budgets.

But many professionals assume that libraries with no archival responsibilities can depend on large research institutions to maintain print subscriptions of

journals that they plan to subscribe to only in electronic form. Publishers think some kind of negotiation can arrive at a fair use of large-library budget dollars, also not taking into account that these institutions have demands on their budgets for information in many formats besides electronic journals. These libraries also may have national-, regional-, or state-level collecting and service obligations. For big libraries to be charged more may seem fair, but there is still an upper limit to how much they can pay.

Ways exist to address this problem, so long as vendors are not counting too heavily on the major players to support a use-based scheme. Publishers can place a cap on use charges just as some now cap FTE-based charges. Price structures might have a flat all-you-can-eat fee for big consumers. This scheme might turn the traditional consortium scheme on its head, with the small fish taxed a bit so the whales can survive to play their traditional role as net lenders, last copy repositories, and guardians of the record of human civilization.

On the publisher side, journal use-based charges will require a lot of calculations, especially since journal use may vary from year to year. For example, a small scientific publisher has rejected use-based pricing, at least in the short term, because of the impracticality of calculating costs for thousands of customers to be reported to 100 subscription agents.6

The future of pricing

The substantial cost to publishers of continued innovations in electronic delivery, standards compliance, and file storage and maintenance ensures prices for electronic journals will not decrease. Indeed, even implementing the standards Project COUNTER develops could well be an expensive proposition for some publishers.

As the number and cost of e-journals continues to rise, the need for greater selectivity on the part of libraries is inevitable. Identifying and evaluating titles to be purchased is one of the many aspects of the e-journal management function discussed in Chapter 3.

Footnotes

- Some industry people use the term loosely to refer to an agreement involving a special price to a consortium, not necessarily covering the publisher's full title list. The effects of the big deal are described in Kenneth Frazier, "The Librarians' Dilemma: Contemplating the Costs of the "Big Deal," D-Lib Magazine, vol. 7, no. 3, March 2001, www.dlib.org/dlib/ march01/frazier/03frazier.html.
- ²The survey was part of Ingenta's 2002 research project on the sustainability of the Big Deal. Results were reported at a preconference session of the Charleston Conference on Oct. 29, 2002, in Charleston, S.C.
- ³ Lesley Harris, Licensing Digital Content: A Practical Guide for Librarians. Chicago: American Library Association, 2002.
- ⁴Andrea L. Foster, "Second Thoughts on 'Bundled' E-Journals," Chronicle of Higher Education, Sept. 20, 2002.
- ⁵ Derk Haank, "Is Electronic Publishing Being Used in the Best Interests of Science? The Publisher's View," Proceedings of the Second ICSU-UNESCO International Conference on Electronic Publishing in Science, Paris, Feb. 20-23, 2001.
- ⁶ Reported by Bruce Lyons of Rockefeller University Press in a talk entitled "E-Journal Pricing Redux: Perspectives from the Field" at the 2002 Charleston Conference, Nov. 1, 2002, Charleston, S.C.