ROI-AV
Research Output & Impact – Analyzed and Visualized

From project to local competences

Lars Lund-Thomsen
Maj 2019
- ROI-AV
  - Scope and homepage

- WP2 –
  - Strategy og results

- Local experiences
  - Introducing VOSviewer to librarians and researchers

- The Future
  - Opera and vizualisations
ROI-AV Research Output & Impact – Analyzed and Visualized

- Strategic – deliver information for management
- Practical – able to support complex products
- Competence development for colleges
- Facilitate knowledge exchange

- ROI-AV – SDU libguides
ROI-AV - WP2 Focus

- **Analysis and visualization tools**
  The project is currently active in the part that deals with competency development of the participants, and works in smaller groups with tools like VOSviewer, Science of Science (Sci2) Tool, Tableau, Excel, Gephi, R, NVivo, OpenRefine and Google Data Studio.

- **We developed that !!**
ROI-AV - WP2 Strategy

- Developing our competencies is best done by teaching
  - Introductions & workshops by group members
- Outside speakers (and Advisory board)
- Every half year we held a Brainstorm and planned ahead
  - Products, software, tools
- Very positive experience
VOSviewer

- Previous experience from AIDA workshop in Leiden

- Developed to a flexible tool where you can analyze thousands of articles and find and show relations between authors, journals, subjects or words

- Wanted to catch up on our bibliometric expertise
VOSviewer – masterclass fall 2018

• 2 days workshop – lots of hands on !!
• Learned a LOT about …
  • Underlying algorithm
  • Change of layout
  • Editing thesaurus file

• Learned about VOSviewer corpus and scoresfiles
VOSviewer – arguments for visualizations

• Visualizations can be used to make complex information more accessible

• Visualizations need to be used in combination with expert knowledge:
  – Confirm expert knowledge
  – Challenge expert knowledge
  – Draw expert’s attention to interesting information

• Be aware of information loss and methodological sensitivity

• Visualizations can also be used pragmatically to attract attention and to ‘sell a message’
Own experiences: Innovation

- Review on innovation
- Focus on 15 journals
- 5000+ articles
- All in WOS

- Started themself in VOSviewer
Co-occurrence word – overlay year
Analysis VOSviewer files
Own experiences: China search

- State Capitalism+ & strategy
- Scopus 1531 articles 2008-
- Vosviewer ended with 26015 terms
- Map: More than 10 times, 715 terms, 60% most relevant 429
Own experiences: small map problem

- Small maps often look strange
- AU, BSS researchers
- Co-authorship on authors
Co-authorship on authors
Attraction = 2, Repulsion = 1
Co-authorship on authors
Attraction = 2, Repulsion = -1
Own experiences: VOSviewer teaching

- 2 hour program (only basics)
- Introduction
- 3 cases with **hands on** (different data)

- Positive feedback (they are critical – loose control)
- Will follow up with an advanced course

maj 2019
What’s next??

—Work a lot with visualizations
—Develop our competences (long term)
  –Text mining, API, Python, AI, ML (time consuming)
—OPERA
OPERA - Open Research Analytics

- Open Science, Open Science metrics, Humanities and Social Science

- [https://deffopera.dk/](https://deffopera.dk/)

- WP3: Network analysis and visualization

- Fantastic workshop with Dimensions and Python
OPERA - partners

- Cornel University
- CWTS – Centre for Science and Technology Studies, Leiden
- Technical University of Delft
- TIB – Technische Informationsbibliothek, Hanover
What’s important ??

— Contact to researchers

— INCONECSS
Final comment

Mikael Laakso

If you ask the right question – you get the right answer

Visualizations might not give you answers – but it helps you ask the right questions
Questions

Comments