

LexisNexis™ Company Dossier™ — Free Trial



Volume 7, No. 7 • July/August 1999

• Special Web-only Feature •

Earth's Largest Library: One Librarian's Plan of Action

by Mike Dahn

Librarian, Webmaster — Stetson University College of Law

Would you like to see a better future for libraries?

I'm so excited about the future of libraries envisioned by Steve Coffman in his article *Building Earth's Largest Library: Driving into the Future* (See the **March 1999 issue** of *Searcher*, pp. 34-47 or <http://www.infotoday.com/searcher/mar99/coffman.htm>). If you have not read that article, please do yourself a favor and read it. In it, he describes the library of the future -- Earth's Largest Library, where you can search the combined collections of the nation's libraries from a single interface, where materials circulate nationwide, where you may enjoy the benefits of rich features, such as customer reviews of materials or personal e-mail notification when your favorite author writes a new book, which are currently available from Amazon.com, but not yet available in most libraries.

Imagining such a future, I can only wonder, "Why not?" This, of course, leads to a bigger question. How do we get there from here?

In this article, I shall attempt to answer that question in enough detail to get us started and with enough analysis to help us avoid potential problems. It is not a complete plan, but it is a start.

Mr. Coffman's ideas are powerful, and, if implemented, would offer great benefits to both libraries and library users. Make no mistake, though, turning these ideas into a reality constitutes a **huge** project -- perhaps bigger than anything undertaken in the history of libraries. How could we actually build such a catalog? How could we forge the necessary cooperative arrangements among libraries? What could those who were interested do *today* to help with the effort?

Tackling the project in stages is probably the only real chance we have of turning the concept of a centralized, integrated system into a reality. (I use the term "we" to mean anyone interested in working on the project.) In each stage, we should start out small, keeping in mind that the goal is to have something that will work for *all* libraries -- and that we intend to have a *much* bigger system eventually. Our small models must scale well.

STAGE I -- The Catalog

Why start with the catalog? Two reasons. First, the national or international supercatalog would form the foundation upon which we would build all of the other cooperative arrangements. Second, and perhaps more important, *actually having* a super-user-friendly, feature-rich, Amazon.com-like *working model* of a supercatalog

would be the carrot with which we would entice potential member libraries to join the project.

After reading Mr. Coffman's article, I asked our library staff to read it, and then we met to discuss it. After more than an hour of thought-provoking discussion, we ended the meeting with a final question, "Why won't this ever work?"

I expected a wide range of answers, but to my surprise, everyone quickly settled on one reason. It wasn't that we could never build a database so big. It wasn't that the infrastructure would be too expensive. It wasn't the high cost of the infrastructure or the technology.

Everyone (except me -- I'm a dreamer) agreed that Mr. Coffman's ideas would never work because we could never get enough libraries to cooperate.

The project would cost money to start and maintain -- too few libraries would contribute. The project would require every library to merge their records into the supercatalog -- too few would be willing to do so. In short, not enough libraries would be willing to cooperate on a project of this scale. Too few librarians would expend the extra time, effort, and money now for the eventual benefits and cost savings for both libraries and their customers down the road.

How depressing!

While I don't consider wide-scale library cooperation impossible, I do believe that it constitutes our biggest obstacle. To overcome this obstacle, we must not only build a highly functional, super-user-friendly supercatalog, but we must also make joining the project as low-cost and as effortless as possible for potential member libraries. The more libraries who are members, the more valuable the supercatalog would become.

The actual construction of the supercatalog would involve two broad components and (at least) two possible models for the integration of these components. One component would be the "back end" database of shared records. The other would be the super-user-friendly, feature-rich, Amazon.com-like "front end" Web interface for accessing the database records.

The models for integrating these components can be described as centralized or decentralized. In a decentralized model, the individual library databases would stay where they are, and the Web-based front end would act as a meta-search tool, querying each database and collating the results (think Z39.50). With a centralized model, each individual library database would be collated into a single (HUGE) database, which the Web-based front end would query directly (think Amazon.com).

Let's examine these models before tackling the various issues regarding the components.

When trying to determine which model to use (meta-search or single, collated database), it is important to note that the idea of libraries sharing both their online catalogs and their collections is not new. Online union catalogs exist today on a (comparatively) small scale. (While OCLC is not "small scale," it is a fee-based, restricted catalog. Here we are focusing on freely available union catalogs.) What is new about Mr. Coffman's ideas -- what is not being done today -- is the sharing of online catalogs and collections on a *massive*, standardized, scale, which would include *most* libraries in the country (or beyond our borders), and libraries of wildly differing varieties.

If you look around at the small scale online catalog sharing that is being done today, you will find *both* of the models mentioned above... so we might first ask ourselves why we should not start with one of the current online sharing projects and merely grow it to the massive, nationwide scale that we envision?

This might be a viable idea. The problem with it is that existing small scale single database models tend to have been created from homogeneous systems, where a central authority had some (or total) control over what products were bought and how things were handled. Examples would be some large state university systems where you can query the holdings of its college libraries statewide, or some large county systems where you can query the holdings of all of its branch libraries. Trying to "grow" some of the largest of these systems may not work for us, as we would want to integrate a wide variety of *very* different online systems -- quickly and cheaply if possible.

As for the idea of trying to grow some of the larger "meta-search" efforts, I would say that the current Z39.50 models pose major problems. For example, many of the various major online catalog vendors have not implemented the standard precisely. This alone would make building a meta-search supercatalog of thousands of libraries difficult. Also, one would have to rely on thousands of separate systems all being "up" and connected around the clock. The biggest problem, though, is that querying thousands of individual databases is far less efficient than querying a single large one, primarily because of the time-lag involved -- which means that Z39.50 meta-search models are unlikely to scale well. It is one thing to query 10, 20, or 50 catalogs instantaneously, but quite another to query 10, 20, or 50 *thousand* catalogs.

In any case, few of the existing small scale models of either type come close to the speed, ease of use, and sophistication of the Amazon.com database. The most impressive effort I've seen is OhioLINK [<http://www.ohiolink.edu>]. Other note-worthy examples include Melvyl from the California Digital Library [<http://www.melvyl.ucop.edu>] and the Virtual Electronic Library from the Committee on Institutional Cooperation [<http://www.cic.uiuc.edu/cli/accessvel.html>]. But no matter how impressive these efforts, they lack the essential focus of our supercatalog project, namely, the quest for world domination.

I'm kidding, of course. But these efforts do display an innate limited vision. They were created specifically to connect a limited number of libraries. For the Earth's Largest Library project, we should have a very "open" design, one which could accept an unlimited number of geographically dispersed libraries of an extremely wide variety. And we must remember to keep the cost and inconvenience of joining as low as possible for potential member libraries.

So, of the two approaches, my strong preference is for the centralized, single database model.

Now let's consider the primary components of the supercatalog -- the database of shared records and the Web-based interface to that database. Of the two, the database is the far more troubling component. In fact, there are no big, sweeping issues regarding the Web-based interface that we need to consider at this point -- there are just a million small, important issues, most of which can be summed up by saying that we need to make the interface as user-friendly and feature-rich as possible -- at least as user-friendly and feature-rich as the Amazon.com interface, and hopefully more so. Mr. Coffman's article details much of the interface wish list. Group discussion among interested librarians could add to the list.

Constructing the database, however, requires some serious initial planning. The problem of the database can be stated simply: What is the best way to build a massive database of library records that will reflect the

holdings of all (or most) libraries nationwide (and perhaps reflect the circulation status of items) and allow for simple and inexpensive updating of records by individual libraries?

It's not an easy question. Four options are readily apparent.

1. Start with OCLC's WorldCat database (over 40 million records).
2. Start with a massive database of library items, such as the Library of Congress catalog (about 17 million records), BIP/BOP (about 3.7 million records), or Baker & Taylor's Title Source (about 2 million records) -- then add holdings information and the ability to import new items and new libraries.
3. Start with the shared database (electronic union catalog) of a large regional consortium -- then add holdings information and the ability to import new items and new libraries.
4. Start from scratch. Design an open system where MARC records from any library -- regardless of library type or local system -- could be imported into a massive database. Add holdings information, and the ability to import new items and new libraries.

Let's examine the pros and cons of each of these options.

1. START WITH THE OCLC WORLDCAT DATABASE

OCLC already has its WorldCat database on the Web, and its search features and usability is pretty good. So here we would be asking OCLC to open WorldCat to all libraries and the public (make it free to access), and add Amazon.com-like features to it (review, etc.).

In the alternative, we would license or purchase the WorldCat database from OCLC, then build a super-user-friendly, feature-rich Web interface to it, and we would regularly update our copy of the database with the new records given to OCLC by member libraries (or get these directly from the libraries ourselves.)

PROS:

- A. We would start with the biggest database of library materials available.
- B. The database would already have holdings information for member libraries.
- C. This solution would probably allow us to offer the supercatalog in the least amount of time.

CONS:

- A. Because our freely available supercatalog would obviate the need for anyone to ever access or license the WorldCat database again, the cost of acquiring or licensing it may be staggering... and prohibitive.
- B. If we cannot purchase the database outright, any license from OCLC would probably restrict its usage to library customers -- the supercatalog would not be open and free to anyone. Aside from making use of the catalog inconvenient (library customers would not be able to use the supercatalog from home or work), by limiting our audience, we limit our ad-based revenue generating opportunities. (More about this later.)

C. What about records from non-OCLC member libraries? Eventually we will want to include these in the supercatalog. How will we do it? If we start with the WorldCat database, it will probably be too costly to add non-OCLC member library records, considering the small percentage of materials that these libraries would have to offer.

2. START WITH A MASSIVE DATABASE OF LIBRARY ITEMS (LC, BIP/BOP, TITLE SOURCE)

PROS:

A. The costs of acquiring such a database is likely to be far less than the cost of WorldCat.

B. Compared with starting from scratch, we would have a fairly large database of titles. If starting with LC, we would merely need to merge library holdings information. If starting with BIP/BOP or Title Source, in addition to adding holdings information, we might need to add information to the item records where there was a significant difference between the item records and standard USMARC records.

CONS:

A. Initially, the database would not be as large as OCLC's.

B. It would take longer to get the supercatalog up and running than it would if we started with OCLC's database, primarily because we would have to merge holdings information.

C. The most troubling aspect of this option -- and all other non-OCLC options -- is the problem of adding new items and deleting weeded items. OCLC already has a process for doing this. Without them, we would have to develop our own process.

D. Again, unless we use the Library of Congress records, the cost of acquiring a proprietary database may be prohibitive, since free access to our supercatalog would wreak havoc on the publisher's profits from the database.

3. START WITH A LARGE REGIONAL CONSORTIUM DATABASE

Here we would start with one of the big databases from a regional consortium, such as those that exist in Ohio or California, and build from there.

PROS:

A. We would not have to bear the cost of purchasing or licensing a database from OCLC, Bowker, or Baker & Taylor.

- B. Compared with starting from scratch, we would have a fairly large database of titles.
- C. We would be able to build on the expertise and processes already established by the consortium.

CONS:

- A. Initially, the database would not be as large as OCLC's.
- B. It would take longer to get the supercatalog up and running than it would if we started with OCLC's database, primarily because we would have to add additional libraries.
- C. We would be trying to "open up" a solution that had been designed for a specific group and for a specific purpose. Rather than designing a "clean" solution for the supercatalog from scratch, we would be trying to fix, patch, and adapt an existing solution for the requirements of the supercatalog. This may be a small detriment, or it may be a large one. It will depend on the existing consortium database and the requirements of the supercatalog.
- D. Many of the existing consortia solutions were designed by outside vendors. *We might* have licensing issues with these vendors.

4. START FROM SCRATCH AND ADD RECORDS AS MEMBER LIBRARIES JOIN

This involves building the supercatalog from scratch. The key element would be the developing a *process* where marc records and holdings information from *any* library could be imported into the supercatalog with a minimum of cost.

PROS:

- A. Libraries and librarians could maintain complete control over the supercatalog.
- B. The supercatalog would be designed specifically for our needs. It would not be a collection of patches and fixes from another system.
- C. It may be the cheapest solution in the long run.

CONS:

1. This would probably be the most lengthy solution. Some would argue that a "from scratch" solution is not technologically feasible, but it's really just a matter of time, not technology.
2. It is far from certain that librarians will be able to cooperate on the scale needed to create the supercatalog from scratch. It is similarly uncertain whether librarians will be able to "group negotiate" reasonable and affordable contracts with software developers or systems vendors for building the parts of the supercatalog that

librarians alone may not be able to build.

So... which option do we choose? It is difficult to try to guess which option would best without knowing the specifics regarding the purchase or licensing costs of various vendor databases -- or just how "expandable" the existing databases of large regional consortia may be.

In my preliminary discussions with many librarians on this subject, the most popular solution, by far, is to start with the OCLC WorldCat database. Personally, I would like to see a "from scratch" solution given serious consideration, but since this possibility is so complicated as to deserve an article of its own, I will proceed on the assumption that we would start with the WorldCat database to build the supercatalog.

Having this database at our disposal, we would now build the super-user-friendly, feature-rich, Amazon.com-like Web-based interface to it. Building this interface will not be easy. Fortunately, sophisticated tools and talented Web developers abound today, both inside and outside the library community. Implementing a Web-based search interface for the database would be relatively easy, but making the interface as easy to use and as sophisticated and feature-rich as Amazon.com's, that would be very difficult.

There are many features that should be taken into consideration when building the Web interface, many of which could be modeled after the features of the Amazon.com interface, and after those described in Mr. Coffman's article. An important design specification would be a welcome screen for the supercatalog that asks users for their library code (a unique number, similar to a zip code, for each member library), or for their library's name (which would then be translated into a unique code, similar to the way domain names are translated into IP addresses). This would allow the results of searches to be displayed in a way that would be especially relevant to the particular user.

It would allow options like, "View your library's holdings," "Click here to see other local library holdings," and "Click here to display holdings nationwide." There are other important reasons for having users identify their library when using the supercatalog, many of which will become apparent later in this plan.

We have essentially two options for building the Web interface. We could try to do it ourselves, or we could hire someone to build it for us. In either case, librarian input would be extremely important to assure the feature set we want. Developing the interface ourselves might be cheaper and offer us more control. Hiring Web developers would probably be more expensive, but it would likely result in a quicker completion of the project and a more sophisticated design. While we have many sophisticated Web developers in the library community, hiring outside developers is probably our best bet.

With a completed Web front end, aside from a few minor tweaks and modifications as problems arose, the supercatalog would be complete. Our next concern would be upgrading the servers and Internet connection in proportion to the actual and expected size and use of the database.

If our goal is to have literally *thousands* of library collections in the supercatalog and *millions* of daily users, we would need to purchase or lease numerous heavy-duty servers. We would also need a very fast, high-bandwidth connection to the Internet, and we would have to hire (if we hadn't already) a sophisticated database administrator (think six figures) and a small support staff to grow and maintain the project. We would also have to start thinking about mirroring the servers and distributing the database. All of this, of course, would take... what?

A lot of money.

We have many alternatives here — grants, gifts, business investments, and up-front contributions from participating libraries. As much of a challenge as the fundraising will be, it will be minor compared with the challenges that lie ahead in Stages II, III, and IV...

At the same time that we were seeking funding, we would also want to promote the project. We could do this through well written articles in national journals and magazines, through press releases, and through announcements to many (or all) library-related electronic mailing lists.

And now, after all of our efforts and expenditures, what would we really have at this point?

Simply put, we would have a customer-friendly ILL tool. And, depending on how sophisticated we built the database, we might also have a good copy-cataloging tool. Furthermore, we should have a finding aid easier to use than most (if not all) current library systems, and our supercatalog would have enhanced features, such as the ability for library customers to read and write short reviews of library materials *nationwide*, in Amazon.com-like fashion.

The big problem with interlibrary loan today (aside from its near-prohibitive costs) is that library customers simply do not know what is available. And even in cases where library customers have access to the WorldCat database or similar databases, the user-friendliness and breadth of features of such databases, when the intended audience would be made up of non-librarians, simply does not compare with what is available at Amazon.com. And of course, in many cases, library customers *do not* have direct access to such databases. The project at this point would solve these problems.

As I mentioned earlier, the biggest obstacle to the entire project will be library cooperation. Stages II, III, and IV will require *a lot* of library cooperation. So, even if we never get that far — if all we ever accomplish is opening up a massive, easily updated, cost-efficient, super-user-friendly, feature-rich, Amazon.com-like supercatalog, I think it would be worth all our effort and expenditure simply to let library customers know what interlibrary loan could supply. And I would bet that even librarians would prefer a super-user-friendly, Amazon.com-like supercatalog interface to the tools they currently use for interlibrary loan. Beyond that, library customers would enjoy some new enhanced features, such as reviews and recommendations from customers and librarians nationwide.

On the other hand, the most exciting aspects of this project lie ahead...

STAGE II -- Circulation

The most obvious functional omission from the project at the end of Stage I is the lack of real-time information about the library materials. A search of the supercatalog at this point would tell you that a certain book is owned by a library in Montana, Indiana, and Arizona -- or that it is owned by 186 different libraries, these 3 closest to you, but users care primarily about whether a particular item is *available*, and if so, *when* can they have it in their hands?

To answer those questions for the user, we need circulation information. How many copies of the item do libraries have? Will they circulate their copies? If so, which library has a copy available? If none have one now, which expects one back soonest and when? Can we promise the customer a copy within a specified waiting period or does the library holding the copy have a waiting list of library customers who have reserved it? All of these questions to librarians grow out of the client's single question: when can I get it?

Adding this level of circulation information would require a difficult jump. We would have to gather and merge information on library transactions all over the nation in *real-time*, or if not in real-time, then super-frequently. This would require additional tables and fields tied to the supercatalog records for holding information, circulation policies, current circulating status, expected return date, holds or reservations, etc. In the alternative, rather than providing all of this information in our centralized supercatalog, we could keep it distributed at the local library level and simply poll libraries for the circulation information as needed.

While collecting all of the circulation information in the supercatalog would allow us to provide a better user experience, it may not be cost-effective. It would require that libraries all over the nation maintain a direct link to the supercatalog or send their circulation information in super-frequent bursts. In either case, it would result in a massive amount of online traffic to the supercatalog, and significant costs in setting up such a system.

Polling for circulation information would allow a user to search the centralized supercatalog for holdings information, and then to poll libraries individually or *en masse* to determine if an item were available. This should work well for searches that return small result sets, but polling for large sets *en masse* is probably not feasible -- it would have to be done in smaller, logical, discrete sets.

So, Stage II simply involves setting up a polling mechanism for circulation information, or, in the alternative, setting up a method for real-time or super-frequent transfer of circulation information to the supercatalog.

Does this have to be a separate stage? Not really. I lump this functionality into its own stage simply because there would be significant benefits at the end of Stage I to warrant making the supercatalog available before attempting further improvements. However, from a systems design standpoint, it might make sense to construct this feature in the development of Stage I.

What would we have at the end of Stage II? Simply put, a supercatalog that not only let library customers know what was available through ILL nationwide, but when they could actually expect to have such material in their hands. We would have moved an essential step closer to *seamless* ILL supporting *wide* circulation, where thousands of libraries would act in concert to efficiently and cost-effectively circulate materials nationwide. This would bring us within reach of creating *Earth's Largest Library*.

STAGE III -- Seamless ILL

Interlibrary loan today is too slow, too costly, and too mysterious. Library customers do not know what they can get through ILL. The supercatalog will have solved the last problem, so let's try now to solve, or mitigate, the remaining problems: cost and speed. To do this, we need to do two things — add customer records to the database and completely rethink the way we allocate library resources. Yet, before we examine these requirements, let's step back for a moment and think about the problems of speed and cost.

Both speed and cost can be associated with two elements of the interlibrary loan process -- the *processing* of materials at the borrowing and lending libraries, and the *delivery* of materials to and from those libraries.

With a sophisticated supercatalog, we could best tackle the problems of speed and cost associated with *processing*. Delivery generally involves postal service on a nationwide scale, or both postal service and courier service on a local scale. Aside from collaborating locally for efficient and cost-effective courier service, there is little we can do to increase the speed or reduce the cost of delivery, except for possibly giving the customer the option to pay for an increase in speed (overnight service, priority mail, etc.), working out collective agreements with private carriers, such as UPS, for reduced costs nationally, or delivering materials electronically. The delivery of materials electronically poses serious copyright problems, difficult technical considerations, and consequently, significant costs. (The wide-scale delivery of library materials — not just short excerpts of books and periodicals — by electronic means deserves the lengthy analysis of a full article of its own.)

We could solve many of the cost and speed problems of processing by having library customers order and check-out their own materials and by having a highly automated retrieval process. The first step in getting these things accomplished would be to add customer records to the supercatalog. For individual member libraries, it would mean an initial upload of all of their customer records, and real-time or super-frequent updating of these records.

Next, Web interfaces and back-end processes would need to be designed to give customers the ability to check-out, renew, and reserve library materials over the Web using their barcode or ID number. At member libraries, automated processes would have to be worked out that would automatically print check-out slips at the local library, and print mailing labels (and possibly bills) at remote libraries.

The process might work something like this:

Customers in a library would sit down at a terminal and search the supercatalog for library material of interest, or they would search the supercatalog from a home computer, an Internet kiosk, an Internet café, etc. Finding items of interest, customers would have the ability to gather the brief records of the items in an electronic shopping cart application, similar to the ones used in many online stores. Of course, items that were non-circulating could not be added to the shopping cart. When customers were ready, they could click a button labeled, "proceed to check-out."

At the check-out screen, the customer would be asked to enter her unique barcode or ID number. Upon doing so, the titles for check-out would be displayed. If the customer were inside a library, the check-out titles would be grouped into two categories, "from this library" and "from remote libraries." Otherwise, the titles would be displayed together without any special designation.

The name of the customer would also be displayed, as well as the customer's mailing address. Recognizing the customer, the system might also display appropriate warnings, such as, "You are not allowed to have more than 30 library items at any one time. Please reduce your check-out list by [number here] items, or return some items you currently have out." Or, "You are not allowed to check-out library materials at this time. A lock has been placed on your account. This is probably due to long-overdue unpaid fines or an excessive number of overdue materials. Click here for assistance."

Once all of this information was displayed, the customer would be asked to verify both the materials requested and her mailing address. It would be possible to update the mailing address or remove items from the shopping

cart at this time. After verifying this information, the customer would click a check-out button and, if the customer were inside a library, she would be presented with a screen that instructed her to "gather the following materials from this library and present them at the circulation desk with your library card. [local items listed here]" and would be informed that "the following materials will be mailed to your home address from remote libraries. You should receive them in 3 - 14 days. If you do not receive them within two weeks, please call [phone number for help here] for assistance. [remote items listed here]." If the customer were outside the library, the "gather from this library" instructions would not be displayed.

When the customer clicked the check-out button, a number of things would happen automatically. All of the items in the supercatalog would be marked as checked-out, and due back at a specific date. An electronic "note" of the local items checked-out would be sent to a verifying application, where it would await verification by a circulation attendant (if the customer were making an order from inside a library). At remote libraries, an order for the material and a mailing label with the customer's address would automatically be printed. If necessary, a bill for the customer might be printed as well.

At the local library, the customer would gather the local materials and bring them to a circulation desk for check out. The circulation attendant would swipe or scan the customer's library card, which would bring up a screen from the verification application listing the local items the customer had checked out. The attendant would verify that the physical materials matched the electronic list, degauss the physical material if necessary, and the customer would leave with the checked-out items. If the customer checked out local items electronically, but then failed to physically check them out within 24 hours, the items would be removed from the verification application, and the records for the items would show that they were once again available for circulation.

At the remote libraries, someone assigned to filling remote orders would pick up the automatically generated printed orders and mailing labels, find the materials in the library, and then mail them to the customer along with a return mailing label and a standard form letter (hundreds of return mailing labels and form letters could be printed in advance), which would let the customer know, among other things, when the item was due back, and that it could be mailed back to the remote library using the enclosed mailing label -- postage to be paid by the customer -- or that it could be returned to the customer's local library at no charge. Some customers would undoubtedly find it more convenient to mail the item from their workplace or from the post-office (where they might be going for other reasons) than to make a special trip to the local library (where they might be going less and less, as nationwide circulation of materials became more popular and sophisticated, and home Internet access became nearly ubiquitous).

When clerks at remote libraries went to their shelves to find the materials that had been ordered, and the materials were in use by customers inside the library, mis-shelved, or otherwise missing, the procedure might be to place it on an in-house search list for 24 hours, and if it had not been found in that time, the order would be forwarded to the another member library.

Sound pretty nice? Well, let's examine a few of the many potential problems.

(1) What if customers in local libraries pick up books off the shelf only to find, when they reach the circulation desk, that the items have electronic reservations from supercatalog customers -- that non-residents have "already checked out" the items? Certainly, this is not a very customer-friendly situation and one that might even cause political difficulties for local librarians.

The best solution to this is probably rapid response to electronically checked-out items. A list of electronically

checked-out items should be printed very frequently (automatically or manually). Shelvees at the library should pull the materials from the shelves as frequently as library staffing would allow -- at least every few hours. This, combined with customer education about the process, should alleviate problems significantly.

(2) Another potential problem associated with nationwide circulation would stem from existing time limits on circulation. With the time for round-trip mailing factored in, customers would have less time to actually use the materials. With different libraries having different loaning periods, customers could not form reasonable expectations. We would need to establish extended standard loan periods agreed upon by member libraries.

(3) Finally, the biggest potential problem (I have saved the best for last) involves "resource equalization." It's the age-old problem of interlibrary loan generally, and of library consortia specifically, where smaller libraries are greater borrowers and larger libraries greater lenders. Large libraries might consider this a disincentive to join the nationwide system. Steve Coffman mentioned the need to consider this in his article.

A nationwide circulation system would increase circulation of library materials greatly over current ILL practices. With libraries of vastly differing resources and budgets, we *must* figure out a way to make the system equitable if it is to work at all.

As big and as complicated as this problem is, it lends itself to a number of possible solutions. I propose the following:

Bottom line, borrowing libraries *must* pay the shipping costs of the lending libraries, as well as a small fee for administrative expenses. It should not be financially detrimental for large libraries (or any library) to loan materials. This immediately raises the question of how small libraries with tiny budgets will pay the considerable postage costs of heavy borrowing.

Well, it's a harsh reality, but as it has been in the heavily decentralized past, so it will be in the partially centralized future -- libraries with fewer financial resources will not be able to offer their customers the same level of service as those with more financial resources. Still, these small libraries should be able to offer their customers more for less in our future. Here's how it might work.

Most libraries should be able to reduce their collection development budgets considerably by ceasing to purchase most of the "just in case" materials that Mr. Coffman spoke of in his article, when a fluidly circulating nationwide collection begins reducing the need for many of these purchases. They could dedicate the money saved to paying the shipping and administrative costs for remote orders.

Of course, the purchasing of materials is much easier to budget for than for the shipping costs based on the borrowing habits of customers, and it presents far fewer equity problems. A system would have to be developed to keep library customers from exceeding the limits of the library's budget. The library might create a system of "access credits," where one access credit was equal to the average cost having a book shipped to a customer and then returned to a remote library. The library would divide its budget for access by such an average cost to determine the number of access credits it could give to its customers. It would then divide its total number of access credits by the sum of its current customer base and the number of projected new customers for the year to determine how many access credits would be given to each customer. The library might make further modifications to such a system. For instance, it might give a small child fewer access credits than the average, and it might give school teachers more.

The supercatalog would reflect the cost of items in access credits (which would be calculated, if need be, from the location code first entered by the customer -- access credits for a library in Alaska or Hawaii would probably be more expensive), and based on the location code entered at the welcome screen, all local items would cost zero access credits. Similarly, when customers went to check out electronically, once they had entered their barcode or ID number, the system would inform them of their access credit account balance, and of how many access credits remote items would cost them.

With such a system, small libraries might only be able to give their customers 15 access credits per year, while large libraries might be able to give their customers hundreds of access credits per year. At any library, customers would have the ability to purchase additional access credits if they ran out before the end of the year, and it would be of great benefit to customers to provide an electronic forum for donating or purchasing access credits within a library's customer base.

Certainly, those who borrow local materials almost exclusively and would never use up their allotted credits in a year might be willing to donate credits to those involved in research. Also, if an access credit is determined by the library to equal \$9, and that is the amount that a customer would have to pay the library to purchase each additional access credit when her allotment had been used up, why not let those customers who were willing, sell theirs for any price less than \$9? It would be a great benefit to the customer in need of access credits, and it would partially compensate customers who are taxed for a service that they do not fully use.

This system of access credits, if designed correctly, would allow for a much more efficient and equitable allocation of library resources than the normal allocation of such resources today. Most of the library's rarely used "just in case" materials would be replaced by the *exact* materials that customers want -- the cost being a delay of 3-14 days. Furthermore, those who use the library less could donate or sell their portion of the library's budget to those who would use library services more, yet all would be entitled to an equal portion of the library's resources.

Clearly, this would be an efficient allocation of resources, but some would argue that it would not be equitable. There would be critics who complained of the rich having greater access to nationwide materials based on their ability to purchase additional access credits, while the poor, in need of more basic necessities than library service, might sell all of their access credits at any price, and as quickly as possible.

Harsh reality.

The only solution to this would be to ensure a basic level of service for all customers. Beyond that, I believe that the poor or non-poor, to a certain extent, should be able re-allocate library funds for their own needs. This would give the customer the ability to effectively convey a message to the funders of the library, essentially saying to a county, "You spent too much on library services for me, when what I really needed was food." Or to a university, "You spent too much on library services for me, when what I really needed was a new book bag," etc. The basic level of service would include free, unlimited local service, and perhaps a minimum number of non-transferable access credits (maybe 5% of the amount allocated). My preference would be for all access credits to be transferable, but there will be opponents to that idea.

The exchange of access credits on a national level would probably be too complicated, since such credits would be tied to *actual* shipping costs and *actual* budgets. However, depending on the sophistication of a centralized accounting system and the ability of libraries to agree on a standard price for access credits, we might be able to create a nationwide system for *donating* access credits. This is a wild idea, because it would essentially mean

that one library customer could allocate (donate) a portion of his local library's budget to *another* library (or more specifically, to the other library's customer). This would provide for a very efficient allocation of resources, but it would pose significant administrative costs and challenges.

A good alternative to allowing customers to exchange access credits would be to have all customer accounts "zero-out" once a year, when the new year's allocation was made. All surplus would be absorbed by the library and re-allocated to customers.

Regardless, an access credit system would solve some of the problems associated with the bigger problem of nationwide resource equalization, but it would not solve all of them. Two of the problems that would still need to be addressed would be billing and the inequalities of local and remote service.

The problem of billing is simply one of sheer numbers. If all lending libraries bill all borrowing libraries for their actual shipping and administrative costs, not only would most libraries receive hundreds or thousands of bills per month, but the administrative costs associated with making and collecting payments would be a strain on the entire system. Fortunately, the solution is rather straightforward. Billing and accounting should be centralized. One central entity would process all bills and keep accounts for all libraries. Monthly, each library would receive only *one* mailing from this entity. Libraries that had borrowed more than they lent would receive a bill, and those that had lent more than they borrowed would receive a check. All libraries, of course, would have to contribute to the administrative costs of the central entity.

The inequalities of local and remote service pose a much more challenging problem. The problem can be stated simply: It is more valuable for a library to have an item actually *in* the library than to merely provide access to an item that cannot be in the customer's hands for 3-14 days, therefore, why would large libraries want to offer their vast collections to outside borrowers, even if all of the shipping and administrative costs would be paid for?

Can we go too far with nationwide circulation? With centralization?

Absolutely. Customers walking into a library want to put their hands on certain materials immediately most of the time. So what incentive would large libraries have to put more materials into remote circulation than small libraries do? The quick answer — the same incentive as all other libraries: the ability to join a nationwide system that gives their customers access to tens of millions of items. Certainly, even the largest libraries would benefit from that offer. But what if a nationwide consortium mandated that a certain percentage of a library's collection be available for wide circulation in order for the library to remain a member? Then the large library would have no incentive. Furthermore, the idea of central mandates scares me. It reeks of bureaucracy and inefficiency. What if some libraries started cheating by making only the most useless percentage of its collection available for nationwide circulation? Would that mean (gulp) the policing of member libraries? The idea makes me shudder.

On the other hand, could we somehow give large libraries an incentive to lend and/or give all customers and all libraries a disincentive to borrow from large libraries?

To address the inequities of local versus remote materials, libraries would put all of their materials into one of three categories: non-circulating, locally circulating, or widely circulating. These choices would be made at the local level, but guidelines would be established cooperatively to help libraries make these choices.

All local material would be freely accessible for local customers. As the names imply, locally circulating material would only circulate locally (these materials would show up in the supercatalog as circulating for local

customers, but they would display as non-circulating to remote customers), and widely circulating material would circulate nationwide. This would allow libraries to maintain more control over their materials and assure that a certain quantity of basic materials were available at all times for their own customer base.

We would still need something in place to keep libraries from hoarding their materials. If too many libraries marked most of their collection (or the best of their collection) as locally circulating, the value of the nationwide system would be diminished considerably. The nationwide circulating collection might merely consist of the small amount of "junk" that member libraries had no desire to hoard for their more important local customers.

Libraries should have a strong incentive to share their materials widely, but they should still have absolute control over what they can keep locally. The most logical way to do this would be to tie the incentives to access costs, so that libraries would need to constantly balance the benefits of local circulation with the benefits of wide circulation -- essentially striking a balance between hoarding materials and sharing materials.

To do this, we would develop a formula, the variables of which would be the percentage of the library's collection that was available for wide circulation, the nationwide average percentage of individual library wide circulation materials, the percentage of a library's wide circulation materials that *actually* circulated, and the nationwide average percentage of individual library wide circulation materials that actually circulate. Special variables could be added for libraries that perform extraordinary archival functions or have exceptional special programs, etc.

We would want libraries to circulate a large a percentage of their collection, so that particular variable would carry a lot of weight in the formula. The variable for materials that had actually circulated would be a rough measure of the quality of the collection available for circulation, and it would be designed to keep libraries from padding their widely circulating collection with materials that should have been weeded. Since it would be a far-from-perfect measure of quality, the variable would not carry as much weight as the variable for the percentage of materials available. The national average variables would help stabilize the formula.

The formula would produce a coefficient that would be used to determine a discount or an additional charge that would be applied to access charges for individual libraries. Ideally, for most libraries, this coefficient would be 1, or a number very close to 1 (.98, 1.04, etc.).

An electronic table of libraries, library location codes, and access coefficients would be kept. Anytime a library received an order for remote materials, it would send the materials, and it would electronically bill the remote library through the central accounting entity. When preparing bills for individual libraries, the accounting entity would multiply the bill by the library's access coefficient to determine the actual bill. For most libraries, this should result in a modest additional charge or a tiny discount. However, libraries that were hoarding materials or offering very low quality materials might be taxed substantially (the access coefficient might be 1.5 or 1.8). Similarly, libraries that were circulating a very large percentage of high quality materials might receive a significant discount (an access coefficient of, perhaps, .85).

The formula should probably produce a maximum coefficient of 2, and a minimum coefficient of .75. In other words, small, special libraries that did not circulate, or offer for circulation, *any* materials should not have to pay more than twice the actual access costs of materials (access coefficient of 2). And libraries that somehow offered *all* of their materials for circulation, and then actually circulated all of those materials, should not receive a discount of more than 25% (access coefficient of .75).

You might wonder, since access credits would be tied to *actual* shipping costs, who would pay the difference when libraries received a discount as a result of a favorable access coefficient. The answer, of course, is that the money would come from those libraries that paid an additional charge as a result of an unfavorable access coefficient. The formula would be designed so that most libraries could easily achieve a coefficient very near the number one, yet it would be lopsided enough (minimum of .75 but maximum of 2) to assure that there were always enough funds to cover any discounts. Any surplus of funds would either be redistributed equitably and entirely to the libraries on the lending end of transactions with "hoarding" libraries (those with coefficients greater than one), or it could be used to cover or defray the costs of the centralized accounting and administration, or it could be partially distributed for both.

The access coefficients could also be used in the supercatalog to reflect the correct access credit prices for individual libraries. For instance, if a particular library had an access coefficient of 1.02, when customers of that library entered their library location code at the welcome screen of the supercatalog, the access credit prices of all materials would be displayed as 2% higher than they would for a library that had an access coefficient of 1.

Another way to accomplish this would be to simply display the standard access credit prices for all materials the same way for all libraries, but when libraries distributed access credits to their customers, they would account for the coefficients. For instance, the library with the access coefficient of 1.02 would only allocate 98% of its access budget for the distribution of access credits. It would reserve 2% for the additional access charge it would expect to pay as a result of its coefficient. The 2% difference, however, would have to be reflected in the price it charged customers to obtain additional access credits.

The effect of all of this would be that libraries who saw more benefit in having a strong local collection for their customers, and therefore hoarded their materials, would not be able to offer as much access to the nationwide collection. Libraries who shared most of their materials would be able to offer more access to the nationwide collection.

The important thing would be that libraries would maintain *complete control* over their materials by balancing their need for readily available materials and their need for cost-effective access to a nationwide collection.

However, one problem would remain. It is one associated with an age-old interlibrary loan principle that borrowing libraries should seek outside material from smaller libraries and from closer libraries. The largest libraries should not bear a burden of filling *all* requests -- the burden should be spread among libraries as much as possible.

We could address this in our system by adding a very tiny access tax to individual library materials, which would be based on the size of the widely circulating collection of the library that owns the material. For instance, materials from libraries that had 900,000 items available for nationwide circulation might carry an access tax of 0.009, libraries that had 640,000 items would carry an access tax of 0.0064, and so on.

When a customer searched the supercatalog (remember, the customer enters a library code at the welcome screen), materials would be displayed based on availability, cost, and location. For instance, suppose a customer performed a search in the supercatalog for a particular title, and that there were 10,000 copies nationwide. The supercatalog would ask itself the following questions, and produce the following result:

Does the local library own a copy of the item?

If yes, display the item.

If no, or if the item is currently checked out, also ask the following questions and display the following result:

Of the 10,000 copies owned nationwide, which ones are available for circulation?

(These would be materials that were not only available for wide circulation, but also not checked out to anyone.)

Of this subset, which copy has the lowest access cost?

If there are many copies with the same access cost (tied for lowest), display the one that is the closest to the requesting library based on location code.

Also display the five closest available copies based on location code, regardless of access cost, but sort them by access cost.

This would display the closest lowest cost item available as well as the closest items available that may carry only a slightly higher access cost -- for these, the customer might be willing to pay a slightly higher access cost for a faster delivery time. Furthermore, items from the largest libraries would only be displayed if there were no items available at the smaller libraries, because larger libraries would have a higher access tax. Or, in cases where items from large libraries were displayed because of proximity, the higher access charges would compensate these libraries for the extra usage.

If a copy of an item were owned by the local library but checked out to another customer, it would still be displayed to give the requesting customer the option of waiting for the "free" local copy instead of ordering a remote item for which access credits would be charged. Also, if all copies of an item were in circulation nationwide, the closest and cheapest copies would still be displayed so that customers could reserve a copy. If the local library did not own a copy of an item, and all nationwide copies were non-circulating, these records would still be displayed based on proximity, in case the customer were willing to travel to a remote location, request a chapter through document delivery, or plead to the remote library for a special exception.

It would be very important to keep the access tax (based on size) very small. We must remember at all times that access credits would be tied to actual shipping and administrative costs, which are fairly expensive. Whatever we can do to keep this cost down, we must. Otherwise, few items will circulate nationwide. The primary purpose of the tax would be maintain a tendency toward requesting materials from large libraries last. Therefore, the tax *could* be measured in billionths of a cent and still suit our purposes. However, I think it makes sense to make the charge very small, but not insignificant, so that large libraries have an additional incentive to keep their collections large, even if it is a small incentive, and so that they receive some compensation for the additional requests they would undoubtedly bear.

We would also want the access tax to remain very small because it will make budgeting for access significantly more complicated. We would want any errors in budgeting for the additional costs of an access tax to be very minor.

Some might argue that such an access tax would only serve to suck the resources out of the already impoverished small libraries. Again, it is a harsh reality, but this is as it should be. Very large libraries have the

least to gain from a nationwide circulation system. Small libraries have the most to gain. Therefore, small libraries would "pay" for their great benefit by having more of their items in circulation. If we designed a nationwide circulation system that resulted in some communistic leveling of resources, large libraries would never join, and it's very important that they do join. In a nationwide circulation system that works, large libraries would still be able to do what they've always done -- provide more materials and greater service to their customers than smaller libraries do.

Finally, it cannot be over-emphasized that the access credits in this system would be tied to *actual* average shipping and administrative costs, that these costs would be *considerable*, and that the costs must remain as *low as possible* if materials are to circulate widely and fluidly.

Having accomplished all of this -- having given customers the ability to check out materials themselves, having set-up automated processes for the ordering and shipping of library materials, having designed a system that would be equitable for all libraries, and having a created a system where libraries retain absolute control over their own budgets and resources, we would have reached the end of Stage III.

Whew!

It will not be easy. Stage III will require a lot of planning, a lot of money, and most importantly, a lot of cooperation among member libraries. At this point, what would we have for all of our efforts and expenditures?

Not only would we have a sophisticated, super-user-friendly, feature-rich supercatalog that would give customers the ability to know what is available through interlibrary loan, but we would now have a system where customers could actually order such materials by themselves, *without the aid of a librarian*, and we would have a system that delivered those materials *quickly, reliably, and cost-effectively* -- often right to the customer's mailbox.

STAGE IV -- Partially Shared Collection Development

Think for a moment about the MASSIVE duplication of effort and resources that exists in libraries today. All libraries purchase materials for their own collections that very few customers will ever use. Not only does this represent the duplication of effort of acquisitions librarians, but it is a massive duplication of resources. Rather than purchase 100 copies of a rarely used book nationwide, why not purchase just a few and make most users wait a few days to get it? To do this, we would have to coordinate collection development on a nationwide scale.

It would be important for individual libraries to maintain control of what they absolutely wanted to buy, so such a system might work by having libraries purchase part of their collections, and then having them send the funds from the remaining portion of their collection development budgets to a central buying authority that would consider the needs of the local collection *and* the nationwide collection.

After purchasing materials they "had to have" and sending the rest of their collection development funds to the central buying authority, libraries would receive a very diverse range of materials that would fill out and complement both their existing collection *and* the national collection. For example, neighboring libraries would not have the exact same books on astronomy unless those books constituted "core" astronomy books that were wildly popular or important enough to justify a copy in almost every library.

In considering partially centralized collection development, we are not just talking about a centralized computer that would share data nationwide. Here, we are moving beyond mere computers to a centralized body of employees. This was alluded to in Stage III when considering centralized accounting and billing.

Any sort of centralized bureaucracy is a bit scary, since large ones without competitive pressures tend to become slow-moving and wasteful. Yet, the benefits to be gained by partial centralization far outweigh these fears. We should simply take these concerns into account when setting up a central group of employees, and we should be ever vigilant regarding waste or lack of progress.

While the costs of such a central administrative body would be considerable, they would not be prohibitive. For instance, imagine the administrative body had operating costs of 20 million dollars per year, and that there were 25,000 member libraries. That would amount to an *annual* charge to member libraries of \$800. Considering the potential revenue generating possibilities of the supercatalog, the budget for the administrative body could be greater, or the cost to individual libraries lower, or both. And if the annual charge were weighted based on the size of the library, there can be little doubt that it would be affordable for *all* libraries.

No, the costs of such an administrative body would not be our biggest challenge. Our biggest challenge would be getting such a body set up, and then keeping it responsive to our needs. The leaders of the body would have to honestly feel like employees of the member libraries, rather than like the heads of a provider of service *for* the member libraries. They would need not just a strong service orientation, but a strong *library* service orientation. They would have to *believe* in the altruistic goals of librarianship, and honestly want the very best for both libraries and library customers.

Centralizing these functions while letting member libraries maintain *absolute* local control of what they feel are essential acquisitions would not only result in significant cost savings for all libraries, but it would also give all libraries more influence over publishers and other vendors, as our central purchasing body would represent a large, influential customer to these businesses.

TODAY

If we can do it, we would truly have created Earth's largest library. We would have a nationwide network of libraries cost-effectively, quickly, and *fluidly* circulating materials among one another. We would have largely eliminated the MASSIVE duplication of effort that goes on in libraries today. We would have provided services to customers on a never-before-seen level. Customers could read and write reviews of materials, receive notifications of new materials of interest, read librarian recommendations, order materials from remote libraries easily, and enjoy a thousand other features of a supercatalog that would enrich their library experiences immensely.

There are countless processes, features, and other details that I have not covered here specifically, but we can work all the details out — together — as we progress with the project. The important thing is that we get started, and we *can* get started *today*.

TODAY we can begin getting interested people together to brainstorm about the ideas and the details that need further development.

TODAY we can begin gathering together technologically sophisticated librarians to try to work out the initial database, record merging, importing, or Web design problems. Let's be creative and resourceful. Perhaps there is a local computer user-group in your area. See if they would be interested in working on the project, or at least in advising those who do. Perhaps you could interest a computer science professor to assign one of these problems as a class project for the good of all libraries? Are there librarians in your organization who have the ability to tackle some of these problems? There are many possibilities.

TODAY we can start discussing fundraising ideas for the capital expenditures to come. We will need significant funds. How might we raise these funds?

TODAY we can assemble librarians to work out a model and feature set of the ideal super-user-friendly Web interface. You do not have to be technologically sophisticated to know what features would be really useful. Let's start making a list.

TODAY we can begin looking for non-librarian partners to help us achieve these goals. There may be businesses that would be willing to help us with both the technical aspects of the project and with money. Let's find them.

TODAY we can take the first step toward the library of the future, Earth's largest library.

SOME FINAL THOUGHTS

If you've been an astute reader, you will have noticed that the plan that I have described above started out as a relatively detailed plan of action, but then slowly digressed into a description of ideal functions and potential problems, similar to Mr. Coffman's original article. It lacks the detail that the "plan for action" in the title promised we would address in the first place.

Why? Any plan for a project of this magnitude must be detailed enough initially to provide for fast action, but broad enough to account for an increasing number of unknown variables. Now, I am not a scholar of interlibrary loan or collection development, nor am I a historian of OCLC, RLIN, or library cooperative arrangements generally. What does this mean? It means that my plan has definite flaws and omissions.

I firmly believe that *none* of these flaws are fatal to the project, as long as we are *persistent*. Initial flaws in the plan will be discovered and corrected through broad discussion from a wide variety of interested scholars and specialists. Undiscovered flaws will have to be dealt with as they rear their ugly heads -- but we should be able to solve them as long as we don't give up.

We need to get started. In this case, *impatience* is a virtue. There are probably a million reasons why this project won't work. Let's ignore them. There were a million reasons why people would never fly, or send a human to the moon, or circumnavigate the globe in a hot-air balloon. Those that accomplished these things ignored all the naysayers, and they learned from, but were not intimidated by, the failed attempts that came before them.

We should remember the Yale university professor who wrote on a term paper, "The concept is interesting and well-formed, but in order to earn better than a 'C,' the idea must be feasible." The term paper proposed a nationwide/worldwide reliable, cost-effective, overnight delivery service. The student who wrote it was Fred

Smith, who, despite the criticism of his esteemed professor, went on to found Federal Express, which is now a successful, multi-billion dollar corporation.

We will have two major enemies as this project progresses: ourselves, and those who stand to lose business (or go out of business) as a result of our accomplishments.

We will be our own enemies in two ways. We will have our own naysayers. There will be many times when some among us will believe that the next step in the project poses an *insurmountable* obstacle, and they will voice this opinion loudly. We must persist.

Perhaps the biggest way we will be our own enemies is something I have alluded to throughout this plan. We will not cooperate. We will fail to agree on a standard way of doing things. We will not collectively contribute enough of our time, effort, and money to advance *all* libraries, to advance *all* library service. We *must* pull together.

As for our external foes, we must be prepared for more naysaying, though I suspect that vendor naysaying will be more sophisticated. They will spell out *exactly* why our project will fail, and they will describe in detail why it would be foolish for us to continue with it. Our response to this naysaying should be the same as it is to any sort of naysaying. We should analyze it carefully and find creative solutions -- and to a certain extent, we should ignore it. But whatever we do, we must persist.

How much savings could we find for libraries with creative, flexible centralization? How much of an increase in efficiency could we realize? How much happier could we make library customers? We'll never really know unless we are willing to *risk* some time, effort, and money to find out. The potential rewards are enormous.

A big problem with the whole idea of the supercatalog is that it involves *RISK*. Building the supercatalog will require expenditures of time and money from many individual libraries -- and if the supercatalog takes far too long to build, or is not nearly as functional as we hope, then those individual libraries would have lost wasted their time, money, and efforts. In other words, they would have *failed*.

Failure is something that successful businesses embrace as a necessary part of progress and innovation. My experience with libraries leads me to believe that they shun failure and avoid risk. That is why I think it is so important that we try to make it as painless and *risk-free* as possible for libraries to join the project.

While time and effort are necessary to this project -- and pose potential obstacles -- money is likely to be seen as one of the largest obstacles. The challenge of raising enough money for our endeavors will be formidable, but we should remember that we really only need enough to get the project off the ground. Once it is up and running, maintenance costs and costs for regular improvements should come out of the operating budgets of member libraries based on the savings the current system represents, or on the potential savings likely to realized soon.

Furthermore, a nationwide supercatalog is likely to offer its own revenue-generating opportunities. With the attention of so many eyeballs nationwide, we should be able to sell advertising by keyword, as the major Internet search engines do. Library customers looking for books on gardening would also see ads for discounted subscriptions to gardening magazines, or for quality gardening tools, etc. This should not be objectionable to most library customers, as it is the sort of thing that Internet users are accustomed to generally,

and the additional revenue would allow us to provide a more sophisticated, easy-to-use library catalog.

Another possibility (mentioned in Mr. Coffman's article), would be to partner with a large bookseller like Amazon.com. Imagine a library catalog that essentially tells the library customer, "Yes there are four copies of the book you are looking for in the national collection. All are at remote libraries. One is non-circulating. The other three are all checked out. The earliest one is due back in three weeks and two days. Click here to place a hold on the next available copy of this book. Click here to purchase the book from [name of bookseller here] for \$9.95 and have it shipped to you in 2-3 days."

Or, "There are no records in the national collection that contain your search terms. Please try a new search, or click here to perform the same search at [name of bookseller here]."

The non-offensive possibilities are numerous. It would be of value to library customers, and it would be of great benefit to [name of bookseller here]. A forward-thinking bookseller might even be willing to contribute funds during the initial stages of the project (when we would need them most) in exchange for being an exclusive bookselling partner when the project was completed. The synergy created by such a relationship could be *amazing*.

Finally, apart from the numerous benefits to both libraries and library customers, I would like to point out one more additional benefit: an enhanced image for librarians. Librarians as a group often complain about the poor public perception of librarians generally and of their relatively low salaries. The media and the public that reads them seem to think that the Internet and the Web have made librarians less and less relevant, now that the layperson can, supposedly, find all the information they needs without us. To this sort of commentary, we generally respond by thumping our collective chests and ranting about our education, our familiarity with reference materials and online databases, and our ability to construct complex Boolean queries.

Well, I honestly believe that the eventual widespread use of XML, and the ever-increasing sophistication of Internet search tools, *will* make it *much* easier for the common person to find information. The Internet is a mess now, but it won't always be this bad. And while librarians will *always* be a few steps ahead of the general public regarding the ability to find information, when the Internet really *is* easy to use, even fewer members of the public will appreciate the abilities of librarians than the low percentage of the public that does today... unless we do something about it...

Rather than jumping up and down and collectively proclaiming, "I can find information better than you can, Joe Public," we should be thinking (and perhaps proclaiming), "I can *organize* information better than you can, Joe Public, and *I'm* the reason why you *can* find information almost as well as I."

Imagine a future where our supercatalog had more regular users than Amazon.com, where our directory of Internet resources was the *de facto* standard -- and more widely respected than Yahoo! or any similar collection -- where it was well known that the people behind some of the awesome, feature-rich, incredibly useful tools that the public used everyday were *LIBRARIANS*. We already know that librarians are valuable, highly educated, and, well, *cool*. What would be different about the future I've described is that the public might know these things as well.

Imagine that.

Certainly, the benefits of the supercatalog that Steve Coffman described, and that I have expounded upon, are

great. The benefits of partial centralization generally are even greater. The costs to us will be a great deal of time, effort, and money. These things will be heavily discussed in the future planning ahead, and occasionally, they will appear to represent great obstacles -- or even insurmountable ones. Yet, time, effort, and money are mere details in our plan. The big-picture elements we need are vision, cooperation, and persistence. If we truly have these things, then everything else will come together.

Allow me to leave you with a quote from Philippe Van Parijs, a professor of economic and social ethics at the Universite catholique de Louvain:

Our world will never become a better place unless bright thinkers find the time and courage to formulate unconventional ideas, work them out in detail, and refute the strongest possible objections they can imagine.

The only thing I would add to that quote would be, "*and then enthusiastic people ACT on those ideas with cooperation and persistence.*"

Act.

Mike Dahn is a reference librarian at the Stetson University College of Law, and he is the Web development team leader for the law school. He welcomes your comments, and can be reached at dahn@law.stetson.edu.

• [Table of Contents](#)

• [Searcher Home Page](#)