

# RDM: Advocacy, Approaches and Tools

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# Today's agenda



Policy

Tools



Advocacy

Sustainability



# Policy

Response to EPSRC's expectations

Approved in February 2013

Revised in 2015

Will be revised again in 2018

[www.lancaster.ac.uk/library/rdm/policy](http://www.lancaster.ac.uk/library/rdm/policy)

## **Key points from the policy**

Responsibility lies with Principal Investigator

Each project will have a Data Management Plan

As a minimum, research data directly associated with publications should be archived

All research data is stored for a minimal of 10 years unless required otherwise

# **What can be improved further?**

Impact of GDPR on research data

Whether each project must have a DMP?

Specific statements for PhD students

Add Library in the policy

# Advocacy

Top down to begin with - PVC Research

ROADMaP Steering Group

Associate Deans for Research, Research Support Office,  
Library and IT Services

Central trainings and departmental meetings

Surgeries and individual support

## **Advocacy - Lessons learnt (1/2)**

Top down is temporarily effective

If engaged, research directors can play a crucial role

Research data as a central training is a boring topic

Peer progression can take a long time unless  
you have lots of engaged staff

## **Advocacy - Lessons learnt (2/2)**

Continuous mixing up of approaches

Data Champions, Data Stewards, etc

Make it about their research

Lancaster Data Conversations

Offer food (we offer Pizza, cakes, tea and coffee)



# Tools

Tough decision on selection of repository

Decided to use Pure - familiar interface

Developed Mint - a DOI minting tool

Developed our own Pure data extraction software -  
interoperability issues

# Problem

At the time, Pure did not have the capability to mint DOIs. When the capability was developed, it would mint DOIs with minimal DataCite metadata. You are not able to reserve DOIs, neither can you mint DOIs for any other research output than research data.

# Tools - Mint (1/3)



## Status

Pure ID:

Search

## DOIs

Full-text search for minted DOIs on title, description, keywords, person name, DOI, sizes, file rights and Pure UUID. For example, using *regulat* as a word prefix would match the whole words *regulate*, *regulatory* and *Regulation*.

Word prefix:

Search

DOIs

DOI reservations

# Tools - Mint (2/3)



## Mint a DOI

Dataset for Design of 71-76 GHz Double-Corrugated Waveguide Traveling-Wave Tube for Satellite Downlink

Letizia, Rosa

218311186

Dataset

Mint

Reserve

# Tools - Mint (3/3)

## DOIs

← Previous **1** 2 3 4 5 6 7 8 9 ... 39 40 Next →

### 10.17635/lancaster/researchdata/198

Detail

Edit

Pure ID	218138446
Title	Supplementary Online Material
Creators	Robertson, Janet
URL	<a href="#">URL</a>

### 10.17635/lancaster/researchdata/196

Detail

Edit

Pure ID	175333622
Title	NUTCAT data for Data-Based Mechanistic (DBM) modelling of phosphorus load
Creators	Haygarth, Philip Matthew

# Tools

Alternative options for data repository in 2016

Preservation was a key requirement

Jisc Research Data Shared Service Pilot

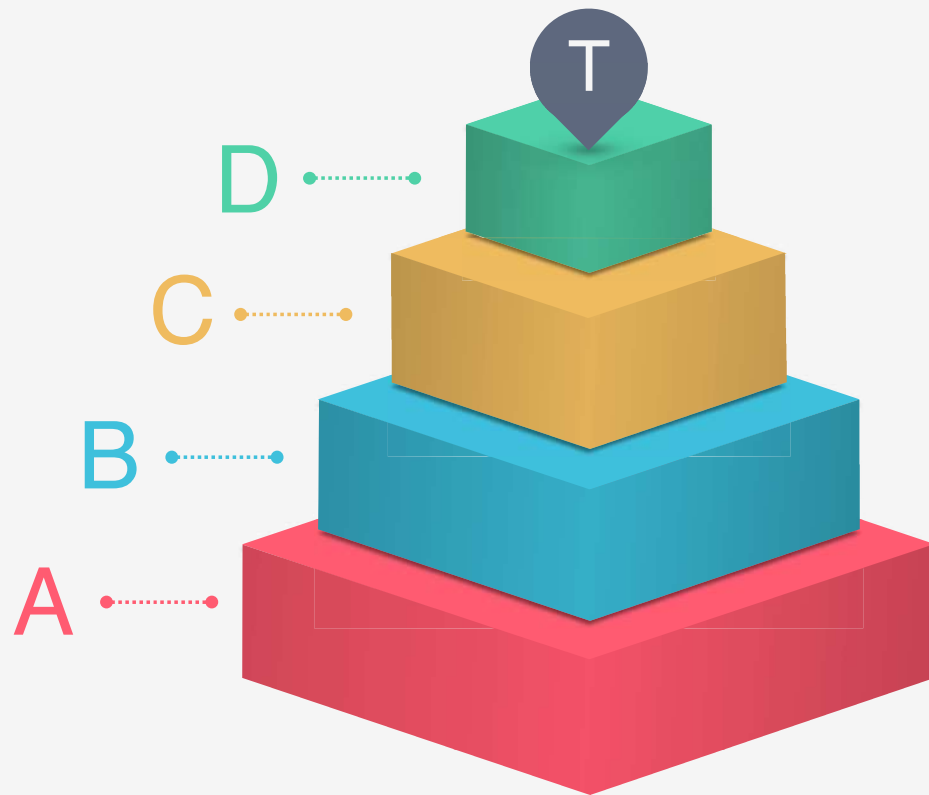
DMAOnline for reporting and analytics

Esploro Development Partner

# Problem

RDM is a complex domain. It is really difficult to see administrative data about RDM in one place aggregated from multiple systems and at different levels of detail. Reporting is also complicated.

# Data Management Administration Online



Dashboard for reporting or end points  
for Tableau

DMAOnline ingest engine

Messages and Events

Jisc Research Data Shared Service



# Tools - DMAOnline (1/2)

**DMAOnline**

dldadmin  
Sign out

Data Management Administration Online reports & statistics

Home

▼ Filters

Lune Valley Enterprise University

📅 January 1, 2000 - January 2, 2018 ▼

All divisions ▼

Clear

By institutional division

13  
All datasets

VIEW MORE

6  
RCUK datasets

VIEW MORE

6  
DMPs produced

VIEW MORE

5  
Projects without DMPs

VIEW MORE

11  
All DMPs

VIEW MORE

63TB  
Storage requirements

VIEW MORE

£32,144  
Storage cost

VIEW MORE

0%  
RCUK access compliance

VIEW MORE

# Tools - DMAOnline (2/2)

**DMAOnline**

dladmin  
Sign out

Data Management Administration Online reports & statistics

Home / All datasets

▼ Filters

Lune Valley Enterprise University

📅 January 1, 2000 - January 2, 2018 ▼

Faculty of Science and Technology ⚙

Clear

All datasets

✓	Dataset ▼	Funder ▼	Dataset ✕	Lead Faculty ▼	Lead Dept ▼	Project ▼	Project Start Date ⌵
✓	Single Locus Variant: Data and Code f...	Engineering and Physical Sciences Re...	10.17635...	FST	Mathematics and S...	Intractable Likelihood: New Challenge...	2013-01-01
✓	Neutron assay in mixed radiation fiel...	National Physical Laboratory	10.17635...	FST	Engineering	FST CASE Studentship: Design and tes...	2013-04-01
✓	Temporal relations in children's sente...	Economic and Social Research Council	10.17635...	FST	Psychology	ESRC studentship Blything	2011-10-02
✓	Counting Neutrons from the Spontan...	Not funded	10.17635...	FST	Physics		
✓	Corrosion Behaviour of AGR SIMFUEL...	Not funded	10.17635...	FST	Physics		
✓	Numerical data on coulomb-correcte...	Engineering and Physical Sciences Re...	10.17635...	FST	Physics	Orbit-based methods for Multielectro...	2012-10-01
✓	Data set for AIP advances 2015 on Ga...	Oclaro Inc	10.17635...	FST	Physics	GaInAsNSb quantum wells for GaAs-b...	2010-10-01
✓	Dataset for Visualizing Pure Quantum...	Engineering and Physical Sciences Re...	10.17635...	FST	Physics	Quasiparticle imaging and superfluid ...	2011-10-01

# Sustainability

In current form, RDM will be non-sustainable for us

Depends on academic culture shift

Lancaster Data Conversations as a key enabler

Embedding activities in departments

Promoting Open Science Practices - PROSPR

# Lancaster Data Conversations



## AGENDA

### - First three Presentations

1. Leif Isaksen, Does Linked Data have to be Open?
2. Jude Towers, Is Violent Crime Increasing or Decreasing?
3. Alison Scott-Baumann, Protecting participants and their data on a sensitive topic

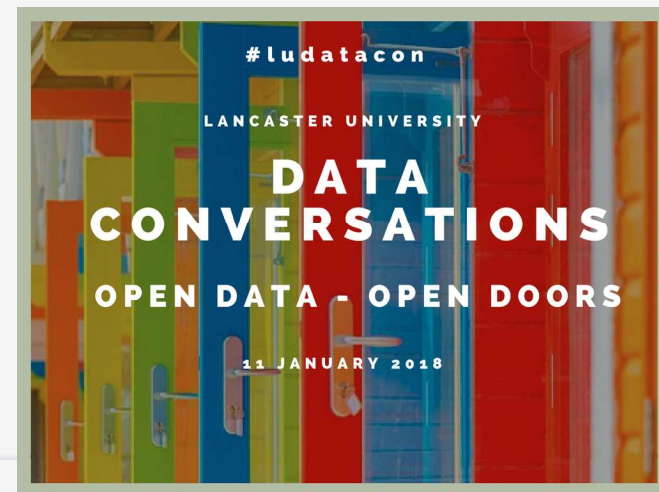
### - Second round of short talks

4. David Ellis, Building interactive data visualizations to support publications
5. Chris Jewell, Efficient sharing of numerical output
6. Chris Donaldson & James Butler, Mining and mapping places with multiple names



<http://wp.lancs.ac.uk/highly-relevant/>

[#ludatacon](https://twitter.com/ludatacon)



# Promoting Open Science Practices (PROSPR)



Informal support group within Psychology

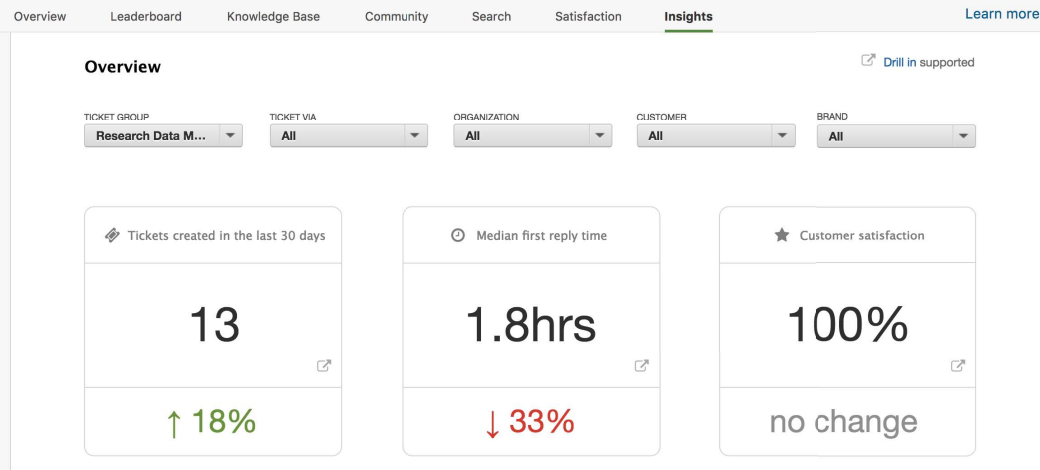
Members have been involved in:

- Registered reports
- Lab replication projects
- Study preregistrations
- Open access and open data

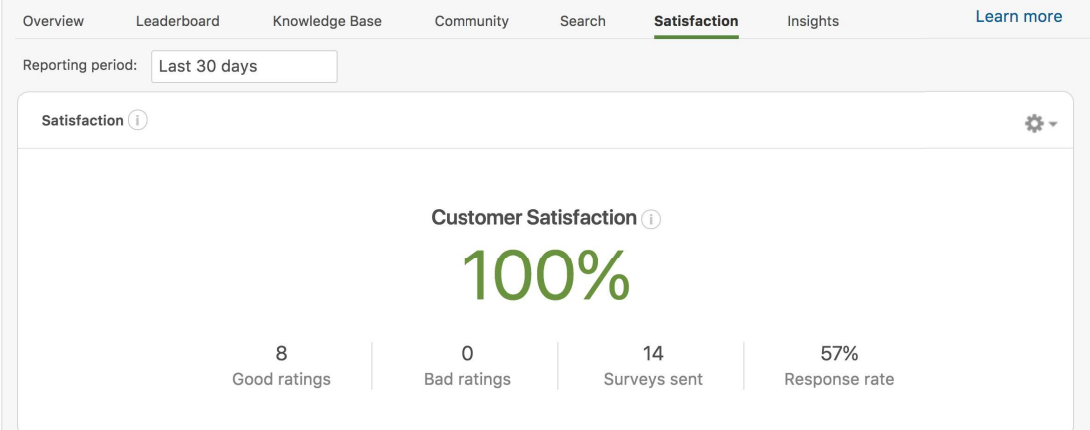
# Showcasing the service

How good is your service for your researchers?  
Data driven - We use CSAT for evaluating this

## Reporting



## Reporting



# Moving forward

Impact of GDPR on research data

Implementation of Research Data Shared Service

Discovery and reuse of research data

Data citations and software citations

Impact of Machine Learning and Linked Data

# Thank you

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