Beyond economic value
Considering non-monetary aspects of data sharing
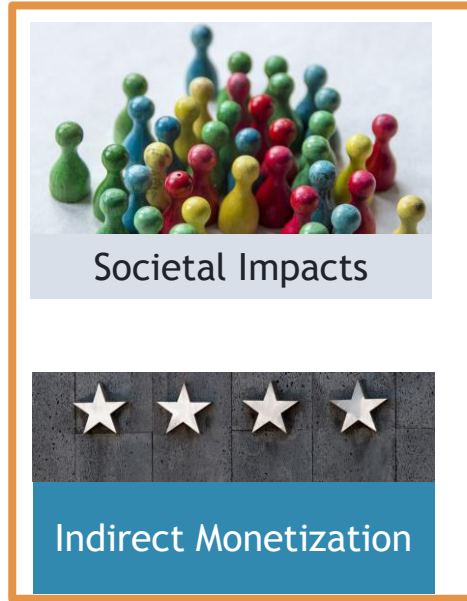
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Why do we look at this?

DATAMITE Infrastructure

DATAMITE Business Models

Societal Impacts

Indirect Monetization

Direct Monetization

Non-monetary benefits

Responsible Innovation Reflection

How did we do this?

Literature research
first insights on facilitators and barriers

Interviews
qualitative information on processes, chances & barriers

Visions
Where to go? Needs for change and likeliness

Foresight
on future of data exchange

Systematic Literature Review

Overview

Are specific impacts of data sharing (benefits/risks) related to specific dimensions or sectors?

- Databases: SCOPUS & Google scholar
- Title & abstract: 253 articles → 40 selected
- Additional literature

- Column analysis
- Qualitative analysis
- Both currently being finalized

Preliminary results

- Mostly written by research for research or practictioners (e.g. public administration)

- Fragmented body of literature

- Non-monetary benefits often used to embed studies rather than being core to the literature

Spotlights: sectors and dimensions

Sectors

- DataMite sectors not strongly represented except public services (OGD)
- Indication of hopes for potentially easy access (public or publicly paid)
- Most prominent: Medicine/ health, Government/ public services, Science/ research
- Business sector 'in the background'
- Some papers focus on specific data & institution (OGD)

Dimensions

- Societal
- Ecological
- Security
- Scientific
- Macro-economic
- Costumer- & business related
- Policy
- Ethics (hardly)
- Cultural
- *Legal/Regulatory*
- Organizational
- *Technical*
- *Economic*

Spotlights: benefits and risks

Risk and Challenges						
Privacy	Bias and discrimi-nation	Mistrust	Shift in economic structur	individual effort to provide data	other	generally mentioned
30	19	12	5	10	23	9

Benefits																		
access and accessibility	accountability	transparency	improved management/ better inform policy	(business) innovation (technical, processes etc)	scientific advantages , new findings	maximising investment s/ efficiency	cost-saving	costly	allocating resources	reuse/ replicability / verification	strategic use of data (sharing)	public interest/ greater good	enhancing trust (in scientific or policy processes)	quality of data, support of AI and models etc.	(of citizens and stakeholders)/ empowerment/ democratizatio n	collaboration (btw. research)	other
17	20	30	15	21	18	18	10	11	5	21	20	18	17	6	27	21	1

Qualitative aspects

- **Assumptions**
  - Data is not neutral
  - Data privacy as political decision

- **Starting from the social rather than the technical**
  - Data sharing may fall short of expectations

- **Responsible data sharing**
  - Principles of responsible data sharing
  - Fairness in distribution of benefits and risks
  - Importance of trust
  - Willingness to share depends on recipients

Summary and outlook

- Work in progress → visioning workshops to come

- Literature manifold and fragmented, but usually written by research for research

- Data sharing specific for contexts and sectors, e.g., medicine/health, research, open government strategies
  - Risks and challenges well known (e.g., privacy)
  - Benefits in relation to issues of democracy and issues of knowledge generation

- Social context of datasharing is crucial → data sharing is more than a technical and organizational issue