Researcher Support: A Collaborative Approach

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Introduction

This paper outlines a new approach to researcher support within the University of Adelaide, initiated and delivered by the Library and Information Technology and Digital Services (ITDS).

In mid-2015 the authors of this paper- Jess Tovara, Change Manager; Mary O'Connor, eResearch Support Project Librarian; and Nel Duffield, Manager, Academic Liaison- either joined the University or started in a new role. This allowed them to see the existing researcher support ecosystem with fresh eyes. They identified areas for improvement, and began to utilise their complementary skills and perspectives to provide unity and continuity to plan, develop and deliver a baseline of research support services.

Background

The University of Adelaide is recognised globally as a leading research university, consistently ranked in the top 1%. 82% of our research is assessed as "above or well above world standard" in the Excellence in Research Australia (ERA) results. However, the University's organisational structure did not provide a clear pathway for a co-ordinated, enterprise wide approach to research support.

Before 2015 there was no centralised researcher support available to all five Faculties. The Division of Research and Innovation was only responsible for research administration support such as measuring and reporting on publication outputs, research funding application and reporting, ethics, integrity and compliance management, so provided support relating particularly to these functions. The Library was beginning to provide direct training to researchers and postgraduate students in citation metrics, research data management, and other aspects of the research lifecycle. However, the confidence of library staff was still developing, and the staffing structure was built around the delivery of traditional library services.

At that time, ITDS were responsible for the implementation and maintenance of technology systems. The funding model meant a new project needed to be championed from within the Faculties or Divisions, not from IT itself. This sometimes led to ITDS solutions that were entirely appropriate at a Faculty level, but not congruent from an institutional level, with inconsistent system architecture or duplication of systems.

ITDS also provided training for specific Researcher Supporting products such as the university's publication management system Symplectic Elements, known locally as Aurora (Adelaide University Research Outputs Reporting and Analytics), and Researcher Profiles, Aurora's locally built outward facing researcher home page. This approach supported the uptake of specific products, but did not fully leverage the interrelationship between all of the rapidly proliferating tools available to a researcher.

For example, in addition to the institutional repositories available for open access publications, theses and research data, a researcher may want to take advantage of ORCID author IDs, various researcher profiles such as Google Scholar, Scopus Author ID and Web of Science ResearcherID, plus researcher collaboration networks including ResearchGate, SSRN, Academic.edu and more. Not to

mention free tools such as Publons, which gives recognition for peer review and editorial work, and GrowKudos, where researchers explain their research in plain language, manage the social media communication around it and measure its impact. As we were learning, researchers are time poor and not interested in attending discrete training sessions for every one of the products that could help them in their work.

Each Faculty also provided services directly to their own researchers, employing staff to provide faculty specific services to suit their current needs and budget. There were risks inherent in this decentralised model. Research support staff in the Faculties do not have the remit to drive university wide solutions. Faculty dependent services potentially impede interdisciplinary research. Disciplines traditionally less research intensive had limited access to research support services that may have led to improved research outputs. There was simultaneously duplication and undersupply of services in different areas of the University. These factors made it desirable to join up the disparate strands for an end-to-end process of cross-portfolio researcher engagement process.

But how can central units address this problem in a way which overcomes fragmentation, and delivers robust scalable solutions while genuinely meeting researcher support needs?

Central units such as ITDS and the Library bring a university-wide perspective, but their staff are often not researchers and can lack understanding of researcher needs. The model that we iteratively developed addresses some of these concerns.

The new model

The model has a three-stage approach: Listen and learn, Project work and Handover to Business as Usual with Liaison Librarian support.

Stage One is Listen and Learn.

Change Management is a discipline built upon people skills, and we were very lucky to have a highly skilled Change Manager to work with. Jess was employed to increase the uptake of University research systems. To massively oversimplify in the interests of brevity, he used the ADKAR model- moving the researchers through Awareness of change (our new research systems), Desire to use them, Knowledge and then Ability to use them effectively, and finally Reinforcement around why they were worth using.

Part of the process was listening to many researchers and research support staff describing their issues with University research systems. Often the systems were robust, but the researchers were not sure how to use them. Jess passed this information back to ITDS or to the Library to fine tune our approach to engagement, training and support. Sometimes there was existing system functionality that we weren't yet exploiting. Jess passed that back to the developers for implementation. Often the researchers needed something we did not have, and Jess would then advocate for researchers with vendors and in-house project teams to improve the offerings, and feed back improvements through researcher Reference Groups set up for particular products.

Jess built his credibility with the researchers by delivering what they needed, or explaining clearly why he could not. It became a virtuous circle- the more he delivered, the more they trusted him, the more they trusted him, the more he could deliver, so the more they trusted him...

The three staff- Jess the Change Manager, Mary the eResearch Support Project Librarian; and Nel the Manager, Academic Liaison- also took the initiative to scan the market for products which would meet researcher needs.

Altmetric Explorer was one such product, so once funding was secured, Jess's growing credibility with researchers paid off. Leveraging previously established relationships with key individuals meant they were more open to trying a new product or service.

Another key factor was that Jess advocated slow tailored rollouts of products, targeting particular research and support groups that would clearly benefit from a product. For example, key individuals who were responsible for the promotion and marketing of research papers across some of the research intensive research groups were engaged early through product and vendor demonstrations. Through this process, it was identified that there was a knowledge gap in relation to the importance of using DOIs when completing the marketing and promotion of research papers, which was something the Library was able to share their insights on. This then informed new behaviour and common practice across these groups.

Stage Two is Project Work.

My role, the eResearch Support Project Librarian, is critical in this stage. My role is funded jointly by the Library and by the Deputy Vice Chancellor (Research), to assist in the design of new services, the identification of useful products, and in their implementation.

A key method for seeking funding for new researcher support systems was for business owners such as the Library to apply for project funding under the Infrastructure Investment Program (IIP). As mentioned earlier, the IIP funding model required the business to request a solution rather than it be driven by ITDS. One notable example has been the Research Data (ReDa) Project, which is described below, and where the Manager Academic Liaison played a key role in researching and writing the funding application. On such projects the Change Manager and the eResearch Librarian work with the Project team, research support staff and researchers to iteratively plan, develop and deliver useful products and services.

For example, the Research Data Project is funded for 2017-18, and has four strands. It arose out of the introduction in 2016 of the aspirational Research Data and Primary Materials policy, which referred to a university research data repository and an online data management plan portal. The 2017 funding was to achieve these two goals, however as researcher interviews were conducted around research data, other issues were noted including pressing storage needs, the lack of data management training and the need for electronic laboratory notebooks. Funding for another year was subsequently granted, to deliver data management training and electronic research notebooks.

Project deliverables include the following

- A research data repository – our figshare repository went live in July 2017
- "Managing your Research Data" – the online course went live in March 2018
- Electronic Research Notebooks (LabArchives) went live in June 2018
- An Online Data Management Portal – a customised version of DMP Roadmap is due to be released in late 2018

As we all know, there can be a big gap between providing a new product, however useful, and having researchers actually use that product. This is where the principles and practice of change management are vital. Recognising the success of Jess's practice in the research space, ITDS has now employed change managers and change analysts for every portfolio to allow a Change Manager to be allocated to every ITDS project.

Stage Three is Business as Usual with Liaison Librarian support.

Once a project has finished, the product is no longer the responsibility of IT but is handed over to a business owner. The business owner is responsible for identifying and prioritising improvements to the product, either through their own knowledge or through consultation with the wider university community, and championing these improvements to IT. Both the eResearch Librarian and the Manager, Academic Liaison service this function.

The Library is a logical place for business owners, as the Library supports all the Faculties and Divisions of the University so can be seen as 'neutral'. Library staff have strong relationships with researchers, as Liaison Librarians had always worked directly with them to help identify and acquire appropriate resources, develop advanced search techniques and so on. It was a natural extension of this trusted relationship to expand into research support such as advising on data management, selecting a high impact journal for publication, and understanding altmetrics. When Liaison Librarians provide these services, it is logical that they become the business owners for the tools.

The role of the Manager, Academic Liaison is twofold in this model. She both works with ITDS as the business owner, and in tandem with the eResearch Librarian to upskill the Liaison Librarians to a level of confidence to offer at-elbow support to researchers.

A recent example is recent ORCiD sign-up pop-ups. Initially, ORCiD implementation was a project. During that phase, the Change Manager and eResearch Librarian worked with ITDS staff, Research Services and researchers to drive uptake of ORCIDs. The campaign was very successful with Australia-wide attention and recognition. The strategies are detailed on the Australian Access Federation's ORCID outreach and communication resources page, and also on figshare – see the item called ORCiD@Adelaide (this item now has 286 views and 100 downloads).

Then the ORCiD project itself finished and there was no further funding available. However, it was important to build on the work of the project and encourage continued ORCiD ID uptake for both pragmatic and altruistic reasons. Having an ORCiD would simplify the work of the researchers, reducing their manual effort in claiming their publications. This would presumably mean that more publications would be claimed, which would benefit the University, and maximise the benefit of our investment in the ORCiD product. So now that encouraging uptake of ORCiDs was considered 'business as usual', it became the role of the Liaison Librarians. They 'popped-up' in a high traffic area of campus, and provided one on one support to passing academics to set up their ORCiDs, link them to their university identity and add publications to their ORCiD profile.

One reason this approach is so successful is that the Liaison Librarians are becoming familiar with the wider suite of research supporting products. It is virtually impossible to discuss one tool with a researcher without the conversation broaching upon another. For example, to explain why a researcher would want an ORCiD, they need to understand why they would be populating the University's publication management system in the first place.

The need for a holistic understanding of the research technology infrastructure led to the Liaison Librarians working with the eResearch Project Support Librarian to develop a new training offering we call "Research Salad", offered jointly by the Library and the ITDS Training Team. Rather than the training being limited to a specific tool, the Librarians work hands-on with the Researchers to implement a number of products in one, interconnected process. Researchers create their ORCIDs, update their internal profile and their external Researcher Profile, working from "cheat sheets" and enjoying one-to-one assistance when they need it. The emphasis is on completing three to five most important steps in each product, with extra steps available for those who want to do more.

The next development we are considering is faculty specific researcher salad, as some researchers want a serve of digital humanities, whilst some prefer their systematic reviews on the side...

Results

The results of the past three years have been very pleasing.

ORCiD was developed and delivered to the University community, with excellent uptake of 1,000 over the last six months of 2016. Responsibility was handed over to the Library in 2017, and numbers rose steadily in 2017 with no promotion. Further promotion is now occurring to increase the rate of uptake. The latest figures show that 2,900 or 38% of academics have an ORCiD registered with University systems.

Altmetric Explorer was purchased and rolled out to researchers, research support staff, media and social media staff and the web marketing team. Summary reports were sent to all Heads of Schools, with Communication Tracker email software giving indications of how many Heads of School opened their emails and clicked on the School Report. The Faculty of Health and Medical Sciences were particularly interested in the reporting functionality, and have requested enhancements that the Altmetric Explorer vendor is working on.

The Research Data (ReDa) project is delivering real dividends to researchers, as outlined above. This is important, as the project is costing over a million dollars. The Library is the Business Owner of the project strands, so once strands are handed over to the Library it is vital that it has the skills to promote uptake of products, plus be able to assist researchers in a holistic manner.

Liaison Librarians are now able to support researchers individually and in a face-to-face training session, covering the ORCiD – Aurora – Researcher Profiles nexus. This delivers real value to those researchers who want to update their interlinked profiles with personalised support on hand.

Of course there are impediments. Just like the researchers, librarians are time poor. It takes a lot of time to upskill, whether through self-directed learning, formal or informal sessions or a 'try it and learn along the way approach'. It is time, perhaps, for us to consolidate what we have already learned rather than continuing to build. We need an approach that is scalable.

Conclusion

But to move from salad to pudding, the proof of the pudding is in the eating.

In the past three years the University has rolled out an unprecedented number of research supporting technologies with resounding take up by the University's research community. Change management techniques such as ADKAR have assisted greatly with successful product rollouts, and the take-up is a clear measure of success for this approach.

The Liaison Librarians learnt new skills and new ways of engaging with researchers. Library staff also began to work more deeply and collaboratively with research support staff in both Technology Services, Faculties and Schools and the Office of the Deputy-Vice Chancellor (Research), building credibility and prominence across the wider University.

This cross-structural approach to research support has been a demonstrably successful model. The combination of resources provided by ITDS and the Library provided both bandwidth and a diverse skill set which enabled new initiatives that would not have been possible by one business unit alone.