UNIVERSITY OF WESTMINSTER#

WESTMINSTER RESEARCH PROCESS & RESEARCH DATA

Project summary and next steps

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CONTEXT - HE

'It is essential...for universities to engage with the research data challenge and improve the way they support researchers in managing data through the research lifecycle, and making these outputs available for further exploitation'

 Dr Simon HODSON, JISC Programme Manager – Managing Research Data. Research Data Management discussion list 12th October 2011



CONTEXT - UW

"The main proposed activity, taken from the Information Strategy has been that the University should:

Review business processes and support systems related to research, wherever the current locus. This would be based on a review of how UW might engage with the development of, and the support for, information and computing technologies to facilitate all phases of research processes across all research domains (not just the sciences) on both small and large scales and that support all the underlying processes involved in research including (but not limited to) creating and sustaining research collaborations and discovering, analysing, processing, publishing, storing and sharing research data and information."

Research, Enterprise and Knowledge Transfer Committee. 21 March 2012. Information Support Systems for the Research Pathway: Setting priorities





CONTEXT – kenchadconsulting www.kenchadconsulting.com

Ken has been researching approaches to research data management for some time and was working with a small technology company (ONEIS) to see how their innovative information management platform could help solve some of the problems

Ken Chad Consulting was invited to the University in September 2012 to discuss potential overall approaches to research information and specifically research data management (RDM).



CONTEXT – THE MARKET

- At the moment there is an array of separate systems involved in managing research data and research outputs. Many of the systems are not fully developed solutions. Researchers frequently adopt personal, ad-hoc solutions which may be as basic as storing research data files on a local PC, shared drive or USB stick.
- Research Data Management (RDM) is an emergent area. This is both in terms of the skills required and the technology solutions on offer. There is continuing discussion in Higher Education about where the leadership should come from in terms of addressing the issues. Clearly it must involve a range of stakeholders and there is significant debate among librarians about their role in RDM.
- In terms of technology, unlike for example Virtual Learning Environments (VLE) or library systems there are no fully mature technology solutions on offer. Jisc has funded some open source development and solutions from commercial vendors are early in the adoption cycle.
- From the project report 2013





CONTEXT – ROLE OF THE LIBRARY

'Managing research data continues to be an emergent area of activity where responsibilities and practices....are generally not firmly established.'

RDM offers an 'important and attractive opportunity for libraries to redefine their role in supporting research' and indeed can be considered a natural extension of the libraries role. 'Management of research data resonates with library values.' This is also broadly the view of the International Federation of Library Associations (IFLA).

There are major challenges 'in terms of infrastructure, skills and culture.'

There is opportunity for 'bottom up entrepreneurial steps where individual library and technology professionals have reached out to faculty and research centres without the benefit of national mandates and high level university policies'

Adapted from: Sheila Corrall 'Roles and responsibilities: Libraries, Librarian and Data' in 'Managing Research Data'. Edited by Graham Pryor. Facet 2012. ISBN 978-1-85604-756-2







WHAT DID WE SET OUT TO DO?

"The project will help the University better understand the needs of its researchers in terms of research data management, how best those needs can be addressed and how such data can be integrated into institutional infrastructures."

(from the project proposal)





UNDERSTANDING THE NEEDS





WHAT DID WE DO?

We interviewed

- Researchers about their research data management practices, needs, pain point and potential opportunities
- University professional support staff to better understand existing institutional practices and infrastructure



WHAT DID WE FIND?

Managing research data v RDM

Research data is critical (of course!) but awareness of formal 'RDM' (as espoused by JISC, DCC etc.) is almost non-existent

"I have never heard of the DCC"

"I've not been asked for anything like a Data Management Plan"

Engagement with existing university infrastructure

Weak engagement with tools for data storage, remote access and collaboration

"We have never used any institutional capability to store or analyse the data"

"We just get on with it" (managing research data)

Visibility

"No one single process. So there are barriers to sharing information about research. Systems are not joined up."

Overall

Pain points throughout the research lifecycle

"Workload: say about 12 hours per week on various form of research admin"





WHAT DID WE FIND?

- "There is scope to improve the admin process"
- "It would be great to know what other research projects are going on"
- "There is ... potential wider value to researchers in discovering who else is doing relevant research and in discovering their data".
- "There may be a five year lead time from research initiation to the published article and that intervening effort (where much of the output is data) could be better exploited."
- "Any new tools and process must be easy to do. More processes to manage research data is inclined to give researchers a sinking feeling."

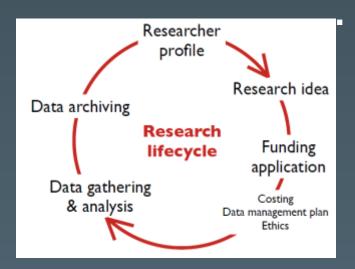
From the project report 2013





WHAT DID WE FIND? MANAGING RESEARCH DATA TOUCHES ON MOST ASPECTS OF THE RESEARCH LIFECYCLE

- Funding applications
 - Economic costing
 - Data management plan
 - (Peer review)
 - School approval process
 - Ethics approval



- Research projects
 - Remote access
 - Collaboration with internal and external collaborators
 - Safe, secure, backed-up storage
 - Data validity: version control, metadata
 - (Milestones)

Repository

- Which repository?
- Preparation of data for deposit
- University knowledge of where each dataset is stored, compliance
- Public record of dataset contributing to raising researcher profile







ANALYSIS

- Forcing researchers at this stage into some kind of RDM compliance is unlikely to be welcomed and therefore will not be effective
- There is value in having a joined up, widely visible, easy to interact with 'thread' of research projects from the earliest stage of project
- To be effective we need to bring the solution to the researcher



ANALYSIS-THE ISSUES GO WIDER THAN WESTMINSTER

"I've been a university researcher for 20 years and I have no clue as to what this article means. It's mostly just gibberish to me. It is something for us researchers to fear-some manager is going to read something like this and inflict some baffling and frustrating policy on the back of it."

COMMENT POSTED ON

Seven rules of successful research data management in universities' By Simon Hodson and Sarah Jones. Guardian Professional .16 July 2013 http://www.theguardian.com/higher-education-network/blog/2013/jul/16/research-data-management-top-tips





ON TO THE NEXT STAGE





ON TO THE NEXT STAGE

We recommend that the University explores the potential of a single portal through which researchers can interact with University research support. The initial focus should be around improving the *workflows*, visibility and sharing of information about research *projects* themselves.

From the project report





ATTRIBUTES FOR A SOLUTION (1) REQUIRED OUTCOMES

Streamlined administrative processes

- make it easier to identify training and support 'interventions' that may be required along the journey (for example compliance with data protection legislation and ethical standards)
- ensuring contractual and legal compliance, for instance through greater visibility and monitoring of the fulfillment of agreements on the submission of data to repositories, increasingly required by funders

Increased visibility of research work

- raising the public profile of researchers
- making it quicker and easier to compile data on research activity for internal and external research assessments
- providing a publicly accessible directory of all research work, helps the University to demonstrate, and market, its research capability

Increased collaboration

improving collaboration with internal and external collaborators through easier file sharing





ATTRIBUTES FOR A SOLUTION (2) THE PLATFORM TO ACHIEVE IT

- This is an emergent field so there are not ready made applications yet - or at least mature applications
- You will need:
 - Technical platform to enable the application to be developed quickly and flexibly and to interface with other systems
 - Future-proofing and flexibility so can easily add extra research support functionality within the same portal, making it easier to roll-out future initiatives.
 - Sustainability





RESEARCH PORTAL

- Bring the solution to the researcher
- Single portal through which researcher interacts with University research support

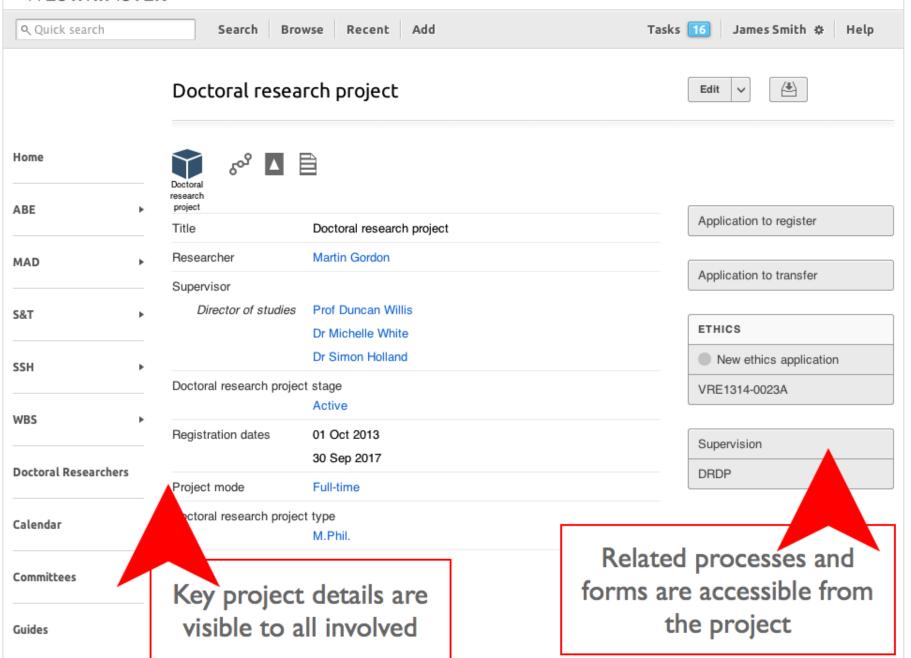


TESTING THE WATER... DOCTORAL RESEARCH PROJECTS

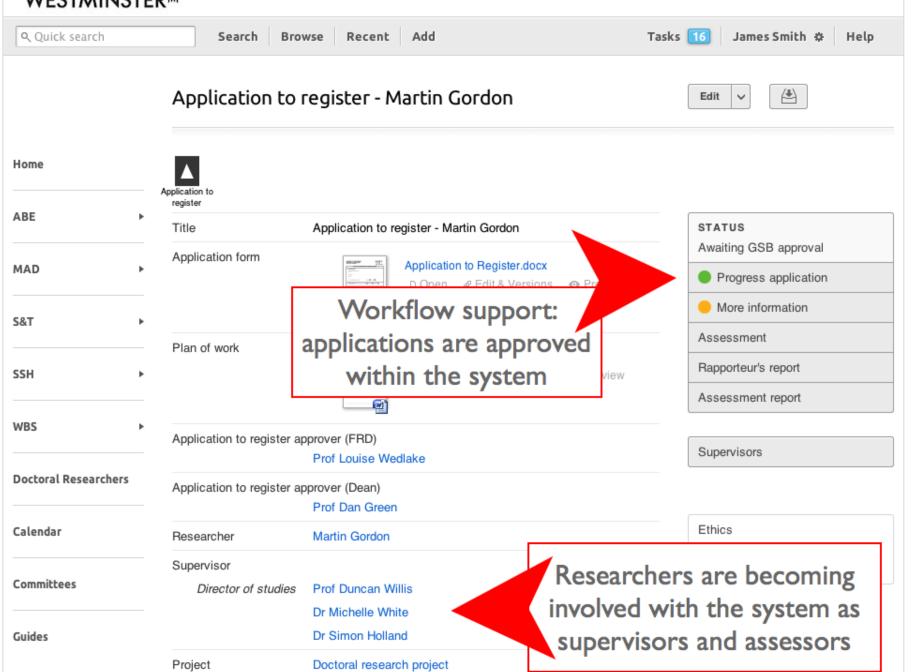












DOCTORAL RESEARCH PROJECTS

- Halved the time taken to complete the Application to Register,
- Increased visibility enabling tailored, timely support
- Researchers becoming familiar with the system in their roles as supervisors and assessors
- Winning hearts and minds with efficiency, reduced administration, and convenience of all information in one place



MOVING ON... MANAGING RESEARCH OUTPUTS





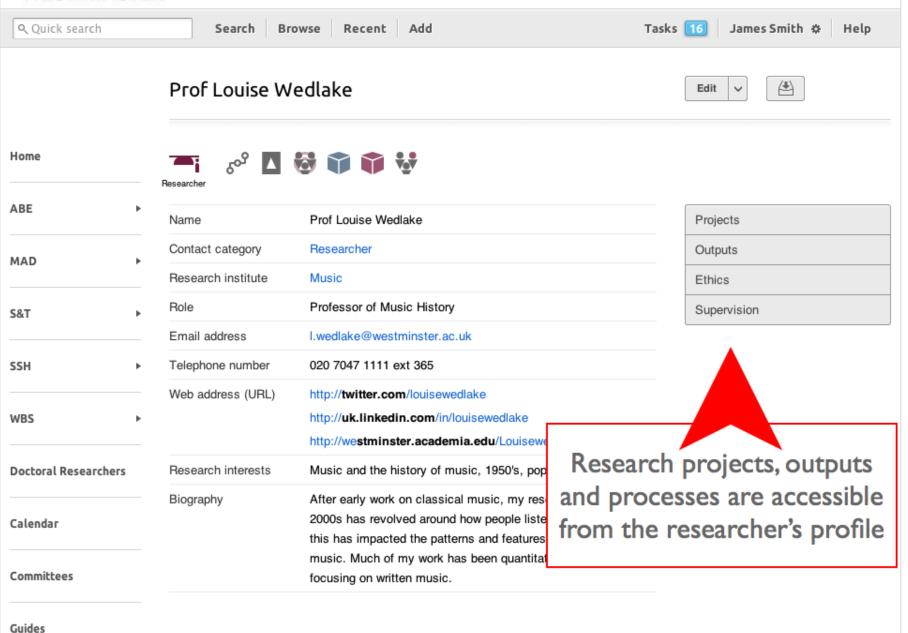
MANAGING RESEARCH OUTPUTS

- A single interface for researchers to submit draft and final papers, presentations, data
- Simple to use and researchers remain 'in control' of their output
- Outputs available for various purposes:
 - faculty review of researcher output and performance (to help with assigning research support and research time)
 - papers fed to institutional repository (we use e-prints)
 - datasets made available under selected access and licensing conditions (monitor funder compliance)
 - marketing and promotion of researcher/research group/University research
 - library alerted to new book publications
 - more efficient compilation and review of research activity for the next
 REF



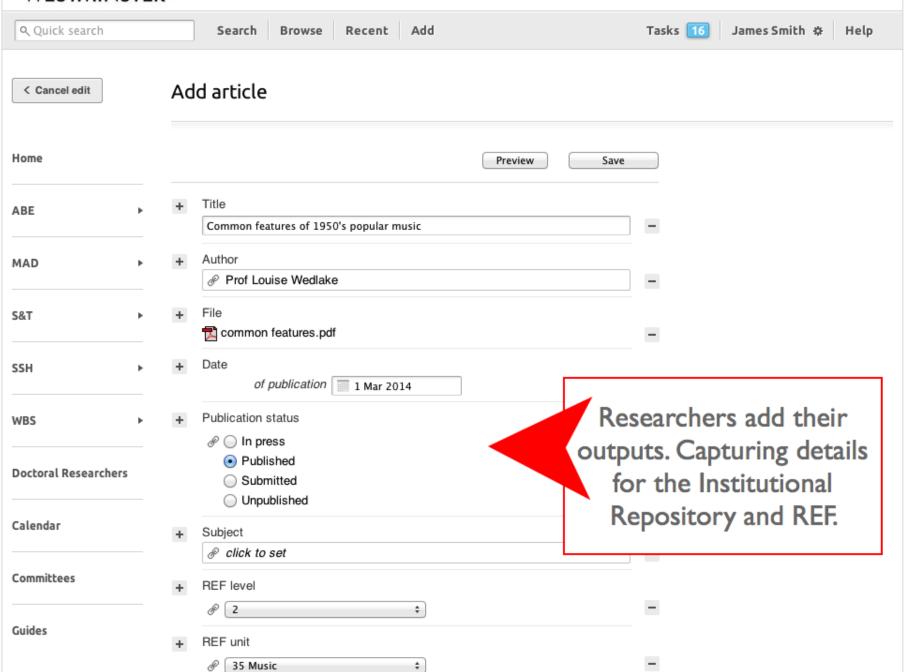




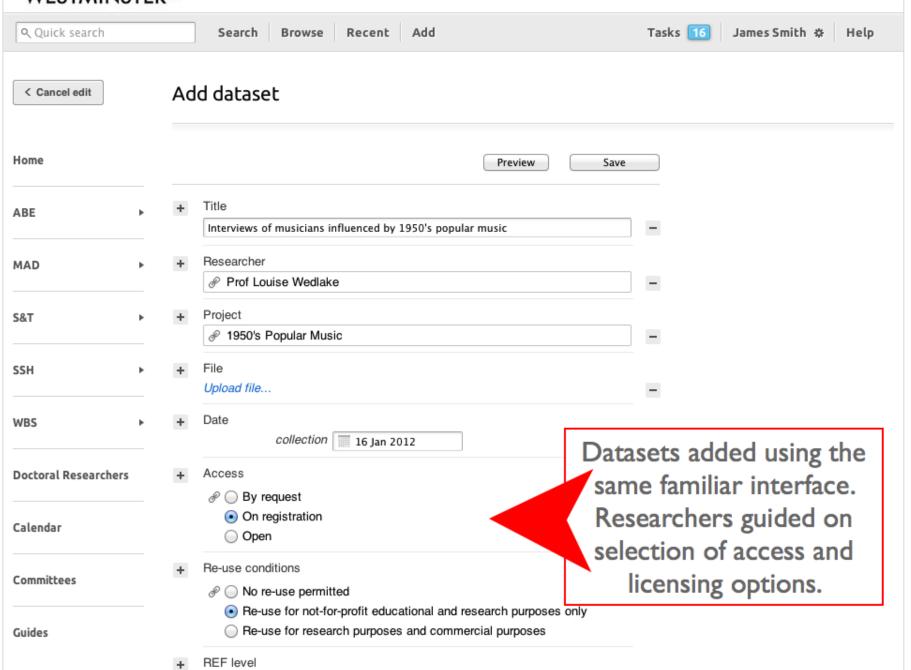


Associated with this researcher »









KEY LESSONS

- 1. DON'T FORCE RESEARCHERS INTO SOME KIND OF RDM COMPLIANCE, AS UNLIKELY TO BE WELCOMED OR EFFECTIVE
- 2. VALUE IN HAVING A JOINED UP, WIDELY VISIBLE, EASY TO INTERACT WITH 'THREAD' OF RESEARCH ACTIVITY
- 3. TO BE EFFECTIVE WE NEED TO WORK ON SOLUTIONS WITH THE RESEARCHER AND THE RESEARCH SUPPORT TEAM





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MORE INFORMATION ON THE TECHNOLOGY



http://www.oneis.co.uk/research

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ANY QUESTIONS? GET IN TOUCH.....

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