Researchers and Funders: Tales of Challenges and Change

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BACKGROUND
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ODE’s Task

- Take a fresh look at and identify barriers and drivers to data sharing

- by interviewing distinguished representatives of all stakeholder groups

- by collecting "success stories”, “near misses” and “honourable failures” in data sharing, re-use and preservation.
Barriers and Drivers

- education
- accreditation & certification
- legislation
- culture & attitude
- funding
- quality
- cooperation
- policies
- data sharing
- data flow improvements
- publishing & visibility
- disciplines
- career
- efficiency

To Unravel Complexity

- Extract meaningful, to the point information and actionable advice

- **Short paper per group of stakeholders**
  - Why should you care?
  - What are our credentials?
  - What has ODE learned from others (about you)
  - What you can do

- Advisable actions with highest impact only
  - For more: read full reports
One of ODE’s TALES

Built a data base for deep sea biological and geochemical data from a variety of sources.
1775 published and unpublished data sets were collected in two years

Learned that one may need to pay research groups to prepare their (existing) data for incorporation in the ADEPD database

Karin Lochte
Vice-President Helmholtz Assoc., member German Science Council, EC-expert group on Research Infrastructures, …

Researchers: Why Care?

• Successful examples, such as sharing data through the Worldwide Protein Data Bank, Pangaea and GenBank, …
  • reminds also of major differences between disciplines
  • … sharing in your discipline may be worth the effort as well.
  • there are (many) more examples too difficult to be presented in half a paragraph: GalaxyZoo, World Met. Org.
Others‘ Views for Researchers

• … publishers make it clear that their own infrastructure might not be sufficient to preserve data …

• researchers will not be aware of publishers‘ problems

• Data centres and libraries are willing to work with you on an incentive system … they will offer advice and training on finding, preparing and managing data.

• researchers will not expect libraries and data centers to be active players in the areas of incentives (evaluation) and data management

What Researchers Can Do (1)

• … (everybody) depend(s) on your learned societies‘ or editorial boards‘ views … formulate rules for appropriate data management plans and best practice for sharing.

• regarding matters of “culture”, societies and editorial boards are the most authoritative entities for researchers

• more so than their institutions!

• If policies run counter to culture, researchers will dodge
What Researchers Can Do (2)

• … identify the best providers of data stewardship and work with them … If capable providers do not exist … you should communicate this to your research funders.

• researchers are the most credible source of guidance for data managing institutions as well as for funding agencies

• they must not expect to get good infrastructure without their own activity

One of ODE’s HYPOTHESES

“Without the infrastructure that helps scientists manage their data in a convenient and efficient way, no culture of data sharing will evolve.”

Stefan Winkler-Nees
Deutsche Forschungs-Gemeinschaft (DFG)
Others‘ Views for Funders

• Researchers have to balance priorities of data … sharing with pressures such as publication of papers.

• hint: It is you who hold researchers back from sharing by “data-blind” evaluation and funding criteria

• … sustainable solution lies in the distributed data infrastructure ...

• Don’t even try to enforce simple solutions

What Funders Can Do

• … promote explicit funding for data management in research grants ...

• this is the most effective, plausible way to establish funding for data stewardship (perhaps not clear to every funder)

• … data skills training in postgraduate courses.

• we encountered the skills/training question ever so often. Postgraduate education is the most obvious first step
Conclusion

• From a rich and complex source of information on data sharing
  • We extracted and prioritized challenges to researchers and funders (why care and what you can do)
  • We transferred evidence and enablers of change between disciplines and stakeholder domains

ODE Results

• http://www.ode-project.eu/ode-outputs

• In particular:
  • Briefing sheets
  • Ten Tales

• All interviews in “Baseline Report on Drivers and Barriers in Data Sharing”