Background

The University of West London (UWL) Library Services uses a Library Management System (LMS) from Capita called Alto. This is a core system that underpins key library operations with various supporting modules. The key functions include:

- library catalogue for locating items with user account functionality (Prism)
- circulation control of physical stock, including handing of reservation and charges
- acquiring, accessioning and cataloguing physical items, including ordering, invoicing and book fund management
- interlibrary loan handling
- library metadata exchange with other library / university systems: Talis Aspire (reading lists); Summon (library search); 3M self-service kiosks; Portal, etc.

In the UK, about fifty other universities use the Capita system and a further fifty public library authorities. The UWL implementation dates back to 1991 – its pre-Thames Valley University days, when the then Ealing College of Higher Education procured the BLCMP Integrated Library System, which ultimately became Talis Alto and later Capita Alto.

Concerns

- Back in early 2014, Alto was running on life-expired physical servers (with nearly full disk space) in a difficult-to-access server room in the middle of new campus building works. The system was at high risk of terminal (sic) failure if hardware problems occurred. Data backup and recovery was not guaranteed in the event of server failure.
- The new IT strategy developed by IT Services would require the decommissioning of these servers anyway, as part of their data centre project, in order to reduce the number of physical servers in favour of hosted solutions.
- Library Services was paying a considerable annual maintenance bill, which was not deemed to represent value for money, especially in comparison with LMS maintenance charges at some other institutions at which the Director had previously worked.
- The LMS agreement at the time did not include the option of additional modules that would be needed to support our future plans – for example, a book sorter in our new library space. More importantly, such modules depended on a solution to the infrastructure issues above and on the latest version of the system being installed.
- A further constraint was that the staff resource was not available in 2014 (either in the library or IT Services) to commit to a major new LMS, even assuming that the current set-up could last a while longer.

Strategic options

Various options were identified as a way forward:

- migrate current system to a new local physical server
- migrate current system to a new local virtual server
- migrate and upgrade system to an externally hosted physical or virtual server
- migrate and upgrade system to a Software as a Service (SaaS) or managed service
- take the opportunity to procure a new LMS, using a variant of the one of the options above
Justification

After various consultations with the supplier and internal stakeholders around resource availability, priorities, timings and technical feasibility, a pragmatic decision emerged in favour of a Cloud-based solution. It was proposed to the formal IT Project committee that, subject to final technical approval by IT Services, Library Services should migrate and upgrade to Capita Chorus (the externally hosted version of Alto) and take advantage of the Capita Managed Service while at the same time outsourcing most major server administration work, given that:

- the current LMS software was broadly meeting UWL needs;
- the supplier could offer different delivery options (hosted and managed LMS service options) consistent with the new IT Strategy’s approach to hardware infrastructure;
- additional modules were available that could help Library Services deliver benefits in future;
- the disruption and expense of a new LMS implementation project was not feasible at this time, given other priorities;
- the new system could be built in parallel to the old one as ‘a greenfield server’ and data migrated across minimising downtime;
- the LMS market was (and still is) in a transitory state as new web-scale systems are being developed and shared service operations being tested – there was therefore some value in making the best of our current set-up and waiting for first and more generously-resourced first-movers to resolve the problems with the next-generation systems on our behalf!
- UWL could realise cost savings by changing hosting method.

Depending on IT resource availability, it was preferable to try and make this change in the June to August 2014 vacation window as it minimised disruption during term time and also offered a chance of e-payments being ready for the new session in September 2014, including at our Reading site, which was being upgraded to a full site library. There were also strategic staffing reasons for completing the move before the end of August.

Review

Nearly twelve months since the original proposal was made and given the green light, and five months since the main transition was completed, how did the LMS project go?

Positives

- The upgrade itself went smoothly, even using the old server infrastructure.
- There was minimal loss of access (half a day?) for end users whilst the switch to the Cloud was happening
- The servers had failed in the run-up to the migration, thus necessitating the short-term renewal of Oracle server support agreements for the problem to be identified and fixed – this further vindicated the decision adopted with 99.8% up-time since the upgrade and server hosting outsourcing.
- New modules that fitted in with other work were available quickly
- We were able very quickly to get better value for money from our new agreement
- Project management by the supplier helped reduce the overhead for IT Services project team.
Negatives

• We have experienced some local problems with rolling out the VPN tunnel (which enables local staff PCs to connect securely to the remote server hosted by Capita) and associated client configurations on library staff PCs using a packaged software approach. But these difficulties (which were due either to network time-outs or system configuration privilege issues on host PCs) were resolvable.

• It became apparent that libraries still need some form of dedicated systems resource even when they are paying for a combination of external hosting and managed services. This resource is required to provide the local first point of contact with the supplier, to monitor progress on outstanding calls logged, to serve as a source of local knowledge and also to serve as an honest broker between various internal agencies and the LMS provider. Delay in recruiting such a resource has meant that some new modules have not yet been implemented, and old inefficient processes and workflows have had to remain in place.

• Additional needs emerged as the implementation progressed and the extent of local workarounds for known limitations of the old system became apparent. Some of these could be resolved by taking advantage of new functionality in the upgraded system (e.g. user notifications), others required additional paid-for modules – e.g. for management information and reporting.

• The short timeframe meant that there was little time to resolve internal differences of opinion around Payment Card Industry compliance for e-payments; this has delayed roll-out of this module

Conclusions

Every LMS implementation is unique to each institution, even with supposedly standard systems. This means that it may be difficult to draw conclusions from this particular project that help other institutions.

Nonetheless, it is fair to say that the trend (whether from a library or IT Services perspective) is definitely towards externally hosted or true SaaS systems. The UWL experience shows that an LMS migration project is best regarded as a change management or business process review project that will surface all the legacy data and other issues that have been circumvented or ignored in the past (in much the same way that discovery systems highlighted metadata issues in OPACs), rather than as a purely technical implementation.

Such projects are therefore best phased carefully to allow time and energy to be devoted to ensuring that key priority functions work efficiently and effectively. It is also important to be realistic about the financial savings that can be made, for example on staffing resources, given local support for the system is still required. As always, getting internal stakeholders on board as early as possible can help avoid (but not avoid completely) tricky technical issues at a later stage.

Ultimately this kind of project is a natural evolutionary step towards a full-scale re-think of the library systems environment at UWL in a few years’ time, when the fun will begin again with a full-blown tender – who knows whether as part of some regional consortium or cooperative like the original BLCMP (Birmingham Libraries Co-operative Mechanisation Project) all those years ago back in 1969!