



Research Data Management at the University of Northampton: embedding work with DCC support

DCC roadshow, Loughborough
7th February 2012

Miggie Pickton & Sarah Jones





Outline

- Introduction research at The University of Northampton
- Why conduct a research data project?
- DAF at Northampton 4 steps
- Findings and recommendations
- From project to policy
- From policy to practice
- How the DCC will help





Introduction - research at UoN

- About <u>The University of Northampton</u>:
 - Achieved university status and research degree awarding powers in 2005
 - Aiming to become "a leading regional, national and international centre for research and knowledge transfer" (from the university's Strategic Vision, 2005)
- Increased focus on research and supporting the research community
- 150+ research students, ??? research active staff numbers are rising
- Like everyone else... thinking about the REF





Why conduct a research data project?

- Little was known centrally 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
- Research funders are beginning to demand that data as well as published research outputs are made openly available
- In NECTAR (our institutional repository), we had available the infrastructure to store and preserve digital data
- Reaching the researchers... previous studies had noted that the process of undertaking a DAF project had been valuable in itself, even if the resulting inventory of data was only partial





Research Data Project – four steps

- The DAF methodology comprises four steps:
 - "Stage 1 is for planning, defining the purpose and scope of the survey and conducting preliminary research.
 - Stage 2 is about identifying what data assets exist and classifying them to determine where to focus efforts for more in-depth analysis.
 - Stage 3 is where the information life cycle is considered to understand researchers' workflows and identify weaknesses in data creation and curation practices.
 - Stage 4 pulls together the information collected and provides recommendations for improving data management."

(<u>Digital Curation Centre</u>, 2009, p.5)





DAF at Northampton

- Project team:
 - two project 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)
- Data collection, three stages:
 - 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





Selected findings (1)

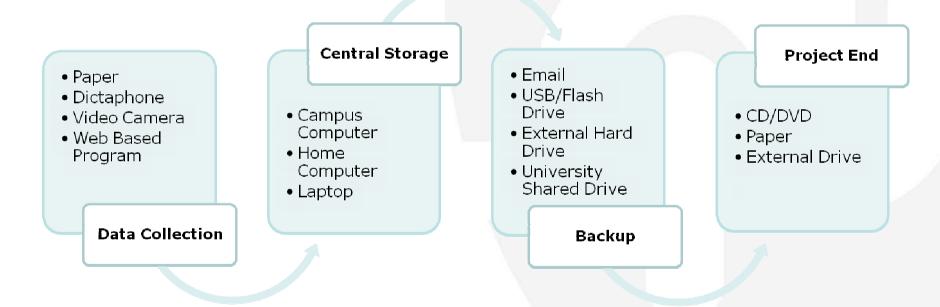
- 80 researchers responded to the survey and 16 agreed to take part in the follow-up interviews; all Schools were represented
- Some common behaviours identified e.g. overwhelming use of Microsoft software for creating documents and spreadsheets (.doc/.docx and .xls/.xslx files); .jpeg preferred for images
- Greater variation in software and hence file types used for databases, audio and video





Selected findings (2)

Data storage needs, behaviours and vulnerabilities vary through the research lifecycle:



A few researchers had previously lost data but most performed regular backups to avoid this.





Selected findings (3)

- Researcher views on open access to data:
 - 56% of participants agreed that they would like a university repository to store their research data, but not necessarily to offer open access
 - Responses varied by School (Business and Education most in favour, Health and Social Science most against)
 - Examples were given of funders who expressly forbade sharing of data
 - Most researchers had not applied for funding from a body that required open access to research data





Recommendations

- Nine recommendations made, covering:
 - Reporting to senior research managers and leaders
 - Creation of research data policy (and procedure to support it)
 - Clarification of ownership of research data
 - Training and guidance (a role for Information Services)
 - Dissemination of findings

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





- October 2010 <u>DAF project report</u> presented to University Research Committee (URC)
- November 2010 URC Research Data Working Group convened to discuss:
 - Scope of policy
 - Fit with research lifecycle
 - Procedure to support policy
 - Relationship with other university policies and practices (e.g. research ethics; academic misconduct)
- November-December 2010 policies from <u>other institutions</u> reviewed





- January 2011 discussions with the DCC re 'generic' version of DMP Online
- January 2010 first RDM proposal presented to URC:
 - RCUK recommendations to be followed (RCUK, 2009)
 - Principal Investigator to complete a data management plan at the start of every project (DMP Online recommended for this purpose)
 - A central dedicated storage facility for research data to be provided
 - Support and training to be offered to researchers
- Members of URC expressed concern





- URC concerns:
 - Duplication of effort "we have to do this already " ...
 for funders, professional bodies, etc.
 - Relevance or applicability to different disciplines
 - Reluctance to set disposal date (or even review date) –
 "I'd be very upset if my data were deleted" ...
 - Aversion to procedures being mandatory
 - Expense who will pay for it?
- So back to the drawing board…





Revised proposal eventually approved by URC in June 2011:

- Emphasis on encouragement rather than mandate
- No longer expected for every research project
- Simplified internal procedures
- Default five year review period
- Additional help offered for identifying external data archives





Next steps: from policy to practice

As yet the policy has not had a major impact. Before this will happen we need to:

- 1. Disseminate the new policy to all Schools and Divisions
- 2. Develop RDM training programme paying particular attention to the needs of different disciplines
- 3. Fulfil our commitment to provide a dedicated research data storage facility
- 4. Promote the importance and value of effective data management and sharing
- 5. Seek ways to support the embedding of good data management practice in research workflows





How can the DCC help to take this work further?





What is the DCC?

... a centre to support HEIs with Research Data Management

- **Develop tools**: DAF, DRAMBORA, DMP Online, CARDIO
- Offer guidance: helpdesk, briefing papers, how-to guides
- Run training & events: DC101, roadshow, RDMF, IDCC
- Support the JISC MRD programmes





How is the DCC helping institutions?

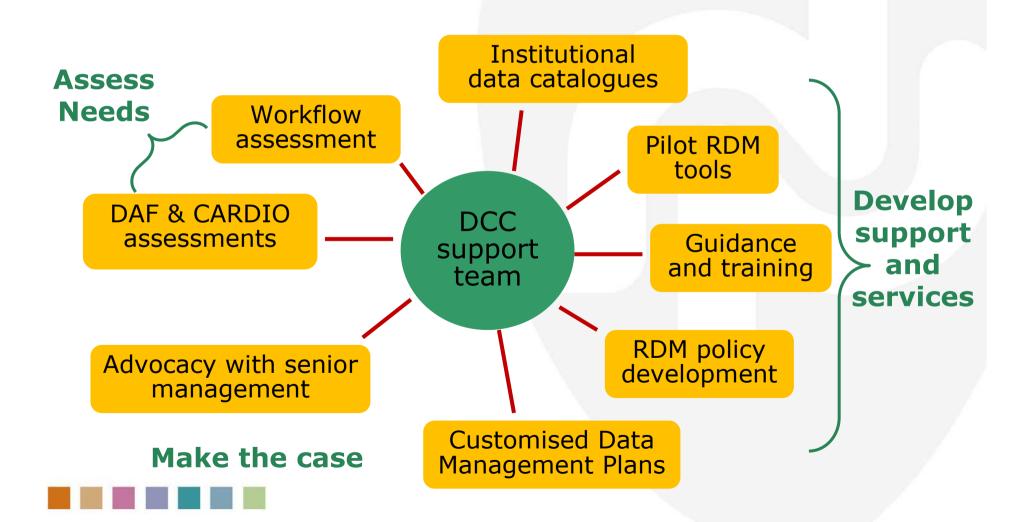
- Working intensively with 18 HEIs to increase RDM capability
 - 60 days of effort per HEI drawn from a mix of DCC staff
 - Deploy DCC & external tools, approaches & best practice
- Support varies based on what each institution wants/needs
- Lessons & examples will be shared with the community

http://www.dcc.ac.uk/community/institutional-engagements





What can the DCC offer?







What is planned at Northampton? Move from policy to practice

- 1. Communicate the research data management policy
- 2. Provide a dedicated research data storage facility
- 3. Develop research data management training
 - paying particular attention to disciplinary needs
- 4. Roll out good practice through advocates





A staged approach

We aim to run 6 exemplars that represent most contexts:

- One from each School, and one cross-school
- Mix of funded and unfunded research
- Early career and established researchers
- Lone academics and large collaborations
- Different types of data (scale, complexity, openness)





The exemplars

Researchers invited to participate by Executive Dean for Research We're proposing to buy out some researchers' time as an incentive

The exemplars will:

- Trial and feedback on RDM policy
 - Create a DMP
 - Deposit data
- Provide practical case studies for guidance and training
- Support the development and running of RDM workshop series
- Act as advocates of good practice to achieve snowball effect





Watch this space...





Thanks

miggie.pickton@northampton.ac.uk

sarah.jones@glasgow.ac.uk

Acknowledgement

The University of Northampton is grateful to JISC for funding the KeepIt project through which we were introduced to DAF and to the Graduate Boost programme for supplying the two project researchers, Sam McKenney and Edward Alexogiannopoulos, to run the DAF survey.