The importance of Data Driven Communities

Road to the **next** Science



Maastricht University
Institute of Data Science

Carlos Utrilla Guerrero (Data Scientist)
c.utrillaquerrero@maastrichtuniversity.nl

How can we make a better science?



This is perhaps an old, globally and persistent question. The transition towards the *next*Science can happen through Open and FAIR principles

<u>Cathedral thinking</u> - commitment to long-term visions



Leonardo Da Vinci conceptualized the idea of people being able to fly 400 years



The creators of places like the Cathedral of Notre Dame in Paris knew they would never see their work completed in their lifetimes

Taking long-term thinking to a whole new level: seven generations!



PROF. DR. MICHEL DUMONTIER,
DISTINGUISHED UNIVERSITY PROFESSOR DATA SCIENCE **'Open Access creates the rocket** fuel to accelerate scientific discovery and improve health & wellbeing' Open up to open access vsnu

PROF. DR. RIANNE LETSCHERT,

'Open Access empowers fair sharing of scientific evidence and contributes to the advancement of science & society'



Open up to open access



Maastricht University aims to be entirely



Enablers of discovery and innovations

Starting point of the journey: Open Science and FAIR

The draft recommendation marks an essential step in the development of an international consensus around Open Science and the promises it holds for science to become more inclusive, cooperative, and also more innovative, it could help science unleash its full potential and take up the challenges facing our contemporary societies, such as global warming, the fight to end the shrinking of biodiversity and the struggle against pandemics.

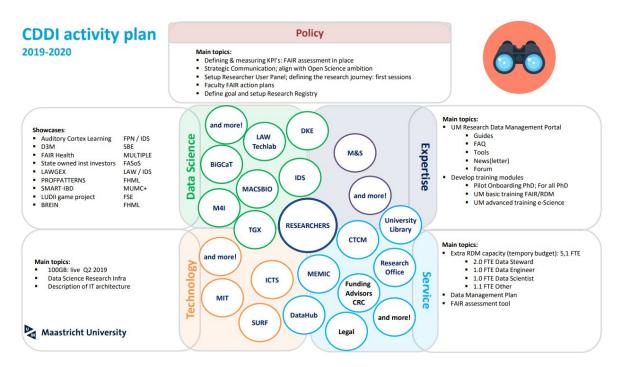
— Audrey Azoulay, UNESCO Director-General

Preliminary report on the first draft of the Recommendation on Open Science



Community For Data Driven Insights (CDDI)

Building the road to the science of the future



Towards FAIR University: from principle to practise Showcases to prove concept across disciplines

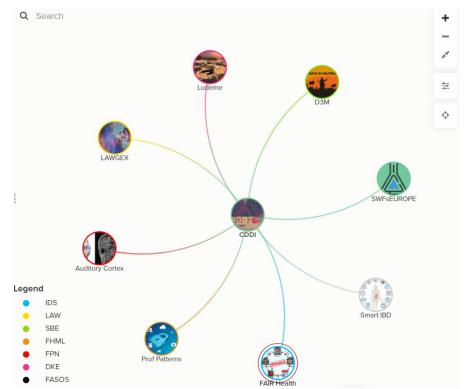
CDDI

ORGANIZATION



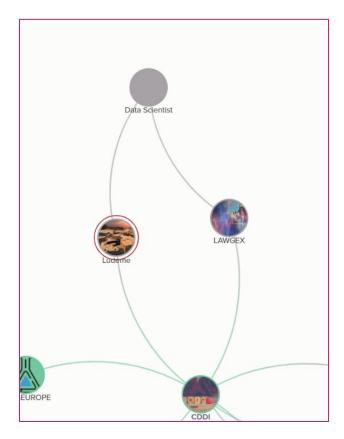
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DOI https://library.maastrichtuniversity.nl/researchsupport/rdm/cddi/

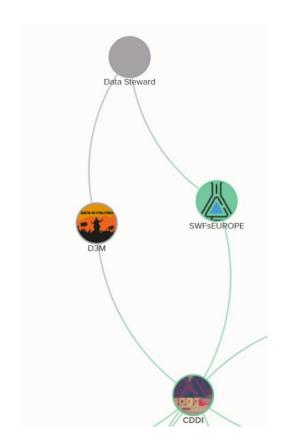




A Data scientist for FAIR



A Data steward for FAIR



Research excellence and the Lawgex Project

LAWGEX

SHOWCASE



Creating a FAIR data infrastructure for storing and analyzing content from Dutch and EU legal documents (e.g. court decisions) is semantically interoperable with open-domain knowledge and existing legal data sources.

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DOI https://doi.org/10.1017/err.2019.51

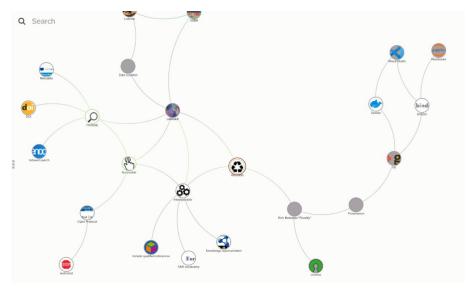
FACULTY LAW

IMAGE METADATA

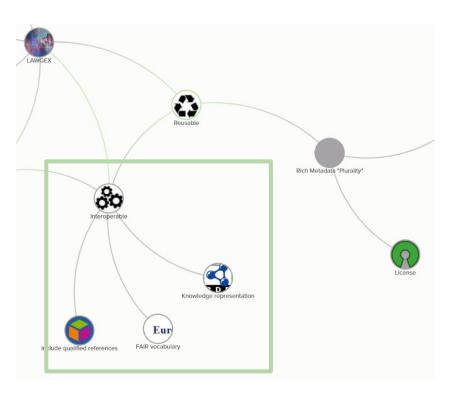
RESEARCHER KOdy Moodley

SUPPORT Data Scientist

How to implement FAIR is particular and unique to the community in which you are doing your research - Kody Moodley



We need to find a suitable FAIR solution



Existing technologies such Semantic Web are widely accepted to adhere with Interoperability principle

It's also about how we share our solution:

#fairsolution are everywhere.

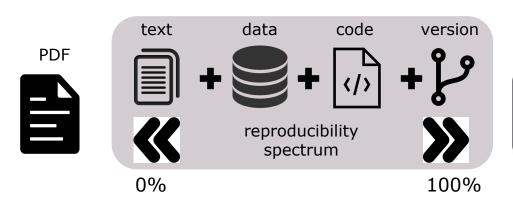
And that's absolutely what we want:

- FAIR Vocabulary using EuroVoc
- Enriched with new terms using RDF standards
- Use Linked Open Data to fulfil FAIR

TO HARMONIZE THE MEANING OF INFORMATION



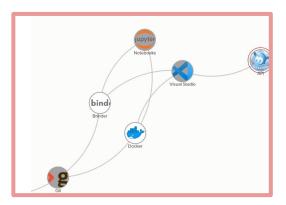
Let's please start using reproducible research tools





FAIR software tools:

This solves the "works on my computer, but not on yours" problem by packaging all the necessary software dependencies and operating system resources required by an application in one independent software "container".



Thank you

You can find me at:

