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Electronic delivery of library information

Background

Library staff is interested in exploring methods of obtaining materials for users that potentially decrease the amount of staff time needed to respond to requests and which decrease the number of physical items sent through delivery. Potential options and workflow components are discussed in this paper.

In her 2004 book, *Legal Solutions in Electronic Reserves and the Electronic Delivery of Interlibrary Loan*, Janet Brennan Croft explores the copyright and workflow issues related to electronic delivery of information in lieu of interlibrary loan. This paper cites some of her comments.

The Rethinking Resource Sharing Initiative is an ad hoc group that advocates for a revolution in the way libraries conduct resource sharing. The group has written a *Manifesto for Resource Sharing*, which outlines a set of principles that support more open resource sharing. The emphasis in the manifesto is on the user and the need to decrease barriers and make access to information easier.

1. **Restrictions shall only be imposed as necessary by individual institutions** with the goal that the lowest-possible-barriers-to-fulfillment are presented to the user.
2. **Library users shall be given appropriate options** for delivery format, method of delivery, and fulfillment type, including loan, copy, digital copy, and purchase.
3. **Global access to sharable resources shall be encouraged** through formal and informal networking agreements with the goal towards lowest-barrier-to-fulfillment.
4. **Sharable resources shall include those held in cultural institutions of all sorts:** libraries, archives, museums, and the expertise of those employed in such places.
5. **Reference services are a vital component** to resource sharing and delivery and shall be made readily accessible from any initial "can't supply this" response. No material that is findable should be totally unattainable.
6. **Libraries should offer service at a fair price** rather than refuse but should strive to achieve services that are not more expensive than commercial services, e.g. bookshops.
7. **Library registration should be as easy as signing up for commercial web based services.**
Everyone can be a library user.

In addition, the world of delivery options is changing rapidly. More people find information outside the library context and people manage information differently. The publishing world is changing. More people use mobile devices and can receive information where ever they are.

Types of services

Electronic delivery of information is used to supply information in response to interlibrary loan requests and to provide service to people taking part in distance learning programs. When state or local contracts or projects for full text delivery of print, photographic, or audiovisual materials exist, electronic service or delivery could relieve the need for patrons requesting materials through interlibrary loan. Libraries also have the option of purchasing electronic articles directly rather than subscribing to periodicals.

Articles scanned from library materials

Traditional interlibrary loan requires sending physical items from one library to another and has an established workflow and set of protocols associated with the process. However, library staff is sometimes able to deliver an electronic copy of some materials in lieu of sending the item. The common scenario would involve the lending library scanning a magazine or newspaper article and making it available to the borrowing library or, alternatively, directly to the patron. Some libraries have considered scanning on demand in lieu of lending for some materials. There are costs associated with staff time for this type of service.

Full text articles and e-books

Programs such as BadgerLink allow library staff to identify full text copies of magazine and newspaper articles, books, pamphlets, or other materials. For Wisconsin residents, links to these materials can be sent to users who have computer access and can be authenticated through BadgerLink. Or materials could be saved in PDF format and emailed to users. The contracts with BadgerLink vendors allow use for interlibrary loan purposes which comply with copyright law and guidelines. Local libraries may also contract for databases available to users in their areas. Use of full text databases has decreased the number of requests for periodical article through interlibrary loan. There are costs associated with vendor fees for this type of service.

Downloadable audio/video

It is estimated that about 40% of the materials included in the statewide delivery system are audiovisual materials. Therefore, a means of providing audiovisual materials directly to users in a manner similar to the delivery of full-text information would decrease the volume handled through the statewide delivery service. There are a number of services available to individuals for downloading audio and video, but not all are available to libraries. Many vendors do not consider libraries as a market for their downloading services.

OverDrive is currently used by many Wisconsin public libraries. The Library Information Technology Advisory Committee developed a paper on downloadable audio and video which is available through the LITAC website. The Educational Communications Board (ECB) is working with DPI to make National Public Television videos available through the BadgerLink website.

Schools contract for streaming video services or use software to manage use of video materials. The size of the collections currently available through these services may be limited. There are costs associated with vendor fees for this type of service.

Purchase from periodical or copyright clearinghouses

Library staff has the option of purchasing articles from publishers or vendors offering clearinghouse services. The University of Wisconsin has a purchase card program for this type of use. There are costs associated with staff time and vendor fees for this type of service. Or libraries can consider non-electronic fulfillment routes such as buying the materials for the patron and giving them the option of keeping or returning the item or managing circulation so that items do not travel back and forth to the owning library as frequently.

Digitization of library materials

Wisconsin libraries have begun to digitize materials from their collections. The Wisconsin Heritage Online program has encouraged and developed standards for digitization. The ability to access current issues and backfiles for a larger number of Wisconsin newspapers would further decrease the number of requests for these materials. Google has digitized materials from United States academic libraries, including the University of Wisconsin – Madison and the Wisconsin Historical Society. Wisconsin state government documents have been included in this scanning project and are beginning to be available through the University of Wisconsin Madison online catalog. When digital materials can be located to fill a request for information, these materials could be used in lieu of interlibrary loan and delivery services.

Participation – state level/types of libraries

WiLS, UW-System libraries, and many other Wisconsin academic libraries currently supply electronic documents in response to interlibrary loan requests. The University of Wisconsin provides \$50,000 annually to UW libraries to use the British Library Document Supply Centre (BLDSC) and the Canadian Institute for Scientific and Technical Information (CISTI). UW-System libraries can also purchase articles from Science Direct and Wiley using a deposit account and from other suppliers using a purchasing card.

The Department of Public Instruction, Resources for Libraries and Lifelong Learning Team (RL&LL) will scan materials from its collection and send the PDF scan to the requesting library. The WISCAT interlibrary loan management system allows libraries to upload an attachment to an interlibrary loan

request and then update the request to shipped. The borrowing library or patron can then download the attachment.

The National Library of Medicine provides numerous services to facilitate electronic delivery, including full text information through PubMed and LinkOut and a national interlibrary loan network (National Network of Libraries of Medicine). Library staff is encouraged to submit interlibrary loan (ILL) requests through [DOCLINE](#), NLM's request routing and referral system. Individuals who need access to medical literature should make a request through a local library or register with a [Loansome Doc](#) library that agrees to provide articles to them.

Public library systems or public libraries receive electronic information in response to requests from WiLS. In many cases, these are printed out and delivered in hard copy to the library or individual. Unless the library has the patron's email address on file, it is not always possible to electronically deliver the article directly to the user.

Software used

There needs to be a way for patrons to send their interlibrary loan requests. Patron initiated borrowing is included in interlibrary loan management systems such as Auto-Graphics Agent or OCLC WorldCat Resource Sharing. If the request results in sending an electronic request, there needs to be a means of storing the item so that a patron can review it or a means of sending the item to the patron. Sometimes these sending functions are incorporated into an interlibrary loan management system. There may also be open source software that can be used.

Odyssey is the electronic delivery component of the ILLiad interlibrary loan system. There is also a free Odyssey standalone system for libraries not using ILLiad. Articles can be sent directly to the patron without further processing by the interlibrary loan staff. At most ARL institutions Odyssey is replacing Ariel as the preferred delivery method.

Ariel accepts articles from lending libraries with Ariel software. The articles are then downloaded into Odyssey and delivered electronically to the patron.

E-DOC is a WiLS developed software for networking scanning stations and hosting of pdf documents. Any library that WiLS acts as a lender for always has the option to have their documents sent to them as a hosted PDF for 14 days. This has been a successful means of delivery articles to libraries that do not have Ariel or Odyssey.

Mercury software is being used on a trial basis by the University of Wisconsin Steven's Point campus.

The Resources for Libraries and Lifelong learning Team manages the WISCAT interlibrary loan management system which uses Auto-Graphics Agent software to provide electronic delivery functionality.

Library staff or individuals who receive electronic delivery must have appropriate software in order to receive or open the electronic documents. For print documents this may involve appropriate version of word processing software or Adobe PDF software. There are multiple software options for downloading audiovisual content and it is also necessary to have a high speed telecommunications connection to make download feasible quickly and efficiently.

Work flow considerations:

Janet Brennan Croft describes the following general workflow.

“Typically, electronic delivery of interlibrary loan documents involves the lending library scanning a physical item and sending the scan to the borrowing library. The borrowing library then passes the item on to the patron by posting it on a secure Web site for a limited amount of time. The contract for an electronic database may permit using items from the database for interlibrary loan by printing and scanning the item, copying the items electronically and sending it as a file, or some other methods.”

Academic libraries and other types of libraries whose users are reachable through an institutional network can send scans or links through those networks.

Public libraries generally must send scans or messages directly to the patron and therefore must have access to an email address for the patron. Otherwise, use of an electronic component is only for delivery between libraries. To receive electronic documents patrons must have email accounts that they check regularly. If materials are only available through online storage at the library for a short time, patrons may lose access to the items before they have time to read it. When WILS emails links to articles to public library staff in lieu of sending a printed copy, staff often have to print out the article for the user to pick up at the library. This reduces the service impact of electronic delivery.

For libraries of all types using interlibrary loan management software, staff must update the interlibrary loan request to indicate that the request was filled electronically so that the some of the process steps (returned) do not need to be handled.

Bandwidth and computing considerations:

Scanning requires the availability of and skill in using the appropriate software for both the sender and receiver. There needs to be sufficient storage to create and receive copies and sufficient bandwidth to allow for sending, receiving, or viewing copies accessed through links. While most libraries may have access to sufficient bandwidth, many patrons do not. Some email accounts cannot handle or accept large document. Libraries may need to consider subscribing to a service or software that allows patrons to open documents using a browser. Not all patrons own computers or find electronic delivery a convenient way to receive information so it cannot be assumed that this method will always be an alternative.

Streaming video and downloadable audio/video services require high bandwidth use that may not be available to all users. Use of these services may also impair performance for other computing tasks on organizational networks or cause slow performance for services used by many people at a time.

Users are increasingly using mobile devices to send and receive information. These devices differ in their capacity and capabilities to store, view, and manage information. Delivery to these devices also requires having access information on file in the library.

Copyright considerations:

Janet Brennan Croft notes that “Photocopying for interlibrary loan use is implied in the copyright law in sections 108(d) and 108(e), which discuss a user requesting a copy “made from the collection of a library or archives where the user makes his or her request or from that of another library or archives.”” She also notes the issues listed below related to the copyright law and CONTU guidelines.

- Libraries cannot substitute interlibrary loan for purchasing an item.
- Libraries cannot profit directly or indirectly from interlibrary loan (any fees must be for cost recovery only).
- A copy must become the property of the user.
- The library must have no notice that the user plans to use it for any purpose other than private study, scholarship, or research.
- The officially worded warning about copyright compliance must be posted where orders are taken and on the order form.
- The library must not perform any “systematic” copying for ILL.

Janet Brennan Croft also notes that “The document should be accessible only to the person who requested it, or it might be perceived as systematic copying and distribution of an article. It should be kept on the library’s server for only a limited time, or it could imply that the library has borrowed the material in lieu of purchasing it.

Publishers of full-text information are sometimes reluctant to negotiate with libraries for use of full text electronic copies for the purposes of interlibrary loan. Publishers participating in the BadgerLink program have agreed to allow use of electronic information for interlibrary loan purposes when use is consistent with fair use.

Costs

There are costs associated with all methods. Staff time costs should be considered to assure that electronic delivery provides an improvement in workflow.

Issues

1. Should libraries reallocate staff time and resources to provide for scanning and electronic delivery of resources?
2. How should library staff inform patrons of electronic delivery options to interlibrary loan of materials? What patron information needs to be available to the library in order to supply this service?
3. Should all libraries negotiating online information contracts assure use of these materials under fair use for interlibrary loan as a part of the contract?
4. What are the copyright implications of use of a secure server to store items for which a link is sent to the user vs. sending the electronic item to the user?
5. What technical environment is necessary for storing items on a secured server? Will small public libraries and other types of libraries have this capability?
6. What is the best format for storing items on a secured server?
7. When must a periodical supplier or publisher be provided a royalty? What kind of record keeping and reporting is required?
8. What percentage of users is able to receive electronic delivery of materials in various formats at home?
9. Should there be a standard for scanning materials sent in response to requests? If so, what should the standard be?
10. Should delivery to mobile devices be accomplished? If so, how?
11. How can expansion of downloadable audio or video be accomplished?