



DATA GOVERNANCE

Reconciling Risks and Benefits of
Data Openness vs Data Control

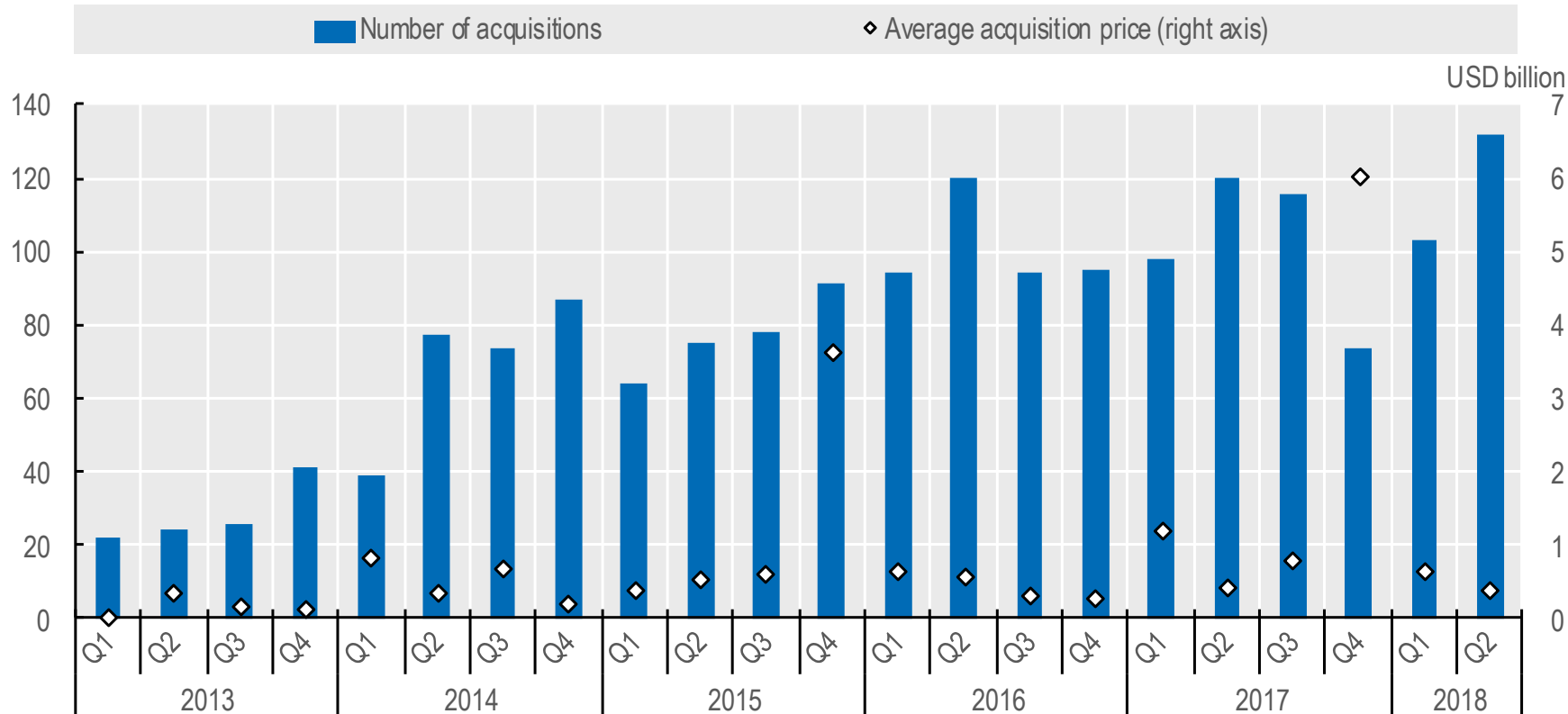
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Growing acquisition of big data and analytics firms to secure control over strategic data-related assets

Number of acquisitions (left scale), and average acquisition price in USD billion (right scale), Q1 2013 - Q2 2018



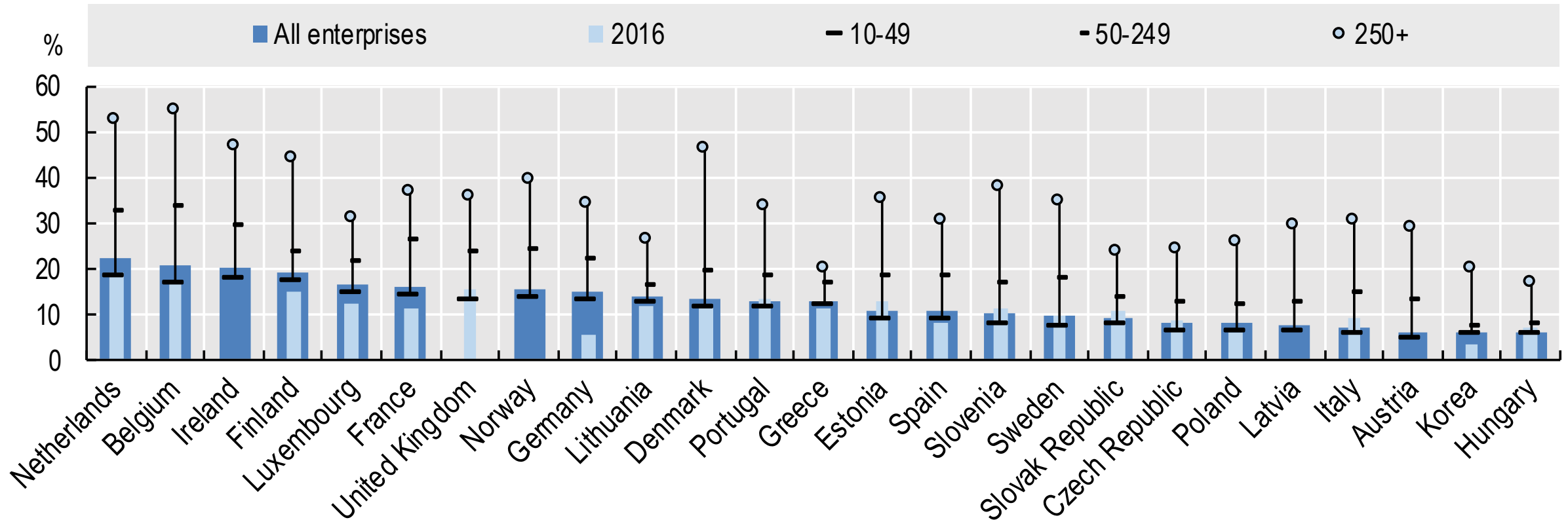
Some of the largest data motivated M&A:

- 2013: Monsanto's acquisition of the Climate Corporation for USD 1.1 billion
- 2015: IBM's acquisition of the Weather Company for over USD 2 billion
- 2018: IHS Markit's acquisition of Ipreo for USD 1.9 billion
- Figure excludes FB's USD 19 billion acquisitions of WhatsApp



Large firms are more likely to adopt big data

Use of big data analytics by firm size as a percentage of enterprises, 2018

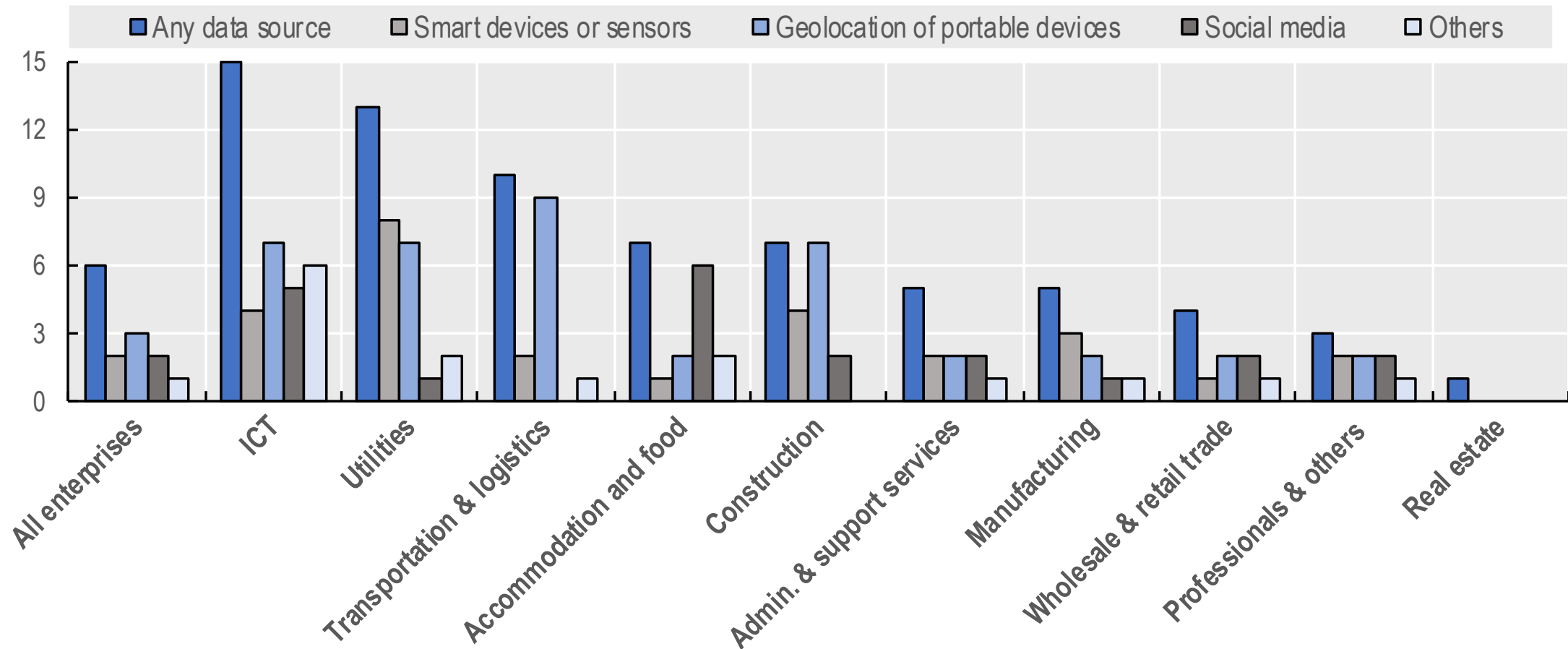


Source: OECD (2020), *OECD Digital Economy Outlook 2020*, OECD Publishing, Paris, <https://doi.org/10.1787/bb167041-en>.



Certain types of data are more likely to be used in certain industries

Use of big data analytics by sector as a percentage of EU 28 enterprises, 2018





Data is not oil, but an infrastructural resource with large spill-overs



Public Administration

Communication

Energy

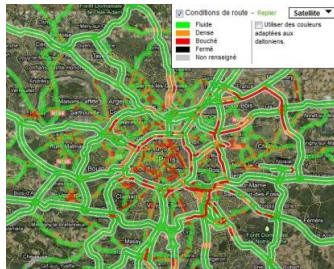
Data



Agriculture



Finance and Insurance



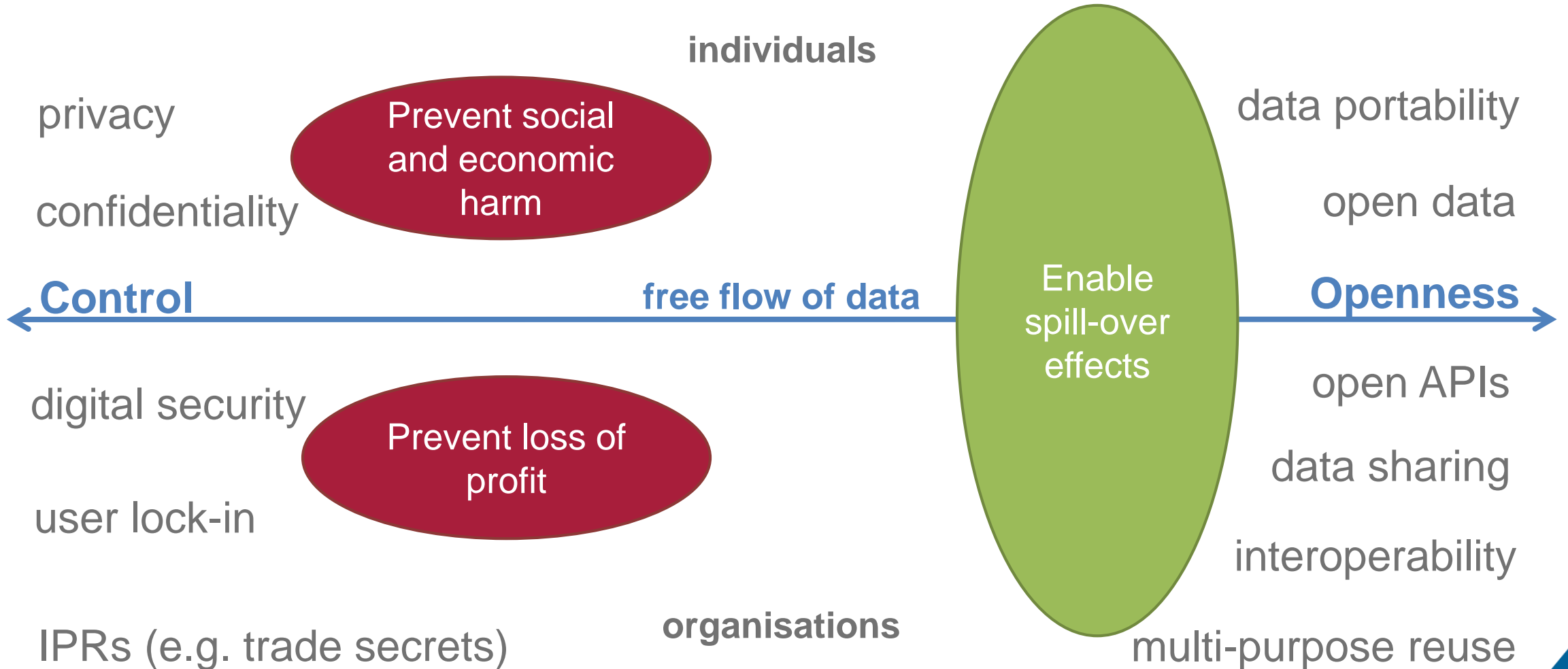
Transportation

Data is:

1. non-rivalrous (but excludable)
 - Data enables multi-sided markets
 - **Data openness** (e.g. data re-use and non-discriminatory access) can maximize value
2. capital with increasing returns
 - Data can be re-used as input for further production
 - **Data linkage** is a key source for super-additive insights
3. general purpose input
 - Data are an input for multiple purposes
 - Its value depends on context and the use of complementary assets (e.g. skills, algorithms, cloud)

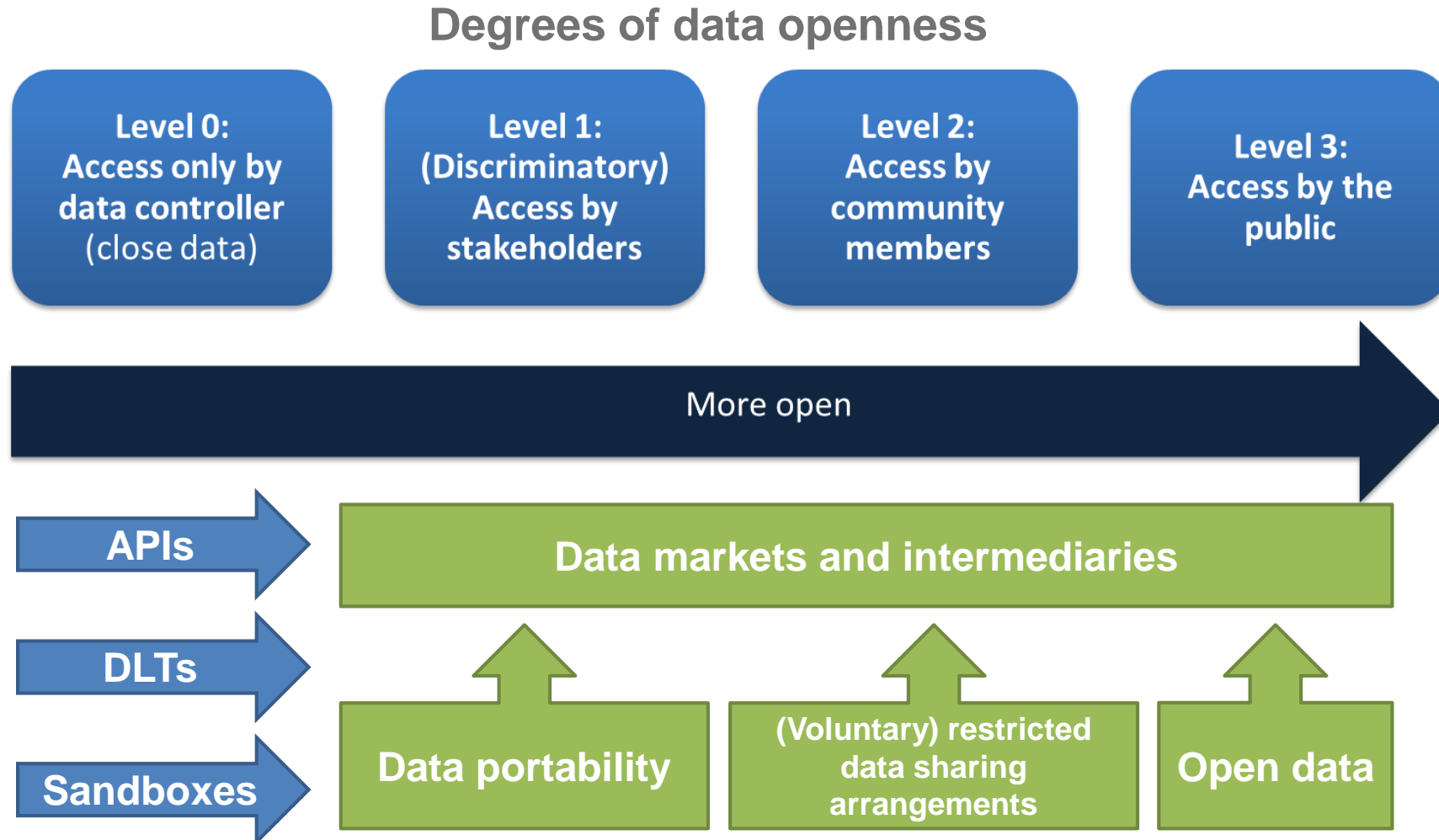


Key dilemma 1: Striking the right balance between “openness” and “closeness” ...



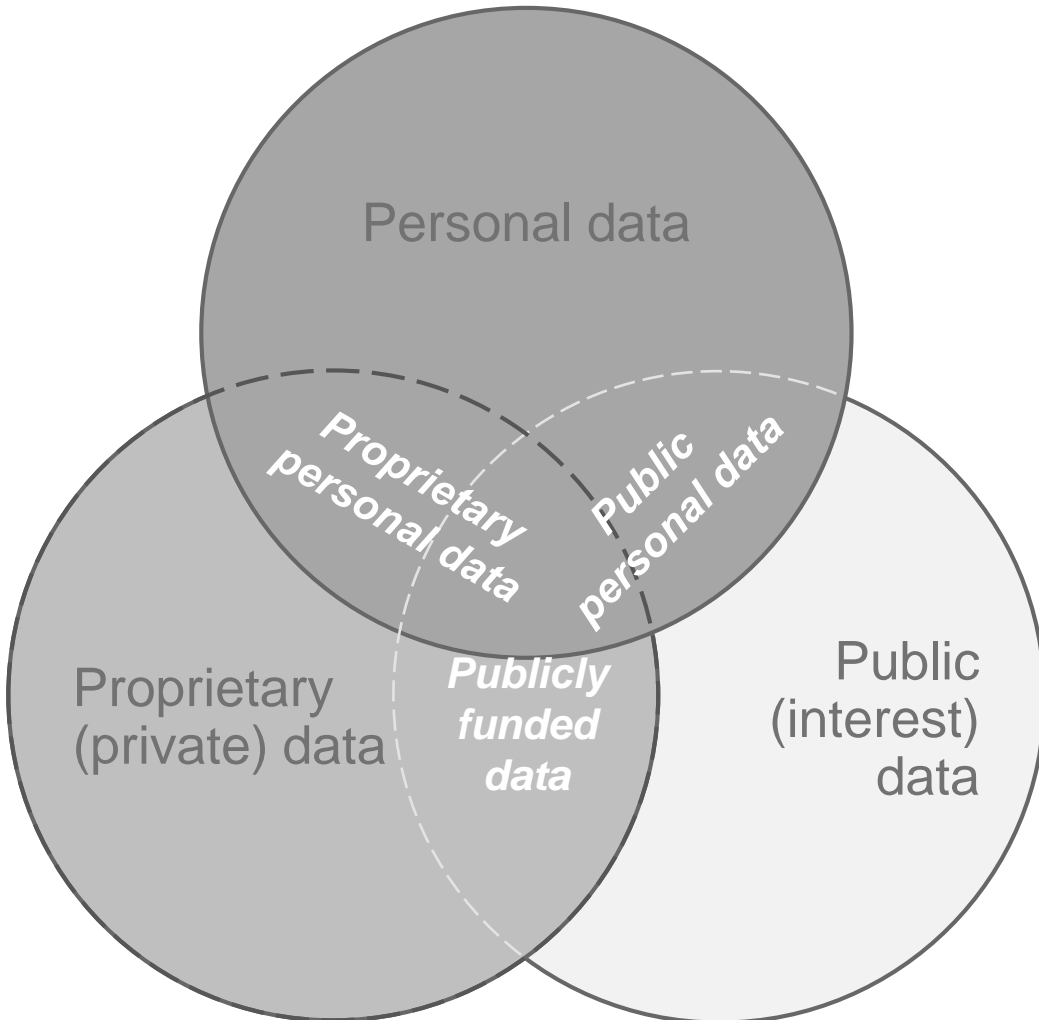


Data openness is not a binary concept but covers a continuum of degrees of openness





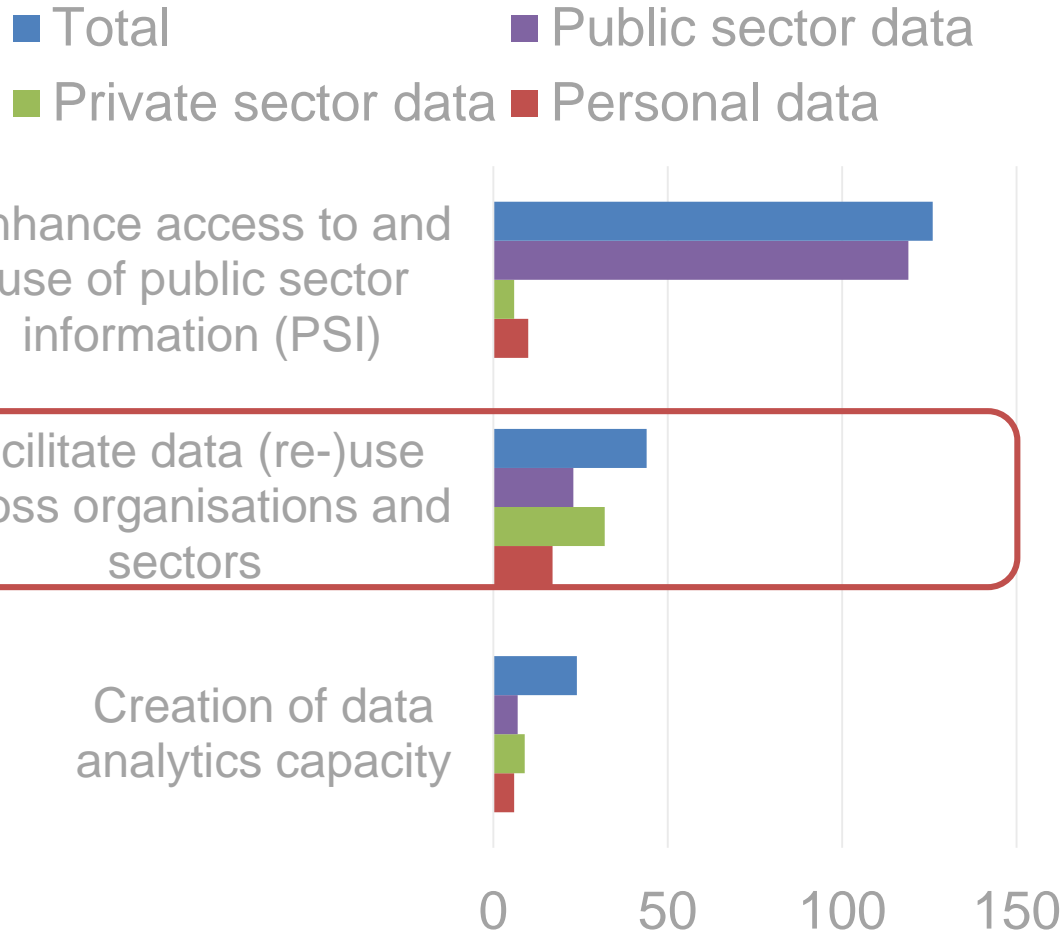
Key dilemma 2: the overlapping spheres of data – reflecting stakeholders' (conflicting) interests



- **Personal sphere** covers all data “relating to an identified or identifiable individual” (personal data) for which data subjects have an interest for privacy;
- **Proprietary sphere** covers all *proprietary data* that are typically protected by IPR (e.g. copyright and trade secrets) or by other access and control rights (e.g. contract law);
- **Public sphere** covers all data that are not protected by IPRs or any other rights with similar effects, and thus are free to access and re-use, but also data of public interest.



Only few countries have initiatives to encourage data access and sharing within the private sector



Facilitating data sharing in the private sector:

- **Contract guidelines and principles**
 - Japan’s Contract Guidance on Utilization of AI and Data
- **Data (sharing) partnerships including PPP**
 - Germany’s Industrial Data Space (IDS)
- **Data portability**
 - Australia’s Consumer Data Right (CDR)
- **Data of public interest**
 - France’s Law for a digital Republic defines “data of general interest”
 - Finland’s Act on Transport Services obliging service providers to open certain essential data to all

Based on the responses including in total 202 government policy initiatives on data access and sharing of 37 countries. OECD (2019), *Enhancing Access to and Sharing of Data: Reconciling Risks and Benefits for Data Re-use across Societies*, OECD Publishing, Paris, <https://doi.org/10.1787/276aaca8-en>.

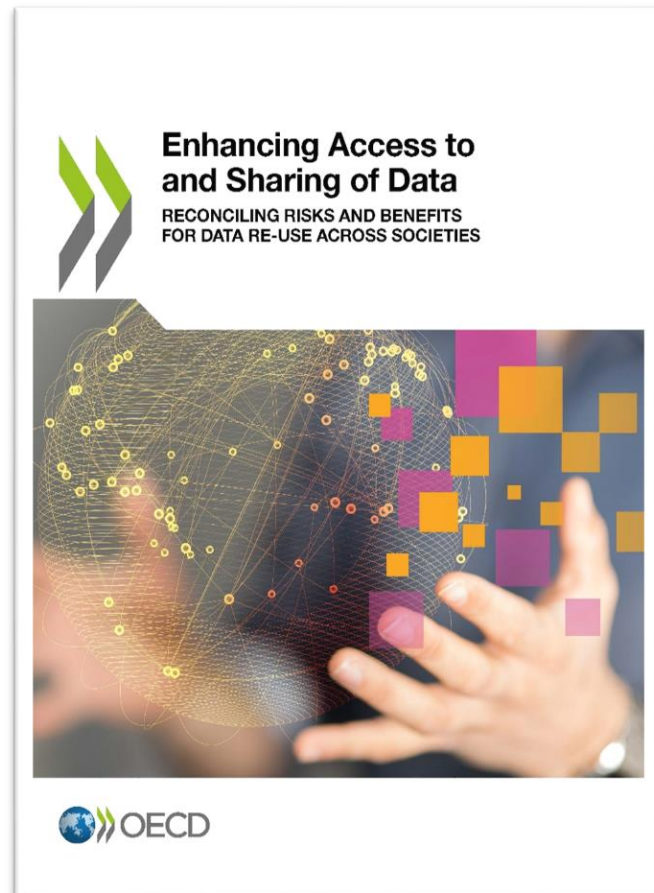
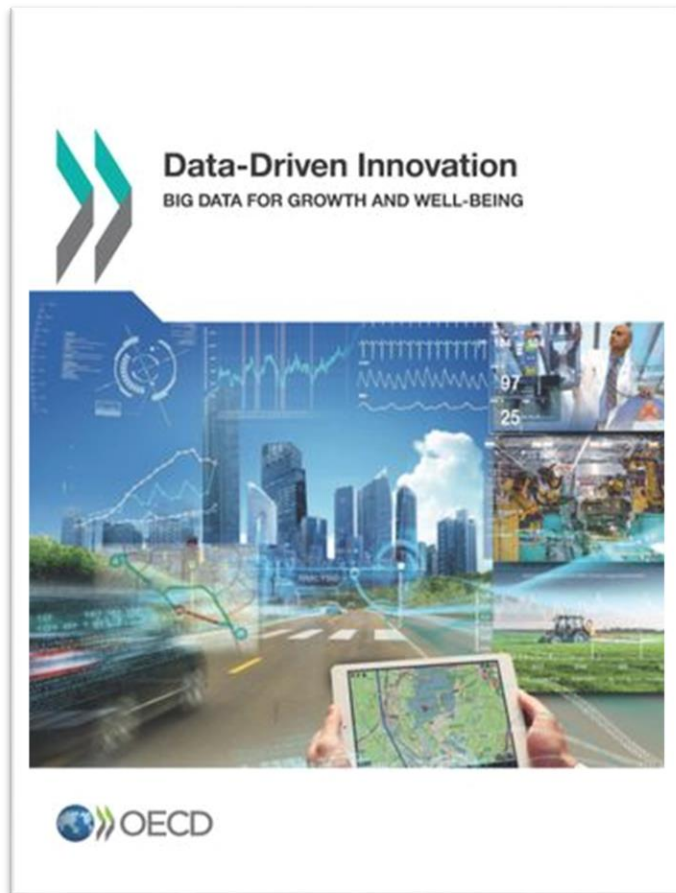


Towards General Principles for Data Sharing

- Aim: enable **coherent data governance frameworks** that facilitate data re-use across organisations, sectors and countries, while addressing major challenges
- Three major policy challenges need to be addressed:
 1. Reinforcing **trust** across the data ecosystem:
 - a. Fostering stakeholder engagement and community-building
 - b. Focusing on societal and policy objectives that matters
 - c. Balancing the benefits of data “openness” with the risks
 2. Stimulating **investments** in data access and sharing
 - a. Encouraging the adoption of sustainable business models
 - b. Providing coherent incentives mechanisms at the level of individuals
 3. Fostering **effective re-use** of trustworthy data across society
 - a. Fostering interoperability across organisations, sectors and countries
 - b. Developing the capabilities for the effective data sharing and re-use



OECD (DSTI/DEP) work on Data and its Governance



Find out more about our work at www.oecd.org/internet/ieconomy/enhanced-data-access.htm

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