Newsletter

ALA TechSource
alatechsource.org

Smart Libraries™

Formerly Library Systems Newsletter™

50 East Huron Street, Chicago, Illinois 60611-2795, USA

Smarter Libraries Through Technology: Library Management at the National Level

By Marshall Breeding

The advancement of technology enables ever larger groups of libraries to participate in shared systems that manage their collections and enable access to their communities. Year-by-year hardware components become faster, smaller, with ever more computing power or storage capacities. Modern services-oriented architecture and clustering technologies enable the creation and global deployment of massive platforms able to serve millions of users. At least at the infrastructure level, computer applications that scale almost infinitely can be built. This characteristic of large-scale computing brings important implications into the realm of libraries. What is the right level of cooperation or consolidation relative to how libraries implement their automation systems? Does it benefit libraries to share systems at the largest possible scale, or do individual or modest-scale implementations hold advantages?

Single-library Implementations

The model of an individual library deploying its own automation system falls at one end of a resource sharing spectrum. Such a system provides the library complete control and autonomy. It can configure and brand the system according to its own interests and preferences. Many libraries that have very large and complex collections appreciate the flexibility and control that comes with managing their own system. Some of the downsides of an independent automation system include higher costs and the increased need for technical personnel. From the perspective of library users, this approach emphasizes the resources owned directly by the

IN THIS ISSUE

ISSN 1541-8820 November 2014 Volume XXXIV Number 11

library, though other mechanisms may be provided for discovering and requesting materials from other institutions.

Trade-offs Between Independent and Shared Systems

Most of the barriers to libraries cooperating to share automation infrastructure lie more in strategy, politics, and personalities than in technology. It is not a given that it is to the benefit of any given library to participate in a shared automation system. For many libraries, the control and functionality needed to meet its operational or strategic requirements may be best fulfilled through an independent, self-sufficient system. Value propositions vary. In some cases the benefits and cost savings weigh in favor of joining a shared system, while in other scenarios, the benefits of local control outweigh any cost savings or operational efficiencies.

Participation in a shared system requires confidence in its governance, operational stability, and many other factors. Libraries must be sure that a shared system will be managed and developed in a manner consistent with its needs and that each participant will have a voice in decision making. For a library to place its essential operations in the hands of an external organization requires an extremely high level of confidence in its integrity and responsiveness.

Shared automation systems must naturally offer the functionality that meets the needs of the participating libraries. Ideally, participating in a shared system should give the library access to a higher quality system than it would be able to afford on its own. The functionality also needs to be oriented to the types of libraries involved. Joining in a consortium should not mean having to settle for a least-common-denominator level of functionality with low-end requirements, but rather should afford a more sophisticated system with more powerful capabilities. Shared systems comprising different types of organizations, such as a mixture of public libraries and academic libraries, may find more tension regarding functional issues than those with a more homogeneous composition. While examples of successful multi-type consortia abound, they involve more compromises than those able to deploy or customize systems oriented to a specific type of library.

Libraries that participate in some level of shared automation environment lose a certain amount of control, but gain other benefits. Shared systems allow libraries to distribute the costs as well as the technical and administrative overhead of operating a system. The aggregate collections of each of the participating members expand the pool of resources available to patrons. While there may be some costs involved in routing materials among the members to satisfy patron requests, these

Participation in a shared system requires confidence in its governance, operational stability, and many other factors.

arrangements provide a universe of resources available to patrons far beyond what any given library might be able to acquire on its own. Shared systems also provide opportunities for libraries to collaborate or consolidate selected operational activities. Participants in these collective systems often choose to perform various areas of processing centrally, such as cataloging or acquisitions. Though shared systems enable centralized operations, these activities can still be distributed among the individual libraries or any of a variety of hybrid arrangements.

Another challenge that arises when libraries participate in shared technology infrastructure lies in how they assert their identity or brand to their users. It is important to present visual reminders to library patrons that the resources are made possible through their local library. Even in with shared system, it is usually possible to configure it so to present a patron's local library's branding, logos, and style sheets as well as to favor local content over that which might need to be requested from another library. When possible, the domain name of the URL should also carry the identity of the library rather than that of the vendor that provides or hosts the system.

Large-scale Shared Systems: National or State-wide

Another end of the spectrum lies in shared technology platforms that support the libraries in expansive groups, such as an entire country or state. Projects at this level may not necessarily press the limits of technology scale, but they present enormous challenges in all of the organizational and political issues mentioned earlier.

So far, we have seen automation projects at the national level in a limited number of cases. This model seems to be an option for countries of a relatively small population and with a political climate that favors centralized public sector projects. Within larger countries, automation at the state or province level has so far been the zenith of cooperation.

These comprehensive projects to automate all of the libraries within a given country or state have some important differences, especially compared to consortia or regional systems with opt-in participation. Providing a shared system to all of the libraries of a country or a state can lead to a much more even level of service. When each library must implement its own system or buy into a consortium based on its local funding and political climate, wide variations in the quality of systems,

the size of collections, or services may emerge. When automation is provided at the national or state level, small or remote communities can enjoy a library service equal to what is seen in the large cities or urban areas.

National-level automation systems have an inherent tendency to embrace cataloging standards and practices. In a decentralized environment, individual libraries may follow their own preferences in describing and processing materials. While such practice may meet some local need, it results in inconsistencies that can complicate resource sharing. Libraries that operate separate systems within a geographic area can agree to common standards and practices, but working in a shared environment usually comes with a mandate for consistency.

In countries as large as the United States, a nationally shared library automation infrastructure would not be feasible, politically or technically. While hardware platforms might scale to that level, none of the software environments available today would likely be able to manage that level of complexity. Within the United States, very few truly state-wide projects have been implemented for public libraries. Hawaii stands as the one state that has implemented a comprehensive shared system for public libraries. Provinces in Canada that have implemented shared systems include Saskatchewan, Prince Edward Island, and New Brunswick.

While the numbers of countries or states opting for comprehensively shared library infrastructure isn't growing dramatically, new examples arise every year or two. This issue of *Smart Libraries Newsletter* features the recent strategy launched by Ireland to implement a national system to support all of its public libraries. It seems that this project has the potential to provide a more powerful library service to the residents of the country while achieving savings in technology costs. It will be interesting to note whether additional large-scale projects move forward in the coming years and whether this model will gain wider acceptance.

Ireland Selects Innovative for National Public Library System

In a project that fits with the trend toward large-scale consolidated library automation implementations, the country of Ireland has elected to provide a single library management system to serve all its public libraries. Following a period of gathering and refining the requirements for such a system, a Request for Tenders was issued in November 2013. According to a contract award notice posted September 15, 2014, Innovative Interfaces has been selected as the successful bidder and will deploy a technical platform based on Sierra and Encore. Consistent with other large public sector projects in Ireland, the formal procurement process was carried out by Local Government Management Agency (LGMA).

Once implemented, this system will support the entire country of Ireland, with a population of about 4.6 million; replace the existing automation systems in the 30 library authorities; manage a combined inventory of 13 million items, 7.2 million bibliographic records; and handle around 20 million annual circulation transactions. Innovative, not the libraries, will host the proposed new system.

The Dublin and the South Dublin library services will manage the shared automation system on behalf of the broader constituency of libraries. The initial phase of implementation will include the Dublin County Libraries, currently served by four separate Axiell Galaxy ILS implementations, and the Kildare and Wexford county libraries, both currently using SirsiDynix Horizon. This initial group is expected to be live on the new system in April 2015. The remaining public library services in the country will transition to the new system within two years.

The contract award notice provides a brief description of the scope of the project:

"The Department of the Environment, Community and Local Government; the Local Government Management Agency, and the City and County Managers' Association have agreed that as part of the new national strategy for public libraries a shared services approach to a single library management system for all local authority public libraries will be implemented.

"The national single LMS will include a single shared library catalogue, facilitate a single national library membership card and provide the capacity for shared acquisitions, management and integration of print and digital material."

The project will facilitate the deployment of a single library card that will enable all residents of Ireland to borrow materials from any library and take advantage of other services.

From Fragmentation to Consolidation

The country of Ireland is currently served through separate automation systems deployed in each of its 32 library authorities. Dublin County is divided into four separate library authorities (City of Dublin, South Dublin, Dún Laoghaire-Rathdown, Fingal), each with a separate implementation of the Axiell Galaxy automation system.

Among the library services outside of Dublin, SirsiDynix is currently the dominant automation provider. SirsiDynix

This country-wide project spells a dramatic change in the library technology landscape in Ireland.

Horizon is used by the library services in Carlow, Cavan, Cork City, Cork County, Donegal, Galway, Kerry, Kildare, Kilkenny, Laois, Leitrim, Limerick City, Limerick County, Longford, Louth, Mayo, Meath. SirsiDynix Symphony is deployed in Monaghan, Sligo, and Wexford.

The only library authority in Ireland previously using an Innovative ILS was County Clare, which implemented Millennium in 2007.

Major Win for Innovative

The selection of Innovative for this country-wide project spells a dramatic change in the library technology landscape in Ireland. SirsiDynix and Axiell both stand to lose significant accounts. Large-scale projects such as this one in Ireland represent a winner-take-all competition with very high stakes. According to the contract award notice, the total final value of the contract totals 452,000 Euros over its 5-year term, with an initial value of 300,000 Euros.

Innovative Interfaces operates its EMEA division from Ireland, putting the company in a strong position to support this project. As part of its increasing international presence, in January 2013 Innovative established a new corporate office in Dublin, Ireland, initially staffed with 8 personnel to serve as the headquarters for its Europe, Middle East, and Africa (EMEA). In June 2014 the company announced that it had expanded its Dublin operations by an additional 25 positions.

For the libraries involved and their customers, consolidation into a single large system provides significant benefits. A catalog that spans the holdings of all the libraries in the country means a much broader array of materials available, including materials available beyond their local library service. From a financial perspective, savings can be expected in the procurement and operation of a single system relative to the 32 incumbent implementations. The shared system also infers a more uniform set of cataloging standards and practices, which should bring benefits both in more efficient processing workflows and improved opportunities for resource sharing.

Moving to a national system also comes with some negative factors. Local library authorities that previously enjoyed full control over their automation system will have to make major adjustments as they move to a shared system. The effectiveness of shared governance will be an important factor for ensuring that the system works to be benefit of all those involved.

Innovative's Capacity for Large-scale Systems

As one of the largest global library technology companies, Innovative has deployed its Millennium, Sierra, or INN-Reach automation products in wide variety scenarios, ranging from those for individual libraries to those that serve very large consortia or geographic regions.

Some of Innovative's largest implementations include:

- Sistema de Lectura Pública de Catalunya, consisting of 143 public libraries in the Diputació de Barcelona, operates a shared Millennium implementation with an Encore interface for its union catalog.
- MOBIUS, based on multiple clusters of Millennium installations that serve the academic libraries in Missouri.
- OhioLINK, one of the pioneering projects in resource sharing among academic libraries, consists of a Millennium or Sierra ILS deployed in each of the public academic libraries in Ohio, with a union catalog and resource sharing provided through Innovative's INN-Reach.
- Michigan Electronic Library Consortium (MeL), a resource sharing consortium in Michigan based on INN-Reach.
- Automated Library Information System of Nassau County, a shared Millennium system serving the 55 libraries in Nassau County in New York.
- eLGAR (Libraries for a Greater Auckland Region), a network of public libraries serving the city of Auckland and surrounding communities (Waitakere, Rodney, North Shore, and Manukau) in New Zealand.
- Minuteman Library Network, serving around 65 public and academic library facilities in the region surrounding Boston in Massachusetts.
- eiNetwork, a consortium of around 70 libraries in the Pittsburgh, Pennsylvania area, served by a Sierra implementation.

Other National and Regional Projects

The concept of sharing library automation infrastructure at the national level is not necessarily new, but is a trend that continues to see new examples. Several other countries have likewise implemented, or are in the process of implementing, consolidated systems.

Denmark: Fælles Bibliotekssystem

The country of Denmark, as reported in the January 2014 issue of *Smart Libraries Newsletter*, is currently in the process of implementing a country-wide library management system for its public and school libraries. This system was awarded to Dantek A/S, which is currently working toward an implementa-

tion expected to commence in 2015, following a phase of software development through the end of 2014. The shared system, called Fælles Bibliotekssystem, will serve 88 municipalities. According to announcements made by Dantek, pilot projects are currently underway in the towns of Horsens and Aabenraa. In recent news, Dantek was acquired in August 2014 by the Danish firm Systematic, and has recently relocated its operations to the headquarters of its new corporate owners. Systematic is a large and well-established firm involved in providing information technology products to a variety of industries, including healthcare, defense, and various public sector areas. The acquisition of Dantek by Systematic should provide additional technical capacity and financial resources to complete the development and implementation of Fælles Bibliotekssystem.

Iceland: Genir

Iceland has a national system for library automation that includes the national library, public libraries throughout the country, as well as most academic and special libraries. This system, called Genir, is based on an Ex Libris Aleph ILS with a public interface based on Primo, serves more than 300 libraries.

Chile: BiblioRedes

The public libraries in Chile have implemented a program of shared infrastructure for their public libraries. These libraries include not only the large municipal system in Santiago, but also those in many rural areas. BiblioRedes supports more than 420 public libraries on a platform based on an Ex Libris Aleph ILS for the management of print resources, a user-friendly public interface based on VuFind. BiblioRedes has recently engaged with Odilo to provide access to e-books, audiobooks, and video materials.

Northern Ireland: Libraries NI

The libraries in Northern Ireland have implemented a system of national infrastructure intended to include both a common library management system and RFID self-service components. The 100 libraries of this country with a population of 1.8 million were previously served by four separate library management systems, each using Axiell Galaxy. SirsiDynix was selected to provide its Symphony ILS for the library management component of this project, with Fujitsu acting as the lead vendor for this £25 project. (See the July 2013 issue of *Smart Libraries Newsletter* for more details).

Slovenia COBISS

The country of Slovenia has a long history of centralized, national infrastructure for its libraries. An organization called Izum, headquartered in Maribor, Slovenia, has developed multiple generations of a library automation system called COBISS, which now supports not only the libraries in Slovenia, but also those in multiple other countries in the region. In Slovenia alone, COBISS.si serves a total of 433 libraries, including the national library (Narodna in univerzitetna knjižnica), 61 public libraries, 80 academic libraries, 126 special libraries, and 165 school libraries. COBISS.Si manages a total of 4.4 million items. Prior to the breakup of Yugoslavia, Izum supported the libraries in each of its republics (Serbia, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, and Macedonia). In recent years, Izum has reestablished national networks for each now independent countries, except for Croatia.

South Australia Public Library Network

For larger countries, shared infrastructure for libraries at the national level may not yet be attainable. In Australia, there has been considerable interest in sharing a single system throughout the public libraries of a state. In 2010 South Australia set out to deploy a single system for its 77 public library authorities, including a total of 159 individual library facilities. This project was awarded to SirsiDynix in October 2011 to deploy its Symphony ILS to all of the public libraries in the state over a three year period. SirsiDynix announced in October 2014 that it had completed the installation of the final library.

People

New President of Ex Libris North America

A change of leadership has taken place in its North American division with the appointment of Eric Hines as its new President. Hines will also become part of the executive management team of the Ex Libris Group.

The leadership of the Ex Libris North America has seen some turnover since it was established in 1998:

- 1998-2003 Carl Grant
- 2004-2007 Dan Trajman
- 2007-2008 Robert Mercer

- 2008-2010 Carl Grant
- 2010-2014 Mark Triest
- 2014- Eric Hines

Ex Libris Group has seen very stable executive management, with Matti Shem Tov heading the global company as its President and CEO since May 2003. Shem Tov has remained at the helm through multiple changes in ownership.

Prior to joining Ex Libris, Hines held senior positions with NICE Systems, a large publicly traded company (NASDAQ : NICE) involved in surveillance and security technologies. Like Ex Libris, NICE Systems is based in Israel. Other Ex Libris executives have likewise been associated with NICE, including Bar Veinstein, Corporate VP Resource Management Solutions, Shlomi Kringel, Corporate VP Discovery and Delivery Solutions, and Ziv BenZvi, VP Asia Pacific. It is not necessarily unusual for multiple members of an executive team to have prior associations with the same company. There are no apparent business connections between NICE Systems and Ex Libris.

Passing of Paul Sybrowsky

Paul Sybrowsky, one of the pioneers in the field of library automation died on September 10, 2014. Sybrowsky co-founded Dynix Systems, Inc. along with Keith Wilson, Jim Wilson, and Ralph Egan in 1983, and served as its President through 1995. The company he helped established became one of the leading providers of library automation systems, morphing multiple times over its history. Dynix Systems eventually became part of Ameritech Library Systems, which became Epixtech, and back to Dynix. Past the time of Sybrowsky' s involvement, the company was acquired by Sirsi Corporation and is now part of SirsiDynix. Prior to Dynix, Sybrowsky, held leadership roles in an antecedent company called CTI.

Beyond his career in the business world of library automation, Paul Sybrowsky held a variety of leadership positions in the LDS Church.

Library Technology News

News items are compiled from press releases on Marshall Breeding's "Library Technology Guides" website. For the latest vendor announcements, visit http://librarytechnology.org/news

California Library Consortium evaluates usage of millions of monographs to create collaborative library collections

SEATTLE, WA, October 9, 2014 – Libraries worldwide are transforming their spaces to better align with the changing needs of their communities. The Statewide California Electronic Library Consortium (SCELC) has initiated a collection analysis project to gain insight on collection overlap and usage as a basis for establishing a sustainable shared collections program among its members. SCELC chose ProQuest Intota Assessment (http://bit.ly/1vyKkUx) for comprehensive analysis of more than 4.5 million monographs across nine member libraries participating in the pilot project.

Outcomes from this multi-phase effort will shape the development of a formal program that will allow libraries to plan for responsible reduction in the number of print monographs in their collections, which ultimately will create space in libraries for collaborative learning and other purposes. The analysis will identify unique and prevalent copies so that libraries may determine which resources will be preserved and shared among libraries.

Overlap analysis and circulation velocity are examples of the metrics the libraries are using to evaluate their print collections within the peer group and to external points such as OCLC WorldCat and Resources for College Libraries. At the Charleston Conference this November, Rick Burke will moderate a panel featuring Lizanne Payne (Shared Print Consultant), Jane Burke (ProQuest), and Mike Garabedian (Whittier College, a SCELC member), who will present insights and best practices from this project.

3M and NOOK Create New Hardware Lending Program for Libraries

FRANKFURT, Germany – Oct. 7, 2014. 3M Library Systems announces the addition of a new lendable eReader for its 3M Cloud Library—the NOOK GlowLight from Barnes & Noble. With this new compatibility, libraries can purchase NOOK GlowLight eReaders directly from Barnes & Noble stores for lending to patrons. The offering enables libraries to provide access to eBooks from the 3M Cloud Library catalog to patrons who do not have their own eReader, computer or smartphone. "What's unique about our program is that patrons can choose

the titles they want to read, rather than borrowing a pre-loaded device with a title they may not be interested in," said Tom Mercer, 3M Cloud Library Marketing Manager.

To use the device at participating libraries, patrons can browse the 3M Cloud Library collection and check out an eBook from any computer in the library, then visit the appropriate lending desk to have the title loaded onto a NOOK GlowLight. The devices are sold to libraries through local Barnes & Noble Community Relations Managers, who pre-load them with secure software. The software only allows the devices to be used through the library's account, requires no personal information from the patron, and renders the device inoperable once titles are due.

OCLC introduces WorldCat Discovery API beta

Dublin, Ohio – October 1, 2014. OCLC is introducing beta availability of the new WorldCat Discovery API, which provides access for libraries to search and find resources in both WorldCat and a central index of article and e-book metadata that represent the wide range of resources libraries provide to their users.

The WorldCat Discovery API exposes library collection data for items in WorldCat, including materials held by individual member libraries, consortia and libraries worldwide. Benefits include:

- Access to an ever growing collection of central index metadata for which OCLC has been granted rights.
- Linked Data response formats, so that library collections can speak the language preferred by the Web.
- Facet functionality, so that libraries can deliver a modern search experience with the ability to quickly drill down into search results.
- Access to the latest data models, including entities.

The WorldCat Discovery API gives libraries the flexibility to use an OCLC-developed interface, create their own application or use the two in combination.

Libraries can use the WorldCat Discovery API to extend an alternative discovery service such as VUFind or Blacklight to include WorldCat results, and as a building block alongside other APIs to create a total user discovery experience.

The WorldCat Discovery API is now available as a beta to a select number of libraries that subscribe to FirstSearch, WorldCat Local or WorldCat Discovery Services. Full availability to all eligible libraries and partners is expected in early 2015. Developers will find documentation and sample code libraries on the OCLC Developer Network site, as well as instructions for how to request access to the API.

New IMLS funding to support the Digital Public Library of America announced

Washington, DC and BOSTON – The Institute of Museum and Library Services (IMLS) announced today a $999,485 grant to the Digital Public Library of America (DPLA) for a major expansion of its infrastructure. The Digital Public Library of America brings together the riches of America's libraries, archives, and museums, and makes them freely available to the world.

This IMLS award builds on a 2012 IMLS grant to DPLA. With new funding DPLA will pursue a major expansion of its service hubs network. The goal is to at least double the number of DPLA service hubs and to use IMLS support to encourage other funders to make DPLA service hubs available to all institutions in every state in the union.

DPLA service hubs are state, regional, or other collaborations that host, aggregate, or otherwise bring together digital objects from libraries, archives, museums, and other cultural heritage institutions. State and regional hubs agree to collect content that describes their local history, but also content about the US broadly and, when available, international topics. Each service hub offers its partners services that range from professional development, digitization, metadata creation or enhancement, to hosting or metadata aggregation. They may also provide community outreach programs to increase users' awareness of digital content of local relevance.

ALA TechSource
alatechsource.org

Smart Libraries Newsletter
American Library Association
50 East Huron Street
Chicago, IL 60611-2795 USA
Address Service Requested

NON PROFIT
US POSTAGE
PAID
PERMIT 4
HANOVER, PA

November 2014
Smarter Libraries through Technology

Smart Libraries Newsletter

Marshall Breeding's expert coverage of the library automation industry.

Editor
Marshall Breeding
marshall.breeding@librarytechnology.org
Twitter: @mbreeding

Managing Editor
Patrick Hogan
312-280-3240
phogan@ala.org

Digital Access for Subscribers
alatechsource.metapress.com

TO SUBSCRIBE

To reserve your subscription, contact the Customer Service Center at **800-545-2433, press 5 for assistance**, or visit **alatechsource.org**.

The 2014 subscription price is $85 in the United States and $95 internationally.

ALA Techsource purchases fund advocacy, awareness, and accreditation programs for library professionals worldwide.

Production and design by the American Library Association Production Technology Unit.

Smart Libraries Newsletter is published monthly by ALA TechSource, a publishing imprint of the American Library Association.

alatechsource.org