Bentham House Conference 2023 | UCL Faculty of Laws | London, 27th April 2023

Data Access Remedies: Regulatory Approaches, Economic Trade-Offs and Information Technology Design

Daniel Schnurr
Chair of Machine Learning and Uncertainty Quantification, University of Regensburg

Data-driven market power: Business value creation and facilitating factors

Sustained competitive advantage (Barney, 1991):

"*inimitable resources and capabilities*" (Wamba et al., 2017, p. 357)

Facilitating factors for a competitive advantage from big (user) data:

Exclusive data access	Economies of scale	Data-induced switching costs
Exploitative data access	Digital ecosystems & economies of scope	Network effects & platforms

Based on a sustained competitive advantage firms can establish **data-driven market power**

Fast, Schnurr & Wohlfarth (2023)

Why and when should we regulate data-driven market power?

Data-driven theory of harm (Krämer & Schnurr, 2022)

Harms to Competition

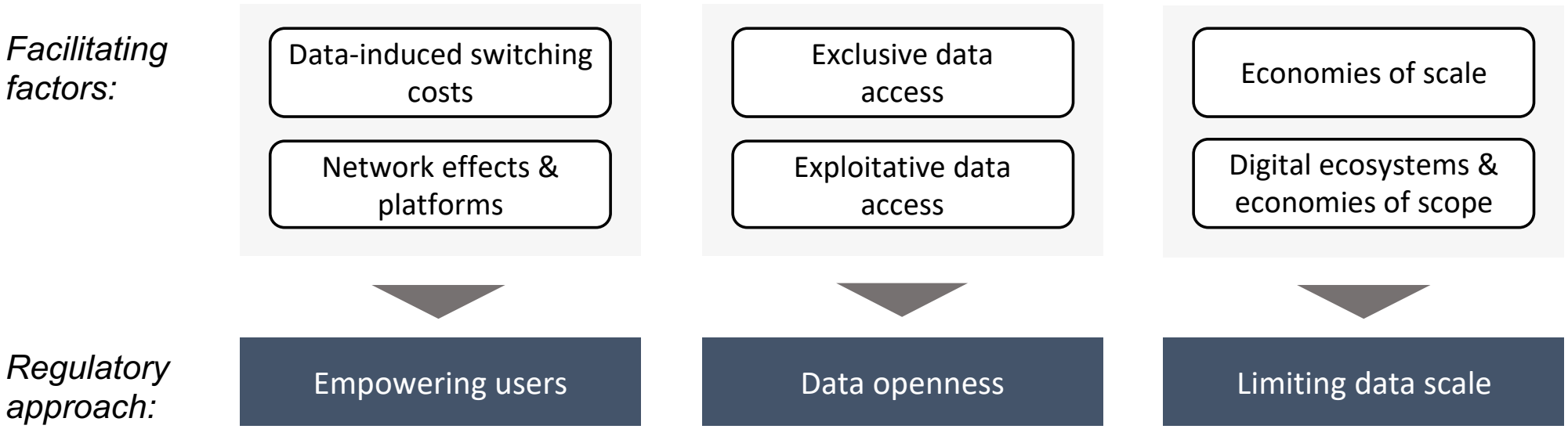
- **Lack of contestability in established markets**
  - (Data-driven) network effects shield markets from entry
  - Risk of envelopment for smaller rivals
- **Lack of contestability in new, emerging markets**
  - Risk of the domino-effect
  - Risk of envelopment and unlevel playing field
- **Reduction of downstream competition**
  - Data-rich incumbents often vertically integrated
  - Self-preferencing possible
  - Margin squeeze possible (increasing the cost of the input)
- **Data agglomeration from 'ancillary' data services**
  - Payment services
  - Identification services

Harms to Innovation

- **Lower innovation in 'tipped' markets**
  - Less competitive pressure
  - "Kill-zones" around data-rich incumbents
- **Lower innovation in 'related' markets**
- **Further monopolization towards integrated ecosystems**
- **But also, efficiencies from integration and economies of scope and scale in data**

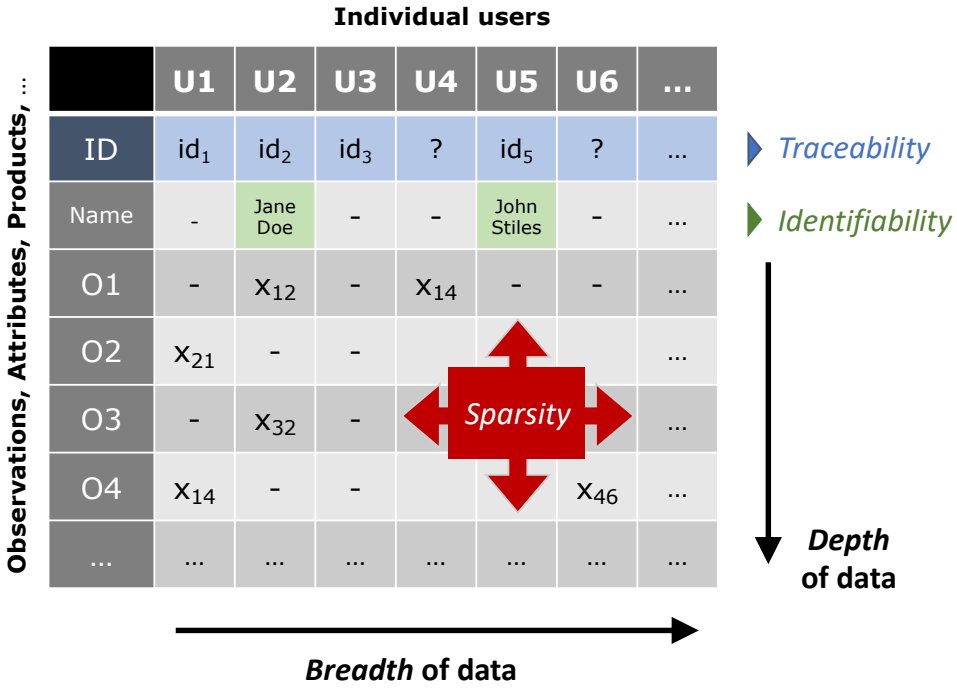
▶ Regulatory focus on niche entry and growth

A conceptual classification of data access remedies



Fast, Schnurr & Wohlfarth (2023)

IT design affects key economic trade-offs: Bulk data sharing



Main Trade-offs

- **Promoting competition vs. protecting legitimate business incentives**
  - Data as a by-product vs. data as a main product
  - Existence of viable commercial offers
- **Users' privacy vs. usefulness of data set for algorithmic learning**
  - Anonymization / Privacy-enhancing technologies
  - Data trusts and data sandboxing
  - Unlawfulness of de-anonymization

Proposed Principles

- Only **raw user data** may have to be shared
- Only data that was created as a **by-product** of users' usage
- **Secure and sufficiently anonymized**
- **Real-time and continuous** sharing through APIs

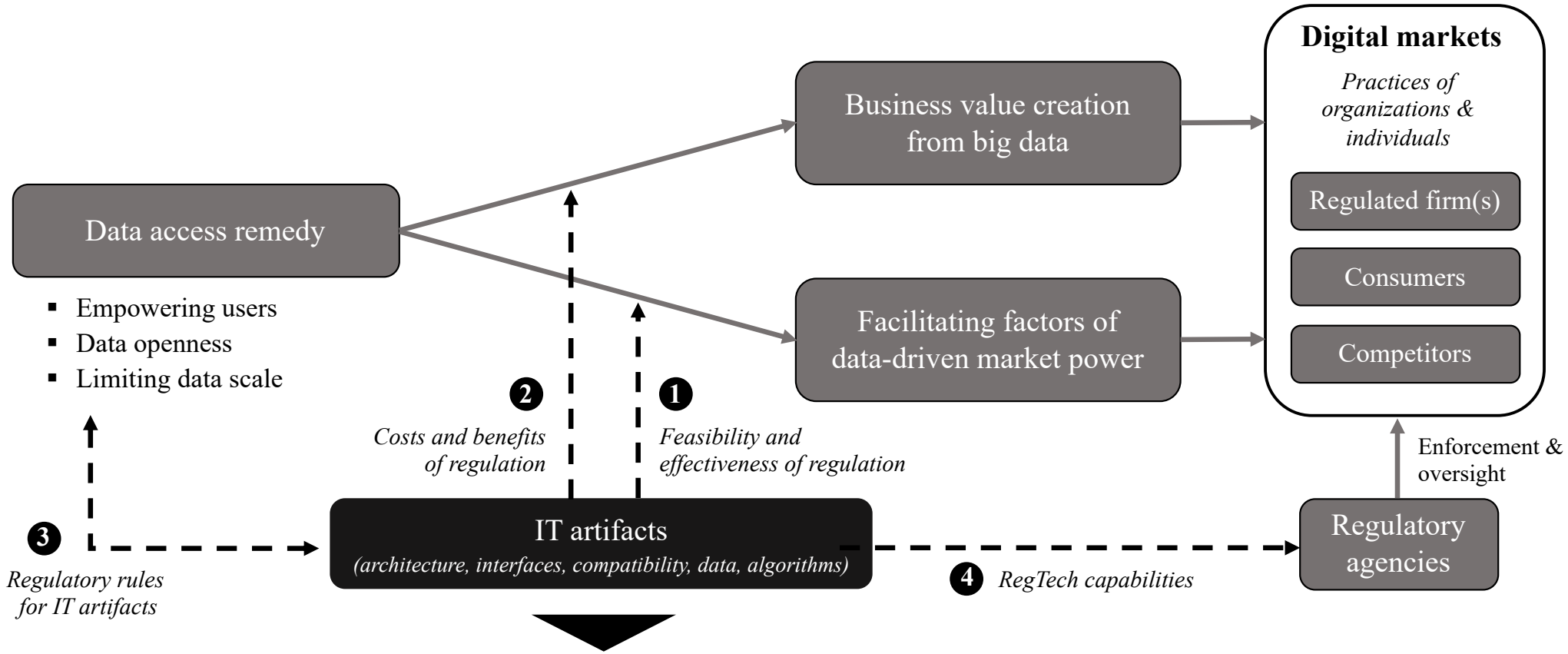
Krämer, Schnurr & Broughton Micova (2020)

Data access remedies and regulatory approaches in practice

Digital Markets Act

- Asymmetric regulation: based on a broad notion of **power** and **gatekeepers**
  - Recognizes “data-driven advantages” as a key characteristic and source of market power (Recitals 2 and 3)
- Combines different regulatory approaches to achieve “**contestability**” and “**fairness**”
- **Data access remedies** for “core platform services” of gatekeepers
  - **Limiting data scale:**
    - Data siloing by default: no combination of personal data between core platform services without an end user’s consent (Art. 5(2))
    - Siloing of any non-public data generated by business users when competing with these users (Art. 6(2))
  - **Data openness:**
    - Bulk data sharing for online search engine providers subject to anonymization (Art. 6(11))
  - **Empowering users:**
    - Continuous and real-time data access and data portability for end users (Art. 6(9)) and business users (Art. 6(10)), but possibly provided as anonymized and/or aggregated data (Art. 13 (5))
    - Broad scope: must also be ensured by emerging gatekeepers (Art. 17 (4))

IT Design and its impact on the effects of data access remedies



? **Institutions? Governance?** See, e.g., delegations in the proposed Data Act (Schnurr, 2022)

Fast, Schnurr & Wohlfarth (2023)

Included studies

- Fast, V.; Schnurr, D.; Wohlfarth, M. (2023). Regulation of Data-driven Market Power in the Digital Economy: Business Value Creation and Competitive Advantages from Big Data. *Journal of Information Technology*. Online first. Available at https://doi.org/10.1177/02683962221114394
- Krämer, J.; Schnurr, D. (2022). Big Data and Digital Markets Contestability: Theory of Harm and Data Access Remedies. *Journal of Competition Law & Economics, 18(2), 255–322*. Preprint available at https://ssrn.com/abstract=3789510
- Krämer, J.; Schnurr, D., Broughton Micova (2020).The Role of Data for Digital Markets Contestability: Case Studies and Data Access Remedies. CERRE Report. Available at https://cerre.eu/publications/data-digital-markets-contestability-case-studies-and-data-access-remedies/
- Schnurr (2022). Switching and Interoperability between Data Processing Services in the Proposed Data Act. CERRE Report. Available at https://cerre.eu/wp-content/uploads/2022/12/Data_Act_Cloud_Switching.pdf
- Schnurr (2023). Global Data Economics. Principles, Strategies and Policies. In (Hennemann, M.), *Global Data Strategies - A Handbook*, C.H.BECK.

Thank you for your attention!

Daniel Schnurr

University of Regensburg
Faculty of Informatics and Data Science
Chair of Machine Learning and Uncertainty Quantification &
CERRE Research Fellow

Email: daniel.schnurr@ur.de
Web: www.go.ur.de/mluq