

**Senate Library: Making the Leap from ILS to LSP with OCLC's  
WorldShare Management Services**

**Assignment 3 Implementation Paper**

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## Introduction

Libraries perform a variety of functions (acquisitions, cataloging, circulation, serials, inter-library loans, online public access catalog (OPAC), and statistics and reporting) in their role of organizing materials and making them accessible to users. Before 1960, these functions were performed largely separately from the others and without the aid of computer automation. From the 1960s through the 1990s, technological advances like the invention of MARC formatting and the creation of OCLC (The Ohio College Library Center, later renamed the Online Computer Library Center) allowed libraries to automate and condense many library functions (Boden, 1993; Lee, 1989). These advances eventually led to the creation of computer based library management systems, or LMS. One example of an LMS is an integrated library systems, or ILS. Since the 1990s, ILS have become the standard for libraries to handle their multiple information needs.

But every LMS has a finite life cycle (Bilal, 2014). In the past 20 years, a new generation of LMS, the library service platform, or LSP, has emerged as a replacement for print-centric ILS. Breeding's recent article in the November issue of *Computers in Libraries* (2016) discusses what an LSP is and how it is structurally and functionally different than an ILS:

- The platform has a technical infrastructure onto which applications can be layered
- The platform uses a web-native user interface, accessed by browsers
- LSP support multi-tenancy (all users access the same version of a codebase, vendors only have to maintain one production version of the software)
- LSP are globally scalable (software can live on multiple servers and across multiple data centers, redundancy means platforms can work around failures)
- Platforms allow for flexibility and customization through APIs.
- Some LSP, like OCLC's WorldShare Management Services, design its applications/services with a unified approach, they are designed to complement each other.

LSP perform many of the same functions as ILS with the added capability to retrieve print, electronic, digital resources with one search. LSP are usually offered as platform as a service (PaaS), eliminating the need for locally-hosted hardware, software, and servers. Gallagher (2016), adds that LSP allow access from mobile devices and feature behind-the-scenes software updates that are often undetectable to users. A library's adoption of an LSP can reduce library costs and streamline workflow, allowing staff to have more time for other tasks. Breeding (2016) and Shea-Tinn (2016) predict that all libraries will eventually turn to LSP and phase out ILS but that the transition will happen slowly and by many pathways.

In my proposal, the Senate Library will migrate from The Library Corporation's (TLC) Library.Solution ILS to OCLC's WorldShare Management Services (WMS) LSP. The following sections will describe the Senate Library; outline the features of OCLC's WMS; describe how the new LSP will be implemented; propose how the Senate Library will evaluate the success of WMS; and suggest future actions of the Senate Library as they relate to their library management system and workflows.

## Organizational and Product Context

### Organization: Senate Library

The Senate Library was created in 1791, and describes itself as “a lending library that offers an extensive collection of congressional materials in print, including House and Senate bills, hearings, reports and debates dating from 1789 to the present” (Faust, 2016). The library, located in the Russell Senate Office Building in Washington D.C., has been a selective depository for the Federal depository program since 1982. It employs about 20 full time staff (s-Doc, 2016; Wikipedia, 2016) and serves a population of about 6000-7000 U.S. Senators and their support staff. The library contains around 220,000 volumes of print materials, a number that is shrinking as more documents are being converted and acquired in digital format. The library circulates around 5,400 items a year (Breeding, 2016). The library operates under the directorate of the Secretary of the Senate, currently Julie E. Adams. Leona Faust, the Head Librarian, describes some functions of the Senate Library and its staff (Faust, 2016):

- Compiling legislative histories
- Locating relevant statistics and journal articles
- Accessing court filings and public records
- Finding information needed for statements on the Senate Floor, committee hearings, and constituent inquiries
- Providing individual and group training in online resources including Congress.gov and enterprise- wide commercial research services

Frequent staff turnover requires ongoing outreach to Senate members and staff in the following capacity:

- Informational materials for new member orientation
- In-person office visits, customized training, and web-based options for state staff
- Participation in educational events for state staff
- Monthly promotions highlighting the Library’s collections, resources, training, and services
- Public display cases highlighting public history, Senate history, and the Library’s services
- Book talks and featured online reading lists linked to the Senate Library catalog
- Conduct periodic Senate staff surveys focused on information and training needs

Library staff may also customize desktop and compile reports about current legislative issues. These individualized reports may contain links to resources, legislative background, and news feeds to help the Senators and staff make legislative decisions (Faust, 2016).

The Senate Library has been with TLC’s Library.Solution ILS since 1999 (Breeding, 2016). Considering the life cycle of library management systems, this is a very long time to stay with the same system. Coupling the age of their current system with the fact that the library collection is becoming predominantly digital, it is logical to assume that the Senate Library is ready to adopt a new system and that the new system will likely be an LSP. In considering a switch from an ILS to an LSP, the Senate Library is following a trend in government libraries reported by Deane Zeeman (2011). Her article recognized six building blocks that government libraries are

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using to shift away from “quick reference” services and allow for more emphasis on people intensive and project specific services:

- E-library: digitizing special collections, customizing content on workspaces, providing custom RSS feeds, providing gateway proxies and federated searches to allow easier searching from anywhere
- E-services: highly personalized individual or group consulting/training via email, internet, chat
- Digitization: both for preservation and for quicker document delivery
- Physical spaces: freeing up space that used to house physical collections for training
- Technology: replacing legacy systems and using tech to better handle requests and workflows
- Procurement: knowing licensing issues with vendors and sharing resources between institutions

How much money the Senate Library allocates towards their library management system is unclear. In a 2014 report to the Senate (S-Doc 114-17, 2016), the total 2014 annual expenses for the Administrative Section of the Office of the Secretary of the Senate was reported as approximately: \$276,000 for Contractual Services, \$283,000 for Supplies and Materials, and \$55,000 for Acquisition of Assets. An itemized breakdown of these expenses suggested that the purchase and implementation of a new LSP could conceivably fall into any one of these categories but the item descriptions were too general (e.g. “software”) to determine the types of contracts, materials, or assets being purchased.

### Product: OCLC WorldShare Management Services

WorldShare Management Services (WMS) is a unified, full-service, cloud-based library management system. The only requirement to use the platform is a subscription and a device with a web browser (Anderson, 2014; Wilson, 2012). WMS offers modules for acquisition, metadata (cataloging), circulation, resource sharing, discovery, and reports, with optional modules for report designing and license management. WMS supports the use of APIs that can be used independently of OCLC software/programs or that can be shared with subscribers to WMS. There is an application gallery from which anyone can browse and download apps (WorldShare, 2016).

Determining the cost of subscribing to WMS is difficult. Vendors are particularly reluctant to disclose the cost of an LMS. This is understandable, since each library is unique in terms of numbers of patrons and types of modules or customization needed. Wilson (2012) and Cibbaretta (2010) describe vendor subscription fee structures as a combination of collection size, full time equivalent staff (FTE for academic), circulation (for public), number of users, number of library locations, and types of licensing (single-use, multiple-use, unlimited use). Through personal communication with Marynelle Chew, a librarian at Joseph F. Smith Library of Brigham Young University-Hawaii, I was given a general idea of how much their recent migration to OCLC’s WMS from Sirsi-Dynix’s Symphony ILS cost. Smith Library’s one-time cost to migrate was

about 66% of the WMS first year licensing fee and future annual licensing fees will save the library about 33% of the annual costs of Symphony (Chew, 2016; Breeding, 2016).

## Implementation Planning

Implementation timelines will vary depending on many factors including, availability of staff to work on migration tasks, availability of vendor for training and migration tasks, and the time required to select new LMS. Cervone (2007) estimates that the entire process can take 7 months to 2 years. A survey conducted by Wang (2009), estimated that many libraries can complete migration in 6-12 months. Every institution must come up with a time frame that best fits their needs and capabilities.

Researchers agree that system migrations have a similar breakdown of transition phases (Cervone 2007; Singh, 2013):

- System evaluation and selection: which can include demo and testing
- Collection clean-up and data preparation: this can include weeding and inventory
- Development and customization
- Migration: which includes data migration staff training and user testing and launch or “go live” date
- Stabilization

Cervone (2007) estimates that a library can expect to spend 32% of their transition time on system evaluation/selection, 48% on Collection clean-up, data preparation, development, and customization, and 20% on migration and stabilization.

Shea-Tinn (2016) believes that identifying and planning for critical success factors (CSF) will improve an institution’s chance of success and minimize anxiety associated with migration:

- Careful selection process
- Considering legacy system’s compatibility with future system
- Data needs: analysis and conversion
- Cost
- Library needs and functionality
- Vendor support before, during, and after migration
- Top management involvement
- Staff and user involvement
- Interdepartmental communication
- Project management and project tracking
- Staff and user education and training
- Managing staff emotions

## Stakeholders

Key stakeholders involved in a migration can include: executives of the Office of the Secretary of the Senate, the Head Librarian, representatives from the IT Department in the Office of the Secretary of the Senate, the staff of the Senate Library, third party vendors, and representatives of the U.S. Senate and their staff. Though any or all of them will likely provide input at some point in the process, much of the transition will be overseen by an implementation team (Dula, 2012). Ideally, the implementation team would be made up of at least one member from each of the key stakeholders involved in the migration (e.g. IT, department head, cataloger, acquisitions, circulation, vendor representative). Regardless of the number of participants on the implementation team, researchers recommend choosing only ONE person in the library and ONE contact from the vendor to liaison during the project. This simplifies communications; reducing redundancies and confusion with multiple people calling and emailing each other (Dula, 2012). The implementation team will be responsible for analyzing the staff/user needs and functions of the LSP, selecting the LSP, preparing the data for migration, preparing hardware and network for migration, launching the new system and stabilizing the system (Gallagher, 2016).

Finally, it is important to remember to keep the vendor of the current system in the loop as well. They may be able to assist with data extraction and they are responsible for handling daily issues until their contract is up (Seeman, 2003).

## System evaluation and selection

Though it is often recommended to try to stay with the same vendors when migrating to a new system, TLC does not currently have an LSP. The Senate Library chose WMS as their LSP because OCLC, a stable company founded in 1967, has a reputation for being “vendor neutral” and dedicated to service and sharing of resources. Furthermore, the Library of the House of Representatives is currently using WMS (Breeding, 2016) and it is likely that if the Senate Library also switches to WMS, both Houses of Congress might be able to share resources. Dula (2012) reported that the vendor support from OCLC was exceptional. The Senate Library implementation team also decided that the WMS functionality best fit their current and future needs and the staff and Office of the Secretary executives all supported this choice of LSP.

## Collection Clean-up and Data Preparation

Implementation is an opportune time to weed items from the collection and conduct a collection inventory. The library needs to consider the data that it wants to migrate (e.g. barcodes, bibliographic records, item records, patron data, circulation statistics, checkouts, holds, fines and fees, budget and acquisition records) and in what form that data needs to be in (Balas, 2011). If possible, it is best to convert the data into a format that the new system can interpret more easily. This task will likely be completed by library and/or IT staff, with the vendor helping guide the

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implementation team through this process. It is worthwhile to do a sample migration (or two) leading up to the launch date to see what types of problems may crop up during the data transfer. This is also the time to print out records of data that are critical or that the library knows it is not going to migrate. Printing out records would likely be done by the library staff.

### Development and customization

Before the migration, library staff and users would have given input about features and functionality that they would like the new system to have. The vendor might spend time customizing certain modules and designing training sessions to address these requests. The IT staff may have to adjust hardware, software, and network configurations to accommodate different demands on the technology (e.g. increase bandwidth, upgrade hardware for faster processing speeds, domain names, static IP addresses, firewalls, etc.) (Seeman, 2003).

### Migration

It is rare that full functionality of the new system will happen on day one of the launch. Before the launch, the implementation team and the vendor should agree on minimal acceptance criteria for launch and schedule staff training (Dula, 2012). There are many options for scheduling staff training. Training could consist of one or two sessions very close to launch or multiple sessions over a longer period. Dula (2012) suggests training closer to launch so that staff does not forget and perhaps follow up with additional training at some point after the launch.

When deciding on a launch date, be aware that all functions will not be present at launch. Wilson (2012) reported that full migration may take up to a month while Dula (2012) suggests planning for at least 1-2 weeks to move tasks from old to new system. During this period, the library may want to keep the old ILS operational to ensure continuity of services for transition. Immediately after the launch, note changes from old system, identify features that need improvement, and prioritize what needs to be fixed immediately and what can be addressed later.

Since many of the Senate Library services are extremely time sensitive, the library is planning on scheduling their “go live” date for when Congress is not in session and services are not in as high demand.

### Stabilization

Stabilization of a new system can take months. A 2015 migration of the Hawaii Department of Education school system from Destiny Library Manger ILS to TLC Library.Solutions for Schools ILS was stable within 3 months but still not fully functional even after 9 months (Barr, 2016). After the Senate Library’s initial launch, additional functionality for WMS will be slowly introduced. The staff and users will continue to identify features and functions that are different



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from the old system and will work with vendors to find replacement solutions. The vendor, the IT department, the library staff, and third party vendors should work together to reconcile discrepancies in records, access to databases, link resolutions, etc. During the stabilization period, evaluation of the new LSP should also begin.

## Evaluation of WorldShare Management Services

Evaluation of WMS should include assessing certain user-based criteria like: learnability, memorability, functionality, likeability/satisfaction for both staff and users. This information can be collected by use of surveys, interviews, observations, focus groups, and usability testing (e.g. task analysis, or contextual inquiry) (Krug, 2013; Bilal, 2014). Also, the library can collect usage statistics and analyze workflows to see if the resources are maximizing the efficiency of the staff and usage of the collection.

Initial evaluation of WMS will happen during the system selection, during the sample migrations, immediately after launch, and during the stabilization period. Once the new LSP is stabilized, additional evaluation can occur annually.

During the system selection and sample migration phases the implementation team and the staff will be the key stakeholders evaluating WMS. The library would want to select a system that can best match the functionality and services that the library and the users need, so it is during this time that the implementation team can look for ways that WMS can streamline materials and workflow (Seeman, 2003). The library staff should realize that no migration is perfect and that they will likely sacrifice some feature from their old ILS to gain certain features from their new system (Cervone, 2007).

Immediately after the launch, the library staff will verify the transfer of data (bibliographic records, item records, patron data, circulation statistics, checkouts, holds, fines and fees, budget and acquisition records) and check it for accuracy. They should test out all the modules: circulation, cataloging, eBooks, holds, reserves, etc. to ensure that they are functioning properly (Dula, 2012).

Soon after the launch, the library staff should gather user input. As staff train Senators and their staff to use the features of WMS, the results of usability testing can be used to build FAQ pages and create topics for online tutorials (Seeman, 2003).

Moving forward from the launch and stabilization period, the library should look to evaluate how WMS is affecting the usage of the library's collection and the workflow of the staff. These metrics will help justify to other stakeholders that the decision to switch was a sound one. The American Library Association's recent migration to WMS yielded the following improvements in usage and workflow: an increase in inter-library loan requests, streamlined processing of monographs, and quicker patron access to digital resources (Fiels, 2015). Other libraries have reported significant budget savings and a dramatic decrease in the amount of time that staff

spend cataloging certain resources (Bénaud, 2015; Product..., 2016). With OCLC's robust history of cataloging products and services, it is not surprising that cataloging is one area where WMS outshines other LSP products. Staff time formerly spent cataloging could be spent giving attention to cataloging special collections (publications by Senators, internal documents) or providing training and outreach to the ever-changing make-up of the Senate and staff. Since the House of Representatives has already adopted WMS, there is a potential for the two libraries to share resources which would streamline both libraries budgets even more. Budget analysis, circulation statistics, staff workflow, and patron and staff satisfaction will all be metrics that the Senate Library will want to collect and monitor on at least an annual basis.

A successful library management system also envisions growth in functionality and services. OCLC plans to enhance WMS's statistical and reporting capabilities and improve its acquisition and cataloging features for serials (Worldshare, 2016).

## Conclusion

The Senate Library is overdue for a change in its library management system. The collections are shifting from print to digital and the staff/users would benefit greatly from streamlined workflows. Switching from TLC's Library.Solution ILS to OCLC's WorldShare Management Services is a sensible plan. Seeman (2003), suggests keeping in mind these 8 guidelines for keeping a migration on track:

- Sane schedule - allow the library plenty of time for each phase of the migration (see Implementation Planning, above)
- Have the implementation team direct action and liaison with vendor
- Communicate - prepare staff, keep administration informed especially about cost and timetable, inform public/patrons let them know of upcoming changes and promote improvements
- Train strategically
- Keep focused - address all concerns at the appropriate
- Data, data, data - train with your own data to make sure that certain data elements are working with the new system, instead of trying to recreate the old ILS, push boundaries to see what the new LSP can do
- Be flexible
- Assess

Migration projects are rarely smooth, and often stressful. But many libraries will undergo multiple LMS transitions within one staff person's career. Successful migrations can happen with thoughtful preparation and planning. Hopefully, the Senate Library will benefit from lessons learned by other institutions who have made similar transitions and end up with a better functioning system and library for staff and users.

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