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Transforming resource sharing services at an Australian academic library: the case of the University of Wollongong

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Abstract
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Keywords
wollongong, academic, university, australian, services, sharing, resource, transforming, case, library

Disciplines
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Abstract

In 2011 the University of Wollongong Library undertook a significant review of its Resource Sharing services. This was prompted by constraints in the systems supporting this service, changes to the Library’s key suppliers, Infotrieve Australia and the British Library Document Supply Service, and the need to deliver effective library services within a defined physical and budgetary environment.

As a result of the review, the existing Millennium Interlibrary Loan and Ariel software hosting the service were replaced by the Relais ILL system. The most cost-effective and relevant methods for supporting the research needs of the university were achieved through subscriptions with networks characterized by strong unmediated requesting functionalities, including ArticleReach, BONUS+, and RapidILL. To expand the Library’s access to international collections, a subscription to OCLC WorldCat Resource Sharing was begun.

UOW Library now processes approximately 50% more requests, 76% of which are now processed to some degree without library staff mediation.

Key words: Resource Sharing, Interlibrary loan, Document Delivery, Academic libraries
Document Delivery at the University of Wollongong Library: an introduction

The University of Wollongong (UOW) is a medium-sized, research-intensive university located in the Illawarra region on the lower east coast of New South Wales, Australia, approximately 80 kilometres south of Sydney. UOW has two Australian campuses, four regional centres (with services delivered by community partners) and off-shore campuses in Dubai and Malaysia. Course delivery also occurs in partnership with other entities in Australia and globally, including Indonesia, Hong Kong and Singapore. In 2013, UOW had 31,322 students and 1,712 academic staff, with Wollongong campus holding the largest student cohorts and academic staff numbers.

UOW Main Library is located at the Wollongong campus where approximately 80 permanent Library staff are located. The UOW Library has centralised a number of key services to Wollongong, including Document Delivery, Ereadings, Publication Management, Acquisitions\Copy Cataloguing, and Academic Outreach. The Document Delivery service at UOW Library has been a high-demand service among UOW postgraduate and academic clients for a number of years. In 2010, the Library processed 10,158 requests for UOW clients (Table 1).

<table>
<thead>
<tr>
<th>Document Delivery - Items received for UOW clients</th>
<th>2010</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items received – mediated</td>
<td>10,158</td>
<td>3,581</td>
</tr>
<tr>
<td>ArticleReach received - unmediated</td>
<td>-</td>
<td>4,553</td>
</tr>
<tr>
<td>BONUS+ received - unmediated</td>
<td>-</td>
<td>5,206</td>
</tr>
<tr>
<td>RapidILL received - unmediated</td>
<td>-</td>
<td>1,470</td>
</tr>
<tr>
<td><strong>Subtotals</strong></td>
<td><strong>10,158</strong></td>
<td><strong>14,810</strong></td>
</tr>
<tr>
<td><strong>Items received via mediated sources</strong></td>
<td><strong>10,158</strong></td>
<td><strong>3,581</strong></td>
</tr>
<tr>
<td><strong>Items received via unmediated sources</strong></td>
<td>-</td>
<td><strong>11,229</strong></td>
</tr>
<tr>
<td><strong>TOTAL ITEMS RECEIVED</strong></td>
<td><strong>10,158</strong></td>
<td><strong>14,810</strong></td>
</tr>
</tbody>
</table>

Table 1. Total client requests at UOW Library before and after the service review, 2010 and 2013.
The Document Delivery service, as it was then called, was a fully Library-mediated service consisting of a staff of nine who also undertook the Library’s acquisitions and copy cataloguing functions. Since the implementation of the Millennium system in the Library in 1995, the service had been delivered using Innovative Interfaces Millennium Interlibrary Loan (ILL) module. The Library had experienced problems with the limitations of the ILL module for many years. Key issues included the inability to export reports in usable formats, and limited interoperability functions with other document delivery systems. The system was highly manual and not client friendly; it did not contain the functionality to accept requests from external clients, such as other libraries. Therefore, these requests had to be processed separately through email or the Libraries Australia Document Delivery system. At that time, undergraduate students were not eligible for Document Delivery services. Due to the limitations of the Millennium system, off-shore clients in Dubai and Malaysia had to approach their local library to mediate on their behalf for Document Delivery requests. In addition, the Ariel file transfer software, used by the Library to receive and transfer files from vendors and other libraries, regularly broke down. Due to the high level of complexity in the many Document Delivery processes at UOW Library, not all staff involved in the service were fully trained or confident in undertaking all tasks. As a result of these issues, service delivery was often negatively impacted.

In July 2011, UOW Library was informed that Infotrieve Australia, the local arm of the Infotrieve company, was closing its Australian office permanently the following week. Due to their service efficiency, and consistent and cheap pricing model, UOW Library had long relied on Infotrieve Australia to fill the majority of journal article and conference paper requests. Infotrieve US was offered as an alternative, though their pricing was significantly more expensive per item, and the fill rate was noticeably lower (McGrath 2013; Walker 2012). With as many as fifty Document Delivery requests being received each day at that
time of year, the decision was made to send them to Infotrieve US in the short term. This quickly became an unsustainable financial option.

Within a month of the closure of Infotrieve Australia, the British Library Document Supply Service, the second most popular supplier used by UOW Library, revised their terms and conditions for institutional requesters. The revisions, as outlined in the Special Conditions for the International Non-Commercial Document Supply service, impacted upon the UOW Library Document Delivery service (British Library 2012). For a number of logistical and technical reasons, UOW Library were unable to comply with the terms.

These changes to document supply vendors put significant pressure on the UOW Library Document Delivery service. Requests continued to pour in, and staff tried to source content from available options whilst dealing with a substantial backlog of requests. Some other Australian libraries were also feeling the pinch, and yet others suggested that it was not too bad because their staff were well-trained in searching for content. UOW Library had relied too heavily on document supply vendors. Its Document Delivery service was not sufficiently prepared to manage the swift changes encountered by the loss of access to Infotrieve Australia and the British Library Document Supply service.

The only remaining sourcing option for the Library was the Libraries Australia Document Delivery service (LADD). LADD is a loan network of Australian and New Zealand libraries. It is a highly valued, though manual service based on the Libraries Australia catalogue of combined library catalogue holdings (National Library of Australia, 2014). LADD is the principle gateway of UOW Library involvement in resource sharing with the Australian library community. As the trend towards sharing electronic content is not widespread in Australia, LADD is not always helpful for access to this content.

Drivers for change in academic library resource sharing
‘Resource sharing’ is considered by some to be an umbrella term comprising services such as Document Delivery and Interlibrary Loan (Bailey-Hainer et al., 2013; Posner & Simpson, 2011). In the last decade, resource sharing services have undergone a transformation within the higher education sector in Australia and other parts of the world. A number of factors have contributed to these changes and are identified in the literature (for example, Bailey-Hainer, et al., 2013; Chang & Davis, 2010; Posner & Simpson, 2011), and include:

- An increased focus on research accountability and competitiveness in universities resulting in a need for expedient access to high quality and up-to-the-minute resources;
- A combination of increased student numbers and limited space within libraries, giving rise to the adoption of the concept of the ‘steady-state’ collection: a collection that has to remove items in order to add new ones;
- Limited staff resources and low growth in Library information resource budgets at the same time as online subscription resources proliferate, costs rise, and student and academic staff numbers increase;
- Availability of information online allowing users to easily find or identify resources (such as books, journals and conferences) published around the world through search engines such as Google or shared with them via social network sites; and
- The development of new and varied e-commerce models designed for selling resources direct to institutions and individuals.

These pressures have transformed the ways libraries source, deliver and share information resources, bringing the Library document supply model to a 21st century audience, and prompting libraries to work together collaboratively (Posner & Simpson, 2011). A number of services have emerged that focus on sharing collections based on consortial arrangements, often accompanied by unmediated methods for clients to request. This model is opening up library collections more widely, as well as reducing the need for staff intervention. This is a boon considering that many resource sharing departments are not staffed for greater
workloads. In Australia, the BONUS+ resource sharing consortium was launched in 2007 as a way to achieve improved seamlessness for libraries and clients in requesting resources not held. The BONUS+ consortium originated from a research project at the University of Newcastle, from which developed a service based on a shared union catalogue. The ‘consortial software’ used to host the service facilitates unmediated requesting by clients, including undergraduates (Anderson & Wilson, 2010).

Consortial services that allow libraries to share articles have also emerged. Two such services include ArticleReach and RapidILL. ArticleReach, also based on a union catalogue, is a product of Innovative Interfaces Inc., a company that produces a number of large system solutions for libraries (Innovative Interfaces Inc., 2012). With a library’s link resolver configured to allow clients to push requests to ArticleReach, library staff mediation is only required if a request cannot be filled. ArticleReach is a small player in this field, having only thirteen members (as of April 2014). RapidILL is another cooperative article-sharing system. RapidILL was developed in the late 1990s by staff at Colorado State University Libraries in response to a need for “very fast cost effective article requesting and delivery” (RapidILL, 2014). RapidILL has over 200 members from North American and Asia, demonstrating the demand for consortial borrowing arrangements across boundaries. RapidILL is compatible with several main interlibrary loans systems, through which it interfaces to push requests back and forth between libraries with minimal staff intervention.

Unmediated resource sharing services have been in existence since the 1990s. For example, Wichita State University used EbscoDoc initially, and then Infotrieve, to deliver unmediated document supply services intermittently to their clients (McGrath 2013; Walker, 2012). A study at Wichita State University showed that there can be substantial cost losses incurred by using a document supply service for unmediated requesting. This may occur in instances where items may be freely available online or else can be accessed more cheaply via direct purchase from the publisher (Walker 2012). Direct (or ‘outright’) purchase is a non-traditional avenue for sourcing content for library clients. As more content is now available
digitally online, libraries are faced with the option of buying content directly from the publisher. For clients, speed of delivery is a key expectation of resource sharing services (Walton 2008). In some instances, outright purchase may be the only option available to libraries to fulfil a request in a timely manner or fulfil it at all.

Regardless of the range of document supply services that can support libraries in getting material for their clients, staff must also have the skills to face the complex array of methods now experienced online for searching, purchasing, accessing, and delivering content to library clients. Staff must now navigate and make decisions related to copyright clauses, digital rights management software, and a range of file delivery mechanisms to clients.

Electronic delivery of content is key, particularly as clients are located across the globe. Systems need effective functionality to accommodate large file transfer and fast communication channels. With the gradual ascendancy of ebooks, libraries will have to negotiate with publishers to find ways to share this content. A recent example is the pilot initiated by Duke University in partnership with 33 North American academic libraries and publisher Springer (Howard, 2014).

Planning for change

The social and economic pressures that have impacted on library services generally as well as the pressures resulting from corporate changes in the document supply industry were keenly felt by UOW Library. The Library did not want to revisit the financial risk associated with relying on the outsourcing of article supply to commercial vendors. With a limited budget available for resource sharing activity, responding to these pressures has presented a great challenge.

In 2010, UOW Library joined the BONUS+ book sharing consortium. The key consideration and benefit for UOW Library of joining BONUS+ was the ability to provide additional
resources for UOW clients without the need to physically expand the Library collection. Membership with BONUS+ would provide the Library with its first foray into facilitating unmediated requesting for clients. This would improve the Library’s capacity to meet the UOW strategic goals of building both numbers of students and diversity in research and teaching programs.

Table 2 shows that in the first full year (2011) of the BONUS+ service at UOW, over 2,000 client requests were fulfilled and a similar number of supply-side requests were dispatched to other member libraries. These numbers more than doubled in 2012 for both borrowing and lending activity. With over 500,000 volumes on its shelves, UOW Library had always been a net borrower in the resource sharing arena. BONUS+ demonstrated to the Library that its collection was valuable to others too.

<table>
<thead>
<tr>
<th>BONUS+ service</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received (borrowing)</td>
<td>2,477</td>
<td>5,486</td>
<td>5,206</td>
</tr>
<tr>
<td>Supplied (lending)</td>
<td>2,200</td>
<td>6,106</td>
<td>6,328</td>
</tr>
<tr>
<td>Total activity</td>
<td>4,677</td>
<td>11,592</td>
<td>11,534</td>
</tr>
</tbody>
</table>

Table 2. BONUS+ activity at UOW Library 2011-2013.

Undergraduate students were eligible to request books using BONUS+; this was the first time UOW Library opened resource sharing services to this client group. In 2012 (the first year in which data could be collected by client group), undergraduates demonstrated a demand for access to material beyond the UOW Library collection (Table 3). Still, staff and postgraduate students remained the principal users of this service.
In 2011, on the heels of joining BONUS+, the Director Library Services, Margie Jantti, requested a review of the Library’s Resources Division. Among other objectives, the review aimed to address the issues with the Document Delivery service. A vision for resource sharing was developed that identified the following key aspirations for the service:

- Client self-service options/reduced Library staff intervention
- Increased integration of systems/improved capacity for systems and software to deliver services
- Reduced manual data entry
- Improved delivery of statistical reporting
- Skilled staff

At the same time, the Library recognised the urgent need to support the number of client requests for ‘copies’. The term ‘copies’ refers to articles received primarily in a digital format, whether they be from journals, conferences or book chapters. Table 4 shows that the number of copy requests from 2008 to 2010 far exceeded requests for loans. During peak periods throughout the academic year, the Document Delivery service would receive as many as 50 copy requests per day.

### Table 3. BONUS+ activity at UOW Library by client group 2012-2013.

<table>
<thead>
<tr>
<th>BONUS+ client group</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduates</td>
<td>2,706</td>
<td>2,780</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>1,369</td>
<td>983</td>
</tr>
<tr>
<td>Staff</td>
<td>1,411</td>
<td>1,443</td>
</tr>
<tr>
<td>Total</td>
<td>5,486</td>
<td>5,206</td>
</tr>
</tbody>
</table>
Table 4. Copies and loans document delivery requests at UOW Library 2008-2010.

<table>
<thead>
<tr>
<th>Document Delivery request type</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>7,435</td>
<td>7,874</td>
<td>8,002</td>
</tr>
<tr>
<td>Loans</td>
<td>2,035</td>
<td>2,489</td>
<td>2,156</td>
</tr>
<tr>
<td>Total</td>
<td>9,470</td>
<td>10,363</td>
<td>10,158</td>
</tr>
</tbody>
</table>

ArticleReach and Subito

To address the immediate need for support in filling client requests for copies, the Library undertook an environmental scan to identify services based on resource sharing and/or fixed cost models, while providing the wide range of materials required by UOW clients. From this, the ArticleReach and Subito services were marked for further investigation. Due to the success of BONUS+, which is also delivered via an Innovative Interfaces product, the unmediated ArticleReach product had appeal as an adjunct resource sharing service option open to undergraduate students on a familiar platform. With the needed software already in place, and a defined annual subscription, ArticleReach membership appeared to be a good choice. The Library had not provided access to unmediated requesting in the document delivery space previously. Nor had it included a document request option in its link resolver page. ArticleReach’s capacity to integrate with the Library’s link resolver presented a strong attraction to its adoption. This would alleviate the client experience of coming to a ‘dead end’ in looking for an item. All clients would be able to request a document at their point of need.

An internal project secondment opportunity was made available in order to dedicate staff resources to introducing the new service. ArticleReach requesting was set up quickly, and added into the Library’s link resolver page.
Simultaneously, an account was set up with the German document delivery service, Subito, (http://www.subito-doc.de/) a vendor that had not previously been used by UOW Library due to the old reliance on Infotrieve Australia and the British Library. The account with Subito was straightforward, enabling staff to search the Subito serial catalogue and place an order for an item. Subito was selected based on its ease of use and low fees. Subito does not offer unmediated requesting for clients of institutional members, nor is it Z39.50 compliant, so Library staff needed to access the Subito website directly to make requests. Nevertheless, Subito was a good option for quick and inexpensive access to material not available through other channels. Staff found Subito particularly useful for requesting conference material, often a difficult format to source due to the ephemeral approach by which some conference publications are produced.

With support in place to enable the UOW Library’s Document Delivery service to continue sourcing requests for books and articles, plans for reviewing the service commenced. This comprised:

1. Investigating and implementing a new system;
2. Forming a dedicated Resource Sharing team;
3. Reviewing and refining the core vendor services and consortia arrangements to achieve the best value for money for a growing service operating under a defined budget, including determining the most efficient and effective protocols for difficult-to-source material;
4. Ensuring staff are skilled to support the service.

**A new system at UOW Library**

In 2009, when considering a replacement for the existing Millennium ILL module, UOW Library had first investigated Relais as well as other document delivery systems on the market. At the time, the Library was not well placed to undertake the full implementation of a new system such as Relais, unsupported and reliant on existing staff’s technical capacity.
Since that time the Australian consortium, CAVAL, had taken on local support for implementation, hosting and customer support for the Relais software (CAVAL, 2014). Importantly, CAVAL also assumed responsibility for organising interoperability testing and implementation between each newly installed Relais system, Libraries Australia, and the LADD Payments Gateway. (Jilovsky & Howells, 2012). Conversations were held with Relais, the National Library of Australia and several other Australian universities that were using Relais for Document Delivery to seek their perspective of the system. Table 5 shows the comparisons made between the current and prospective systems resulting from this period of investigation against UOW Library key system requirements.

<table>
<thead>
<tr>
<th>System requirement</th>
<th>Current system</th>
<th>Prospective system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics and reporting</td>
<td>Extracted manually for previous month only. Very limited statistics available.</td>
<td>Large range of predefined and customised reports available. Reports run via simple system query.</td>
</tr>
<tr>
<td>Communication channels</td>
<td>One-way communication channel from Library to UOW clients only using generic script responses.</td>
<td>Ability to create generic script responses. Communication between all clients, internal and external.</td>
</tr>
<tr>
<td>Client requesting</td>
<td>UOW on-shore clients only can request using the system.</td>
<td>All internal and external clients (including off-shore UOW clients and other libraries) can request an account and place a document delivery request.</td>
</tr>
<tr>
<td>File delivery</td>
<td>The system cannot send and receive files. The Ariel file receipt and delivery software is used instead, though it is highly problematic software which regularly malfunctions.</td>
<td>Inbuilt file receipt and delivery software called ReceiveFTP. No staff mediation in sending items received electronically.</td>
</tr>
<tr>
<td>Integration with other systems and vendors</td>
<td>System integration enabled to push requests to Infotrieve Australia and British Library. All other vendor services, including LADD and UOW Library catalogue, non-integrated.</td>
<td>Interoperates with RapidILL, OCLC WorldCat Resource Sharing, UOW Library catalogue, LADD. Does not interoperate with ArticleReach or Subito (not ISO ILL compliant). Interoperation with BONUS+ not established.</td>
</tr>
<tr>
<td>Customer and system support</td>
<td>US-based customer support. Product will not receive further development or upgrade.</td>
<td>Local support through CAVAL, extended support through Relais International, Canada. Local hosting and management service.</td>
</tr>
</tbody>
</table>
Table 5. Comparison of key functionality requirements between previous and prospective document delivery systems.

It was recognised that Relais may not be able to accommodate some of the legacy practices incorporated in UOW Library’s Document Delivery service. Yet, it was agreed that Relais could deliver an efficient and positive service to a wider range of clients, both local and international. The Relais system also presented the opportunity to provide a more streamlined and productive workflow experience for Library staff.

The implementation of Relais was a very challenging experience and required the formation of an internal project group comprising staff from the Library Technology Services team and the newly formed Resource Sharing team. Implementation occurred over a six-month period. During this time, the project team coordinated the delivery of the new system and other elements affecting the service, including:

- Configuring the system, loading patron information and university group affiliations, email templates, interoperability with UOW Library catalogue and LADD;
- Creating workflows and procedures in collaboration with other internal stakeholders, and after discussion with other Relais users in Australia;
- Establishing methods and procedures for drawing key statistics;
- Developing new webpages, forms, and online information (Figure 1);
- Developing the communications strategy to the University community; and
- Organising staff training with CAVAL.

The Relais system was launched in July 2012, after which the Millennium ILL module and Ariel software were decommissioned.
Figure 1. University of Wollongong document delivery Web site.

Resource Sharing team

The Resource Sharing team was formed in April 2012 as a result of a Resources Division review. The new team comprised three full-time and four part-time staff who are responsible for facilitating responsive, cost effective access to supplementary content via resource sharing and Ereadings services. The team was formed early in the Relais implementation project to ensure team involvement in the development of procedures and workflows in preparation for the launch.

Once the new system was launched, the team went into an intense period of team training and learning. New approaches to delivering resource sharing services were introduced to
the new team, emphasising support for researchers and the addition of value-added services such as locating missing metadata in client requests to aid in the supply of items.

**Sourcing arrangements**

**OCLC WorldCat Resource Sharing.** Finding the right configuration of consortial arrangements to source material for UOW clients, particularly researchers, was the next priority. Sourcing a proportion of book and journal content for clients was achieved through the use of ArticleReach and BONUS+. The ArticleReach fill rate was moderate at approximately 65%. Books held at international libraries were still difficult to source. This was usually because UOW Library’s only option when requesting a book loan from an overseas library was to contact the library directly. This was often ineffective due to either non-acknowledgement of the request or the requirement of IFLA vouchers. There were a number of academics and postgraduate students who, due to their research areas, requested hard-to-source books.

Through conversations with other Australian Libraries, the positive reputation of the OCLC WorldCat Resource Sharing service was recognised. WorldCat membership aligned well with the core aspirations of the Library’s resource sharing service in terms of its cost-effective annual membership fee structure which would support the Library’s growing client base, and ability to interoperate with the Relais interface, reducing the need for Library staff to use multiple systems. Another benefit of the OCLC product was its integrated fee management. This feature would allow the Library to consolidate its payments through OCLC thus opening up access to requesting from a range of previously inaccessible overseas library collections.

UOW Library committed to an annual subscription. Membership to the OCLC WorldCat Resource Sharing community immediately enabled the Library to expand the range of content which could be sourced. For some research areas, such as Russian studies, among
others, it had previously been difficult to source material requested by clients. The OCLC subscription immediately increased the Library’s opportunities for sourcing content in these areas. A welcome surprise in joining the service was the extent to which material from UOW Library collections was requested, demonstrating the value of the collections. This also positively impacted the OCLC monthly fee structure, calculated based on the difference between requesting and supply.

The fleet of desired resource sharing facilities for sourcing content for UOW clients was being realised. The complementary nature of services was proving to offer a sustainable model in face of changing client needs, as well as reducing the risks associated with using a limited number of suppliers:

- **ArticleReach**: unmediated point-of-need article requesting for all UOW clients.
- **Subito**: a source of conference and foreign language articles. Subito does not interoperate with Relais, though it is relatively inexpensive and for content requested the fill rate is nearly 90%.
- **LADD**: the most useful avenue for sourcing print Australian content.
- **OCLC (WorldCat Resource Sharing)**: sourcing international and hard-to-find items.
- **BONUS+**: unmediated book requesting for all on-shore UOW clients.

**RapidILL**. Apart from theses and standards, sourcing recent or current year material - content that is highly sought after by UOW researchers - remained problematic. This content is often only available electronically and, where held, publisher license agreements often preclude other libraries from sharing articles or ebooks.

The Library had initially contacted RapidILL in 2011 during the period after the closure of Infotrieve Australia. Their service offerings were highly appealing in terms of consortial arrangements (over 200 member libraries), cost-effectiveness (annual membership fee only), fill rate (advertised as 96%) and turnaround time (13 hours: a factor that weighed in
UOW Library’s favour due to the time difference between Australia and USA) (RapidILL 2014).

RapidILL was unable to interoperate with the Millennium system, but had functionality to automatically push new requests received in Relais into the RapidILL request queue. The adoption of ArticleReach and BONUS+ had shown the Library that the use of unmediated requesting opportunities presented a cost-effective method for expanding the service to accommodate the growing client base. After the RapidILL requesting was integrated into the UOW Library Relais instance, a request-side trial of RapidILL was undertaken in March 2013. The purpose of the trial was to determine if this service could positively impact staff time in manual processing, and improve access to electronic and current year content. The Library was further interested in evaluating RapidILL’s proposed capacity for unmediated requesting.

The trial showed RapidILL could provide a solution to sourcing a significant portion of current year material. Some of this material had previously been requested unsuccessfully via all other suppliers before being supplied through RapidILL during the trial. RapidILL’s facility to push all new requests directly from Relais to the RapidILL system held strong appeal to the Library. Of the 198 unmediated requests submitted to RapidILL during the trial, 163 (82%) were filled. In May 2013, as a result of the positive outcomes of the trial, UOW Library became the first Australian library to join RapidILL.

Membership to RapidILL has not only consolidated the UOW Library Resource Sharing fleet of services, but has also allowed it to extend its involvement in resource sharing globally. It has also prompted the Library, for the first time, to actively supply electronic journal holdings, where licensing permits.

Staff skills
As the Library had learnt previously, staff reliance on system processes and vendor requesting protocols can be detrimental to the Library when systems fail or vendors close down a service. Staff had historically relied on self-taught search skills, chiefly using Google and the Library’s Summon discovery layer to locate items held at UOW Library. For this reason, the Resource Sharing team received in-house training in ‘deep’ search skills from reference librarians. These were skills that Resource Sharing staff had not previously developed to a significant degree. These skills were also identified as a competency gap area by the staff when the new team was initially formed. Training in searching online focused on using advanced search techniques in Google Scholar and a range of academic databases to which the Library subscribed, including tips on how to use the Library’s link resolver to drill down to content. The team also received pointers on accessing standards and using persistent identifiers. The training provided staff with an added layer of knowledge that they have built on as a group by actively sharing hints and tips between each other.

The Library will purchase content outright in order to fulfil a UOW client resource sharing request based on three criteria: where no other option is available for sourcing an item, where cost and access methods are not prohibitive, and where an online purchase option is available to institutions. A set of protocols were established in the team for those instances where a level of technical knowledge or complexity was involved in making a decision about access to a document. These include where:

- A standard is not available via a Library database;
- A document can only be accessed by outright purchase and may have access requirements using digital rights management software or account registration;
- It is a dissertation/thesis.

Library staff avoid outright purchasing from publishers that use digital rights management software if the publisher terms are restrictive or if the publisher’s viewing software cannot be accessed on University computers. Where access to a publication (purchase or freely
available) requires account registration, the Library will undertake the registration where an institutional account is available; creation of individual accounts are referred back to the requesting client.

A good investment

For a number of years a defined budget, set at approximately 4% of the Library’s Information Resources Fund, has been allocated annually to cover the costs of resource sharing services. During the review process, the Library transitioned from a mediated model dependent on pay-per-copy/loan, to one centred on annual membership or subscription to consortia-type services, and unmediated client requesting. Apart from Subito, OCLC’s mediated functionality, and occasional outright purchase requests, this has been achieved. The volume of requests that the Library can service has risen by almost 50%, from 10,158 in 2010 to 14,810 in 2013; 76% (11,229) of these client requests are now being provided via unmediated services (Table 1). This has been achieved without increasing the annual budget commitment to resource sharing, thus not impacting on the Library’s core collection funds.

Membership to groups and services such as RapidILL, OCLC WorldCat Resource Sharing, and BONUS+ have significantly increased the demand for UOW Library material by 350%. However, with the Library now moving more towards sharing electronic journal content (88% of articles supplied through RapidILL are from electronic serials), the introduction of a more efficient system, and the overall decrease in manual workflows, the impact on staffing and budget is minor. Anticipating the approximate expenditure for the year is another advantage of the new model, assisting wider budgetary planning in the Library.

Conclusion
Resource sharing is a legitimate strategy for modern library collection management. It provides greater exposure and access to scholarly information worldwide while informing local collection needs through request trend analysis. The transition from a 20th Century to a 21st Century Resource Sharing service has been complex and, at times, challenging. Though it has been necessary to ensure UOW Library’s ongoing relevance and efficiency for clients and its value to the international resource sharing community. Resource sharing is a complex area, comprising myriad consortial arrangements, systems and skill sets. Finding the right balance of elements in building a resource sharing service is dependent on the budget, type of client community, and staff resources of the library. By using a wider range and number of sources for supply, the UOW Library Resource Sharing service now has the ability to offer a sustainable, high volume, valuable service for all UOW clients. As changes continue to occur in the higher education research environment, scholarly publishing world, and document delivery systems and services, the Resource Sharing service at UOW Library will need to adapt frequently. Challenges will continue to surface as scholarly publishing and technologies evolve, with formats such as data sets and ebooks being new tests for resource sharing services. Although not every single request can be filled (in some rare instances, material just cannot be located or accessed), the UOW Library is in a much better position than three years ago to meet the needs of its clients.

References


