

Research Data Management - Roles and Responsibilities

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5th International Symposium on Information Management in a

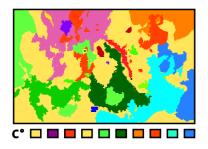
Changing World

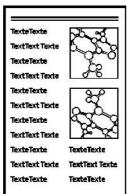
November 26, 2014, Antalya, Turkey

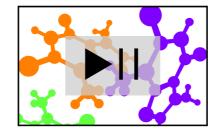


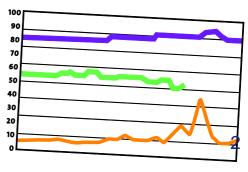
### Research Data Definition

- No clear definition; depending on discipline
- everything that was created during scientific research and that can be used as a basis for scholarly output.
- Data as a result of research
- Data as a source for research











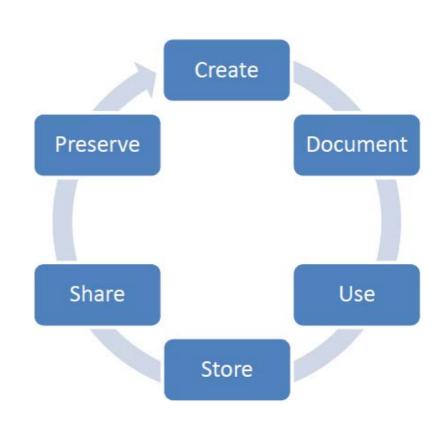
### Research Data Management **Definition**

- all activities concerning processing, archiving and publication of data
- complete, accurate, well-documented data, complaint with ethic standards, open and in preservation-friendly formats
- How to do RDM?
  - give your data a structure, it makes it easier to find things



## Research Data Management Lifecycle

- Data Management Planning
- Creating data
- Documenting data
- Using data
- Storage and backup
- Sharing data / Giving Access
- Preserving data



### Research Data Management Roles and Responsibilities

- Resposibilities for RDM distributed across several shoulders
  - Technical
  - Management
  - Data creation
- Stakeholders / Roles
  - Researchers / scientists
  - IT-Specialist
  - Informationmanager (Data Scientist?)
- Experts / Institutions
  - Libraries
  - IT Departments
  - Universities



### Research Data Management New tasks for libraries?

- Archives and libraries
  - Know how to store and find things
- Information specialists
  - Providing information
  - Supporting researchers with RDM
- Provision of services
  - Information literacy
  - Data management



# Research Data Management in Germany I

- University of Göttingen / Library
  - Policy
  - eResearch
  - Support Service
- University of Bielefeld
  - Policy
  - Infrastructure for archiving and publication
  - DMP support (online tool)
- Berlin / Humboldt University
  - Policy
  - DMP support manual
- University of Heidelberg
  - Policy
  - Support group located at library











## Research Data Management in Germany II

- ZBW and GESIS
  - Online RDM training for social sciences
- Several working groups
  - Working on topics regarding RDM and long term preservation
  - e. g. DINI/nestor working group for research data
- Funders
  - DMP in proposals
    - Open Data Pilot (H2020)
    - DFG projects (optional)













## Research Data Management at University of Hannover

- Short introduction to
  - Leibniz University of Hannover
  - Library for Leibniz University Hannover
- Research Data Management Support Service
  - Library Activities
  - Project Activities



# Leibniz University of Hannover Facts and figures



- 1831 founded as Higher Trade School of Hannover (64 students)
- 1st of July 2006 the "University of Hannover" is given the name "Gottfried Wilhelm Leibniz Universität Hannover"
- 90 subjects
- 23,900 students
- 3,400 graduates in 2013



### German National Library of Science and Technology (TIB)

### Two Libraries in one



- German National Library of Science and Technology (TIB) founded in 1959
  - world's largest specialized library for science and technology
  - funded by all the Länder and by the federal government
  - By now: 5 sites; open 95 h/week; 1700 seats in reading rooms
  - Responsible for provision of literature and information to university (1831)



## TIB Hannover Facts and Figures

- 5,600,000 books
- 3,370,000 micro-materials
- 103,000 individual digital documents (e.g. E-books, E-dissertations)
- 64,000 E-journals
- 16,800 specialized journals (print)
  - 1,700 Journals from Eastern Europe and
  - 2,800 Journals from Eastern Asia
- 4,100 specialized databases
- 17,040,000 patent documents, norms, standards
- 160 Million metadata-sets in GetInfo-Portal
  - Offering 18 Million pay per view





## Research Data Management Beginnings in Hannover

2005: DOI assignment for research data

2009: DataCite

Projects

- KomFor project (earth sciences) <a href="http://www.komfor.net/">http://www.komfor.net/</a>
- Radar project (generic) <a href="http://www.radar-projekt.org">http://www.radar-projekt.org</a>
- University and Library
  - Established supporting service
    - Guidance DOI assignment for data (library)
    - Guidance for writing project proposal (university)
  - Starting in 2015: RDM project
    - In cooperation with Research Office and IT Services
    - Evaluation of needs
    - Development of support service for RDM





### Research Data Management Library Support Service

- Development of RDM support service covering different aspects of RDM
  - Data management plan (DMP)
  - Metadata
  - Repositories
  - Publication and citation
  - ...
- Starting Activities:
- 1. Workshop for Researchers of University (Nov. 2014)
  - Why and How to do RDM?
  - Focus on Data Management Plans
  - Discussion and interactive parts

# 1. RDM - Workshop Roadmap

#### Short introduction

- Participants / disciplines
- Expectations

#### • Research Data Management

- Basic information
- Benefits
- Metadata
- Short exercises: research data and metadata

#### • Data Management Plans

- Why and How
- Checklists
- Short exercise: writing a DMP

#### Repositories

- · Where to store
- How to find
- Live demonstration: <u>re3data.org</u>
- Feedback



### 1. RDM - Workshop Lessons learned

- Raising researchers awareness
- Giving basic information
  - focus in future events
  - Educating less topics
- More profound information in future
  - e. g. in disciplinary events
- Professionalizing workshop event
  - Workshops on regular basis



### Library Support Service Further Developments

- Workshops covering other RDM-topics
  - Copyright
  - Licensing
  - ...
- Webinars (planned)
  - Data management plans
  - Metadata
  - Repositories
  - ...
- Other ideas
  - Workshops for Libraries
    - How to develop RDM service
  - Workshops for students



### RDM support service Further Developments

- RDM Project in cooperation with university and IT services
- Kick-off January 2015
- Conception of RDM Service at University of Hannover
  - Policy
  - Support Service
  - Infrastructure

### Project plan

- Survey to retrieve researchers needs
- Development of official university policy
- Development of support service
- Infrastructure set-up (internal/external)



### Conclusion

- Research data and its management
  - highly complex issue
  - various responsibilities
  - various stakeholders
- Establishment of support services
  - Involvement of researchers
  - Work in cooperation
- Many activities already happening
  - Workshops
  - Training material
  - Documents / Manuals
- Raising awareness
- Data as recognized scholarly output



### TIB GERMAN NATIONAL LIBRARY OF SCIENCE AND TECHNOLOGY

Thank you for your attention!

