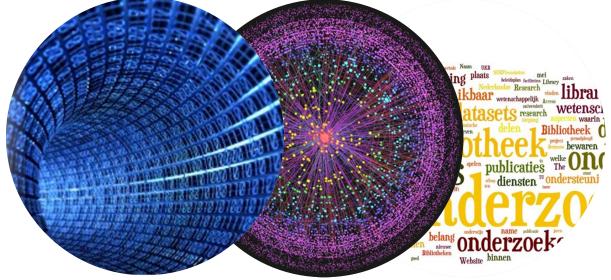
# Managing and Archiving Research Data

FB - Library & ICT

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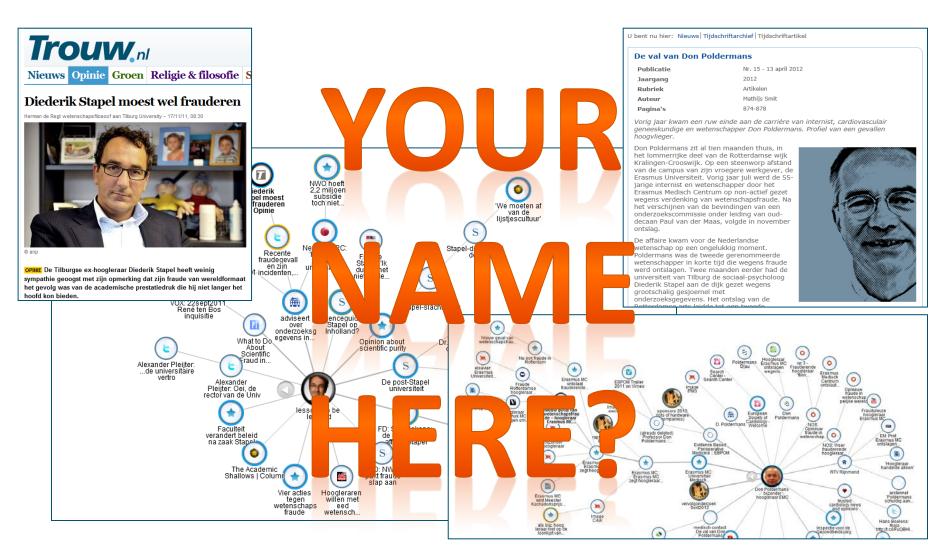
### Objective

- Why it is important to archive and manage your data
- How we can assist you to do this
  - ICT perspective
  - Library perspective
- Your feedback (discussion)





### Why it is important







## Why it is important

- Motivation:
  - Quality: verifiability and replication (peers)
  - Transparancy: Data is collected with public money
  - Science for society
  - Financial
- Policy makers, funders and Academic Organisations demand/promote it
  - NWO
  - EU
  - NL government
  - KNAW



#### Our Code of Conduct for Scientific Practice

#### 2.3. Verifiability

#### Principle

Presented information is verifiable. Whenever research results are publicized, it is made clear what the data and the conclusions are based on, where they were derived from and how they can be verified.

#### Best Practice

- Research must be replicable in order to verify its accuracy. The choice of research question, the research set-up, the choice of method and the reference to sources studied is accurately documented.
- The quality of data collection, data input, data storage and data processing is guarded closely. All steps taken must be
  properly reported and their execution must be properly monitored (lab journals, progress reports, documentation of
  arrangements and decisions, etc.).
- Raw research data are stored for at least five years. These data are made available to other scientific practitioners at request.
- 4. Raw research data are archived in such a way that they can be consulted at a minimum expense of time and effort.
- 5. The source of all educational material, including oral information transfer, is stated.

Wageningen UR attaches a great deal of value to the accessibility and intelligibility of its scientific and technological research for a broader public that extends beyond its scientific colleagues. Researchers are expected to be willing to present the design and results of their research to the public in a comprehensible way.





### Quotes for voting



- 1. The integrety & quality of research will increase when peers verify the quality of research data
- 2. I do not want other researchers to (re)-use my data at all
- 3. Others can only use my data after I finished my publication
- 4. The FB-IT services for data are sufficient

5. I have taken necessary precautions to safeguard my data from loss, also in the (near) future





# My data is safe:

I agree!







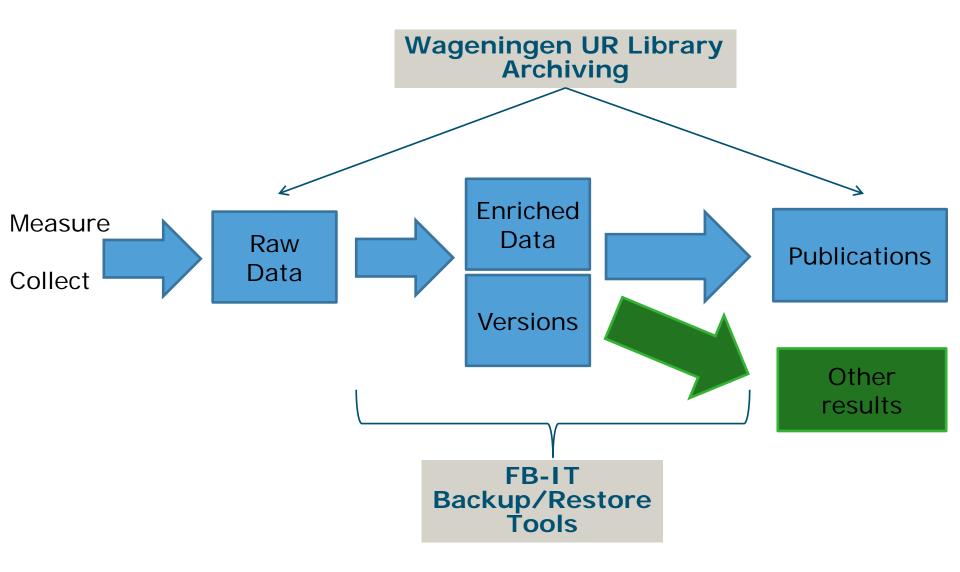








#### Research Data Life Cycle







# Misconceptions about archiving

I agree!





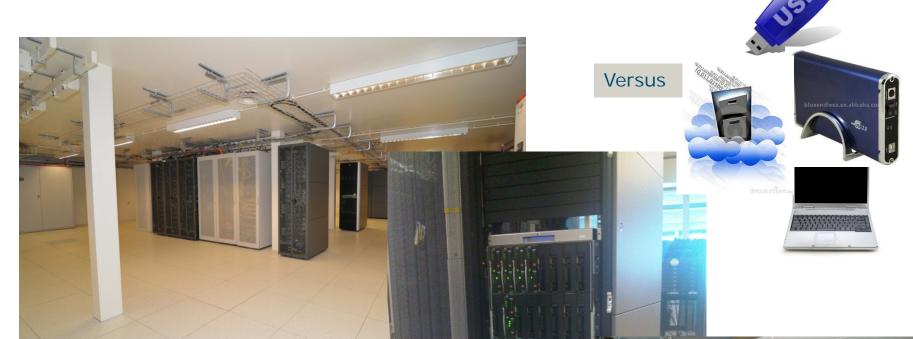
### Data Archiving

- Long term preservation
  - Can you still use it after 5 years?
    - Supporting software versions?
- Target group is larger than the individual researcher
- Must be findable (metadata!)
- Must be protected
  - Access control
  - Legal









- Data centre . Secure: (fire, power incidents, burglary).
- 2 data centres in case of disaster
- The equipment is fail-safe
- 500 TB reserved, 300 in use, 1 PB avail





#### ICT Data Products & Services







### Data storage workshop – Better alignment

(% is total percentage of score + 1 up or down)

| Subject             | Importance           | Score FBIT           |
|---------------------|----------------------|----------------------|
| Ease of use         | 9 (85%)              | 8 (64%)              |
| Backup/Restore      | 9 (64%)              | 7 (28%) very diverse |
| Share (intern) ^    | 9 (79%)              | 9 (71%)              |
| Share (external)    | 6 (28%) very diverse | 5 (21%) many n/a     |
| Archive function    | 8 (50%) many n/a     | 5 (14%)              |
| Findable            | 9 (79%)              | 7 (28%)              |
| Price               | 9 (86%)              | 4 (28%) very diverse |
| Speed data transfer | 9 (72%)              | 5 (21%) very diverse |
| Availability        | 9 (79%)              | 8 (64%)              |
| Flexibility         | 8 (78%)              | 6 (28%)              |
| Security            | 7 (50%) very diverse | 8 (57%)              |





## Data storage workshop - Conclusion

- Enhancements Request:
  - 1. Lower the price
- we can get for Information
  - period, costing, etc)

  - 5. Deliver a Product for Arcin n
  - 6. Higher throughput (data rate)
- What is the next step?
  - Building a roadmap for IT Storage and Products



## Services Library Wageningen UR

■ Data portal for archiving. Mail to: <a href="mailto:data.library@wur.nl">data.library@wur.nl</a>

Search portal for datasets on WageningenUR.nl/library

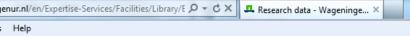


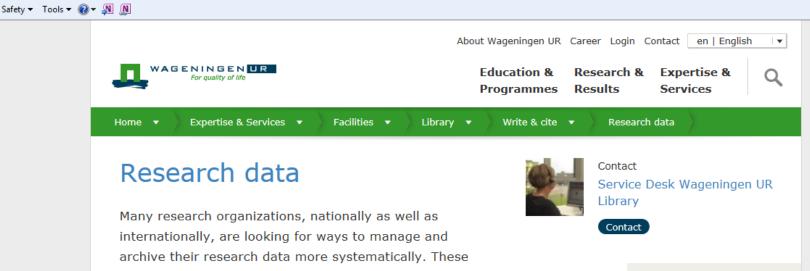
### Data management course

- For PhD students
- This year in November (13th)
- One day
- Contents: how to make a data management plan
- Check our website: http://library.wur.nl/desktop/services/courses/
- Send email to:

servicedesk.library@wur.nl or data.library@wur.nl









#### What is research data?

be reproducible for verification.

Primary research data is data that you collected as input for your research. It is from there that you start working with the data, create new versions, new data result sets. Eventually, at the time when you draw your conclusions, you have a final data result set. The primary dataset and the final result dataset are, apart from your publication, the main research result products. For reasons of verification of scientific work it is necessary that you archive the primary and final data sets.

activities are motivated by a sense that research data

are public goods, that they can be re-used and need to

While doing research your data needs to be managed for backup and restore in case of an error or failure. This data does not need to be archived, since it is not a primary data set nor an end result. Services to guarantee the availability of your data during your research are managed by Information

#### Services

Wageningen UR Library supports researchers in the management and archiving of their research data in several ways. We initiated the following:

Continue to:

Other services

#### Data archiving

Wageningen UR Library has an agreement with the repository from The Royal Netherlands Academy of Arts and Sciences, called DANS EASY.

Wageningen UR Library data librarian is the contact point for this service and can assist you with the deposit of your research data to DANS EASY. DANS EASY does not provide

#### Let's GO

Research data management is important Your data is not safe on a harddisk or in Dropbox Library and IT can support you in RDM

servicedesk.library@wur.nl (0317 - 4)84440

servicedesk.IT@wur.nl

(0317 - 4)88888



