

# Trends & Issues in Library Technology

IFLA IT Section Newsletter

July 2015

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## Libraries as Gigahubs, and other inspiring ideas

Edmund Balnaves  
Chair, IFLA IT Section  
< [ejb@prosentient.com.au](mailto:ejb@prosentient.com.au) >

### Libraries as Gigahubs

The free public library service was one of the wonderful developments of the 19th and 20th centuries. The implementation of the idea has resulted in a remarkable network of physical infrastructure and information services that, where implemented, becomes entrenched as a fundamental service to the community. Closures or attempted closures bring out groundswells of opposition.

The underlying idea of the free public library service has been taken further by the Library WhiteSpace project. This project capitalises on the existing physical infrastructure represented by the public libraries, as well as their importance as an information hub in communities, to act as a Wi-Fi portal using technology that can be implemented in a very practical way.

The project aims to use the spare capacity of the TV spectrum to extend access to internet and other resources by leveraging a technology that with no physical cabling reach (literally) through walls to act as a gateway for Wi-Fi hotspots and connections. This technology provides a low-cost vehicle for letting the library act as a wide-area Wi-Fi hotspot gateway.

A key selling point of the project is to leverage the physical position of the library to provide local nets and new portable WiFi hotspots as backups and crisis communications points during any form of disaster. The possibilities of this technology are also significant to information access in areas that might not have good existing Internet access, including regional areas and developing countries.

This can allow a library to act as a gateway for key public access points that may be kilometres away in their communities or as a way to reach a library without an existing physical

connection (i.e. by distributing new Wi-Fi access points or as an initial connection to the Library itself.

More information on this project is available on the [GigLibraries.Net](#) pilot page- or watch [The Airwaves Are Beautiful](#).

### O&O: Open access and open source

Access to information has become quite fundamental to development. The Lyon declaration recognises this. The enlightenment was a movement inspired by the importance of access to information, in a way not entrenched for the privileged. Library technology has moved into an exciting era, because so many components of a solution to information access exist. What we do with this requires the inspired commitment to the principles of access to information along with creative use of the technologies already at hand.

The mechanics of access to information lie in a combination of:

- the physical access to the information delivery vehicles (e.g. via books or technology)
- the learning barriers to access - the core information skills that include reading, comprehension
- the social barriers to access, including politically, socially or religiously based barriers to access to information
- the qualitative value of the information access - the depth and coverage of the information resources.

Any of the above can act as a barrier to access, and an impediment to development. The qualitative value of information access can be best seen in the information resources to the first tier Universities.

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## IFLA 2015 IT Section Events and Activities

A consolidated list of sessions with IT Section interest/collaboration.

- ★ **Transforming libraries with open digital technologies**  
IT Section Satellite meeting. Stellenbosch University.  
Thursday-Friday, 13-14 Aug.
- ★ **IT Section Standing Committee Meeting I**  
Saturday, 15 Aug, 09:45-12:15
- ★ **Division Leadership Forum: Division III Business Meeting**  
Sunday, 16 Aug, 08:30-10:00
- ★ **10 years of development to collect, preserve and access Web-Sites: Ready to go for everyone!?**  
Preservation and Conservation with Information Technology.  
Monday 17 Aug, 09.30-12.45
- ★ **Technology facilitating access to information: libraries supporting development**  
IT Section, Public Libraries Section, Asia and Oceania Section, Library and Research Services for Parliaments Section.  
Monday, 17 Aug, 16.00-18.00
- ★ **Libraries working for development through information access: realising the Lyon Declaration**  
Division III Sections.  
Tuesday, 18 Aug, 11:45-13:45
- ★ **Big Data SIG Business Meeting and Open Session**  
Tuesday, 18 Aug, 16.00-18.00
- ★ **Preservation and Access Challenges (PACS) for Government and Parliamentary Information - A Knowledge Café**  
Government Information and Official Publications with Preservation and Conservation, Library and Research Services for Parliaments, and Information Technology.  
Wednesday, 19 Aug, 09.30-12.45
- ★ **Library Linked Data: Access, Development and Transformation of Library Data using Semantic Web Technologies**  
Semantic Web SIG.  
Wednesday, 19 Aug, 11.45-13.45
- ★ **Technology for multi-institution co-operation: aggregating, sharing and collaboration**  
IT Section.  
Thursday, 20 Aug, 08.30-10.30
- ★ **IT Section Standing Committee Meeting II**  
Thursday, 20 Aug, 11.30-13.00

The latest IFLA WLIC 2015 program is at [conference.ifla.org/ifla81/programme](http://conference.ifla.org/ifla81/programme).

# OneSearch – NLB’s One-Stop Search Service to Find Resources in Singapore’s Libraries, Archives and more

Patrick Cher

Assistant Project Manager, Technology and Innovation, National Library Board Singapore  
<patrick\_cher@nlb.gov.sg >

## Introduction

OneSearch (search.nlb.gov.sg) is a new unified discovery service launched by Singapore’s National Library Board (NLB) in Aug 2014. The service enables the public to search across all collections managed by the public libraries, the National Library and the National Archives.

By entering a search word and a single click, users can locate a range of books, magazines, audio-visual materials, e-books, photo-graphs, news articles and even oral history interviews and maps related to a particular subject.

OneSearch complements the existing Online Public Access Catalogue (OPAC) and eReads services by allowing users to serendipitously discover other resources about a research topic beyond books.

## Re-thinking content discovery

In Nov 2012, the National Archives of Singapore (NAS) became an institution of NLB. NAS is the official custodian of the Singapore government’s corporate memory, and is responsible for the collection, preservation and management of Singapore’s public and private archival records.

As NLB expands its role beyond the traditional library collections, it is important for the discovery service to represent more of what NLB does and can provide. This prompted NLB to re-think how the NAS’ archives and NLB collections can be better organised to facilitate discovery.

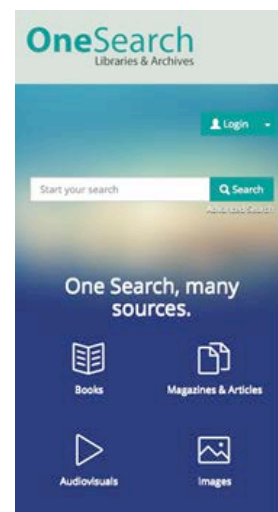
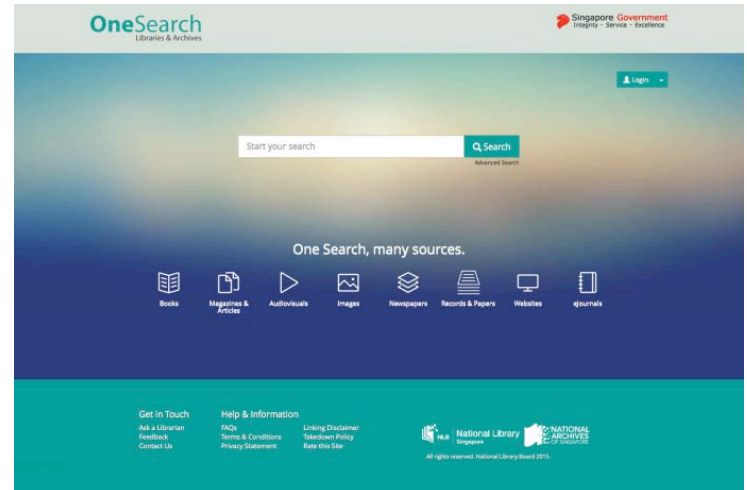
The design of the discovery service had to consider the organization and presentation of the myriad content types and formats from the libraries and archives, as well as the shift in the information seeking behaviours of the digital-savvy Singaporeans.

## Intuitive and mobile-friendly interface design

OneSearch is designed with a simple and intuitive search interface, which has been popularised by Google and other internet search engines. Users are not required to decide on their search options when they start their searches.

Another major design consideration is the provision of a mobile-friendly interface to allow users to search on-the-go. Singapore has one of the highest smartphone adoption rates in the world. This meant that NLB’s users are likely to use a smartphone to access information online than a computer. Hence OneSearch was designed with mobility in mind, not as an after-thought.

NLB adopted the Responsive Web Design framework for OneSearch web interface. This enables users to search and

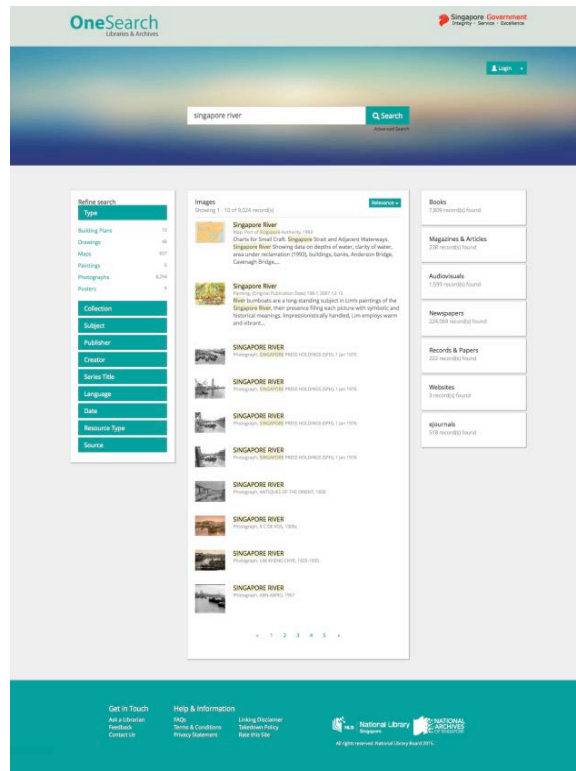


view results comfortably on the mobile devices of their choice.

## Bento style presentation

The traditional approach of displaying search results in an aggregated manner does not work well for NLB’s collections. It is difficult for the search engine to rank results across different type of resources, without causing confusion to the users. Materials and records with more descriptive metadata, for example books, tend to be ranked higher than other content such as digitised photographs with a short title description.

After much deliberation, NLB decided to adopt the Bento style presentation of search results. Search results are



organised by “containers” or different content groups according to the type of media (books, articles, audio-visual materials, etc.). When one searches for “Singapore River”, for example, one does not only get results for books but also digitised newspaper articles of Singapore River, links to images from the databases, links to oral history interviews and more. This allows a serendipitous results browsing experience for NLB’s users.

The Bento style approach is implemented by developing a discovery user interface (UI) layer that integrates the functionalities of existing resource-specific search services using the APIs. This approach allows NLB to maintain control of the UI design and customise the search interface to serve our users’ needs. It also de-couples the search interface from the underlying search engine(s), and enables NLB to switch to another search provider in future without the need for users to re-learn new search interfaces. The Bento style also allows NLB to add new “containers” or content groups for future expansion of search content.

### Standardise metadata schema and data harmonisation

The difference in metadata standards is a key challenge to making NAS’s collections searchable. The NAS uses ISAD-G (General International Standard Archival Description) to describe archival records while NLB uses Dublin Core standard to describe its library collection. There is a need to harmonise the metadata records to a common metadata standard so that relevancy of search results from the libraries and archives are normalised and additional facets can be provided to allow users to quickly zoom into their results.

NLB decided to adopt Dublin Core standard for resource discovery. A cross-institutional team was formed to define crosswalk mapping from the ISAD-G schema to NLB’s Dublin

Core Application Profile used by NLB. Both institutions also agreed to adopt established vocabularies for content type classification and common authority files for people and organisation.

### Using open source to support search innovations

OneSearch is one of the many projects in the NLB to leverage open source to back its innovative ambitions. A myriad of open source technologies was deployed for this discovery service. For instance, jQuery was selected as the preferred Javascript library for creating a user friendly interface, Apache Solr for indexing, relevance ranking and information retrieval services as well as Alfresco CMS for managing the resources in the collections. The OneSearch service was built in-house with close collaboration with the librarians and archivists and consultation with library users.

### Future plans

The launch of OneSearch is a starting point for NLB in making discovery of resources in the libraries and archives more serendipitous and efficient. We have received positive feedback from the users. With OneSearch, the users no longer need to choose different places to search for different materials, and the service has helped them to discover resources that they were not aware of before.

In future, NLB plans to partner other Singapore agencies and institutions to provide a one-stop discovery service for Singapore content. Discussion is already underway with local museums to make their online database of artefacts and artworks searchable through OneSearch. OneSearch will also be enhanced to include new search features such as image search and spatial search to provide users with multi-dimensional search experience. ■



# The NDL of Indonesia for Preserving National Heritage and Information Access

Chaerul Umam

Librarian, Library Cooperation and Automation, National Library of Indonesia

< chaerul\_umam@perpusnas.go.id >

## Introduction

The National Digital Library (NDL) of Indonesia is a priority long-term initiative by the National Library of Indonesia (NLI) to facilitate its efforts in implementing digital library recommendations from the global community as well as national policies on information access and cultural heritage preservation. The objective of this program is simply to provide access to, and ensure preservation of, various digital resources.

There are two points that are emphasised in this project: cultural heritage preservation, and national collaboration.

## Local Contents and Collaboration

The NLI has been building its digital collection through acquisition and digitization. The acquired digital resources are mostly purchased from vendors in both e-journal and e-book formats. The NLI has also been developing its digital collection through the digitization of its old and rare collections such as ancient manuscripts, old books, and maps.

However, the NLI also recognised that there are still uncountable resources that represent national heritage of various Indonesian customs waiting to be preserved. These resources bear local contents that are unique to specific custom, and are mostly owned by regional libraries throughout the country. They are often difficult to access due to many factors, and it is important for the NLI to ensure that such resources are properly preserved and accessible as well.

Looking at this issue, the NLI has established a collaborative effort with all provincial and public libraries in Indonesia to preserve local contents that represent the value of national cultural heritage through its digital library program. The collaboration is implemented within the five-year period of the first phase of the program.

### Phase 1: 2010-2014

The project started in 2010, and focused on the development of digital library networks amongst the regional libraries, including 33 provincial libraries and 120 public libraries both in municipalities and cities.

The first year saw the development of IT management, facilities, and infrastructures. The NLI built data centers, and initiated development of library application software, and systems for network, inventory, repository, and data access.

The IT development included the installation of data management hardware, library information system software, and data communication Internet network. Training was also provided in 33 provincial libraries, 2 regional units of the National Library, and 120 public libraries, and completed in 2014.



Fig. 1 Heritage of Indonesia Website Homepage

In 2011, the program focused on the development and implementation of an information system. The NLI developed an open library application system called Integrated National Library Information System (INLIS) that is built on the Indonesian MARC-based metadata standard called IndoMARC. The application has been used for supporting acquisition, management, services and preservation works in NLI.

For the partner libraries, the NLI has also developed a program called INLIS-Lite that is an extension of INLIS system. This application is used by provincial and public libraries for technical processes such as acquisition, circulation, and membership.

The third phase was focused on the development and integration of information system. The NLI set up an information and communication network through Internet connection with the 33 provincial libraries and 120 public libraries in Indonesia to ensure that it is able to manage the integration of library information systems used by the partner libraries. Until 2014, there are 2,252,088 records in the National catalogue, and 1,495,892 records in the National Bibliography.

In 2013, the program focused on the usability of the digital library services. The NLI has built 46 web portals and thematic websites that contain digitized objects, subscribed journals, e-books, and digital videos that are all available online. It has also supported the regional libraries in developing their own websites to provide the online services for their local users and communities. Through these websites, digital objects created by the regional libraries from their local content are provided online, and accessible by everyone.



Fig. 1 Heritage of Indonesia Website Homepage

The last phase of the first term in 2014 was focused on the evaluation and the extension of the usability of the NDL.

### Next phase

With the accomplishment of the first period of the NDL project, the NLI has developed an integrated NDL system with all provincial and regional libraries in Indonesia. This NDL is seen as a sustainable program, and thus the work will not end here.

In the next phase, starting in 2015, the NLI will be collaborating with university and special libraries to build a national network that will also be integrated in the NDL. ■



### [Web Sites for Public Libraries: A compilation of advice for libraries and library-support organizations](#) Silvina Furnadzhieva

Portal Specialist, Global Libraries – Bulgaria Foundation

In the Dec 2014 issue of the TILT newsletter, we wrote an article – *Web Site Usability and other Lessons Learned from Bulgaria* – that described a project to develop a website guide.

We are pleased to announce that the guide has been released!

[ continued from page 1 ]

While these universities provide unparalleled opportunity to engagement in intellectual activity, they also represent stark examples of the inequity of information access represented by differentials in the wealth of the institution.

Software is the glue for access to information. Open source represents a different view of software development that can be an enabler to information access because:

- institutions are not impeded by licensing restrictions in deploying the technology
- these systems favour open representation of the information that they facilitate.
- the building blocks of distributed systems and aggregation allow the building of powerful aggregated services that are not monolithically owned
- the library can be an active participant in the forward direction of the system.

Open access represents a means to ensuring that the fruits of intellectual output are available beyond the pay walls raised by publishers, governments, and learning institutions.

These are exciting times in information communication technology for libraries. While it may be true that the some libraries have been marginalised in organisations, the situation may not be as dire as it sometimes seems.

The components for a renaissance of the library in the institution are all there. The opportunity also exists for the library to move out of the role of technology and information “taker” and become an active participant in technology, information access and publishing.

The IT Section is hosting a satellite pre-conference on Open Source at the beautiful Stellenbosch University as part of the IFLA 2015 World Library and Information Congress in Cape Town. This is an opportunity to find out more about these developments. ■

This is a compilation of tips, case studies and shared experience from IT specialists in five countries on creating good library websites. The guide is written with the non-technical user in mind, so it can be helpful even to librarians in small libraries who do not have IT staff to help them.

The Website Guide is available for free download at [bit.ly/glwebsiteguide](http://bit.ly/glwebsiteguide).

We welcome your comments and feedback – please email [silvina@silvina-bg.com](mailto:silvina@silvina-bg.com).

Enjoy!

# Widening Information Services of Geo-referenced Libraries: Connecting by Augmented Maps

Francisco Mardones  
Geographer, Library of Congress, Chile  
< fwardones@bcn.cl >

## Introduction

With the increasing development and distribution of information technologies, one of the most interesting initiatives in the area of geo-referencing is Augmented Reality (AR). This involves extending the amount of useful data, and increasing the cognitive recognition of information, based on the display of geographical and statistical resources, in ways beyond what had usually been allowed by cartographic design, even beyond the most innovative and daring designs.

This concept involves the use of a library's own digital resources, together with the harvesting, and display of other online resources or database content.

## The BCN, and new social challenges

The Biblioteca del Congreso Nacional (BCN) - Library of Congress of Chile - was created in 1883, and has been at the service of Chilean Congresspersons, their staff and the general community. As a member of the South American libraries network linked to legislative bodies, the BCN's contemporary duties and the emerging needs of the society, together with developments in IT and networking, have forced the BCN to broaden its channels and formats of communication to share its services and products.

In this context, the BCN undertook initiatives to diversify the designs and structures of its services and provide direct advisory services for Congress and, in subsidiary fashion, for the broader community. In this way, a very important issue to be addressed was related to relevant geographical and territorial affairs.

To achieve this, the Library improved and upgraded an already extant specialized area, the Territorial Information Unit (SIIT). This unit is responsible for territorial affairs and statistics, and the main duties are the production of maps

and the preparation of extensive statistical databases geared to the work of the Chilean Congress.

When the present decade began, the BCN matured in Informatics development and the implementation of networking infrastructure, and generating new duties. Many traditional services were gradually replaced with Internet based solutions, while still maintaining the usual production of printed maps, all created as closed objects and not shared with the broader Congressional community, nor with the general public.

## The GIS and AR: a way to expand service channels

The reason for building a Geographical Information System (GIS) within the BCN was directly related to the need to manage and display geo-referenced data for the advisory services tasked to the BCN and to display on-screen all the Districts represented by Congress-persons for simple navigation.

As time passed, developments in computer and network systems, together with the growing needs of Congresspersons for more detailed and deeper facts and data related to their territories, generated increasing demands for geo-referenced products.

The first step was to build an alphanumerical database and a repository of digital cartography, and the second step was to distribute the data throughout the Congressional community, eventually making it public. That's when GIS gained relevance.

Although, there are many definitions of GIS, there is general agreement about defining GIS as a computer-based technology and methodology for collecting, managing, analyzing, modeling and presenting geographical data for a wide range of applications. All of those elements are involved in geographical analysis and the creation of solutions or answers for spatial issues.



Fig. 1 Use of AR in printed documents. Right, the printed appearance of the map; Left, map scanned with AR software.





Fig. 2 Image of a scanned map, using a mix of GIS and AR applications

After an initial period of managing the new application, the BCN SIIT began to exploit its geo-database, as well as broaden Congressman advisory services, with more detailed and in-depth products. Faced with budgetary and staffing constraints, SIIT took advantage of new techniques and web spaces to expand both coverage and the range of services offered. And it satisfied the need of territorial information products for a time.

Despite a constant demand of SIIT products by the Congressman and general community, the new technologies, and the abrupt emergence of Internet based mobile devices, brought a growing demand to broaden its services and solutions. In this context, in 2013, the BCN began to test a new technology: Augmented Reality (AR).

AR can be defined as the view of the real environment, combining, or mixing virtual contents generated by computer.<sup>1,2</sup> Using little pieces of computer code implanted in a seamless way, inserted in a traditional map composition, and involving a mobile device connected to internet, users can scan the environment and gain access to additional resources, such as data tables, online (or cloud-based) videos, with hyperlinks to specific repositories or sources, street view imaging, etc..

Although the concept of AR has been broadening its meaning, in this paper it should be understood as enhancing/augmenting of a plain object, in this case a printed map<sup>3</sup>, so as to provide access to every resource available related to Congressional research and oversight, which is the main goal of advisory services in the BCN.

With this in mind, and given the broad distribution of printed maps to Congress people and the increasing number of digital web-based resources easily accessible by the use of smartphones, the Library sought a mid-range solution to add value to its traditional products, and thus broaden its services platform.

Going beyond on customizing products to meet Congressman's data needs, the BCN has been testing this new technology, based on the services of a mixed solution platform: ArcGIS (for cartographic composition), and Layar (for publishing and mobile AR scanning). Both these make it possible to produce enhanced digital objects and transfer resources to printed outputs.

The production line begins with the development of an offer to, or request from, a Congressman related to a carto-

graphic representation of a specific geo-referenced issue. The query is analyzed to determine if it can be represented in an augmented reality format. If it is feasible to do so, a new product is developed specially intended to meet the standards related to the amount of data to display, reading ease and the pertinence of the cartographic representation.

The cartographic representation is built with GIS software (ArcMap), by mixing layers so as to focus on the thematic representation desired for the map. When completed, it is exported as a jpg or png file. This is when the Layar creator, a cloud-based solution, begins to take on relevance. The digital map is uploaded to the server where the development of the digital object (and related web resources) is performed by embedding computer code to generate the AR of the map.

Different sources can be selected to create links to objects in the figure being created. These may include videos, linked tabular data, infographics, street view links (to highlight some particular point), and generally, any useful resource with a URL and compatibility with smartphone browsers. The Layar AR application needs to be downloaded from the AppStore or Google Play, then scan a computer screen or printed map with the app, and wait until the software recognizes the AR elements available.

In the example of the Santiago Subway Network, the user sees a traditional map composition, representing through a dotted symbology the different amount of subway rides, according to jump on the train at different stations. When it is scanning, users can access a wide variety of resources, from Google spreadsheets to PDF reports about the communes that the line goes by. Many new resources can be added, and it is all about the needs of the desired product and final purpose.

## Discussion

This technology represents a new and previously undeveloped way to extend BCN services, and access and connectivity to a growing body of Library resources. It also makes it possible to open new ways of displaying geographical information, by combining traditional techniques with a contemporary mobile tools, so as to broaden the range of resources offered, unleashing the power of the maps to inform and assist decision-making and policy development.

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# The Corporate Network of St. Petersburg's Public Libraries: Practice and Development

Smykova Evgeniia,

St Petersburg State University of Culture and Arts, Library and Information Department (final year student)

< zhenya.smykova93@gmail.com >

It is hard to imagine that libraries with their catalog, the books' smell, and the rustle of pages may disappear in the near future. Libraries in the 21st century are facing transformation, but not extinction. The move to an information society requires fundamental changes.

In 2007, the Modernization of Public Libraries program was adopted by the Government of St. Petersburg. The general part of this was the Corporate Network of Public Libraries (CNPL) project to unite all public libraries in St. Petersburg in a single city network, and create corporate catalogues. This project reaffirms the role of the public library in St Petersburg.

The project involved 16 centralized library systems of St. Petersburg. The leading participants were four city libraries: Central City Public Library of Mayakovskiy, Central City Children's Library, State Theatre Library, and the Public Library for the Blind.

The primary goal of CNPL is to increase the quality and efficiency of library and information user services. To realize this goal, it was necessary to:

- create a common network of St. Petersburg's public libraries, with the possibility of access to other libraries.
- develop a corporate catalog of current receipts funds participating libraries St. Petersburg's CNPL.
- establish other corporate databases, and provide access to them.
- provide information about St. Petersburg's CNPL on other organizations websites.
- adopt common rules, principles and technologies of St. Petersburg's CNPL enterprise resources.

In 2014, statistical data showed that the participating libraries of St. Petersburg's CNPL had created 142,191 new bibliographic records. This is 1.3 times more than in 2013. Daily addition to the electronic catalog is about 100 bibliographic records. The corporate catalog of current receipts is over 112,000 bibliographic records.

Talking about the possibilities of the resource, it should be noted that the user cannot work in several catalogues. The first is the corporate catalog of current receipts, contains bibliographic records on national and foreign publications issued since 2009 and received by public libraries in St. Petersburg.

The next catalog is the distributed electronic catalog that contains bibliographic records of publications received by the public library until 2009. The corporate electronic catalog of periodicals contains information about the magazines received by the Library of St. Petersburg during 2009.

In addition to directories, users can use various databases, example, the corporate analytical bibliographic database



Fig. 1 The home page of the site

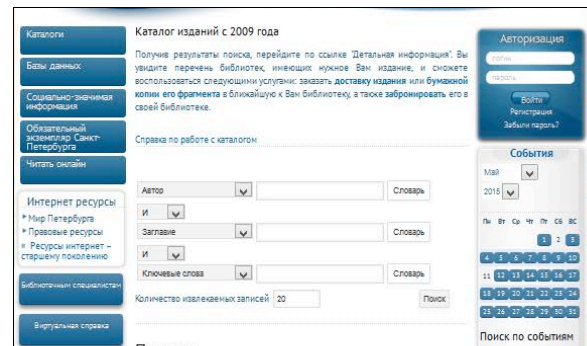


Fig. 2 The corporate catalog form since 2009

contains annotated bibliographic records of journal articles and collections since 2009. The database "Digest of the St. Petersburg press" is a full-text database, and includes articles from local and city newspapers with materials about St. Petersburg and its regions. Another is the Corporate database "Legal deposit of St. Petersburg" containing bibliographic records of publications received by the public library of St. Petersburg in accordance with the "Legal deposit documents of St. Petersburg" law which came into force in 2011.

There is also a separate database exclusively for the project participants of CNPL called "Methodical bank" database, which is a full text database on current issues in librarianship. It includes articles from professional journals, collections, Internet, as well as its own methodological, technological, and regulatory governing materials libraries.

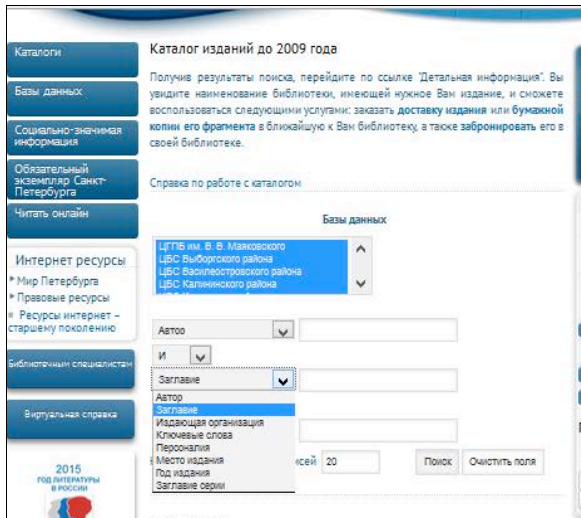


Fig. 3 The corporate catalog form until 2009



Fig. 4 The annotated bibliographic records of journal articles catalog form until 2009

Summarizing the above, we can see the following advantages of this project:

- Finding information in the union catalogs of public libraries of the city, bibliographic and full-text databases.
- A single library card for the user. It allows visiting all city libraries of St. Petersburg.
- Expedited city wide services: ILL (interlibrary loan), reservation of editions, electronic document delivery.
- Automation recording readers is suing and receiving books, reducing reader's service time twice.
- Possibility to order the necessary book in the library, which is close to home.

Despite some shortcomings, we can say that the system is very popular among users. This is evidenced, first of all, in the increased interest and positive feedback from the library staff.

Experience of combining libraries of the city is a positive trend in the libraries development. We can anticipate that CNPL will be continuously developed in the future, coordinating work process of all participating city libraries, and the user service will be carried out quickly, efficiently and at a high level. ■

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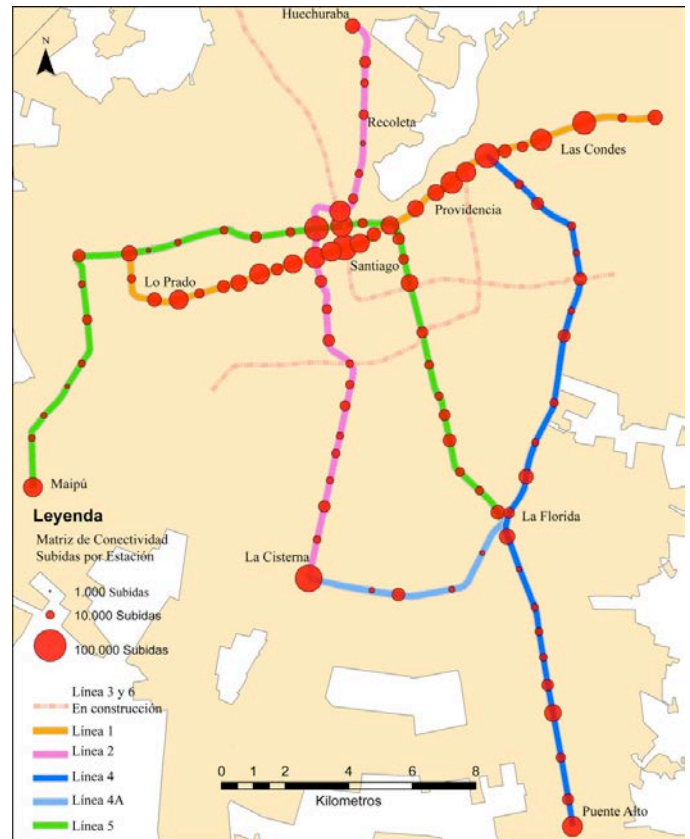


Fig. 3 Map published using AR technology in printed documents. See it live using the Layar app at [www.layar.com/campaigns/1G4AONGJJ](http://www.layar.com/campaigns/1G4AONGJJ)

Due to the static nature of a map, and the constraints imposed by its format, it is important to develop alternative ways of display at geo-referenced libraries. This would help improve its value and expand the utility as well as extend its own utility cycle.

On the down side to date, the software is proprietary and the price of a sustained campaign is considerable, given that it involves hiring provider space to store published products. The technology needs to mature to support widespread use; to date, the alternatives are commercial and closed. From this perspective, the development of public clouds or low cost publishing platforms is highly desirable. ■

## References

- (1) [www.inglobetechnologies.com/docs/whitepapers/AR\\_editoria\\_whitepaper\\_es.pdf](http://www.inglobetechnologies.com/docs/whitepapers/AR_editoria_whitepaper_es.pdf)
- (2) [pire.fiu.edu/publications/Augmented.pdf](http://pire.fiu.edu/publications/Augmented.pdf)
- (3) [www.perey.com/ARStandards/Perey-Standards\\_for\\_expanding\\_AR\\_with\\_Print.pdf](http://www.perey.com/ARStandards/Perey-Standards_for_expanding_AR_with_Print.pdf)

## Book Reviews

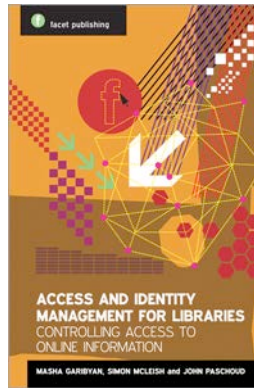
### Access and identity management for libraries: Controlling access to online information

M Garibyan, S McLeish, J Paschoud  
Facet Publishing, Aug 1, 2013

Reviewed by:

**Alenka Kavčič-Čolić**

Head of R and D Division,  
National and University Library,  
Ljubljana, Slovenia



The book is an excellent overview of the history of access and identity management systems, and the development and introduction of the technology into libraries. The authors emphasize that librarians should be more involved in the processes of identity and access management as the development of digital libraries has become an indispensable part of their services. Although the book is primarily aimed at librarians, it could be useful for other professionals who need to understand the complexity of these systems.

The book covers principles of access and identity management, access to public and commercial resources, and current access management technologies (IP address, barcode patterns, proxy servers, shared passwords, user registration with publishers, and federated access). It also details different authentication and authorization technologies and federated access, with emphasis on Shibboleth, which is widely used in libraries. Guidance is provided on selection of access and identity management products and services. The last chapter is the types of Internet access provided in libraries, and the use of library statistics, which complements these services.

Appendix 1 provides eight case studies with detailed descriptions on the implementations at organizational and national levels in the UK, USA, and Europe. These could be used as a practical guide in planning, implementing, and operating access management in libraries. Appendix 2 provides the draft of the 1998 White Paper on Authentication and access management issues in cross-organizational use of networked information resources. This document has an important role in setting the technical and political directions of authentication and access management systems. There is a glossary with the definition of specific terms used in this field.

It is evident that the authors are experienced, and provide useful recommendations and advice regarding the conditions for different authorization and authentication systems as well as the advantages and disadvantages of their implementation. The book remains at a strategic level, not describing detailed technical implementation issues. However, it represents a good starting point before deciding on implementation of the type of access and identity management systems in a library.

Despite every effort to describe the functioning of the systems as simply as possible, readers of the book need to have a basic technical knowledge for a better understanding of its contents. Probably a more structured text with emphasis on recent solutions would make an easier reading. But taken as an overview, it is very interesting. ■

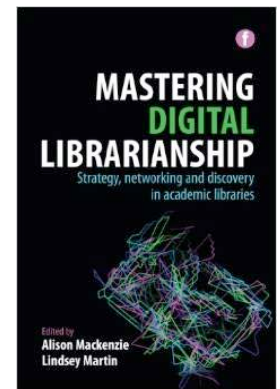
### Mastering digital librarianship: strategy, networking and discovery in academic libraries

Edited by A Mackenzie and L Martin  
Facet Publishing, Nov 15, 2013

Reviewed by:

**Astrid Verheusen**

Head of Innovative Projects Dept  
Koninklijke Bibliotheek,  
National Library of the Netherlands



This book examines the changing roles of the librarian, and how working within a rich digital environment has impacted the ability of professionals to develop the appropriate 'know how', skills, knowledge and behaviours required to operate effectively. It provides a thematically focussed collection of research-based essays that provide academic librarians with a strategic primer for adapting library services for the digital age.

The introduction contains a global overview of current studies on digital librarianship. The book has three key strands where the impact of digital technologies is significant:

- Rethinking marketing and communication - this looks at strategic approaches and practices that harness social media, and illustrates the importance of communication and marketing activities in these new online spaces.
- Rethinking support for academic practice - this examines the professional expertise required of librarians who support new academic and learner practices in digitally teaching, learning and research environments.
- Rethinking resource delivery - this investigates the use of strategies to maximize access to online resources and services.

Each chapter presents a case study of a university, and the principles guiding marketing, and service provision or resource delivery activities. These are written by about 20 specialists and opinion-makers with a range of skills and experience from different universities, data and learning services, and from three continents. They discuss the challenges and successes of adapting existing practices, introducing new services, and working with new partners in an environment that no longer recognizes traditional boundaries and demarcation of roles.

This book distinguishes itself from others by the diversity of the authors, and the lively and engaging set of papers. It is not an overview of new technologies but provides a comprehensive insight in current thinking and practice on developing library policy and strategy. The book does not give solutions but the issues discussed are of universal interest. Perhaps one of the most important advice is the reminder that libraries are support services, and their focus must be on enabling users to meet their goals, and not imposing the library's goals on users. ■





The Information Technology (IT) Section promotes and advances the application of information technologies to library and information services in all societies, through activities related to best practices and standards, education and training, research, and the marketplace. The scope covers IT for creation, organization, storage, maintenance, access, retrieval, and transfer of information and documents for all types of libraries and information centers; IT for the operation of libraries and information centers; and, related management and policy issues. Of primary importance is the application of IT for supporting access to, and delivery of, information.

The Section meets annually at the IFLA Congress; in between congresses, members collaborate with other Sections on programs and workshops. There are election ballots every two years as members complete their 4-year term. Currently, there are 21 standing committee members from more than 10 countries.

The IT Section is one of the largest in IFLA with over 300 members from nearly 80 countries, from all types of libraries, and a range of disciplines. We welcome all members ([www.ifla.org/membership](http://www.ifla.org/membership)).

The IT Section's website at [www.ifla.org/it](http://www.ifla.org/it) has news and resources regarding activities of the Section, session minutes, publications, and membership details.

The IFLA-IT email list provides a forum for members to exchange ideas and experience in the use of information and communication technologies in libraries. The list address is [ifla-it@infoserv.inist.fr](mailto:ifla-it@infoserv.inist.fr), and subscription is at [infoserv.inist.fr/wwsympa.fcgi/info/ifla-it](http://infoserv.inist.fr/wwsympa.fcgi/info/ifla-it).

The *Trends & Issues in Library Technology* (TILT) newsletter is published twice a year in June and December.

## Primary contacts

### Chair

Edmund Balnaves, Prosentient Systems, Australia,  
[ejb@prosentient.com.au](mailto:ejb@prosentient.com.au)

### Secretary

Lars G. Svensson, Deutsche Nationalbibliothek, Germany,  
[l.svensson@dnb.de](mailto:l.svensson@dnb.de)

### Information Coordinator

May Chang, USA, [mmchang@gmail.com](mailto:mmchang@gmail.com)

## Standing Committee Members 2011-2015

- Edmund Balnaves, Prosentient Systems, Australia, [ejb@prosentient.com.au](mailto:ejb@prosentient.com.au)
- José Luis Bueren Gómez-Acebo, Biblioteca Nacional de España, Spain, [joseluis.bueren@bne.es](mailto:joseluis.bueren@bne.es)
- Frank Cervone, Perdue University, Calumet, USA, [fcervone@cervone.com](mailto:fcervone@cervone.com)
- Mikhail Goncharov, Russian National Public Library for Science and Technology Russian Federation, [goncharov@gpntb.ru](mailto:goncharov@gpntb.ru)
- Nina Hyvönen, The National Library of Finland, [nina.hyvonen@helsinki.fi](mailto:nina.hyvonen@helsinki.fi)
- Annika Lund, The Jakobstad City Library Finland, [annika.lund@jakobstad.fi](mailto:annika.lund@jakobstad.fi)
- Shawky Salem, ACML- Egypt, [chairman@acml-egypt.com](mailto:chairman@acml-egypt.com)
- Lars G. Svensson, Deutsche Nationalbibliothek Germany, [l.svensson@dnb.de](mailto:l.svensson@dnb.de)
- Dawei Wei, The National Library of China, [weidw@nlc.gov.cn](mailto:weidw@nlc.gov.cn)

## Standing Committee Members 2013-2017

- Hasna Askhita, Syrian Computer Society, Syrian Arab Republic, [hasna@scs-net.org](mailto:hasna@scs-net.org)
- May Chang, USA, [mmchang@gmail.com](mailto:mmchang@gmail.com)
- Khalid Cherkaoui Addahabi, Ecole des Sciences de L'Information (ESI), Morocco, [ceghali@yahoo.fr](mailto:ceghali@yahoo.fr)
- Nthabiseng Kotsokoane, Monash University, South Africa, [Nthabiseng.kotsokoane@monash.edu](mailto:Nthabiseng.kotsokoane@monash.edu)
- Jie Li, University of South Alabama, USA, [jli@southalabama.edu](mailto:jli@southalabama.edu)
- E. Maepa, University of South Africa, [maepame@unisa.ac.za](mailto:maepame@unisa.ac.za)
- Tan Sun, National Science Library of CAS (Library of Chinese Academy of Sciences), China, [sunt@mail.las.ac.cn](mailto:sunt@mail.las.ac.cn)
- Kazuo Takehana, Digital Information Services Division, National Diet Library, Japan, [k-takeha@ndl.go.jp](mailto:k-takeha@ndl.go.jp)
- Ainura Toktombaeva, National Library of Kyrgyz Republic, Kyrgyzstan, [miranat@mail.ru](mailto:miranat@mail.ru)
- Aluwani Witness Tshishonga, National Library of South Africa, [aluwani.tshishonga@nlsa.ac.za](mailto:aluwani.tshishonga@nlsa.ac.za)
- Astrid Verheusen, Koninklijke Bibliotheek, Netherlands, [astrid.verheusen@kb.nl](mailto:astrid.verheusen@kb.nl)
- Qiang Xu, Shanghai Library, China, [qxu@libnet.sh.cn](mailto:qxu@libnet.sh.cn)

## Corresponding Members

- Emmanuel Bermes, Semantic Web SIG, [emmanuelle.bermes@bnf.fr](mailto:emmanuelle.bermes@bnf.fr)
- Alenka Kavčič-Čolić, IT & digital preservation projects, [Alenka.Kavcic@nuk.uni-lj.si](mailto:Alenka.Kavcic@nuk.uni-lj.si)
- Gloria Toks Matthews, National Library of Nigeria, Virtual Libraries, [gloriatoks@gmail.com](mailto:gloriatoks@gmail.com)
- Stella Nduka, Open source, [stellacnduka@gmail.com](mailto:stellacnduka@gmail.com)