WHELF Shared LMS Benefits Case Study:

National Library of Wales

This case study is one of three completed by the Wales Higher Education Libraries Forum (WHELF) as a complementary qualitative study to the Jisc sponsored benefits report produced by Cambridge Econometrics.

Summary

This case study, for the National Library of Wales, has identified several benefits from the WHELF LMS project.

Benefits identified derive from adopting a new system but also from working across a range of institutions as part of the WHELF consortium.

The key benefits identified by the National Library of Wales include:

- Improved tender process – better specification and evaluation and reduced burden of work – through sharing the work across WHELF institutions
- Improved implementation and training process, through learning from the work of earlier cohorts
- Efficiency gains through extra functionality not supported in legacy systems
- Ongoing learning opportunities through engaging with specialists across WHELF, providing a richer and more thorough delivery of training and services
- Provision of a service that has enabled NLW Systems staff to re-direct their resources to 'value added' activities
- Reduced risk to reputation through more timely and efficient service delivery
- Improved integration with other Library business systems

Background

The National Library of Wales (NLW) was established in Aberystwyth by Royal Charter in 1907, and received several Supplemental Charters, most recently in 2006.

The NLW's foundation purpose, as expressed in 2006 is:

> 'to collect, preserve and give access to all kinds and forms of recorded knowledge, especially relating to Wales and the Welsh and other Celtic peoples, for the benefit of the public, including those engaged in research and learning.'

The Library is a registered charity and a Welsh Government Sponsored Body.

As one of the six Legal Deposit Libraries in the UK and the Republic of Ireland, the Library works in partnership to store and maintain access to the published output of the UK, physical and digital. As a major reference library, the Library also builds its collections by purchase, donation, bequest, exchange, and deposit of materials, with particular reference to materials of Welsh and Celtic interest.

The Library is a bilingual organisation which conducts its internal operations primarily in Welsh.

The Library's collections contain more than 6.5 million books, mainly resulting from its status as a legal deposit library. It is entitled to claim a copy of any printed material published in the UK. In recent years this right has been extended to electronic publications such as e-books and e-journals. The NLW also safeguards and provides access to a broad range of documentary materials including approximately 950,000 photographs, 1.5 million maps, 40,000 works of art, 60,000 manuscripts, 1,900 cubic metres of archive materials, 5.5 million feet of film, 450,000 hours of sound and video recordings.

Prior to the WHELF Shared LMS project, NLW was using VTLS's locally hosted Virtua library management system, including their iPortal OPAC and their DAMS system, VITAL. The LMS provided the functionality to manage all aspects of the Library's requirements for the acquisition, description and circulation of all items held in the collections and for the management of user data. The systems were implemented in 2006/7 with several bespoke developments. Although regular upgrades were made available by the company, the complexity of NLW's setup meant that the Library was regularly several releases behind the latest version due to issues with the bespoke elements of the solution.

Benefits from being part of a consortium

Maximising buying power and meeting strategic aims

Collaborating to identify and implement effective and sustainable services is one of the National Library's key aims and aligns with the Government's vision for cultural bodies in Wales. By operating as part of a consortium, the Library was able to put forward a strong and clear business case for the procurement of a new Library management system.

The consortium approach also enabled the Library leverage discounts for the selected system which would have been more challenging otherwise.

Reducing risk through sharing knowledge at implementation

Although the size and complexity of NLW data meant that the migration process was an unique challenge, learning from the experiences of the other partners was extremely useful. The Library went through a number of test loads before doing the final migration

and colleagues in cohort 1 who had already implemented, were immensely helpful during this period. As they had already gone through the process, they could answer specific questions on functionality or how they had set up their workflows. Aberystwyth also invited NLW to some of their implementation meetings with Ex Libris and this prepared the Library well for their own meetings with Ex Libris months later.

Gaining from a dedicated consortium resource

The provision of a dedicated, independent resource working across the consortium has been an important part of the project especially in bringing the institutions together and ensuring that experiences have been shared and lessons learnt across the partners. NLW has also found it useful in the context of liaising with the supplier, ensuring that any escalating problem is dealt with promptly and fairly.

Developing more comprehensive specification requirements

The Library benefited greatly from working with consortium partners to identify and agree on system requirements. The requirements of a national and legal deposit library differ in many ways from those of academic libraries, but the National Library has in the past tended to see itself as 'too different', and has relied on bespoke developments to meet its needs. During this process, the Library has been challenged to consider how its needs can be met using standard Library Management System (LMS) functionalities. Whilst it was not possible to meet the requirements of all collections, the Library benefited from considering the requirements of the other partners as it revised or created new workflows during implementation.

Better training and development of staff

NLW has benefitted from various collaborative sessions within the WHELF consortium, both during and post-implementation. Especially useful prior to implementation was the on-site configuration and training session at Aberystwyth University, which gave NLW staff prior knowledge ahead of its own local implementation, enabling staff and trainers to focus on key issues for the National Library sessions. This made better use of time for both Ex Libris trainers and National Library staff.

Other shared training sessions, including those on Analytics organised by the consortium Project Manager, have also been extremely useful.

Sharing expertise and knowledge

Sharing of experiences and resources during and post-implementation using face-to-face meetings and online tools, such as Basecamp and Yammer, has been of great benefit in helping the Library deliver information and training to the broader staff. There have been various examples where fellow consortium members or the wider LMS community has been able to provide advice and resources to assist with addressing particular tasks and workflows, often with responses coming more quickly than can be provided by experts from Ex Libris.

Examples where NLW has benefited from the advice of others both within and beyond WHELF include usage of new functionality in relation to authority maintenance, and troubleshooting configuration of acquisitions and work order functionality – in each case, questions to the broader community have yielded answers quickly, and saved staff time in either researching the documentation or formally reporting issues to Ex Libris.

The NLW has also been able to share its own expertise in certain areas with other members of the consortium including complex metadata, migration and cataloguing issues.   As a bilingual institution with many years of experience of implementing systems in two languages, the Library has also lead on the translation of the LMS system into the Welsh language which has benefitted all members of the consortium.

Enhanced profile for the Library service

Along with the other consortium members, the National Library of Wales was successfully nominated for a Times Higher Education Leadership and Management Award in 2015, which generated recognition and increased the profile of the individual institutions as well as the consortium. NLW contributed to presentations within Wales and the wider UK, along with other consortium members, and the project manager.

Being part of the consortium has also given the NLW an opportunity to raise its profile as legal deposit library within a Welsh context which has opened other avenues of possible collaboration. The approach taken by NLW has also been of great interest to the other national and academic legal deposit libraries.

Higher quality service from the use of a next generation LMS

Improved integration with other key NLW business systems

NLW previously used the LMS to store and co-ordinate patron data, and also as the basis for authentication to various services, such as Wi-Fi access. As such, various key systems were already integrated. However, the new LMS has enabled the Library to use its Active Directory as the core storage and management facility for both patrons and staff and to authenticate via Shibboleth. This has allowed the NLW to replicate all the previous integrations and add additional benefits, such as passing user credentials between systems to enable improved single-sign-on functionality for users.

More integration is envisioned, for example with e-payment accounts for online purchases of copies of items from the collections. This will be highly beneficial to NLW, allowing the Library to implement readily-available and sustainable solutions without needing internal time and expertise to develop and maintain bespoke functionality. It will also improve workflows and reduce maintenance compared to the running of separate systems.

Flexibility of web and browser-based systems

Using a web-based system has been a clear benefit for NLW due to ease of access. Now staff users can access the LMS easily and quickly from various devices, including

PCs and Macs, both in and out of the office (facilitating home and off-site working) and due to recent developments even from mobile devices if required. The previous VTLS system required individual installation on staff PCs (not Macs), which NLW had mitigated to some extent by developing a scripted automatic roll-out of software. This did save the time and maintenance implications of individual installs, but naturally created new maintenance implications for IT Operations staff.

The lack of an on-site installation has resulted in significant resource savings for the Library's IT Operations team who no longer have to maintain servers and backups - savings which have proved essential due to resource shortages and increased workloads in recent years.

The hosted nature of the cloud service means that software upgrades are installed in a timely manner - a significant improvement for NLW considering issues with the previous system. All customers within the consortium and beyond are on the same version at any given time, which makes diagnosing software issues much easier. Once issues are identified they are then either scheduled for an upcoming release or, if serious enough, are issued within days or weeks as a 'hotfix'. NLW is seeing issues raised with Ex Libris resolved in a significantly shorter timescale than before, keeping staff and users happy and reducing systems and IT resource in designing and implementing workarounds. Most of the issues raised with Ex Libris, particularly those with significant impact on service delivery, have been resolved within a month at most, with more minor or complicated issues taking a few months, or possibly longer where significant development work needs to be scheduled. This compares with the issues described above of waiting often several months for new software releases from the legacy system, which often could not be implemented due to bugs in other functional areas.

Improved integration between printed collections and electronic resources

Integration has significantly improved with the new system for both users and staff.

On the staff side, the ability to manage electronic resources within the same system, versus the previous arrangements of using Summon to manage subscriptions for online resources, has saved staff time.

For users, results for searches of physical and electronic resources, previously only discoverable using separate interfaces, are now returned from a single Primo search, and the faceting allows users to easily concentrate their search to one or the other when required.

Feedback from the two public reviews of the new catalogue conducted to date indicates that, particularly amongst student users who engage regularly with the Library's electronic journal subscriptions, the new catalogue is an improvement over NLW's previous offer. The fact that NLW and Aberystwyth University now offer resource access via the same discovery system is likely to be a factor in this.

Better analytics driving better services

Reporting on the previous system was less than adequate - various data combinations of use as a national/legal deposit library (which tend to be different to those regularly used by academic libraries), were either completely unavailable or very difficult to extract. The Library had almost no regular reports configured other than reports on request and user registration numbers required for regular KPIs, and ad-hoc requests for data such as circulation usage, expenditure or data content which would take considerable time and effort to deliver, using expertise that was confined to only a few members of the Systems Unit. As a result, many managers had been resigned to either living without reporting functionality or keeping their own statistics.

Some regular reports have been scheduled on the new system to meet regular KPI requirements, but the Library still has work to do to explain to staff the significant increase in reporting capability and capacity. It is hoped that this will encourage staff to request reports which can be created by the systems team and accessed any time by users. Plans are currently in place to cascade Analytics training to some managers to enable them to collate their own data, which will be a significant benefit for the Systems Unit, reducing their workload and allowing them to concentrate on other key work, such as data import and export.

Improved functionality generating efficiencies

The system by nature of being a next-generation offering is of a higher quality than the aging system it replaced. The flexibility and configurability of this system, as well as the functionality it provides to allow libraries to manipulate data and display is a significant improvement on the previous software. Functionality in terms of data import, export, global editing and reporting is now all available to administrators within the single package - all areas where previously the Library had expended significant resources in implementing alternative solutions.

During system review various staff reported that they find the system more intuitive and faster to use, particularly for searching. They have also reported that the sets functionality has made a significant improvement to the efficiency of various workflows.

The advanced search functionality in Alma allows staff to build quite complicated search queries within the system, making full use of the extensive out-of-the-box indexing available, which is more comprehensive than was available on the previous system. Additionally, staff can save the results of queries for future use, either in a snapshot form or as a real-time query, both options providing the opportunity to create personal or shared datasets for reference or for identifying records requiring work, which can then be easily accessed for editing or running of batch processes.

User permissions are significantly simplified on Alma compared to the previous system, with much of the access grouped under obvious functional areas or 'profiles'. This is considerably easier for the Systems Team to maintain, as they are no longer required to implement access to individual screens or functions. Occasionally this has been a cause for concern for some managers as access to certain functions cannot be

restricted as granularly as before; however, risks have been mitigated through improving staff training and workflow documentation.

Staff had used standardised templates extensively on the previous system to facilitate cataloguing work, which were created centrally and rolled-out to staff along with the client software. During implementation, the existing central templates were duplicated on Alma, but staff are now able to create and modify copies of these templates, either for personal or shared use with other cataloguers. This facilitates work of smaller teams or staff working on particular collections where portions of the record are frequently repeated. Again, there is less control for managers in terms of ensuring adherence to the latest standards, but this is also addressed through training and documentation.

The workflow that has seen the greatest improvement is the creation and export (or 'publishing') of the Library's weekly data contribution to the British Library for the Shared Cataloguing Programme. This is a key workflow for the Library with considerable time restraints and significant reputational damage and backlog of work should the NLW be unable to deliver. The workflow previously required use of additional software, coding of scripts to modify output to meet requirements, and was frequently subject to technical problems preventing or delaying delivery. The functionality of the new system has enabled the Library to create a new workflow, entirely within Alma (so no call for IT resource), that allows staff to send the weekly file within minutes rather than hours. There have also been very few issues other than some initial teething problems when testing the new workflow. The staff who work in this area can now meet their targets with confidence that the system will enable them to deliver.

Many other workflows have only seen small changes, and thus, while they demonstrate no particular efficiencies, there has neither been any detrimental impact from the new workflows. However, in two areas, staff are finding that working on the new system takes more effort or time to complete their work. The first is for the staff of the National Screen and Sound Archive, who previously used a bespoke development within the Virtua LMS to facilitate their work of recording detailed descriptive and technical metadata for film materials. In moving from a bespoke development to workarounds enabled in a more generic bibliographic system, there are inevitable inefficiencies, which the Library will look to address possibly via an alternative solution in future. The other area is acquisitions, where compared to previous workflows staff are finding that they are having to repeat more steps in creating purchase orders for materials, and therefore the process takes a little longer. This is due to the nature of the majority of materials reaching the NLW through legal deposit, which arrive at the Library before orders are created. However, the impact on workflow has not been significant enough to require any additional resourcing, and staff are managing to complete their work in the required time. The NLW will look to address these issues through the enhancements process provided by Ex Libris, potentially in collaboration with other legal deposit libraries who may implement the Alma system in future.

<u>Annex</u>

Further background information on the National Library of Wales is provided here, including:

- Project delivery
- Counterfactual scenario, which describes what the National Library would have done had they not pursued a consortial approach as part of WHELF
- Methodology for the case study

Project delivery

With WHELF seeking greater collaboration amongst its members in line with Welsh Government expectations, the appeal of a consortium approach for the NLW was to drive down costs, increase efficiencies and provide an improved service to end users.

In addition, the NLW recognised the potential to offer enhanced services across Wales through further collaboration once the system was implemented.

This aligned with the NLWs vision for the future which was later incorporated in its strategic plan Knowledge for All, 2014-2017. Collaboration in order to identify and implement sustainable and more effective ways of delivering Wales-wide services was one of the Library's key strategic aims and this also aligned with the Government's agenda for the cultural bodies.

Given the complexity of the National Library, the new system was implemented over an extended period. Implementation started in January 2015 and the systems went live to staff on 5 November 2015 and to the public on 6 December 2015.

NLW had also purchased Aquabrowser as the Library's main Resource Discovery Interface in 2009. Aquabrowser offered faceted searching functionality of all the Library's collections and in addition, provided access to the shared Electronic Legal Deposit Collection. The Summon product provided search access to subscribed electronic resources.

The project within NLW was managed by a project team which was answerable to the NLW's Executive Team, and through them the Board of Trustees. The project team was assembled from staff from the Systems unit as well as managers from various functional areas within the Library, to provide relevant expertise and understanding of the day-to-day issues faced by staff. These managers were responsible for cascading information to their staff, in addition to regular library-wide updates from the Systems unit.

Weekly internal team meetings were held during implementation, and with external project management for system implementation supplied by Ex Libris and consortial and co-operative working led by the WHELF programme manager, NLW were able to plan and deliver the implementation within existing resources and structures.

The WHELF programme manager was based at Cardiff University, providing consortium level oversight.

At the pre-procurement stage, key staff from NLW including the Head of Systems and the Deputy Head of Collections provided inputs into the design brief, taking a specific lead on specification development as well as ongoing discussions in the areas of cataloguing, data manipulation and data sharing. They also spent time visiting and discussing with representatives from the WHELF partners, as well as other organisations which had already implemented Alma, with a view to learning from their experiences.

Training, where not provided by Ex Libris through on-site visits, was cascaded by members of the project team, usually by holding training sessions on a per-unit basis, and following up with smaller groups or individuals where appropriate. In many cases this has resulted in step-by-step documentation for key workflows. Additionally, all staff were made aware of how to access the Ex Libris documentation and training videos (now the Knowledge Centre).

The broader project team were instrumental in delivering the required activities to get NLW through the implementation phase to 'Go Live'. In moving towards a 'business-as-usual' state post implementation, most on-going Systems work is handled by the Systems Unit, albeit in regular consultation with key staff across all functional areas within the Library.

Counterfactual
In the absence of a WHELF Shared LMS project, the National Library of Wales would have procured a new system. A business case would have been prepared internally but whether resources would have been available to procure a next generation cloud hosted system similar to that purchased through the consortium, is less certain.

Case study methodology

A series of focus groups and one-to-one interviews were carried out with members of staff in cataloguing, acquisitions and reader services departments to gain a full understanding of the benefits to the National Library of Wales. The study has also been informed by two more formal 'system reviews' undertaken within the Library since the implementation as well as a public consultation undertaken with users.