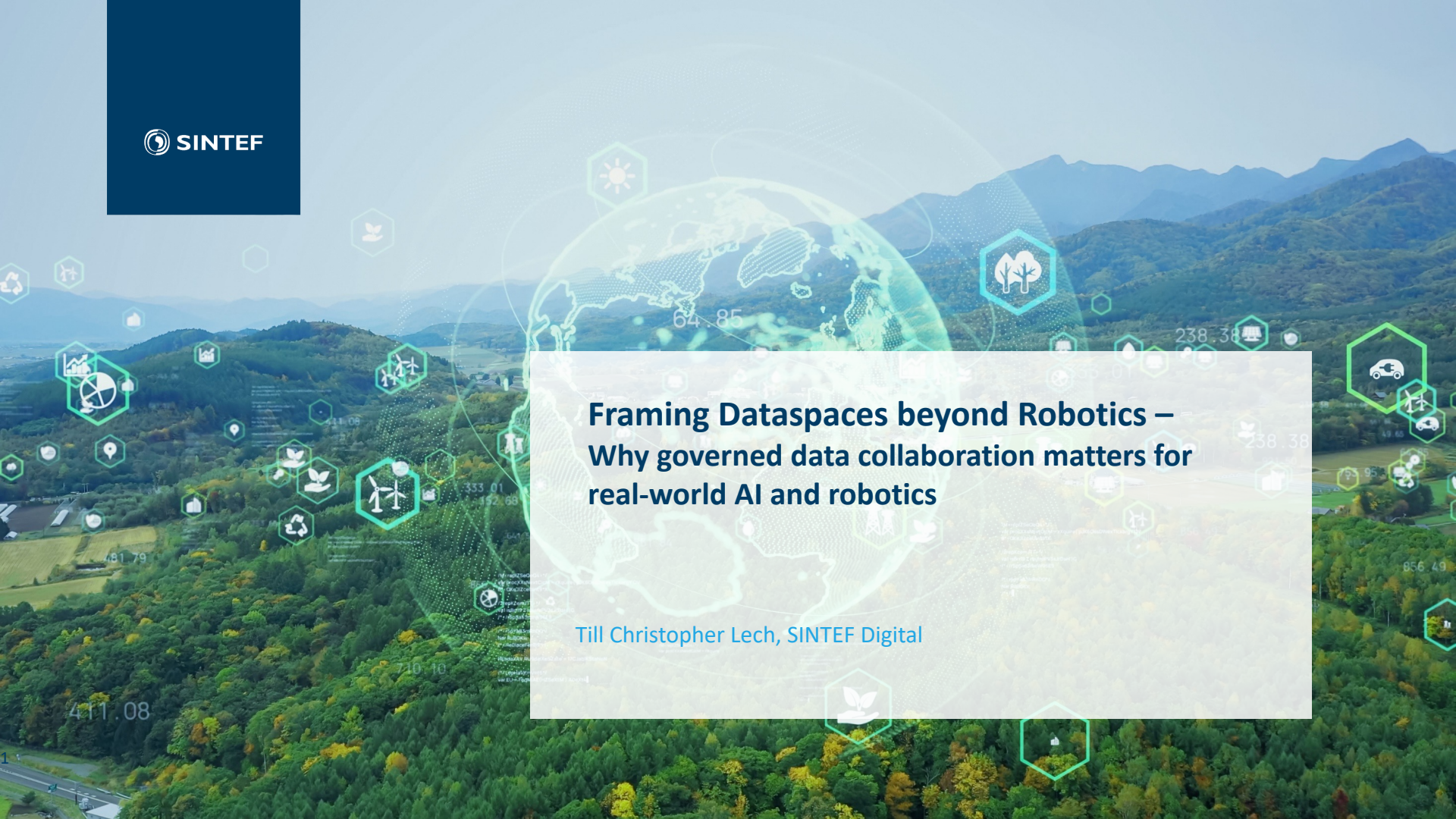


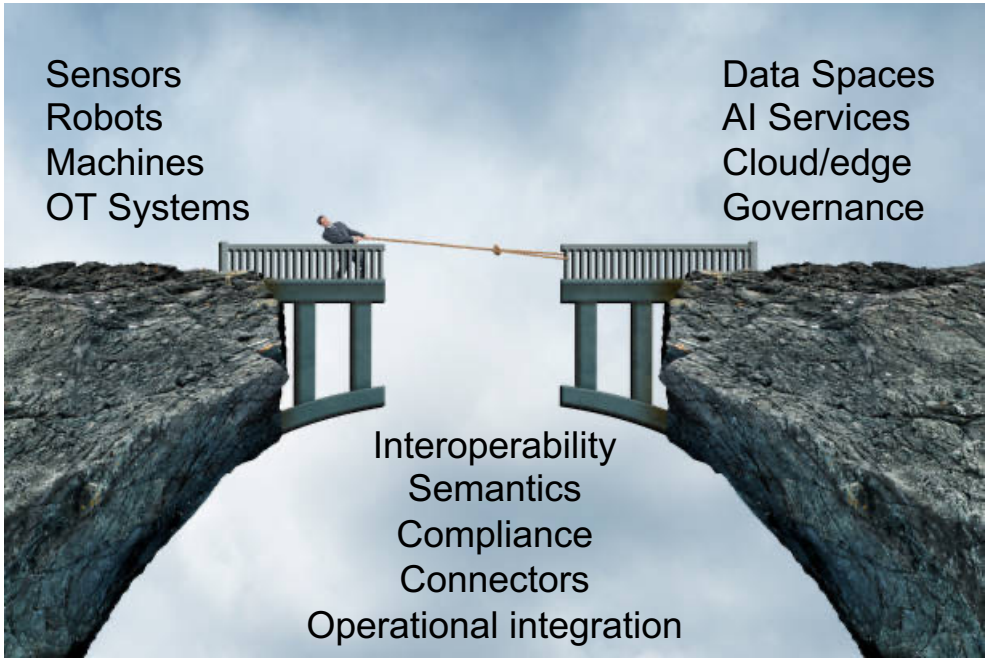
Framing Dataspaces beyond Robotics –
Why governed data collaboration matters for real-world AI and robotics

Till Christopher Lech, SINTEF Digital

Data spaces are moving from concept to deployment

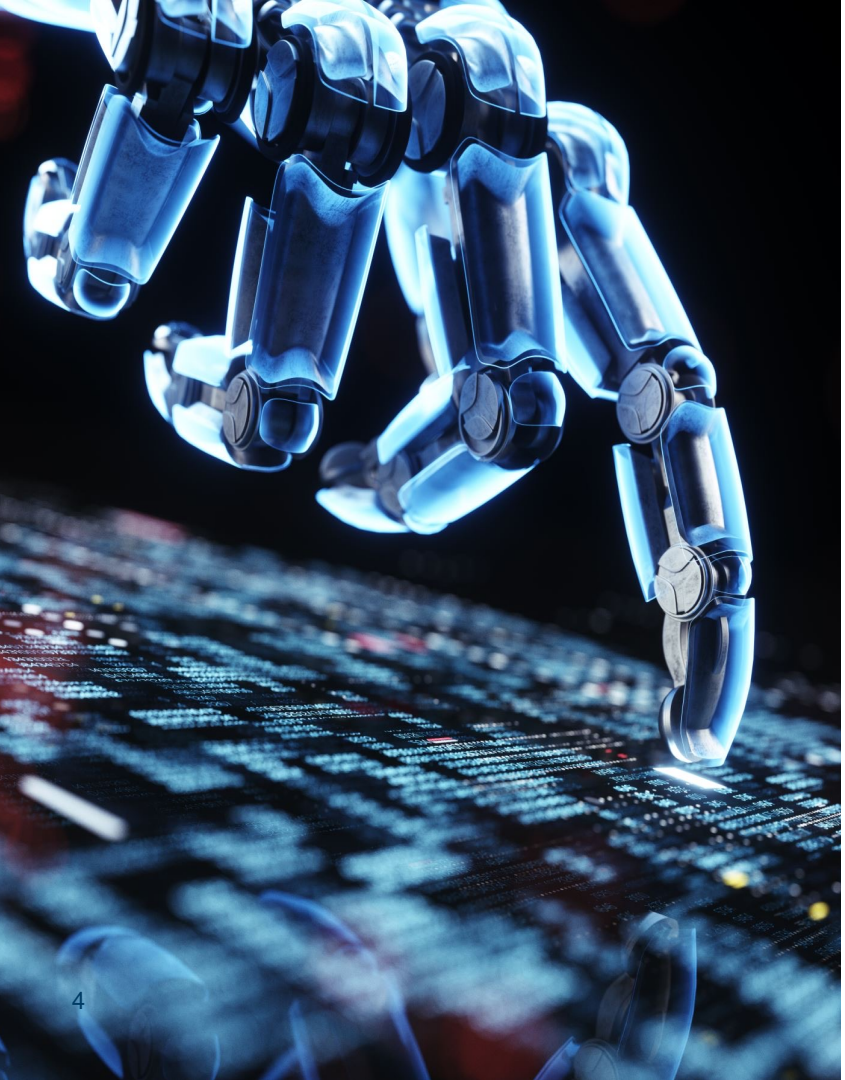
- Data spaces are moving beyond vision documents and pilot rhetoric
- Early operationalisation is now visible in several domains
- Examples include industrial, mobility, healthcare, and smart city ecosystems
- Robotics can build on these experiences rather than starting from scratch

Robotics has strong reasons to care — but also specific barriers



- AI-powered Robotics depends on OT and IT integration
- The OT–IT gap makes interoperability harder than in many other domains
- That is one reason robotics has lagged behind in data space uptake

SINTEF



What’s in it for robotics, though?

- Access to richer operational and contextual data across actors
- Better basis for distributed learning and data-efficient AI
- Improved traceability, trustworthiness, and explainability
- New opportunities for ecosystem collaboration and service innovation

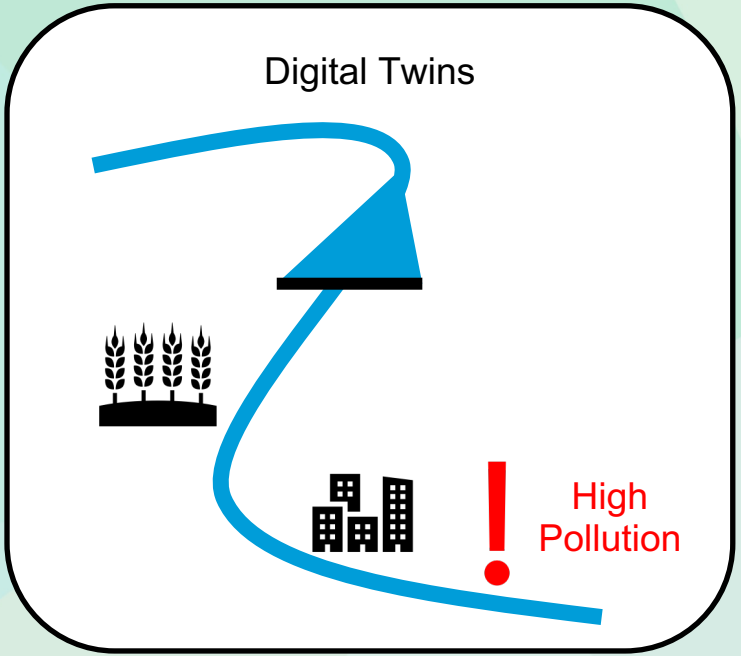
- **Better adaptation, more scalable deployment, and AI that performs better in real operations**

SINTEF

A lesson from other domains
The Oslofjord Scenario

Data

Decisions

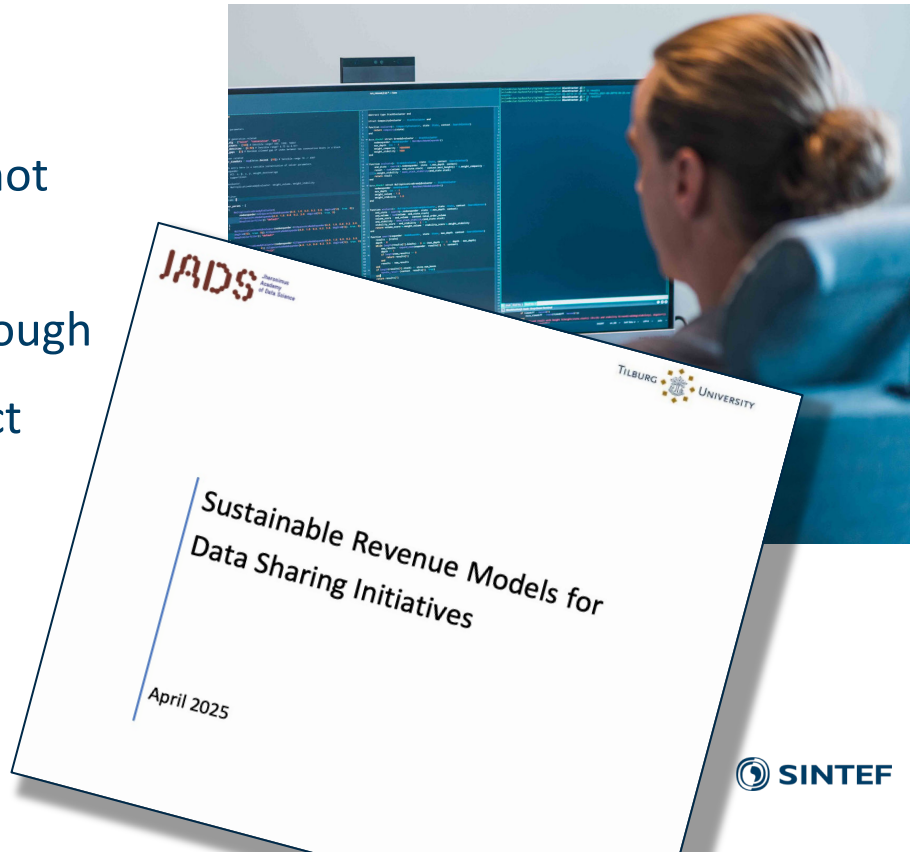


European data space
for smart communities

Funded by
the European Union

The key lesson: Start with use cases

- “If you build it, they will come” has not worked for data spaces
- Building infrastructure first is not enough
- The right starting point is high-impact use cases with clear value for participants
- Is there a viable business model?



SINTEF

What needs to happen next…

Identify the highest-impact robotics and AI use cases

Building a “data culture”: Derive and curate data, interoperability, and governance requirements from those use cases

Scale from focused pilots to operational ecosystems

ORGANISED BY

BDV BIG DATA VALUE ASSOCIATION

IN COLLABORATION WITH

IFE

NTNU

SINTEF

WESTERN NORWAY RESEARCH INSTITUTE
VESTLANDSFORSKING

DATAWEEK

JOIN.LEARN.SHARE.GET VALUE

REGISTER NOW!

5-6 May 2026 / Oslo

data-week.eu
#DataWeek26

Key Takeways

- Scaling AI-driven Robotics is depending on well-functioning data ecosystems
- Bridging the OT-IT Gap is an important part
- Think use cases and value creation before infrastructure

Smart Data @ SINTEF Digital