University Research Assessment using ORCID, WoS and VIVO

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In the OPERA project we:

- Explore and review:
  - Metrics
  - Systems
  - Software
  - Code
  - Tools for visualization and analysis
  - Indicators for Research Assessment

Identify:

- Opportunities and barriers to include Open Science and Open data in research analytics

Examine:

- Relevant quantitative indicators for the societal impact of research in the humanities and social sciences

Develop:

- Research analytics systems with Open:

Background – OPEN REsearch Analytics
Part of OPERA: A WP that aims at developing Open metrics and Open systems for a university’s research assessment on university and department level. While the data will be traditional licensed bibliographic and bibliometric data, the concepts, metrics and system software will all be open, documented and freely available for reuse – including the adaptation to other data sets.

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DTU Research Analytics Platform
DTU Researchers and DTU Units
Research assessment at universities is often a combination of quantitative analytical metrics and qualitative judgement by scientific peers.

- To generate and communicate such metrics well is quite a task – very human resource intensive.

For example

- At DTU, we only generate certain in-depth metrics for researchers, their groups and departments, every five years – when a department is up for research assessment by international expert peers of its field.

**Based on data from closed and commercial vendors**

**Based on advanced but very static author/affiliation searches**

**Hierarchical approach – management checks publication lists**

**DISCLAIMER**

From the perspective of a technical university
Responsible Research Assessments – it starts with data!

Be open and transparent by providing data and methods used to calculate all metrics
DORA, San Francisco Declaration on Research Assessment

The range of data sources and indicators available to practitioners are constantly changing (…)
Introducing SCOPE – a process for evaluating responsibility (The Bibliomagician)

Data sources should be clearly understood, accurate, up to date and have sufficient coverage for the purpose intended
Principle for the use of indicators in research assessment and management, St. Andrews University

Allow those evaluated to verify data and analysis
Leiden Manifesto for Research Metrics, Principle 5

How underlying data are collected and processed – and the extent to which they remain open to interrogation – is crucial.
The Metric Tide
Engage the researchers in the research assessment process – giving them the control (somewhat) back

A shift from name/affiliation search to relying on PID’s

Making research assessment more flexible and hereby meeting the different needs of various scopes and stakeholders

A shift from a very human resource intensive task, to a more automated one

Opening up the assessments and making them more researcher-centric. Hence meet the data requirements of responsible metrics

A more sustainable approach to research assessments also allocates resources to meet other perspectives of research assessment and impact
RAP Research Assessment – PID motivation

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Bottom-up approach
→ from affiliations to individuals
Relying on PID’s
→ ORCID-based
Researcher advantages of metrics based on ORCIDs:

- Publication lists reflect the researcher’s self-maintained list in ORCID.org
- Researcher involvement/control - Leiden Manifesto compliance
- Publication lists are not the result of complicated/expert searching, which depends on the skills (or lack thereof) of an individual administrator – and rarely come out the same, if done by different individuals
- Publication list derived metrics become similar/comparable, no matter who does them and no matter where they are done (towards global validity)

System advantages of metrics based on ORCIDs:

- ORCID-searching may be automated without loss of precision
Researcher challenges of metrics based on ORCIDs:

- Researchers will have to actively choose to update their ORCID (and understand how!) – which makes researcher encouragement essential
- ORCID profile and data has to be public in order to be adapted to other systems
- Lack of ‘search control’ and modifications – better possibility of ‘gaming’ or disrupting the data basis?
- Sustainability in PID – will some of the problems we see with author search transpire into PID searches?

System challenges of metrics based on ORCIDs:

- Synchronization between different commercial vendors and ORCID.org – and who is responsible?
- Could create a even more so a distance between the researcher being evaluated and the ‘evaluator’ – could it become efficiency over customization?