A portal for the people:
National Library & your local public library
= new access paradigm

Kylie Moloney
Kinetica Customer Services, National Library of Australia
kmoloney@nla.gov.au

Roxanne Missingham
Assistant Director General, Resource Sharing Division, National Library of Australia
rmissingham@nla.gov.au

Christine MacKenzie
CEO, Yarra Plenty Regional Library
christine.mackenzie@alia.org.au

Abstract:
Australians are avid seekers and consumers of information in a great variety of forms. The National Library is working with five public libraries to better understand the information resource needs of Australians. InformationAustralia is a twelve-month pilot providing a more integrated approach to information via a web portal for Australians. This paper outlines the development of the pilot portal, including policy and technical issues and future possibilities for a service available to all Australian libraries.

Introduction

Australians are avid seekers and consumers of information in a great variety of forms. Their search for information now includes the Internet for almost all regular "discovery" activities. Figures released in September 2003 from the Australian Bureau of Statistics reveal a continuing increase in Internet access – Australians subscribing to the Internet through Internet Service Providers exceeded 5 million at the end of March quarter 2003. This represents an ongoing increase – for the six month period from September 2002 there was an increase of 521,000 subscribers (11%). New subscribers were predominantly from the household sector (or homes), rather than businesses (Australian Bureau of Statistics 2003).

Libraries are increasing the provision of services which enable Internet access to services and collections – whether they be catalogues, subscribed services and/or electronic journal collections and reference services – to meet the growing needs of convenient access by users. Many organisations have provided a technical infrastructure covering issues such as authentication to support access to digital library services to the desktop. For the general public the National, state and public libraries have increasingly provided access to digital content, collaborating on purchasing and moving to provide access to services. One of the National Library's major undertakings for 2003 – 2005 is to "cooperate with other libraries, cultural institutions and creators of information to ensure a wide and culturally diverse range of material is available to the Australian community" (National Library of Australia 2003).

Over the past 18 months the National Library and a group of public libraries have been working on a project to better understand the needs of Australians to access information resources. The challenge for both the National Library and public libraries is to deliver access to our collections and services in a manner that is easy to use, relevant and timely for Australians. Collaborative projects undertaken in the past, such as PictureAustralia and the National Bibliographic Database have provided targeted access to defined sets of resources. The move to electronic service delivery in public libraries and the National Library has enabled us to better understand user needs. This, combined with the maturity of technology, provides a framework for building a more integrated approach to information access for Australians.

The result of discussions with public libraries is the development of a pilot to test a new service, which offers a single "Google-style" approach to a range of Australian print and electronic resources. This paper outlines the development of the pilot portal, including policy and technical issues.

Why a partnership between the National Library and public libraries?

The National Library's involvement with public libraries to deliver resources directly to Australians originates from the strategic directions.

> "Our major undertaking in 2003 - 2005 will be to provide rapid and easy access to the wealth of information resources that reside in libraries and other cultural institutions and to break down barriers that work against this. Services supporting access to library information will be simplified and made more user-friendly, and will be widely promoted." (National Library of Australia 2003).

To meet this broad goal, the National Library's focus includes the investigation of services to overcome barriers and create access to electronic and print resources across the nation. The National Library's fundamental approach to overcoming barriers can only occur through working with Australian libraries to meet the needs for all Australians.

Australian public libraries are a key service throughout the nation. With over 93 million visits a year (Australian Bureau of Statistics 2001) Australians are primarily served by their local public libraries. Public libraries have increasingly offered access to electronic resources – ranging from full text electronic services to homework help. Public libraries have also been key collaborators in the development of online service for their customers, including collaboration with the National Library in PictureAustralia and state based initiatives such as Gulliver.

For public libraries, the goals of providing relevant online services, including innovative delivery services and consortia purchasing, to increase the range of resources available were particularly relevant to the project. Public libraries have developed many services to enable their users to access electronic resources. Kay Poustie, library consultant and Chair of the Library Board of Western Australia, has commented on the transformation of public libraries in Australia and the strengthening of their community access role (Layland, 2003). Public libraries have a strong history of collaboration. The portal enables the connections between these libraries to develop further.

The partnership between the National Library and participating public libraries resulted in an agreement to pilot a service, InformationAustralia. The concept was developed at a workshop held with Yarra Melbourne, Yarra Plenty and National Library staff in mid-2002 to explore issues relating to supporting access to resources for Australians. The workshop identified a need for a user-friendly interface that enabled simultaneous searching of several different databases. The portal aims to enhance access to quality information resources using federated searching of Kinetica's National Bibliographic Database, Australian Public Affairs Full Text (APAIS FULL TEXT) and PictureAustralia. More databases may be added to the portal in the future.

The InformationAustralia pilot commenced in October 2003 and will run as a trial project for one year.

Framework

InformationAustralia is an initiative based on increasing resource access for Australians. The public libraries currently involved in the pilot are Brisbane City Council, Yarra Plenty Regional Library Service (Victoria), Northern Regional Library Service (Moree, New South Wales), Thuringowa Library Service (Queensland) and Southern Tablelands Regional Library Service (Goulburn, New South Wales).

The overall objectives of the InformationAustralia pilot are to:

- develop better access to Australian print and online resources for community across the nation through an Internet based portal;
- develop a new business and funding model for access to these resources and the material from the National Library's collection to support public library needs;
- enable document delivery through direct access to online resources or via the Australian interlibrary resource sharing network; and
- evaluate the service and the needs of Australians for access to online resources and collections in the nations' libraries.

The three prime deliverables of the pilot are:

- a working portal supporting access to a range of Z39.50 compliant data sources and interlending workflows;
- research into the information needs of Australians including interface and content issues; and
- the development of a business model applicable to a range of Australian public libraries.

The InformationAustralia Portal

The InformationAustralia web site brings together a host of information services making them available from a single entry point. The portal uses the Internet to extend access to Australian research resources including:

- the NBD, containing information on more than 36 million titles held in Australian libraries;
- full text articles from the top 200 Australian journals and article references on Australian political, economic, legal, social and cultural affairs via APAIS Full Text;
- PictureAustralia - providing integrated access to more than 960,000 online images from 34 cultural institutions across Australia;
- directories such as the Australian Libraries Gateway database, Maps Directory and Oral History Directory; and
- links to other online services and information resources such as Mura Gadi, AskNow! and Australian Government Publications.

While there has been a focus on providing immediate access to electronic materials, InformationAustralia includes the ability to request materials through Interlibrary Loan services. In order to gauge the extent of public demand for Australian resources interlibrary loans and copies from the National Library's collection are being provided free of charge for the duration of the pilot.

The resources available through the portal for which there is a charge are purchased on the basis of consortial arrangements, building on the work done on cooperative purchasing with National, state and public libraries through the CASL Consortium (http://www.caslconsortium.org).

The general model for the service is:

Collections	Libraries and other institutions		

	Cooperative purchased materials (eg CASL Consortium)	Digital collections (subscribed materials, digitised materials and born digital resources)	Print collections

"Get" component	Immediate access to locally available e-resources	Immediate access to freely available e-resources	Ability to request print resources (via the ILL form)

Discovery	Directories eg ALG, Map directory	Portal or "find" service

The target audiences and beneficiaries of InformationAustralia will be people who are looking to find information about Australia and resources in Australian libraries. They may include:

- public library users;
- researchers;
- students and teachers;
- recreational information seekers;
- local community researchers;
- genealogists researching family history;
- university students;
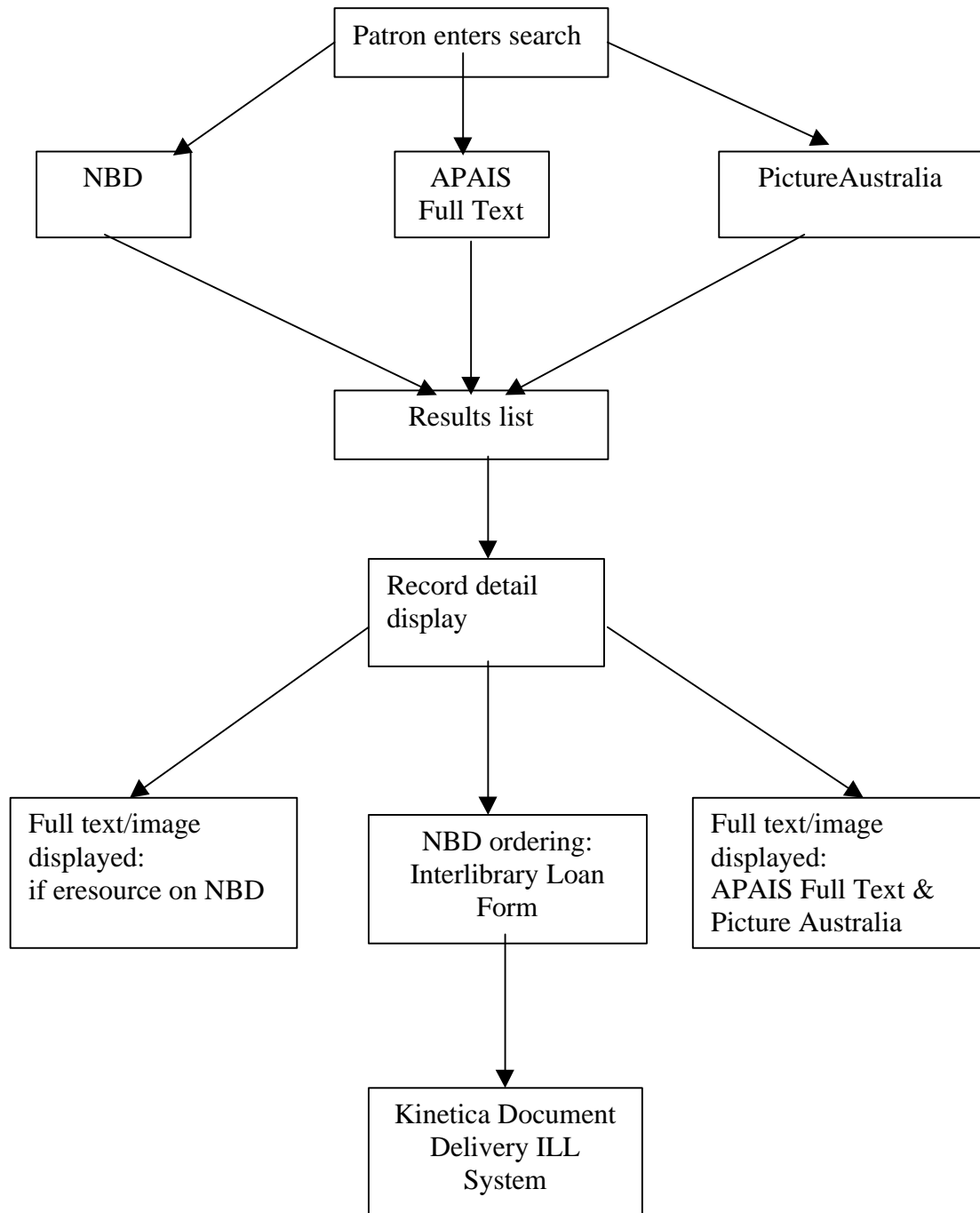- local politicians; and
- public library staff.

The front page of InformationAustralia is designed to be a simple, user-friendly "Google-type" interface. Patrons simply type a keyword into the search box and click search.

Technical Information

InformationAustralia was developed using the National Library's standard in-house application development framework, based on the Java programming language, the Apache web server, the Tomcat servlet container and the WebMacro scripting environment. InformationAustralia searches several different standard formats, MARC (NBD and APAIS Full Text), Dublin Core (PictureAustralia) and index (APAIS Full Text) format simultaneously

The portal distributes the query to multiple Z39.50 targets in parallel, searching keyword searches on author, title and subject fields. It then waits for the results, which are formatted and sent back to the user as they arrive. Hence, results from Z39.50 targets, which complete their search quickly, are visible to the user even though some targets have yet to return their results. The upside of parallel and asynchronous searching is that the user gets some results quicker. The downside is that results from the targets are returned in an unpredictable order.

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Patrons can then click on the PictureAustralia thumbnail or the detailed button next to the NBD or APAIS Full Text record and view the full bibliographic details including the names of the libraries which hold the item.

If the item is available as an electronic resource from the record in the National Bibliographic Database, the full bibliographic detail view will have a link to the digitised object and the patron will be able to access the resource directly online. For example, if a user clicks on the link of digitised music held in the National Library's collection they will be taken directly to the digitised copy.

Patrons can retrieve full text articles from APAIS Full Text by simply clicking on the URL next to the short view of the record.
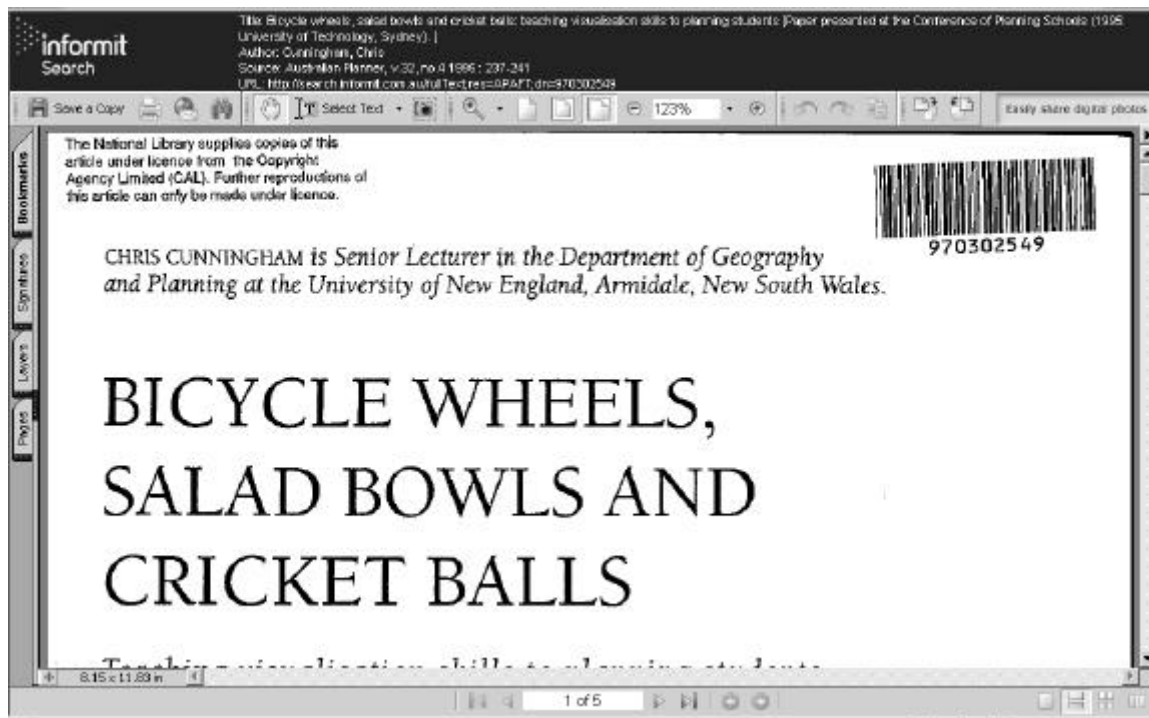
Patrons can also choose to follow links to other online services such as AustraliaDancing and GovPubs, MuraGardi, the Oral History Directory and AskNow!

Interlibrary Loans

Patrons can access resources in other library collections by creating online interlibrary loan requests for items held in the NBD and APAIS Full Text. Patrons simply enter their contact information and have a choice of whether to borrow or copy. They can also indicate if they only want the item if it is free, or if they are willing to pay for the item they can specify how much they are willing to pay. Information from the form is then parsed through to their local library's Kinetica Document Delivery system using Internet Protocol (IP) authentication. Interlibrary Loan staff at the local library check the request and sort the libraries on the rota according to whether or not the patron wishes to pay for the item. If the patron wishes to have the item for free, they may add the National Library to the rota or other libraries with which they have reciprocal borrowing arrangements. The responding library uses Kinetica Document Delivery to ship the item to the requesting library. Materials from all three resources in the portal can be accessed electronically. If patrons' request copies of items, they may also be provided electronically, for example by Ariel web delivery. So far, over 93% of the interlibrary loan requests have been for books.

Issues

Critical issues identified through the pilot include:

- supporting library staff in developing appropriate skills to provide the service by providing education and sharing documentation amongst the participants;
- marketing the service to the general public through launches, media and marketing collateral;
- understanding the needs of Australians and their expectations of access to resources online and through interlibrary lending including the development of a detailed evaluation plan analysing usage, usability and content of the service, use and demand of interlibrary loans and management of the InformationAustralia project;
- authentication;
- business issues including the complex challenge of expanding the service to other libraries because of authentication and funding issues;
- and bandwidth.

Access to the Kinetica and APAIS Full Text databases is restricted to subscribers. Authentication for the pilot is via web proxy and IP. The InformationAustralia system uses authenticated user-ids of its users to select the appropriate Z39.50 user-id and password when querying the Kinetica and APAIS Full Text services. InformationAustralia mediates access to the Kinetica and APAIS Full Text systems by replacing their native web interfaces with a simple InformationAustralia interface when showing summary and detailed results. However, access to the full text function on APAIS Full Text is not mediated, requiring the user to have valid APAIS Full Text access credentials.

Libraries participating in the pilot are currently offering access via their reading rooms. Long-term solutions for authenticating users of InformationAustralia need to be investigated, particularly for those who wish to access the portal at home. Many public libraries throughout Australia may not have sufficient infrastructure to offer appropriate authentication. The National Library is working with State Libraries to investigate alternative authentication systems, including Shibboleth and other emerging standards, which could be used by a larger group of Australian public libraries to access InformationAustralia.

For the duration of the pilot, interlibrary loans are to be provided free of charge from the National Library's collection to determine the need by the general public for these resources. While the pilot incorporates the potential for charging for the ILL service the extent of demand and nature of collections required will be evaluated throughout the pilot. The extent and nature of support for interlibrary lending that might be offered in an ongoing service requires further investigation.

Bandwidth for patrons in rural and regional Australia is limiting access to resources offered through the pilot. It is essential for all Australian libraries to have sufficient bandwidth in order to view larger images or sound files. This broader communications infrastructure was noted in Recommendation 7 in the report to the Senate enquiry on the "Libraries in the online environment"(Commonwealth of Australia 2003).

The Senate enquiry also recommended that the "National Library of Australia receive additional funding to provide improved access to Kinetica for all Australian libraries and end users [see paragraphs 3.14 and 5.8]. (Recommendation 1 - Commonwealth of Australia 2003) as well as recommending that the "National Library of Australia identify a number of key databases for which national site licensing might be desirable; and that additional Australian Government funding be extended to the National Library of Australia for this purpose [see paragraphs 4.56 and 5.10]. (Recommendation 9 - Commonwealth of Australia 2003). InformationAustralia provides a timely demonstrator model for offering access to these resources. The National, state and public libraries of Australia await a government response to the recommendations.

The business model for future development of InformationAustralia will require considerable investigation to determine how the service will fit with the needs of public libraries in various states. For public libraries, issues of access to resources are based upon capturing the best solution to meet the needs of Australians.

Future Possibilities and Options

Libraries have committed significantly to developing online services to better meet the information needs of their users and the public libraries portal fits within a concept of getting best value for money in purchasing online resources through consortia and enabling easy access to both print and electronic collections. The InformationAustralia pilot project combines Australian information resources, building on collaborative purchasing and the growing electronic collections to support access for all Australians. While discussion in library literature has focused on "find" and "get" services based on resource discovery and copy access, this project represents a major step towards full "access"; combining direct access to electronic resources and the ability to request material not in digital form.

In the past, Australians have had uneven access to online resources through their libraries. Many people in rural and regional Australia can only access online library catalogues via their local library. Whilst the pilot is at an early stage, InformationAustralia provides a model for offering integrated access to print and electronic resources by supporting Australians wherever they are in their search for information. The public funded resources across the nation's thousands of libraries can be found and obtained via InformationAustralia, creating an information infrastructure which truly supports a knowledge-based economy.

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