DATA SPACES SUPPORT CENTRE

Data spaces and AI in the European Data Union

Boris Otto · 4 March 2025

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European Data Strategy

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The **European Strategy for data** (2020) aims to make the EU a leader in data-driven society

The **Data Governance Act** (2020) facilitates data sharing across sectors and Member States

The **Data Act** (2022) clarifies who can create value from data

Regulatory Framework

Ten **European common data spaces**, ranging from industry to mobility, from European Green Deal to energy and health

Interoperability for Innovation

Source: adapted from (Cyber Risk GmbH, 2023).

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Business Rationale for Data Spaces

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- Why data spaces are built
  - Collaborative innovation from data (e.g. mobility, healthcare)
  - Sharing a burden (e.g. automotive, consumer goods)
  - Joining forces in the market (e.g. industrial manufacturing, logistics)
  - Creating data markets (e.g. open data, context and commodity data)
  - Serving a greater common good (e.g. green deal data space)
- What the ecosystem logic behind data spaces is
  - No player alone has all the data needed to respond to business rationale
  - Distributed design of data spaces matches ecosystem nature
- What makes data spaces successful
  - Adoption by users for solving a real-world problem
  - Ease of use and low entry barriers
  - Scaling and network effects

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DSSC and the EU Data Strategy

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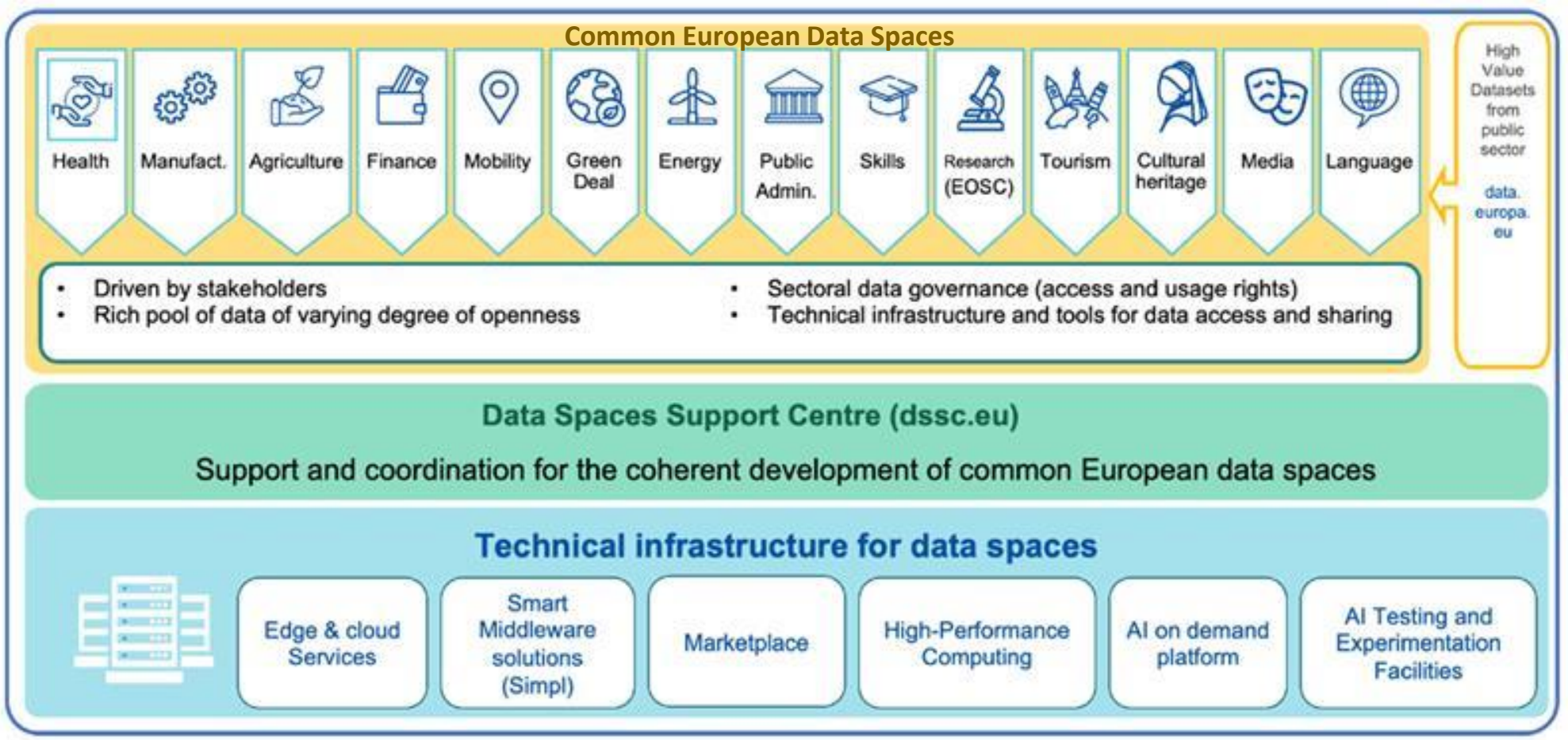

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Europe‘s Competitiveness Challenge

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- The Draghi Report proposes a sector-specific AI strategy: "EU Vertical AI Priorities Plan":
- Shared AI model development across sectors: Strategic AI integration in 10 key industries (automotive, energy, healthcare, etc.)
- Cross-industry data pooling to overcome Europe's lack of large datasets (“for free”).
- Balance in supporting European cloud industry with securing key technologies amid US dominance.
- Key challenges: Companies hesitate to share data (competition concerns, lack of incentives, regulatory uncertainty

“The EU should promote cross-industry coordination and data sharing to accelerate the integration of AI into European industry.“[1]

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1) European Commission: The Draghi report on EU competitiveness (2024). - https://commission.europa.eu/topics/eu-competitiveness/draghi-report_en

Integrated Data and AI Value Chain

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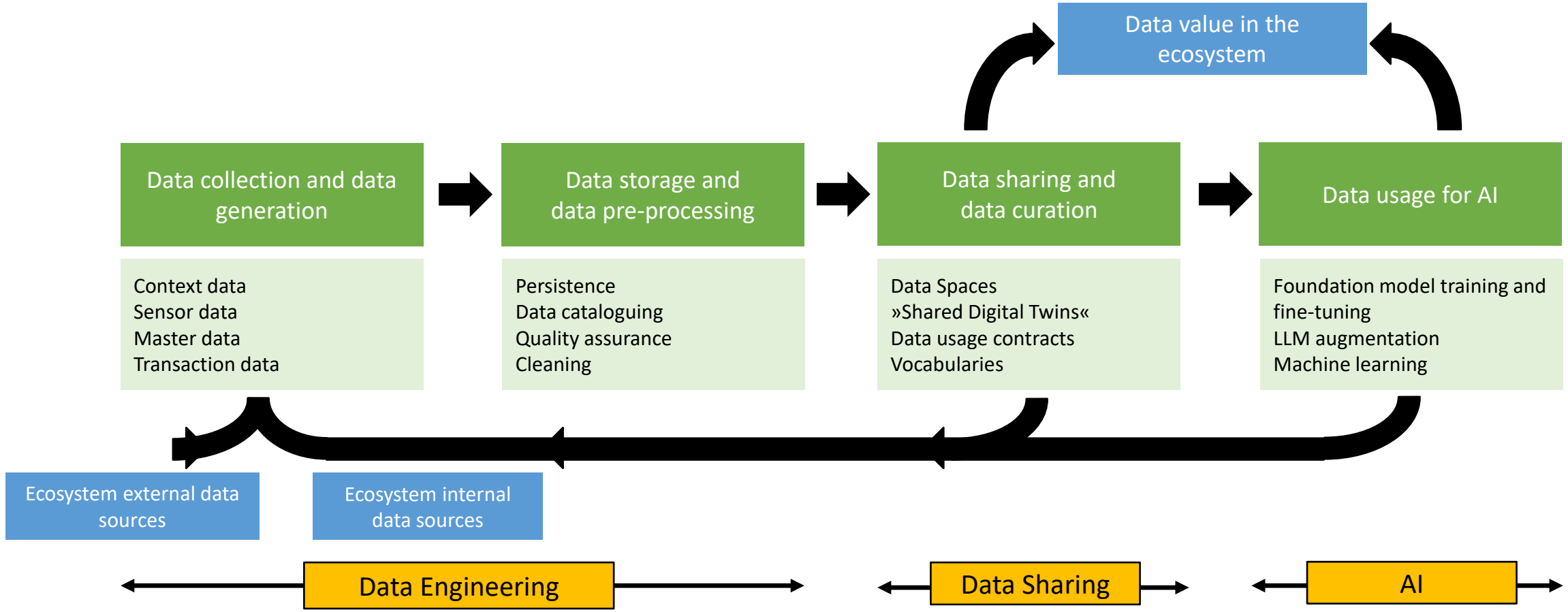

Source: adopted from OECD (2020). Legend: LLM – Large Language Model; AI – Artificial Intelligence.

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Industrial AI Typology

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1	2	3	4	5
Use of AI-powered digital services (logistics, smart infrastructure) provided by 3rd parties	**Provision** of predictive AI smart services for industrial operations (maintenance, efficiency improvements)	**Use** of generative AI for automation (business processes, marketing, decision support)	**Use** of generative AI models enriched with proprietary industry data (e.g. through RAG, fine-tuning etc.)	**Co-creation** of shared foundation models tailored to specific sectors

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„Data Travels at the Speed of Trust“

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