

Research Information Management system (KRIMSON) at Kent

Type of contribution

Technical and business contributions: a case-study and lessons learnt from the implementation of the CRIS implementation at Kent (2013-2016)

Submission track

IV Other

Purpose

The aim of the presentation is to outline the plan for the Kent CRIS and the progress to date. The focus will be on the managerial, organisational and technical challenges that have occurred and been addressed. Some of these are generic but there are many that are CRIS specific. It is hoped that others will be able to learn from our experiences.

The drivers and needs for integrated research information management systems at universities are well rehearsed and so will not be the focus here. We will present the detailed experiences of implementing and rolling out a CRIS in a phased way.

Background on the CRIS scope and selection

The University of Kent reviewed its existing systems through meetings with focus groups and workshops. A project manager was appointed to identify internal stakeholders and their requirements for all existing systems that were to be integrated with a new management information system. The requirements were split into seven different categories (and assigned a weighting):

Generic Operational level Analytical Repository Mini CV REF Cost and payment

Each category consisted of three different levels of criteria:

Minimum requirements Highly Desirable Requirements Desirable Requirements

The requirements for a research management system were put out to tender. At that point in time a bid by Avedas most closely matched the University's requirements.

The University invested in the following modules:

Pre award management Post award management Publication management Mini CV Configuration

and opted for managed hosting by the supplier due to cost efficiencies and reliability issues.

CRIS Implementation

The overall implementation was designed in phases, with a project plan running from July 2013 with a go live of April 2014 for pre- and post-award; September 2014 for publication and Mini CV; leaving 6 months for project closure and transition to "business as usual".

As of February 2016 we have gone live (in August 2014) with pre-award, only. Post-award, publications and Mini CV are still being implemented and tested. In the following we will explain the issues that have been encountered, and how they have been addressed.

It is hoped that a positive (although delayed) outcome will be presented, as the current “go-live” for the remaining modules is April-August 2016.

Procurement of the configuration module meant that all key elements of the system (workflow, relations, user-roles, labels etc.) were able to be customised by staff at Kent without recourse to the supplier.

In order to deliver the new functionality, first a number of existing systems had to be integrated.

The first systems to be integrated were Human Resources (CORE) and User Authentication (Shibboleth). Both of these systems required bespoke VPN connections between the University and the hosted CONVERIS instance (branded as KRIMSON for Kent) at the supplier, which enabled regular automatic data transfer and synchronisation. A benefit of which, is that all new staff which are added in to the HR database will have certain credentials automatically imported into the system. Similarly, University staff can take advantage of a single-sign-on (SSO) mechanism which enables them to use their university login information on the remote system.

The first module to be completely implemented was *‘Pre-award management’*. This phase has replaced the paper-copy internal approval system which has removed the need for researchers, approvers and administrators to be on-site in order to approve applications. All staff linked to particular applications can now see what actions have been performed at each stage and what status each application is in, throughout the entire process. Also the system has a project application cloning function which saves researcher’s considerable time and effort when developing similar proposals (perhaps to different funders).

The next step was to integrate the finance system (Agresso) allowing the periodic export of budgets with actual costs and commitments, providing staff with a quick overview of their project spend against budget, without having to master the finance system. This provides the core data for the post-award module.

The final element of the research lifecycle is *Publication*. The University is in the process of integrating KRIMSON with our Institutional Repository (EPrints). The initial step will be to import all publications currently held in EPrints, and then use KRIMSON as a front end to EPrints. End users will be able to import (either from external sources such as ORCID, Scopus, or Web of Science) directly into the system, rather than re-typing the metadata or manually entering their publications into the system. All newly entered publications and any updates performed on the existing publications, will be reflected in EPrints accordingly.

The Student data system has also been integrated to link research student data and module teaching information to academic staff. Additional information, such as research interests and external activities can also be added directly into KRIMSON. These data will be used to create a mini CV for researchers, with project student, publications and research activities all in one place.

Issues

Over the last nearly three years we have encountered numerous issues and obstacles including:

- Development overruns, due to:
 - Unclear/ambiguous requirements

- Lack of staffing resource (Kent and supplier)
- Technical issues
- Miscommunications
- Lack of a shared vision
- Related issues
 - Usability
 - Academic buy-in
 - Regard of KRIMSON internally
- ETC

Lessons learnt

For each of these issues we will detail why they happened, how they were (or are being) resolved, and how others might avoid the same pitfalls.

Conclusion

As with most projects, the devil is in the detail. The tighter the functional specification and requirements determination, the greater the chances of getting it right first time. There were many examples where the third party supplier was unable to meet the agreed requirements and compromises had to be made. Likewise, deadlines can be jeopardised if the third party suppliers experience resourcing issues, for example, if they spread themselves too thinly. This can work both ways and staff churn locally can have a significant impact too, especially with a medium to long term projects such as this.

General integration, staff training, producing system documentation and user guides are all overheads that can be underestimated at the outset. It is all too easy to expect that these things will all magically fall into place but it is essential to budget for these 'knowns' at the outset. It is also recommended that some contingency, both financial and time based, be added to the budget for the 'unknown unknowns'. Beware hidden consultancy costs.

As the project is not yet complete, The University cannot yet take full advantage of KRIMSON. However, once the end-to-end system is in place, it is hoped that it will be possible to present data quickly, efficiently and in a user-friendly format. An effective research management system will drive down cost, save time and generally improve efficiency throughout the entire research management information process, which will help to support better management decision making. We should have been here two years ago.