Open Knowledge Base

01-12-2022

Darco Jansen
Digitalisering bedreigt onze universiteit. Het is tijd om een grens te trekken

Digitalisering en privatisering in het hoger onderwijs gaan hand in hand. De afhankelijkheid van (Amerikaanse) techbedrijven neemt toe. Tijd om een grens te trekken, stellen de rectores magnifici van de Nederlandse universiteiten.
<table>
<thead>
<tr>
<th>Different areas of influence of commercial companies</th>
<th>Scope of this document</th>
<th>Specific examples within each area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research information</td>
<td>Elsevier publishing contract</td>
<td>Other national read and publish deals</td>
</tr>
<tr>
<td></td>
<td>Open Knowledge Base</td>
<td>And others...</td>
</tr>
<tr>
<td>Research data</td>
<td>Cloud contract with Amazon Web Services or Microsoft Azure</td>
<td>Lab Notebooks</td>
</tr>
<tr>
<td>Education</td>
<td>Google Workspace for Education</td>
<td>And others...</td>
</tr>
<tr>
<td>Administrative tools</td>
<td>Blackboard</td>
<td>And others...</td>
</tr>
<tr>
<td></td>
<td>MS Teams</td>
<td>And others...</td>
</tr>
<tr>
<td></td>
<td>Zoom</td>
<td></td>
</tr>
</tbody>
</table>
The case of Research Information and analyses

Knowledge about scholarly output and operation of scientific research is increasingly important.

How data related to publications and other scholarly output is handled and analysed has a crucial impact on judgements about research success of scientists, institutions and countries.
Bottlenecks around metadata, RI and analytics

• We have become dependent on few commercial parties for overviews and analyses; *(data and software entangled) (vendor lock-in)*
• Research information is not under public control and algorithms are often not transparent *(reliable and reproducible for decisions)*
• Information about research is fragmented and sometimes of insufficient *quality and/or coverage*
Dutch Taskforce started early 2020

- **First Track**: developing principles and conditions for RI systems
- **March 2020**: *Guiding Principles 1.0*
  - GP1. Ownership of (meta)data
  - GP2. Enduring access
  - GP3. Trusted and transparent provenance
  - GP4. Interoperability - community owned governance
  - GP5. Open collaboration with the market
  - GP6. Community owned governance
- Included in negotiations with Elsevier (in **contract**: collaboration principles)
Guiding Principles 2.1: [https://zenodo.org/record/6074944](https://zenodo.org/record/6074944)
**Dutch Taskforce** by 2020 / 2021

- **Second Track**: to investigate whether the most critical information about research can come under public control.

- **Feasibility study towards Open Knowledge Base (OKB)**

- **2021**: positive decision towards OKB, next step Businesscase
Open Knowledge Base – business case or?

• Business case study conducted by SURF-UNL in 2022
• Focus on
  • what kind of information included – relation to NARCIS, CRIS
  • stakeholders, / relation to commercial parties (e.g. SCOPUS)
  • functionalities needed, relation to international developments (OpenAIRE, EOSC, OpenALex)
• Results: a concrete proposal that describes the best way and with which parties/people/resources an OKB can be realized (including cost-benefit analysis, financial model, governance model)
## Arguments for an OKB (Dialogic)

### Core values

<table>
<thead>
<tr>
<th>Critical information on scholarship</th>
<th>Information underlying obligatory SEP and KUOZ reports</th>
<th>Current metrics cannot be verified due to closed systems</th>
<th>Risk of data lock-in as large publishers become data-oriented</th>
<th>Rethink infrastructure for assessments for “recognise &amp; reward”</th>
</tr>
</thead>
</table>

### Use cases (selection)

<table>
<thead>
<tr>
<th>National science policy</th>
<th>Institutional policy</th>
<th>Researchers</th>
<th>Library IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Funders lack overview of output from funding</td>
<td>-Benchmarking research between institutes -SEP &amp; KUOZ reports</td>
<td>-Tracking output -Exposure</td>
<td>-Reducing duplicate data across institutions</td>
</tr>
</tbody>
</table>
Many use-cases – many stakeholders - ....

A. management information/reports on research output, the impact of science or reporting on agreed KPIs

B. indicators for the impact of (scientific) research such as publications, datasets but also co-creation, and participation in public discussion;

C. aggregated information that can be used for evaluation and assessments of research applications, of results of research projects, of research groups (e.g. visitations, SEP, Strategy Evaluation Protocol);

D. RI with regard to research projects by researchers to grant providers, to publishers where they publish and to their own employer(s);

E. generating formative and summative evaluations in which research groups and institutions can be compared nationally;

F. communication about research with the general public (companies, citizen scientists, politicians, journalists, etc.); making research output findable and reusable

G. profile pages for researchers, research groups, research teams, to profile their achievements and increase findability
Open Research Information
Agenda
Open Knowledge Base
01-12-2022

Darco Jansen
Open Research Information Agenda (ORIA)

• how public institutions can independently enrich their research information (in CRIS) using open data sources
• how we can further expand the information in local research information systems with new information based on joint agreements and other sources.
• how to use open data sources to generate information as completely and reliably as possible;
• how a central database/datagraph based on open data sources and the local information systems can improve and generate overviews at national/institutional level with improved quality (e.g., cleared of duplication).
Iteratively with different pilots

- PID-Graph (approved by NWO 30-11-2022)
  *the added value of a (central) PID Graph for (open) CRIS data*
- Extended Open Access monitor
  *enriching CRIS systems with reliable data on other scholarly output (e.g., books, proceedings) and with data on licencing, embargo periods for institutional and nation reporting*
- Other pilots supporting use-case A-G;
Thank you