TIB | GERMAN NATIONAL LIBRARY OF SCIENCE AND TECHNOLOGY

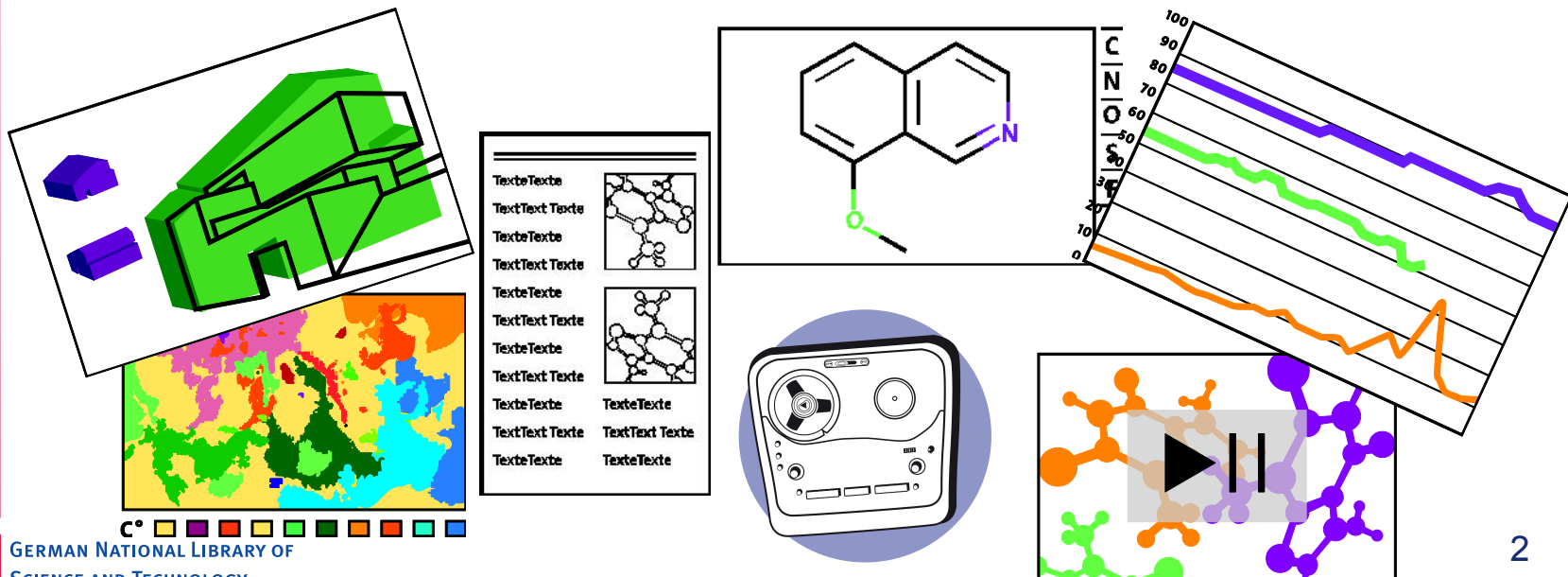# Research Data Management -
Activities at University of Hannover

Dr. Janna Neumann
International Workshop on Research Data Management
November 21, 2014, Ankara

- everything that was created during scientific research and that can be used as a basis for scholarly output.

- a reinterpretable representation of information in a formalized manner suitable for communication, interpretation, or processing
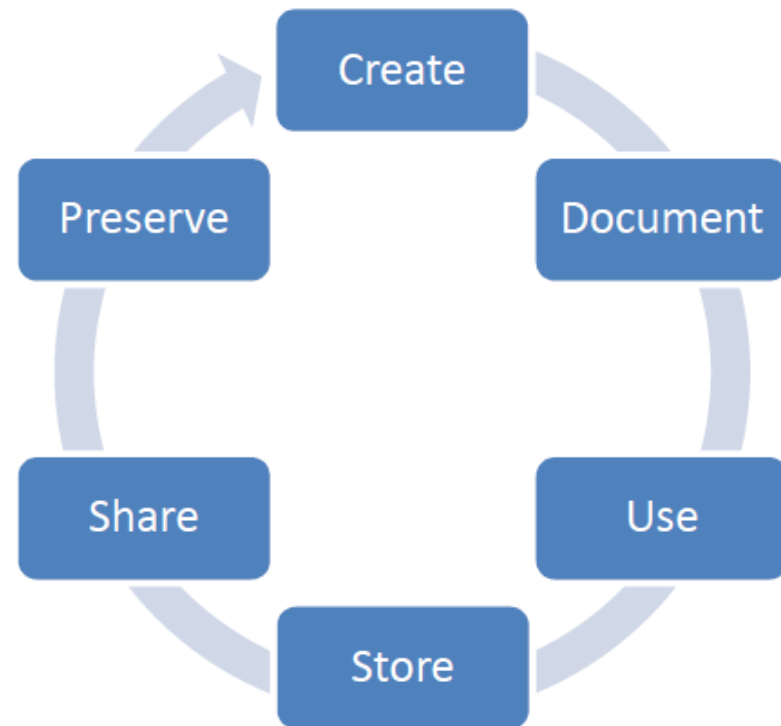
Research Data Management
Definition

- all activities concerning creating, processing, archiving and publication of data
- what we do with research data to ensure 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

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Research Data Management
Lifecycle

- Data Management Planning

- Creating data

- Documenting data

- Accessing / using data

- Storage and backup

- Sharing data

- Preserving data

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Research Data Management
at University of Hannover

- Introduction to
    - Leibniz University of Hannover
    - Library for Leibniz University Hannover

- Research Data Management Support Service
    - Library Activities
    - Project Activities

- 1831 founded as Higher Trade School of Hannover (64 students)
- 1879 becomes the "Royal College of Technology" and moves to the Welfenschloss
- 1968 The "College of Technology" becomes the "Technical University„
- 1978 The "Technical University" is given the name "University of Hannover„
- 1991 Student numbers exceed 30,000 for the first time
- 2005 The departments are grouped into 9 different faculties
- 1st of Juli 2006 the "University of Hannover" is given the name "Gottfried Wilhelm Leibniz Universität Hannover"

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Leibniz University of Hannover
Facts and Figures

- **Courses**
  - 90 subjects
  - in 180 full and part degree courses
  - from 7 subject groups
  - grouped into 9 faculties

- **Students**
  - ~ 23,900
  - ~ 9,800 (41%) women
  - ~ 2,000 (8 %) international students (from > 125 countries)

- **Alumni/Graduate**
  - 3,400 alumni in 2013
    42 % humanities and social sciences
    29 % natural sciences
    29 % engineering sciences

- **Research**
  - 2 Excellence Clusters (in cooperation)
  - 4 Selected Research Areas (2 in cooperation)
  - 3 Transregios (2 in cooperation)
  - 5 Research Training Groups
  - 12 Research Groups (8 in cooperation)

- 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 specialised journals (print)

  - 1,700 Journals from Eastern Europe and

  - 2,800 Journals from Eastern Asia

- 4,100 specialised databases

- 17,040,000 patent documents, norms, standards

- 160 Million metadata-sets in GetInfo

- 18 Million pay per view

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Research Data Management
Beginnings

- 2005: DOI assignment for research data
- 2009: DataCite was founded
- Projects
  - Until 2013: KomFor project (earth sciences)
  - Since 2013: Radar project (generic infrastructure)
- University and Library
  - Established supporting service
    - Guidance DOI assignment for data
    - Guidance for writing project proposal (University)
  - Starting 2015: RDM project
    - Evaluation of needs
    - Support Service for RDM

Research Data Management
Library Support Service

- RDM Project Team
  - Library
  - Research and EU Liaison Office
  - IT Services

- Development of RDM support service covering different aspects of RDM
  - Data management plan (DMP)
  - Metadata
  - Repositories
  - Publication and citation

- 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: re3data.org
- **Feedback**

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- Workshops on regular basis
  - Covering further topics
    - Copyright
    - Licensing
    - …

- Webinars
  - Data management plans
  - Metadata
  - Repositories
  - …

- Workshops for Libraries
  - How to develop RDM service

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
    - Support service conception
    - Infrastructure conception (internal/external)