"Global implications of Rapid: an international system facilitating inexpensive resource sharing" Nordic ILL Conference October 8, 2008 Var Gard, Saltsjobaden, Sweden

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ABSTRACT. This paper will briefly describe the Rapid system which facilitates interlending of articles between libraries, and obtaining articles from document suppliers, and open access journals. A basic description of how the system works along with strengths and weaknesses of the system will be identified followed by analysis of how well those system aspects can be applied globally. System elements analyzed include turnaround, fill rates, how easy the system is to use, support and capabilities of the system vendor. International implications including copyright, ability to interact with various types of interlibrary loan managing systems, scanning and human interactions will be reviewed. This paper will conclude with an assessment to whether a system like Rapid can impact efficient global sharing of information.

KEYWORDS: Rapid, interlibrary loan, interlending, global resource sharing

#### Overview

The range of information from educational to recreational is growing while most libraries ability to provide excellent service in a cost efficient manner is challenging everyone to become more efficient. One solution currently in use by over one hundred libraries in the United States and beyond is Rapid. This system is the most cost effective and efficient system in the United States for sharing articles via interlibrary loan for academic and possibly public libraries. This paper will describe the basics of the system, provide perspectives on how it is impacting services, and speculate on how well it could be utilized in a global resource sharing environment.

Rapid is a system that combines technology, commitments, an outstanding vendor, and people to provide the best service for the least cost per filled transaction. The 111 libraries, almost all academic, participating in Rapid includes libraries outside the United States from Canada, Taiwan, and China. Three document suppliers, Canada Institute for Scientific and Technical Information, Center for Research Libraries, and Linda Hall Library also participate. Open Access Journal articles are also available through the system.

Libraries pay an annual fee to participate in Rapid and can then join specific pods; which are defined groups of libraries. These pods range from being open to any participating Rapid library who meets certain criteria to smaller group pods established to support a specific group of libraries such as a pod for University libraries in Taiwan. To participate in Rapid, a library commits to submitting their list of journal holdings at least every six months to Rapid and fulfilling lending requests within twenty four hours of receipt of the requests, excluding weekends.

The main Rapid system is on a server at Colorado State University. Participating libraries have some minimal software that resides on computers that are used for submitting mediated requests to the system. Participating libraries currently only use web browsers to access Rapid as a lender. Rapid has minimal need for local library technical support.

It must be noted that many medical libraries in the United States utilize the National Library of Medicine system Docline. This is a very effective system for medical libraries with some similarities to Rapid and some differences. This paper will not include analysis of Docline.

Rapid is a critical reason for many libraries success. There are many aspects which make the system the best possible solution with some issues to be aware of. The features that

currently make it outstanding in the United States apply internationally although with some possible development needed. The Rapid system can simply be used by a group of libraries to improve sharing between those libraries. In addition, it could be even more powerful as a cornerstone, or at least an effective model, to a truly effective global resource sharing system that helps get more information to the broadest number of people beyond national boundaries.

## How Rapid works for borrowing libraries

The borrowing library can currently use Clio, ILLiad, Relais, or not even have interlibrary loan management software to request articles from other libraries through Rapid. The library receives requests from their patrons through their regular method. If a library does not have a patron request capability then Colorado State University can provide their open source Webzap patron requesting software.

The Rapid system then either pulls requests from the local system using an unmediated process or allows staff to mediate and submit requests manually. The unmediated request process helps to reduce turnaround time but requires the request to have an ISSN and article year in the original request. Libraries that responded to a survey reported that this process is "very easy to use", "especially easy to use as a borrower", and "extremely easy". One library noted that it is "very easy and the best place to start training a new student worker".

The Rapid system checks borrowing requests against the borrowing library local holdings as they are stored in Rapid. If it is available locally, then the request is identified as a locally available request in the borrowing library interlibrary loan management software system. If the request is not available locally, then the system checks the Rapid holdings. If the request does not have any holdings in Rapid it is updated as not being available in Rapid. Staff can then submit the request to other systems like OCLC. If the request does have holdings in Rapid then it updates the local system to reflect the request is in Rapid and the first potential lending library is able to download the request. This process is impressive in that it checks to the year level and not just at the title. This contributes greatly to the high fill rates.

The Rapid load leveling mechanism determines the libraries to send requests to within a pod. The borrowing library has the ability to customize other aspects including whether to send requests to any of the document suppliers. Libraries in the same pod provide free service to each other. When the borrowing library obtains copies from a document supplier there is then a charge that is handled outside of Rapid. Borrowing libraries receive articles via Ariel®.

The Association of Research Libraries completed an interlibrary loan cost study in FY02 which showed that Rapid requests were 1/3 of the cost of traditional interlibrary loan<sup>1</sup>. This information is now dated but this author feels similar cost differences would be seen today.

For Borrowers, the process works great with one small exception. The main issue is that some libraries report not receiving some articles that Rapid shows as supplied. Libraries have utilized their local interlibrary loan system to monitor for this issue. This is apparently happening to some libraries due technology issues between different versions of Ariel® and possibly some libraries not supplying. Several libraries report this happening as many as ten times in a week during busier times of the year. However, ten articles a week only represents around 3% of the total filled articles so the problem is very minor; especially when one considers this same problem occurs in other systems.

### How Rapid works for lending libraries

Lending libraries must send their holdings information to Rapid at least once every six months. This process can be a little challenging; depending on how local holdings data is stored. However, Rapid staff has assisted libraries with this process. Several libraries have even automated this process.

Rapid lending requests are downloaded through a web browser by libraries at least once a day and more often by some libraries. These requests have the full bibliographic information, location, call number, and the Ariel® address to send the scanned articles to which saves considerable time. Rapid articles that are found are scanned via Ariel® and updated to filled through a web browser. Rapid articles that are not found are updated to unfilled through a web browser. Some lending libraries report how easy it is to simply "fill", "unfill", or "bad cite" requests versus trying to determine what unfilled reason to use. Bad citations can also be easily reported through the web browser. The web interface is very easy to use and provides additional information that is useful such as requests that are aging and need to be worked on.

"Rapid streamlines lending as much as it can be." "Rapid is the easiest system of any of the three we use." These sentiments expressed by several libraries exemplify how easy it is and explains why costs associated with processing Rapid requests are low. Several libraries reported being concerned about having to check yet another system but this problem did not materialize since the system is so simple to use.

The biggest concern for Rapid lending is the accuracy of the holdings information since that directly impacts how efficient the paging process is. This issue can be resolved through more frequent holdings updates. Rapid staff demonstrated the highest level of service through assisting libraries with this process as well as taking the next step by helping a library automate this process.

# How Rapid helps provide outstanding service

Rapid facilitates very fast turnaround time in a highly efficient manner. It is very easy to submit borrowing requests into the system. It is then very easy for lenders to fulfill the requests accurately and quickly. The University of Kansas Libraries typically fills around 65% of article requests within two days with an increasing number filled the same day of patron submission. In a recent month, 18% of requests were filled within 16 hours of patron submission with 42% within 24 hours.

Fill rate is another important variable to analyze to determine efficiency. The borrowing library system average fill rate in Rapid is between 92% and 97% which is outstanding<sup>2</sup>. Related implications include:

- Eighty five percent of requests are filled by the first library<sup>2</sup>. Since most of these requests are filled within 24 hours then the turnaround time to the patron is outstanding while optimizing the least amount of staff resources.
- This results in fewer requests that need to be filled in other systems which directly saves staff time while also insuring faster turnaround to the patrons.
- Most unfilled Rapid requests only take 1 to 2 days to be returned to the borrowing library which helps to keep the turnaround time lower for even requests that can't be filled within Rapid.
- Overall service to the local customer is directly impacted by how many article requests a library can fill through Rapid. Some Rapid libraries report fulfilling from 50% to 70% of all their article requests with a few reporting as high as 90%.
- The number of titles available through Rapid is fairly extensive depending on which pods a library participates in. This obviously helps with the fill rates. The University of Kansas Libraries belong to the Association of Research Libraries pod which contained 132,832 different titles as of September 26, 2008.<sup>2</sup>

The Rapid lending library fill rate is also critical to the success of Rapid. Most libraries range from around 80% to 87% fill rates as lenders which are relatively high compared to other systems that have 50% to 60% lending fill rates for articles. This has a direct impact on

maximizing the number of filled requests compared to staff time spent on unsuccessful requests that slow down turnaround for the requesting libraries.

Some academic libraries have historically received rush requests from customers who requested that articles be filled "rush" since they perceived that interlibrary loan would take too long. These requests typically take extra staff time to process. Several libraries reported that participation in Rapid has resulted in a drop in these types of requests since patrons recognize the fast turnaround that Rapid allows so they do not feel the need to specifically ask for something rush. The extra cost to this perspective is that patron expectations of fast service are raised regardless of whether the articles are available in Rapid or another system. This is a nice challenge to have.

An interesting new function to Rapid is called Easy Lending. This feature includes over two million open access journal articles as available through the Directory of Open Access Journals. This process is unmediated and allows fulfillment of requests from these sources before trying any library. This function truly supports the concept of open access journals through unmediated access.

Challenges in Rapid

There are various types of challenges posed by Rapid from technology to staff based issues. A critical component to the success of Rapid is that participating libraries are meeting their commitment to fulfill within 24 hours. When libraries do not do this then it impacts the turnaround the local patron receives relative to the resources being applied to provide the fast service to other libraries. A sampling of data completed by the University of Kansas Libraries show that not all libraries are fulfilling as fast as what the Rapid data shows. This is likely due to the fact the Rapid system considers the request finished when the lending library updates the article to filled on the Rapid website. This is a minor issue since the overall turnaround is outstanding; especially compared to other systems. Rapid staff is willing to handle issues that arise.

Some libraries were uneasy about being able to meet the 24 hour turnaround expectation as a lender. This has turned out to not be an issue. Libraries that have had to hire additional student assistants or purchase equipment recognize the benefit of these investments to their own patrons through fast turnaround.

The 24 hour turnaround expectation impacts values seen by some in how traditional interlibrary loan processing is done as a lender. Many lending libraries value the extra service provided by helping with bad citations. The focus in Rapid on speed does result in some lending libraries spending less time trying to correct bad citations or to determine if it was a local catalog issue that could be resolved leading to fulfillment of the article.

Some libraries anticipated that they would see equivalent drops in article requests in other systems after starting to participate in Rapid. This will depend on who the regular partners. One library reported only a drop around 100 OCLC requests while seeing over 2,000 Rapid requests in their first year.

Some academic libraries find it challenging to meet the 24 hour turnaround time commitment as a lender during break times when student assistants are not working or when scanning equipment breaks. This can be a challenge but is seen as necessary since their own patrons are needing articles which can be filled through Rapid.

Another concern is whether minimal or bad citations lead to lenders having to take more time to process requests. This was especially seen as a potential problem when unmediated requesting was initiated. This issue appears to be minimal since more libraries use open URL standards to pre-populate request forms leading to usually accurate data. Most requests that go to Rapid from the University of Kansas Libraries are generated from databases resulting in pre-populated requests. Over a six month period from January 2008 through June 2008 there

were only 102 bad citations out of 8,100 article requests (around 1.3%) submitted to Rapid by the University of Kansas which illustrates that this is a minor issue.

Many Rapid libraries use ILLiad for their interlibrary loan management software. One useful feature in ILLiad is to establish trusted lenders so articles received from other libraries via the Odyssey scanning software can go unmediated to patrons. This is currently an issue in Rapid since all libraries must use Ariel®. Rapid is working on the ability for libraries to utilize Odyssey so this should not be an issue in the future.

Rapid as a vendor

There have been few technical issues in Rapid. For those issues, Rapid provides outstanding support. Libraries commented that Rapid "responds immediately", "is quite responsive", "very easy to get in touch with" and "takes the time to fix problem (not that we've had many)".

Another critical area that a vendor contributes to is implementation of enhancements. Rapid excels in this through truly listening to customers' interests and being able to act in a very timely manner. One library commented "they are the most responsive vendor we work with and truly understand the nature of our work and their system's role in it."

Finally, and just as important, is how Rapid acts as a collaborative partner. This is the most critical element when considering how well the vendor will cooperate with libraries that have different policies, practices, and even cultures. One library summed this up best by stating "...they get excited about customers' ideas..." This type of collaboration has resulted in excellent enhancements that have been added in timely fashion that met needs requested by participating libraries. They also experienced enough growth in library customers in one year that they actually reduced the annual license fee.

## International implications

These features greatly help participating libraries through low cost, easy to use, and fast service and would support global success. However, copyright, licensing, technological hurdles, language and culture must be looked at to determine the viability of Rapid at a global scale.

One of the most challenging aspects is copyright due to different copyright laws across the globe. In the United States, the burden rests upon the borrowing library to handle copyright so this process is easily handled by libraries outside of Rapid. The need to add copyright costs automatically to every filled transaction in some countries presents a new variable. Libraries would need to create the ability to recover these costs outside of Rapid. If it is needed then libraries could ask Rapid for the ability to develop this capability if it was needed to support global sharing.

Another challenge would be whether Rapid could interact with additional interlibrary loan management systems that a global environment presents. Rapid has demonstrated the ability to work with a variety of systems and an interest in developing what is needed to support participating libraries.

Licensing agreements for electronic journals can be another challenge. As more libraries have more electronically licensed content then their ability to share this information via interlibrary loan is dictated by the license. Some libraries have licenses that do not allow international ILL and are unable to change that condition. The Rapid system allows libraries to identify which of their holdings can be shared with other libraries so licensing agreements can be honored.

Ariel® is currently the only scanning system used by libraries. This software is used by some libraries internationally so that would indicate some success. However, Ariel® might be seen as too expensive for many libraries and there is some question about the future of Ariel®.

Rapid will need to accommodate additional options such as the Atlas System ILLiad Odyssey protocol which they are currently working on. Libraries can then utilize the free stand-alone Odyssey to participate in Rapid. Rapid will be establishing a pilot soon that will allow libraries to send via Odyssey.

In a global environment Rapid would need to accommodate different languages. This is not an issue now for those that currently participate. The request process for the borrowing library is independent of language and the lending library only needs to understand the bibliographic citation for requests. The Taiwan Universities actually translated the free Webzap open source software to Chinese for their use. This indicates this would not be an issue.

# Is Rapid the answer?

The reality is that the global information infrastructure is currently economically based which results in some information not getting to some people who need and desire it. There is a growing interest in open access but economics will continue to be a major part of the information environment for awhile. Libraries that have a mission of supporting the informational needs of their customers should be actively seeking out opportunities to participate in systems like Rapid if they have journal information needs. This type of system reduces the costs that libraries can control to as low a cost as possible. This results in more people getting the information they need.

Rapid is currently the most definitive system that can do this in North America for libraries that are not focused on using the National Library of Medicine's Docline system. The exciting aspect is that the more libraries that participate in Rapid, or at least in systems that can interconnect with Rapid, then the more effective it is. Results would include more extensive collections being available, greater fill rates, and even faster turnaround. This in and of itself should be enough to participate in a system like Rapid. However, a bonus is the development of community across national borders and cultures.

Rapid, as a community, came together in 2005 to form the "Katrina pod" where willing libraries fulfilled almost 2,500 interlibrary loan requests for Louisiana State University who was impacted by Hurricane Katrina in Louisiana. These libraries did not expect anything in return since Louisiana State was unable to fill from their damaged collections. This community service to faculty and students was most affordable through the low cost system Rapid and the fact so many libraries joined in this service effort.

Rapid began as a way to help Colorado State University patrons receive materials quickly following their flood in 1997 and has grown to an international system for 111 libraries to share their materials. As citizens around the world discover more information beyond what their local library can provide then libraries need to be prepared to maximize access to that information. Systems like Rapid are in place to help. Vendors like Rapid are ready to help develop the system further to take into account the increasing challenges presented by going global. Libraries just need to assess their needs and then join the global community if needed.

# **NOTES**

- 1. Mary E. Jackson, Assessing ILL/DD Services: New Cost-Effective Alternatives. (Washington, D.C: Association of Research Libraries, 2004).
- 2. Some statistical data obtained from Rapid Library staff.

I also obtained background comments on Rapid for this article from eight current Rapid libraries who responded to an email I sent to the Rapid listserv in August 2008.

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