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Economics and Market Design for Data
Computing and Data
Congestion Is Going from Bad to Worse
Physical and Engineered Systems

Institutions
Paradigm Shift

Physical and Engineered Systems

Society

Institutions
Papers Published on AI (Scopus.com)

0 5000 10000 15000 20000 25000 30000

AI Funding in the U.S.
Revenues from AI Market in North America

Revenues in million U.S. dollars

2016 2017* 2018* 2019* 2020* 2021* 2022* 2023* 2024* 2025*
Job Openings (Monster.com)

- AI
- NLP
- ML techniques
- Deep learning
- Computer vision
- Speech recognition
- Robotics
Data as a Commodity
“Personal data is the new oil of the internet and the new currency of the digital world.”

Meglena Kuneva, Head of the EU Delegation to the Council of Europe
Why design a digital marketplace now?
Today customers are not part of the market.
Two-Sided Markets
What makes data different as an asset class?

- Replication is at zero marginal cost
- Value is inherently combinatorial
- Prediction tasks and accuracy can vary widely
- Authenticity and value are difficult to verify
- Value depends on what others can access