Research data management and the Flemish Universities

VLIR WG Research Data Management & Open Science
Research data management, an essential step towards Open Data

and ultimately Open Science
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RDM Survey:
State of affairs in Flanders, depict RDM needs & requirements

Onderzoeksmanagement aan de Vlaamse Universiteiten, TH&MA (3), 47-51, 2017

Collaboration on practical issues:
DMPonline.be
DMP templates

Joint Policy statements:
Research data management en de Vlaamse Universiteiten: White paper, VLIR-WG RDM & Open Science
RDM @ the Flemish universities: State of affairs

Survey set-up

Questions
Consistent with foreign surveys so that benchmarking is possible

Two tier system:
Survey to principal investigators (n=224)
Survey to researchers (n=425)

5 dimensions:
- Data formats
- Archiving, storage
- Ethical & Legal
- Infrastructure & Services
- Collaboration and Reuse
Policies

AD HOC RATHER THAN ORGANISED

DO YOU MAKE A DATA MANAGEMENT PLAN BEFORE THE START OF A PROJECT?

- Never: 8%
- Hardly ever: 11%
- Mostly: 26%
- Yes, always: 34%
- Yes, when requested: 20%

DATA MANAGEMENT POLICY

- Formal: 38%
- Informal: 57%
- Non: 5%
Access

MORE BASED ON “NEED TO” THAN ON “WANT TO”

DATA ACCESSIBILITY: TO WHOM

- Selected members of my institution
- Interested persons by request
- Peer reviewers
- All members of my institution
- No one
- The scientific community
- The public
- Other

DATA ACCESSIBILITY: MEDIUM

- Via email
- Via cloud applications
- Via physical disks
- Via remote server or share drives
- Via data archive/repository
- As linked supplementary material for publications
- Via personal or institutional website
- Other
- Not at all
What is your opinion on storing (a selection of) the research data of your unit in an open access data repository so that they can be reused by other researchers?

Opinions concerning openness
DIVIDED BUT HOPEFUL

- Preferred: 49%
- Not preferred: 51%
Sharing

Advantages are recognised but legal issues and lack of time

What keeps you from sharing data?

- Privacy violation
- Increased effort of time and/or cost
- Increased competition in the "publish or perish"...
- Other legal restrictions (e.g. copyright, patent law, ...
- Danger of misuse
- Risk of misinterpretation and/or falsification of data
- Lack of infrastructure
- Potentially undesired commercial use
- Lack of motivation for sharing
- Missing data standards
- Missing data processes
- Other
- Use of rare data formats

Open data sharing incentives

- Increased visibility and impact of your own research...
- New contacts and/or opportunities for cooperation...
- Consideration of research data as relevant scientific...
- Recognition in the scientific community
- User friendly infrastructure
- Establishment of standards for accountability and...
- Support in the process of making the data accessible
- Financial incentives (bonus, expense allowance)
- None
- Other
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Massive change of the way research works

Is it Utopia or can RDM be facilitated?
Research Data Management

**WHAT IF NOTHING IS BEING DONE?**

1. In 2020 the market share of open data in EU28+ will have risen to 75.7 billion euro and an estimated 100,000 data steward positions need to be filled.

2. By 2020 an estimated 1.7 billion € net gain through increased efficiency in information provision i.e. No redundant analyses, rapid sharing → saves money, time and sometimes even lives.

3. Opening and sharing data fosters more visibility & impact in science and beyond.

4. Are commercial providers the best partners in ensuring fair & sustainable access to our data?

Alternative 1: Are we prepared to lose our competitive edge, money, time, trust & governance?
Alternative 2: Will Flanders take this opportunity to boost knowledge and innovation in the region?
Research Data Management

RECOMMENDATIONS

1. INVEST IN INFRASTRUCTURE
   1. Data = intellectual capital
   2. EOSC is great, if your data repository is interoperable with this service
   3. Data services: 1.000.000 £ set up, 500.000 £ recurrent cost

   Q: What data repositories?
   Q: Joint supported initiative (DANS) or multiply costs for all research institutions (i.e. 5X Flem. universities,...)

2. INVEST IN EDUCATION
   1. RDM skills are lacking: 100.000 data stewards, researchers, ...

   Q: If nobody has the skills, how can we make RDM work in a qualitative manner?
Research Data Management

RECOMMENDATIONS

3. PROVIDE CLEAR & UNIFORM LEGISLATION
   1. GDPR \(\Rightarrow\) Belgian law
   2. EU Copyright & TDM reforms

Q: Don’t make it complicated for researchers to do research
Q: Provide support

4. PROVIDE INCENTIVES FOR OPEN SCIENCE
   1. There’s more to (academic) life than publications, IF-factors,... Data = intellectual capital
   2. Open data is better than sharing data, sharing data is better than dead data

Q: Provide incentives, re-think evaluation models for research(ers)
The collaborating members

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