Open Science and Research Data Management

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Briefly

- Library's tasks in Open Science
- Open Science in Finland
- LUT Open Science Policies
- Open Science and Research Process
- LUT Research Data Services

Library teams dealing with research issues

Researcher services

CRIS, Current Research Information System

Copyrights

Electronic materials

Education

Metrics

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Open Science in Finland

Open Science and Research Initiative (2014-2017) funded by Ministry of Culture and Education:
- Open Science Roadmap
- Recommendations
    - No national mandate
- Practices
- Services
- Developing Projects
- Education and courses

- Main partners:
    - Ministry of Culture and Education
    - Universities
    - Research organizations
    - National Library of Finland
    - IT Center for Science

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Library as a Cooperative Partner in Open Science

Active partner in the university in cooperation with:

- OA group of Vice Rector of Research, steering and decisions
- Academic Schools
- IT Services
- Funding Services
- Research Administration

Active partner in national cooperation

- Open Science and Research Initiative
- Universities' OA network

Takes part in international cooperation

- Member in the international OA working group of Ministry of Culture and Education
- National Pasteur node 2014-2016

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Library's Tasks in Open Science

Tasks in Open Science

- Bringing knowledge and skills to the university
- Developing services
- Information dissemination in the university
- Education of Open Science issues on all levels
- Making guidance
- Guiding:
  - Seminars, posters, visits to academic schools
  - Service email and chat
  - Personal sessions
- Evaluation and metrics

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LUT Trailblazer Strategy and Openness

LUT is committed in Open Science in Research Strategy Implementation Plan

LUT was rewarded in 2016 by Ministry of Education and Culture

for promoting Open Science

LUT Strategy includes big global questions

- Research results must be largely disseminated to have impact in society and in the world

Open Access Policy since 2014

- Most research funding institutions require open access to results of publicly-funded research
- Publish in that journal which is most important for researcher's merits and for the university´s merits
- Parallel online versions of all published articles, other publications and dissertations will be published in LUTPub Repository according to green open access principles
- if the terms and conditions set by the publisher allow
- if the terms and conditions of the research funding allow, the copyright of scientific publications created in connection with the research shall remain with the researcher

- The Academic Library will provide researchers with guidelines and training in open access publication
- The Academic Library will help researchers with any questions they may have

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Research Data Policy since 2016

- Research Data principles in LUT
    - The research data produced at Lappeenranta University of Technology is, as a rule, open and available for shared use.
    - The long-standing, confidential collaboration between Lappeenranta University of Technology and business enterprises should always be taken into consideration

    - Important principles to follow:
        - LUT Code of Conduct and Good Scientific Practice at LUT
            - Ethical issues
        - New: EU Data Protection Regulation
            - Education demand to the university staff

Open science

Science is characterised by openness, subjection to criticism, and development. In its strategy, LUT is committed to the promotion of open science. Open science and the different ways to implement it – open access to research data, publications, research processes and research methods – provide many advantages for the researcher. Publications are demonstrably cited more and receive more attention through open access publishing, the social media, and open access research data. Openness increases the societal impact and possibility for innovations.

Find out more about open science through an online course.

LibGuide, guide to open science.

Services round the research circle

Exploiting research

Preparing research

Making value to results

Carrying out research

Publishing and dissemination

Generating research outputs and results

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Preparing Research

- Data Management Plans are demanded by research funders:
  - Tool for Data Management Plans:
  - [DMPTuuli](), (service developed in Great Britain, national initiative and tailored service in Finland)
    - Accepted by funders, e.g. Academy of Finland, Tekes – the Finnish Funding Agency for Innovation, Horizon 2020

- Research agreements including open science aspects
- Defining rights to research outputs and data
- Publishing plan, aim to open access publishing
  - If Gold Open Access, APC:s must be noticed in the budget

Carrying Out Research

- Using open data, using Big data

- Using open materials

- Are there open methods to be used?

- Defining Data Management Plan

- Working with colleagues during research

  - Services:

    - Eduuni group working environment, MS SharePoint based

    - European service: B2DROP, EUDAT Research Data Services

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Generating Research Outputs and Results

- Describing research results, writing articles etc.
    - RefWorks bibliographic management program
- Is there something to be patented?
- Building metadata
    - National Etsin Research data finder for research data
- Depositing research data and research methods:
    - National IDA Research Data Storage
    - Finnish Social Science Data Archive, FSD
    - B2SHARE
    - ZENODO
    - LUTPub University Repository
    - LUT disk drives
- Creative Commons licencing recommended: CC 4.0 By to data, CC0 for metadata

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Publishing and Dissemination

- Parallel publishing (Green OA) in LUTPub University Repository,

- Publishing in Gold OA journals

- Parallel published publications are harvested to OpenAIRE

- Dissemination in social media, ResearchGate, Academia.edu
  - publisher's permissions needed for publishing full texts

- Publication information to LUT Research Portal (CRIS)
  - Research information hub of LUT, also public interface

- ETSIN Research data finder,
  - Open data, limited access data, rejected access data,
  - Minimum metadata model

- AVAA Open research data publishing platform

- AILA Portal to Finnish Social Science Data Archive materials

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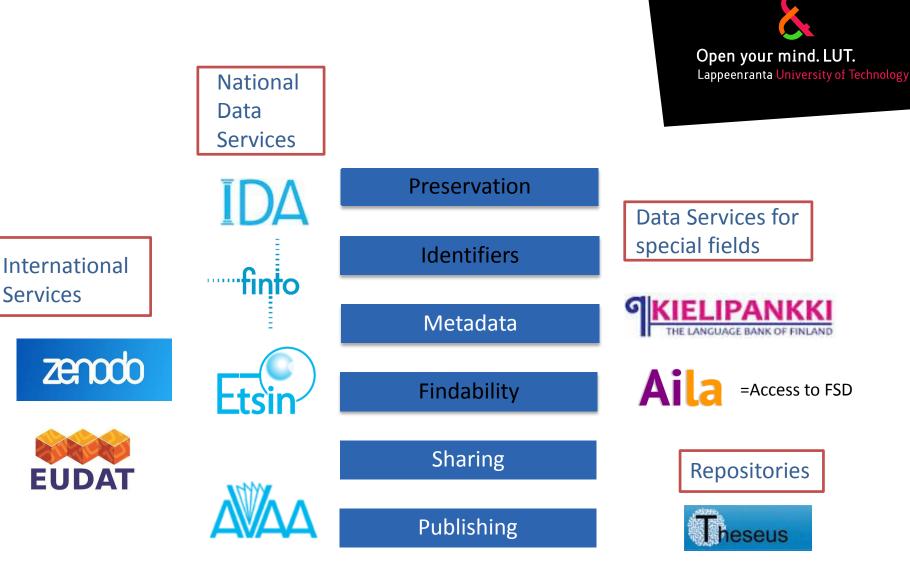
Making Value to Results

- Planning long term preservation: national [Digital Preservation Solution](#) for Research Data (PAS) will be in use 2017

- Altmetrics and bibliometrics in analyzing results

- Ministry of Culture and Education gathers publication information from universities
  - Publication information is yearly published in [Juuli Portal](#)
  - 13 % from funding of universities depends on the amount of high quality publications
  - Openess is also monitored but not yet in the funding model

- No special merits to researchers in LUT for the time being
  - Have to be planned
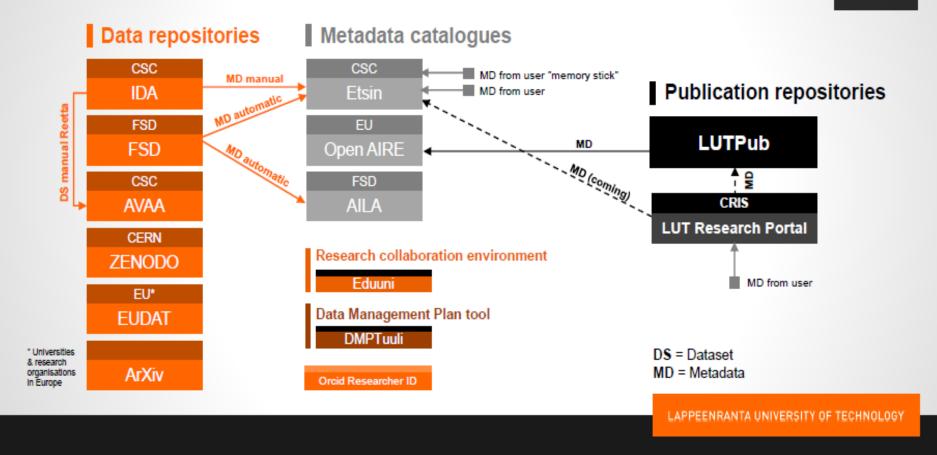
Exploiting Research

- Exploiting open data and results

- Innovations

- Citizen science

- Curating outputs and data, long term preservation in the national long term preservation system

  - Library is a member in the national working group

  - Guidance in long term preservation services

- From open data to Big Data

- New research ideas

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Open your mind. LUT.
Lappeenranta University of Technology

National Data Services

Preservation

Data Services for special fields

International Services

Identifiers

Metadata

KIELIPANKKI
THE LANGUAGE BANK OF FINLAND

zenodo

Findability

Aila =Access to FSD

EUDAT

Sharing

Repositories

Theseus

Publishing

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Doria

Doria incl. LUTPub

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Thank you!

Questions?

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