

A TALE OF TWO LIBRARIES AND THEIR DEVELOPMENT OF A USER FOCUSED REQUESTING SERVICE

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ABSTRACT

Users want a fast, easy and inexpensive way to get copies of articles, chapters of books, photographs, pictures, maps and manuscripts. The National Library of Australia's Copies Direct service was launched in 2002 and it allows National Library users to easily request copies of material from the collection.

The State Library of Victoria will release its digital delivery service in October 2010. As a part of the slv21 digital strategy, State Library has re-examined how to provide a seamless order service for digital copies from its collection. This project focuses on automation across the interlibrary loan and the copying services at the Library.

In 2009 the National Library commenced a project to review the Copies Direct Service with a view to making significant improvements. As the State Library has invested in the use of the same software, Relais, it was an opportune moment for the two libraries to learn from each other. Although both libraries have taken different approaches there is significant overlap and opportunities to collaborate.

This paper describes the processes the two libraries used for these projects, the cooperation and collaboration to develop new online services and the outcomes. The lessons from sharing institutional approaches have provided each library with greater knowledge and power to increase their capacity to serve their users online.

1. COPIES DIRECT AT THE NATIONAL LIBRARY OF AUSTRALIA

It was the best of times,
it was the worst of times.[1]

Today the internet enables users to easily access a myriad of web sites around the world finding information no matter where it is located. Although finding references to items in library catalogues is relatively easy, when it is time to order a copy it is often an entirely different story. Many libraries do not offer any online ordering services at all and very few offer online payment options.

In late 2000 the National Library received a complaint from a user, who in attempting to order a copy of a newspaper article had been quoted three different prices and ordering methods. At the time each work area of the library supplying copies to users was responsible for establishing charges and workflows independently of other areas. The complaint was a catalyst for change. It prompted the re-evaluation for ordering processes across the Library and the development of a new service model aimed at moving towards a one stop shop that would offer online ordering and standardise charges.

By the time the National Library launched the Copies Direct service in 2002, the simple form had morphed into a series of forms allowing clients to order photocopies, scans, images, sound recordings and microfilms from the Library's Collections and to provide payment details in a secure online environment. The development of the Copies Direct Service was unique in many ways. The service allows users to search for items using one of Library's search services, for example, the National Library's Catalogue, Libraries Australia (Libraries Australia is Australia's largest single bibliographic resource which records the location details of over 45 million items held in most Australian libraries) or Music Australia (specialist service for music) and select an option to place an order for a copy. The bibliographic information is automatically copied into the order form. The user then adds their requirements, copyright/permission information, and personal, payment and delivery details. Alternatively, the user can access the blank forms from the Copies Direct site and enter all of the details including the bibliographic information. Delivery is primarily electronic through email or email post to Web or through mail either as a hardcopy or as an electronic document on CD-ROM. Until automation in 2007, the service operated mainly via email with a database collecting request information and processes were manual behind the scenes.

In 2005 the Library purchased Relais, an interlibrary loan management system to improve the administrative processes in supplying interlibrary loans and document delivery services to libraries. In February 2007 Copies Direct requests were added to the Relais system for the first time. This change meant that all requests received from libraries or users would be managed through the system, therefore streamlining processing significantly. Once the requests are received in Relais, the system automatically checks the catalogue to ensure the material is held. The request is automatically printed and staff retrieve the material requested. If the user (library or user) has requested a copy the item can be scanned through the Relais system and delivered electronically. If

the user requests a loan the request is updated to produce a coverpage to accompany the book and indicate that the material has been mailed. Overall the system has simplified the workflows significantly.

Although modifications have been made to the Copies Direct service in the intervening years, the service remained virtually unchanged. On the other hand users' expectations have skyrocketed. They expect to satisfy most of their information needs online: music, books, articles, etc. and they are very confident ordering material and paying online. Since Libraries Australia records became accessible through Google in 2008, the number of Copies Direct requests has increased. In 2008/2009 just under 14,000 requests were received and in 2009/2010 the library has experienced a 25% increase in the number of requests received. With the prospect of continuing growth it became imperative that workflows be reviewed, and in April 2009 the Library commenced a project (Streamlining Collection Reproduction Services) to review all of the copying and interlibrary loan workflows in the library.

1.1 The review

Before beginning on the review it is useful to set the scene. National Library provides offsite access through a decentralised model. Requests of material from the printed collections are supplied through the Document Supply Service. Requests from the special collections; i.e. Asian Collections, Manuscripts, Maps, Newspapers, Oral History and Pictures, are serviced from these areas directly. Usually access to these collections requires either specialist language skills or specialist collection knowledge. However, whilst the supply processes are decentralised, the management of requests is centralised through the use of the Relais system and standard charges and policies.

The Streamlining Reproduction Services Project set out with a number of aims:

1. To improve customers experience in getting copies of collection material, especially unique material by improving turnaround time and easier requesting;
2. To gain greater efficiencies in copying/interlibrary loan processes and workflows by eliminating duplication and unnecessary tasks;
3. To centralise services where it is more efficient to do so and enhance the virtual centralised service (i.e. through changes to Relais) with an emphasis on ensuring consistent procedures and policies.

The project consisted of a comprehensive review of interlibrary loan and copying workflows covering nine different work areas of the library, the seven collection areas mentioned earlier and the Preservation Section and the Digitisation and Photography branch. These sections were included to cover the workflows for requests of material that require preservation treatment or specialist photography services.

The project used Business Process Modelling Notation (BPMN) to document the workflows. BPMN is a standard for describing and modelling business processes. It uses a graphical notation for specifying the business processes in a business process diagram, accompanied by a narrative

describing the same information. This tool is very effective in identifying areas of overlap or overly complex processes and communicating this information to all stakeholders. Meetings were held with stakeholders and information on their current workflows collected. BPMN diagrams and narratives were produced and reviewed to identify efficiencies. In addition different delivery models were considered with a view to explore the extent to which services could be centralised.

1.2 The findings

The project report [2] completed in October 2009, made over one hundred recommendations which can be summarised into five main streams:

1. CopiesDirect - in order to improve the Copies Direct service, the requesting interface would need to be redeveloped to enable users to order multiple items in a single order, simplification of screens and credit card validation.
2. Relais – required a number of system changes to streamline some of the workflows.
3. Policies – establish policies on copying and review the loan policy with a view to empowering staff to be more independent.
4. Workflow – review a number of workflows so that in conjunction with system changes to Relais processes would be streamlined and double handling reduced.
5. NISO Circulation Interchange Protocol (NCIP) – explore implementing NCIP to enable Voyager and Relais to exchange circulation data.

The report also recommended the National Library continue with a hybrid organisational model for the delivery of interlibrary loan and document delivery services, with decentralised delivery and centralised administration and policy. The report considered that the wide variation in storage sequences, control, access conditions and copyright across all formats held by the Library, would make it difficult to train a central team of staff to carry out all these duties.

1.3 The Redevelopment

The Redevelopment of the Copies Direct Project will run from March 2010 until February/March 2011. The project will redevelop the interface to include:

1. A shopping cart facility to enable users to order multiple items in a single order;
2. Improved layout and functionality of the service and simpler forms;
3. Credit card validation as a minimum first step towards e-commerce;
4. Improved copyright information and access conditions where possible;
5. Amalgamate user request workflows and internal orders for copies from the collections for exhibitions and publications, and;
6. Update the technology supporting the service.

There will also need to be a number of system changes to accommodate these requirements and the workflow recommendations identified in the first phase of the project. These projects will deliver improved services to users and more efficient workflows to staff. While the National Library will be able to undertake much of this work in house there are real benefits to collaborating.

2. DIRECT DELIVERY AT THE STATE LIBRARY OF VICTORIA

Over the last two decades the State Library of Victoria has made significant investments in emerging communication and information technologies to develop a digital library service. In 2006 the Library received additional Government funding to implement a four-year program, known as slv21, to accelerate the Library's existing digital (or online) service, to help ensure that the Library is equipped to serve the information needs and expectations of Victorian communities in the 21st century.

The slv21 program has enabled increased investment in digitising the Library's collections, which comprise over 2 million items and provide a comprehensive portrait of the social, historical and cultural development of Victoria from settlement onwards. This increased emphasis on digital collections has been supported by another slv21 project, the implementation of a Digital Object Management System. Meanwhile, access to collections, especially digital collections, has been greatly improved by the implementation of a federated search tool that includes enhanced access to e-journals and greater discoverability of related items through clustering [3].

The Library was already experiencing increased demand for loans and/or copies of collection items, and the increased online visibility of collection items – digitised and non-digitised – has boosted demand further. However, users have only been able to use a print-based form to order copies of collection items, rather than placing and paying for orders online.

The State Library like the National Library has received similar feedback about service provision.

Direct Delivery was established to provide:

- A centralised management system covering both document delivery and interlibrary loans;
- An easy to use online interface for both individuals and institutions to place requests;
- Online delivery of copies; and,
- Management of financial transactions through the Library's financial systems.

There were a number of requirements guiding the development of the project and tender selection, including:

- Ability to integrate with international/national resource sharing and delivery initiatives;
- Flexibility and scalability to accommodate future developments;
- Ability to accommodate copyright responsibilities and compliance with other agreements concerning the use and care of collection items;
- Adherence to the State Library of Victoria's purchasing guidelines, based on the Victorian Government Purchasing Board's Procurement Policies; and,
- Compliance with the Victorian Government guidelines regarding website accessibility with mandatory and minimum requirement of compliance with the World Wide Web Consortium (W3C) Level A guidelines [4].

Implementing Direct Delivery will achieve the following benefits:

- Support for the increase in requests for digital copies, resulting in increased awareness of the State Library of Victoria and its collections;
- Increased user satisfaction due to reduction of negotiation between them and multiple staff members concerning:
 - catalogue information;
 - permission to reproduce conditions;
 - copyright compliance;
 - tracking requests;
 - turnaround times and deadlines;
- Integration of current manual workflows, resourcing policies and performance targets, including consolidation of copying with document delivery and interlibrary loan processes across the Library resulting in:
 - more efficient use of staff time;
 - elimination of duplicate internal resource processing.

The result will be a service that delivers on the commitments of slv21 to *'put information into the hands of all Victorians when and where they want it...'* [5]

2.1 Innovation

Direct Delivery is an ambitious and complex project. In order to create the Direct Delivery online requesting system, the project has approached its challenges with innovative solutions.

Extensive business analysis to document (using WebSphere Business Modeller) and consolidate the multiple manual processes across multiple business units unearthed hidden policies, customs and practices throughout the organisation which affected both services and workflows. This analysis allowed the project to streamline policies to offer more effective and efficient services. For example, different practices in use by different areas within the Library resulted in vast inconsistencies in pricing [6]. The complex pricing policies, which required numerous pages of explanation and documentation, were systematically rationalised and reduced to a more consistent, one-page pricing table. The Library has improved its payment policies – although the user still pays for their copies upfront, we changed the primary payment method to credit card and debiting the user's card only after the work has been completed. This will reduce the need to refund payments for requests that cannot be supplied. The types of services offered have been consolidated to provide digital copies, primarily delivered online, rather than a mixture of digital and print. These streamlined services are also being supported by the Library's workflow changes. Staff movement within work groups have accompanied the changes. The workflow changes introduced before the launch of the Direct Delivery Service, have allowed for refinement before the introduction of the new service.

Providing a quality service for users is the focus. In the business analysis we considered existing processes (requesting, delivery, supply and payment) as a whole entity, with clear management

responsibility across divisional and operational units. Direct Delivery is replacing the existing manual systems and processes with an automated process for providing loans and copies of collection items. The Library is building the capability to collect all required data for the order, including credit card payment details, through an enhanced web form, with catalogue details imported directly from the catalogue. Copyright and permission information is part of the order form, with the conditions of use, and users will agree to these terms at the point of ordering. Users will receive automatic confirmation via email to verify the receipt of their request. The Library will effectively administer the flow of orders with automated tracking, monitoring and managing requests across operational units. Digital copies will be offered as the preferred method of distributing resources, and these digital copies will be lodged in a document store for collection by users directed via hyperlinks in an email. The Library is ensuring integrity with all transactions, providing customers with security and privacy, through secure data transfer. The project is to transform the entire process to benefit both staff and users.

The State Library has built a web user interface in-house to integrate the backend management system provided by vendor Relais International with our existing systems: catalogue (ExLibris - Voyager), Search (ExLibris - Primo) and digital repository (ExLibris - DigiTool). This development work has also given us the opportunity to implement an e-gateway to allow customers to pay online and to allow the Library to validate their credit card. This web interface will enable the user to order multiple items in a single session via a shopping cart facility and to track their orders and update their details. The project contracted usability experts to design the interface and conduct user testing.

The outcomes of the business analysis and redefined business rules are supported by the configured application workflows which include a decentralised system for approving requests, enabling staff with specialist collection knowledge to be involved with the process. The project commissioned development work to allow the Library's collections, primarily Manuscripts and Pictures, which have records that are particularly complex, to be part of the initial implementation. Catalogue records representing items from these collections sometimes describe them as single items, and sometimes as groups of items. This development work will enable users to request multiple items from the same group in a single order, mimicking the previous manual process. These requests can be tracked as a group within Relais. Other development work will provide a streamlined way of communicating with users about copyright requirements and other permissions, tracking the progress of copyright compliance and retaining approval documentation within the system.

The business analysis and subsequent innovation supported by Relais International and internal applications development are vastly improving online copying services at the Library.

3. COLLABORATION

Undertaking complex projects requires significant collaboration within the same institution with the different stakeholders, be they business areas, business analysis or information technology experts.

In the case of the development of the Direct Delivery Project and the redevelopment of the Copies Direct service, collaboration has extended beyond our individual organisations. Both the National Library of Australia and the State Library of Victoria are benefiting greatly from the collaboration between the two organisations.

As part of its research for the Direct Delivery project, in 2007 the State Library of Victoria arranged for staff to visit the National Library of Australia to discuss in detail the Copies Direct service, the Relais system and interlibrary loan and document delivery workflows in general. This was the first time the authors met. It was a productive meeting however the friendship was cemented at the 10th Interlending and Document Delivery Conference held in Singapore in 2007. The rapport has greatly assisted in sharing information, allowing frank and open communication in a sense that no question was too insignificant or dumb. It enabled quick exchanges of information. Both libraries appreciate the benefit of this communication and encourage it.

The information sharing between the two Libraries commenced with the National Library providing background information on the development of the Copies Direct service, issues encountered and lessons learnt which the State Library found invaluable as a reference point to the development of the Direct Delivery project. The National Library also shared with the State Library the details of its Relais system configuration and it proved helpful as it allowed the State Library to consider the requirements to implement the system in the different environment. Discussions on the Streamlining Collection Reproduction project were useful as it helped both libraries consider workflow improvements. The National Library's use of BPMN to describe workflow processes was of interest as the State Library was able to use the information on the process to validate its approach to the Direct Delivery project and in consideration of possible future developments.

The development of the Direct Delivery web user interface was shared with the National Library to highlight the direction the State Library was pursuing. The National Library appreciated the information as it assisted with redevelopment of Copies Direct.

Information sharing regarding development work commissioned by the State Library has broadened the context of the product development, leading to enhancements benefiting both institutions and other Relais customers.

Both institutions have different local business and functional requirements therefore it was not practicable to collaborate on a single system. Although both institutions use Voyager to underpin library operations, there are differences in bibliographic data, discovery interfaces, and supporting systems, which would have expanded the scope of the project significantly and added an additional layer of complexity to the development. Instead developing two systems but modelling them closely will enable both institutions to be more flexible in adapting in the future.

3.1 NSLA Connection

The National Library of Australia and the State Library of Victoria are both participants in the National and States Libraries Australasia (NSLA) Re-imagining Library Services – Delivery project. Both authors are members of this project team which has enabled further sharing of knowledge and experiences with the other project team members. There are synergies between the NSLA Delivery project and the State Library of Victoria and the National Library projects, as all NSLA libraries have acknowledged the need to automate their services over the next three to five years based on the models developed by the two Libraries

3.2 Relais Connection

The State Library of Victoria requested development work from Relais International to meet specific requirements which will be incorporated into subsequent releases of Relais. By expanding the collaboration to include the National Library the benefits realised included solutions to existing issues. For example the State Library requested additional fields to be added to the Relais database in order to collect special collections information. The National Library provided information on an existing problem with the length of some database fields to further improve the modification. Relais International was able to incorporate all of this information into the development.

One of the more significant changes to Relais was the State Library requirement for the development of functionality to enable the user to request multiple items from a single pictures or manuscript catalogue record. This development will form the basis of future shopping cart functionality for Relais. This early work will require further collaboration in order to fully develop the shopping cart facility.

Currently Relais can send an email to the user but the response from the user cannot be captured in the system and is received as an email. Staff then annotate the specific request in Relais with the information provided. The State Library approached Relais International for an integrated customer friendly solution. Relais International has developed a proposal to add a “patron communications” enhancement to Relais that would accomplish two way communications with users. Both libraries will be working collaboratively to further this development.

In addition to the close collaboration between the two institutions Relais International supports the Australian User Group by maintaining a User List and holding the Australian Annual Relais User Group meeting, which encourages broader industry collaboration between libraries, enabling a forum for sharing and learning from each others’ experiences.

4. LESSONS LEARNT

The importance of a good relationship between key people involved cannot be underestimated. Having good rapport enhances communication and therefore offers more opportunities to collaborate, take advantage of colleagues’ experiences, reduce the chance of reinventing the wheel and hopefully avoiding too many mistakes. There is also a reciprocal benefit as this exchange can

lead to opportunities to review earlier decisions and open other avenues to consider. It also leads to collaborative approaches to system developments that benefit both institutions. Building and maintaining a good relationship with the vendor, has been an essential component in the success of these projects.

Whilst there has been strong collaboration, this has not come at the expense of either institution. Each institution has unique requirements, client base and mandates, and respecting each other's differences is essential. These different approaches highlight areas for improvement and enhancement assisting with clarifying the desired outcome by exploring other options. This experience shows libraries can share information, ideas and collaborate as equal partners.

The review of business processes promoted a greater understanding across the organisation on the user experience. It meant that decisions were made with knowledge of the complete picture, which enabled the solution to be more easily seen. Discussing these findings with colleagues in the broader library context enabled the provision of valuable input. Different perspectives can provide powerful insights.

Complex projects are challenging: being able to share experiences results in finding better solutions.

REFERENCES

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- [2] National Library of Australia, Streamlining Collection Reproduction Services Report: a review of the different workflows used in the National Library of Australia to support interlibrary loan/document delivery and copying services; National Library of Australia, 2009
- [3] More information regarding slv21 can be found at www.slv.vic.gov.au
- [4] <http://www.egov.vic.gov.au/index.php>
- [5] internal document, unpublished
- [6] An example of this would be a request for an A4 black and white photocopy of a Library item through Document Supply cost the standard \$13.20, but if the photocopy was made as a result of a reference inquiry, it could be provided at the cost of \$3 for the first page and \$0.60 for each subsequent page – or, in some cases, for free.