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Research Data Management at the University of Northampton: a case study

Miggie Pickton

CILIP Research Data Management Executive Briefing

20th May 2014





Outline

- Introduction: the University of Northampton
- RDM at Northampton a brief history
- Implementation of our RDM policy and roadmap
- Where next?





INTRODUCING THE UNIVERSITY OF NORTHAMPTON





The University of Northampton

- University status achieved in 2005
- 11590 undergraduate students; 2445 postgraduate students (HESA*, 2012/3)
- 250+ research students plus growing number of research active staff
- Increased interest in research and supporting the research community







Our new campus

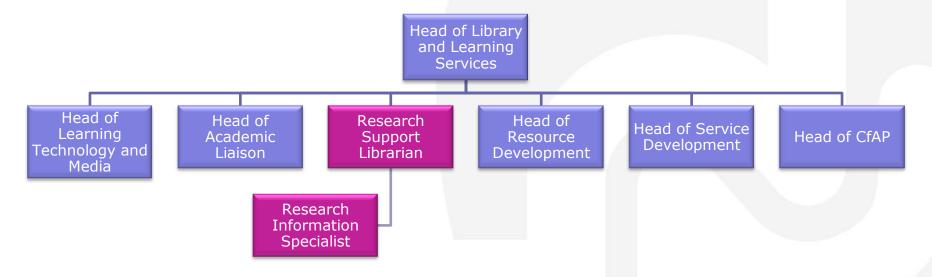
But resources are now being diverted towards our big move...







Library and Learning Services



- Since 2006 Library and Learning Services have had a Research Support Team; responsible for:
 - Supporting researchers across the university
 - Managing and coordinating applied research within LLS
- RDM services are led by this team





A BRIEF HISTORY OF RESEARCH DATA MANAGEMENT AT NORTHAMPTON





RDM drivers at Northampton

Like other UK institutions, we were (and are) driven by...

- Pressure from funders (e.g. government; RCUK; EPSRC)
 for long term (open) access to enable reuse and repurpose
- REF: research environment; impact
- Legislative requirements: FOI/EIR requests; Data protection
- Publisher demands: evidence to support published work
- Good research practice





Research data at Northampton

Back in 2010...

- External drivers beginning to make themselves felt
- Central services knew little about university researchers' data storage requirements, or the research workflow that incorporates the creation and management of data
- No university wide data storage policy or procedure existed
- In NECTAR (our institutional repository), we had available the infrastructure to store and preserve digital data
- So we undertook our first research data project, using the DCC's <u>Data Asset Framework</u> (DAF)





DAF at Northampton

- Project team: librarian led; two researchers (graduate interns) plus a Project Board comprising staff with expertise in repositories, records management and collection development
- Ran from May to June 2010 (eight weeks)
- Three stages of data collection: initial interviews with research leaders in each School; online survey of researchers; one-to-one interviews with researchers
- Topics covered: Types, sizes and formats of research data; data ownership; storage; security; sharing and access (short and long term); funders' requirements





DAF project outcomes

- 80 researchers responded to the survey; 16 follow-up interviews; all Schools represented
- Findings: some common RDM behaviours, some variance; little interest in open access
- Several concerns: uncertainty regarding data ownership; data collection format; 'abandonment' of datasets at project end; server space under-exploited; researchers ill-informed of services available to them
- 9 recommendations, including the creation of a research data policy and procedure

(Full results and recommendations are described in the project report – see Alexogiannopoulos *et al.*, 2010)







From project to policy

October 2010

 <u>DAF project report</u> presented to University Research Committee (URC)

Nov 2010 First URC Research Data Working Group convened

Nov-Dec 2010 Policies from <u>other institutions</u> reviewed

January 2011 Discussions with the Digital Curation Centre (DCC) re 'generic' version of <u>DMP Online</u>

Jan-June 2011 • Research Data Policy proposed, refined and approved





UoN Research Data Policy

June 2011 – Research Data Policy approved by University Research Committee:

- Recognised that good research is underpinned by good RDM
- RCUK recommendations to be followed on record keeping, data security, accessibility and ethical and legal practice
- Principal Investigator encouraged to produce and then follow a data management plan (<u>DMP Online</u> recommended for this purpose)
- At the end of the project, data to be deposited in a national collection if possible, otherwise in a secure central storage facility to be provided by the University









Then we had a short pause while the Professional Services at Northampton were restructured and reorganised...

... until another external driver made itself felt...





EPSRC expectations

- In May 2011 the EPSRC had set out a new <u>policy framework</u> covering "the management and provision of access to EPSRC-funded research data."
- Comprised 7 core <u>principles</u> and 9 <u>expectations</u> covering:
 - Awareness of regulatory environment
 - Access to data behind published work
 - Policy on access to publicly-funded research data
 - Storage of and access to non-digital data
 - Metadata describing research data
 - Preservation and data curation
- Universities wishing to receive EPSRC funding were expected "to have developed a clear roadmap to align their policies and processes with EPSRC's expectations by 1st May 2012, and to be fully compliant with these expectations by 1st May 2015." (EPSRC)





UoN Research Data Roadmap

- Although the University at that point received no funding from the EPSRC, it was felt that other funders might follow EPSRC's example, so...
- April 2012 roadmap created to ensure UoN complies with <u>EPSRC expectations</u>
- Approved in principle by Research & Enterprise Committee (R&EC) but University senior management team concerned with cost
- July 2013 Revised lower cost version approved by Chair of R&EC





IMPLEMENTATION OF THE POLICY AND ROADMAP





Four elements of implementation

- 1. Creation of a central research data storage facility
- 2. RDM skills development for academic and support staff
- 3. Ongoing engagement with research community
- 4. Monitoring and evaluation of policy, roadmap and services

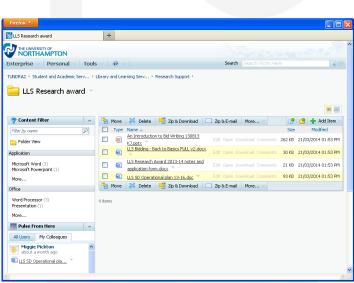




TUNDRA2

Our infrastructure for data storage is TUNDRA2, a content management system (OpenText Content Server 10)

- Existing central facility which can be used by all researchers
- Handles a wide range of file types and has other useful functionality e.g. rich metadata, social tools
- External users can be registered (subject to availability of licences)
- Permissions can be set at multiple levels for open and secure access
- Currently being piloted by a major EU-funded research project







DCC institutional engagement

- <u>Digital Curation Centre</u> '<u>institutional engagement</u>' –
 one of 21 projects designed to increase RDM
 capability across the sector
- Offered us 60 days of expert help
- We chose to use our engagement to raise awareness of good practice in RDM by providing training and guidance for researchers and professional staff
 - School workshops addressing the issues that matter to them
 - Data management 'clinics' for one-to-one support
 - Training for professional services
 - Tools and guidance







Ongoing RDM support

The skills learned during the DCC engagement have enabled us to provide further RDM support:

- RDM training embedded in Graduate School programme
 - Introduced during research student induction
 - Highlighted in research supervisor development days
 - Followed up with workshops for research students and early career researchers
- One-to-one support for funding bids and data management planning
 - Internal documentation for bidding activity now has a section on research data





Research Data Working Group

- Convened by R&EC and chaired by Research Support Librarian
- Comprises representation from research community (range of disciplines) and support services
- RDWG is:
 - Reviewing the research data policy and procedure
 - Creating data management guidelines
 - Recommending amendments to <u>DMPonline</u>
 - Identifying and disseminating good practice in research data management





Still to come (1)

- Creation of a standard 'research project' template in TUNDRA2
- Evaluation of TUNDRA2 as a solution for RDM
- Development of <u>NECTAR</u>, our institutional repository, to provide access to research data
- Possible creation of DOIs for open datasets?





Still to come (2)

- Production of online RDM guidance for Northampton researchers (possibly in our <u>Research Support Hub</u>)
- Monitoring of compliance with RDM policy and roadmap (in conjunction with University Research Ethics Committee?)
- More of the same... awareness raising and embedding good RDM practice among researchers and support staff





Questions?

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