INTRODUCTION TO

Research Data Management

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Présentation in 3 times

BACKGROUND = EXPERIENCES
RDM BASICS
RDM BASICS
AIMS of RDM

Create, organize, make accessible, store, and share research data of an institution.
Definitions

DATA MANAGEMENT: "Data management is the practice of organizing and maintaining data processes to meet ongoing information lifecycle needs."

RESEARCH DATA: « the recorded factual material commonly accepted in the scientific community as necessary to validate research finding”

- HETEROGENEOUS: size, type, flow, quality, documentation, renewable/unique
- have different STAGES: from raw to published
a guideline for RDM all around the world

FAIR data principle
F.A.I.R

**FINDABLE**: YOU CAN LOCATE IT (doi)

**ACCESSIBLE**: YOU CAN ACCESS IT (repository)

**INTEROPARABLE**: FOLLOW STANDARDS OF METADATA

**REUSABLE**: BY ANY RESEARCHER, WITH PROPER DOCUMENTATION
PROS & CONS

12 REASONS TO JUMP INTO RDM

9 OBSTACLES AND CONCERNS
RDM ADVANTAGES

- Helps planning your research
- Increase use of data management best practices
- Get access to data collected by others
- Share your data with your fellow partner, scientific community, or society.
- ...But keep your sharing in control (legal, ethical)
- Get cited for your data (DOI)
- Visibility
- Transparency (reproducibility)
- Get more from your data (other researcher): better return on investment
- Store and backup safely
- Merge datasets and start new research projects
- Sometimes it's mandatory
RDM OBSTACLES & CONCERNS

- Universities face many challenges with limited resources
- Academic inertia
- Growing but still limited pressure to comply from funders
- Commercial sponsorship restrictions
- Legal and ethical restrictions
- Academic autonomy and liberty not to share
- Administrative load
- Exhaustive documentation/knowledge to make data reusable
- Design RDM service to all - very different - institutes is a challenge
CONTEXT
URGE TO
IMPLEMENT RDM
We live in a digital world where data are central

Trust crisis in science - reproducibility

Meet researchers needs

Open access

Research support to reach excellence in research
Developpement of RDM services

A summary of existing strategies
3 Pilars of a RDM services

CASE STUDY OF COLLABORATION
Data Management Plan
PILAR 1: FORMATION

PUBLIC
CONTENTS
MEDIUM & MATERIALS
FORMATION

Public

TYPE OF DATA
RESEARCH CAREER
SCIENTIFIC INSTITUTES
TRAIN THE TRAINEES
FORMATION
Content

Best practices of data management

plan

MANAGE

Metadata selection and documentation

store & share

save & secure

Organization and naming of file

Research life cycle
FORMATION
Content

Back-up and security
best practices

plan
manage
store & share
SAVE & SECURE

Store your data

Research life cycle
FORMATION

Content

STORE & SHARE

Research life cycle

plan
manage
save & secure

Get citations for your data
Make your data visible
Publish your data
FORMATION

Supports

- FAQ
- Guides
- Webinars
- Workshops
- Personnal meeting
- Lessons

Make it attractive

- PhD credits
- CV
- Discuss their data
- Reward best practices
TRAINING
follow research life cycle

ONLINE RESOURCES
International documentation, tutorials, online courses, MOOCs, FAQ

WORKSHOPS
general or thematic, with internal experts

COURSES
Credits for Master or PhD students
EXPERTISE

SERVICES WORKING TOGETHER

LIBRARY
IT
RESEARCH SUPPORT
INSTITUTES
RESEARCHERS
PILAR 3: INFRASTRUCTURE
TRAINING WORKSHOPS
ONLINE RESOURCES
WORKING GROUPS
MEMBERS
COORDINATION
EVALUATION
STEERING
RDM UCLouvain
INFRASTRUCTURE
WEBSITE
INTERACTIVE TOOLS
INSTITUTIONNAL REPOSITORY
EXPERTISE
CONTACT
CONSULTANCE
ONLINE RESOURCES
WORKSHOPS
COURSES
DOCUMENTATION
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