Lucerne University of
Applied Sciences and Arts
HOCHSCHULE
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Technik & Architektur

Data Spaces: Use Cases for Manufacturing Industries

Next Industries, 10. F&E-Konferenz
30 January 2025, Rotkreuz

Dr. Eugen Rodel

FH Zentralschweiz

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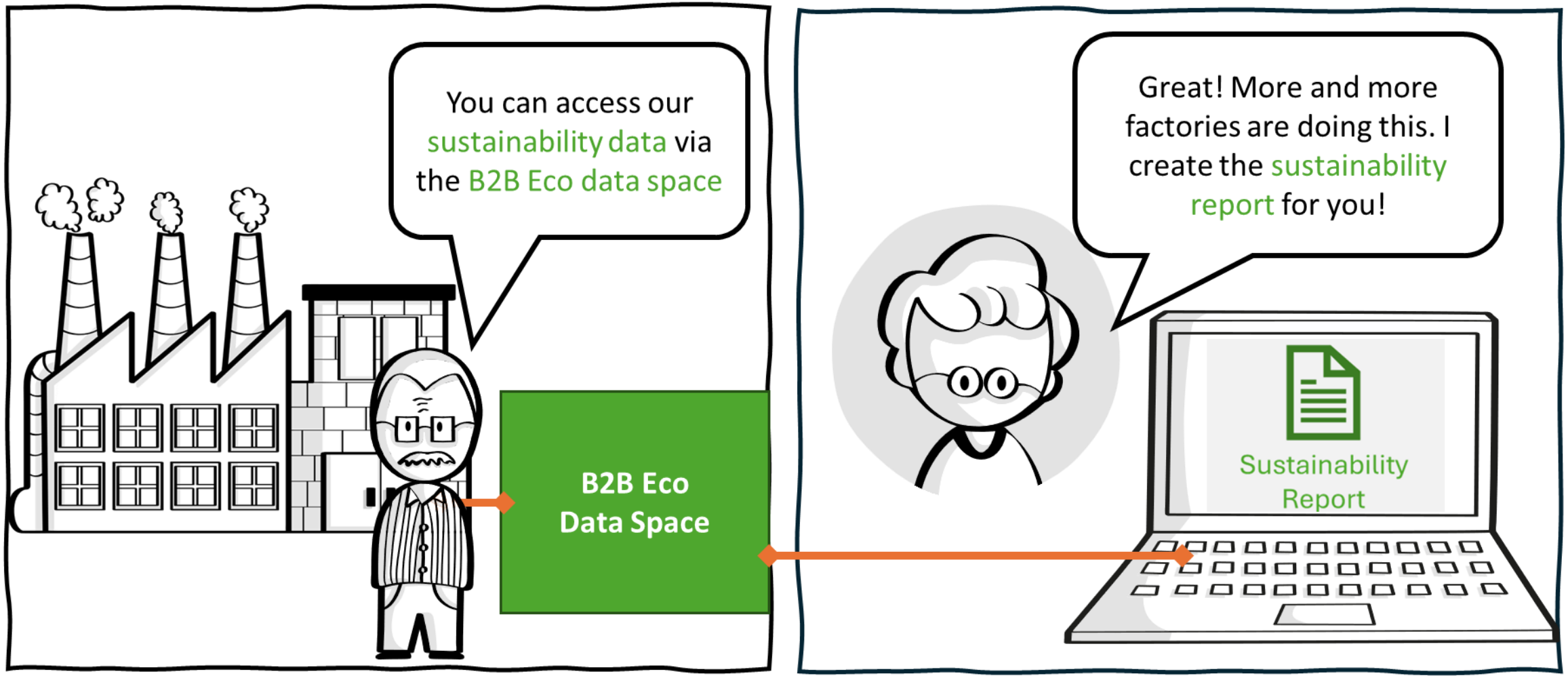
In Idealworld ...



Alex is a manufacturer and Jim is a service provider.

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Introduction
Problem and purpose of this presentation

Problem

… stakeholder operate in disconnected systems, limiting collaboration and data integration.

… current processes for generating sustainability reports are inefficient and lack reliable data.

Purpose of this presentation is to:

… to demonstrate the potential of data spaces in enabling automated and efficient sustainability reporting.

This presentation shows how data spaces enable secure data sharing and automate sustainability reporting.

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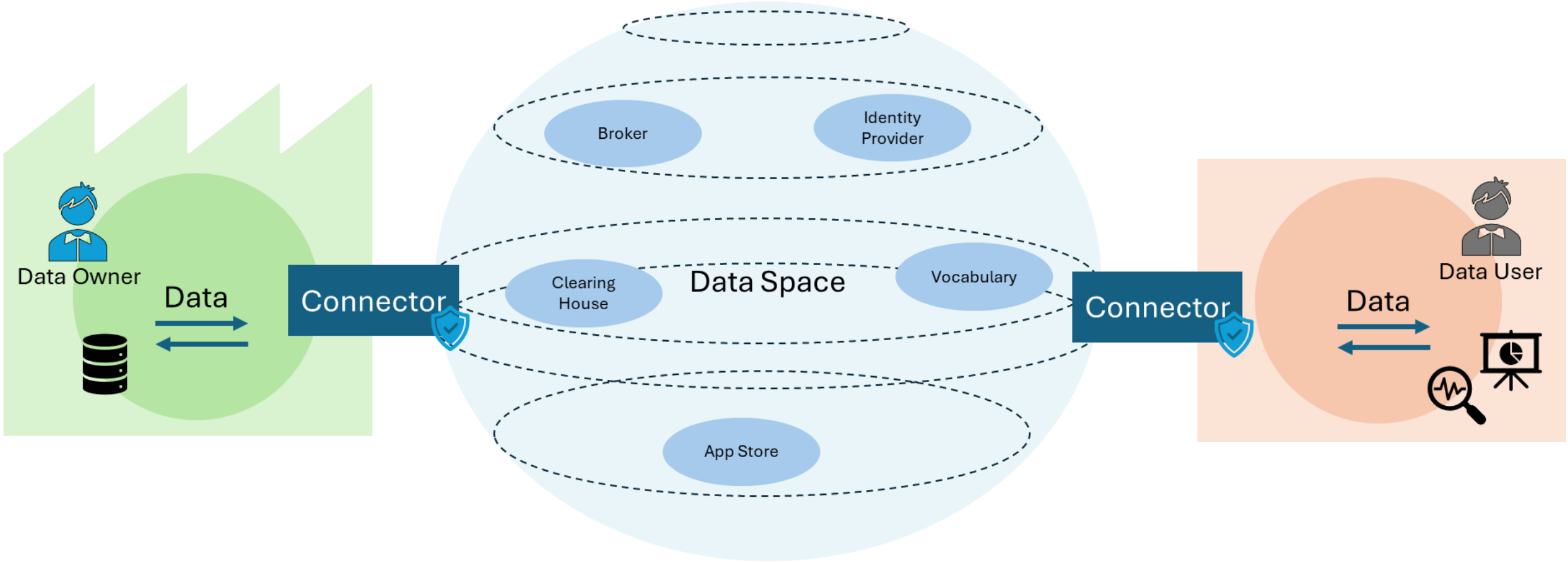
Background
Introduction to data spaces



Data spaces are trusted environments enabling secure and sovereign data exchange among stakeholders.

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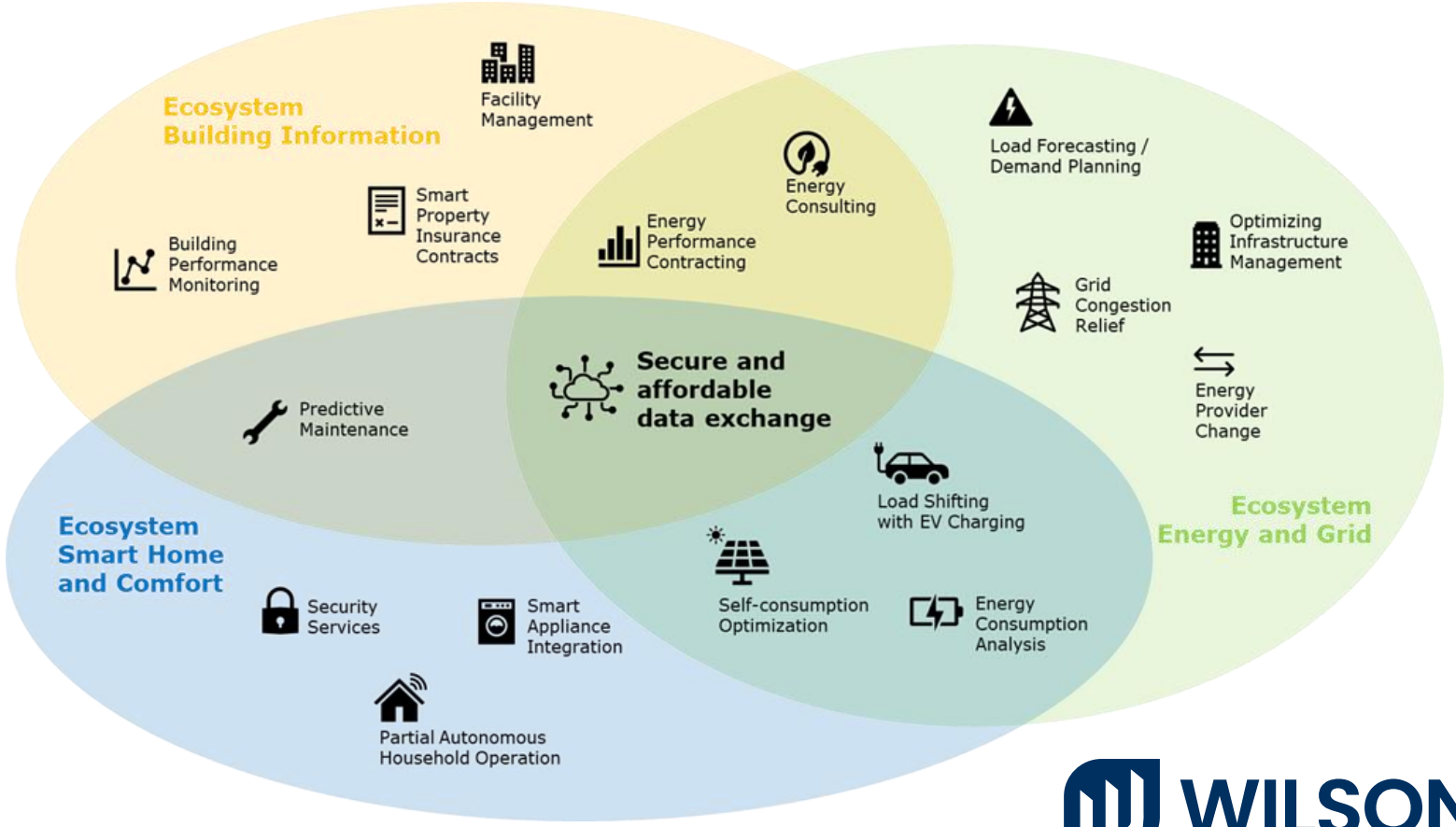
Research

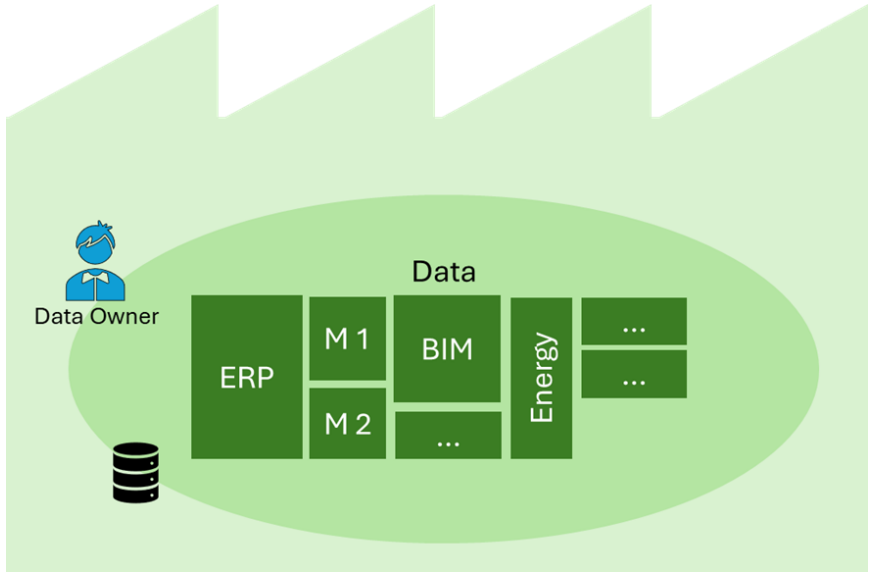
Past and current projects with data spaces



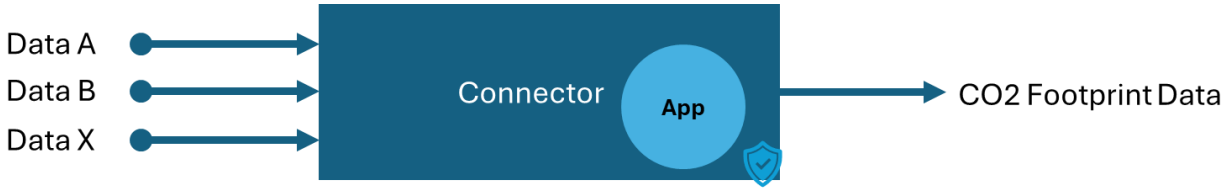
The project is based on “SINA”, a successfully completed feasibility study on data spaces in the energy sector, which examined the technical, economic and legal aspects.

“SINA” is now being continued in “WILSON”, a Horizon Europe project, with a real-life demonstrator.

Research
“Sustainability Report” research project overview



"What benefits and potential do data spaces offer, and how can they create value for stakeholders in terms of practical applications and sustainability?"



The project combines technical, legal, sustainability and business aspects.

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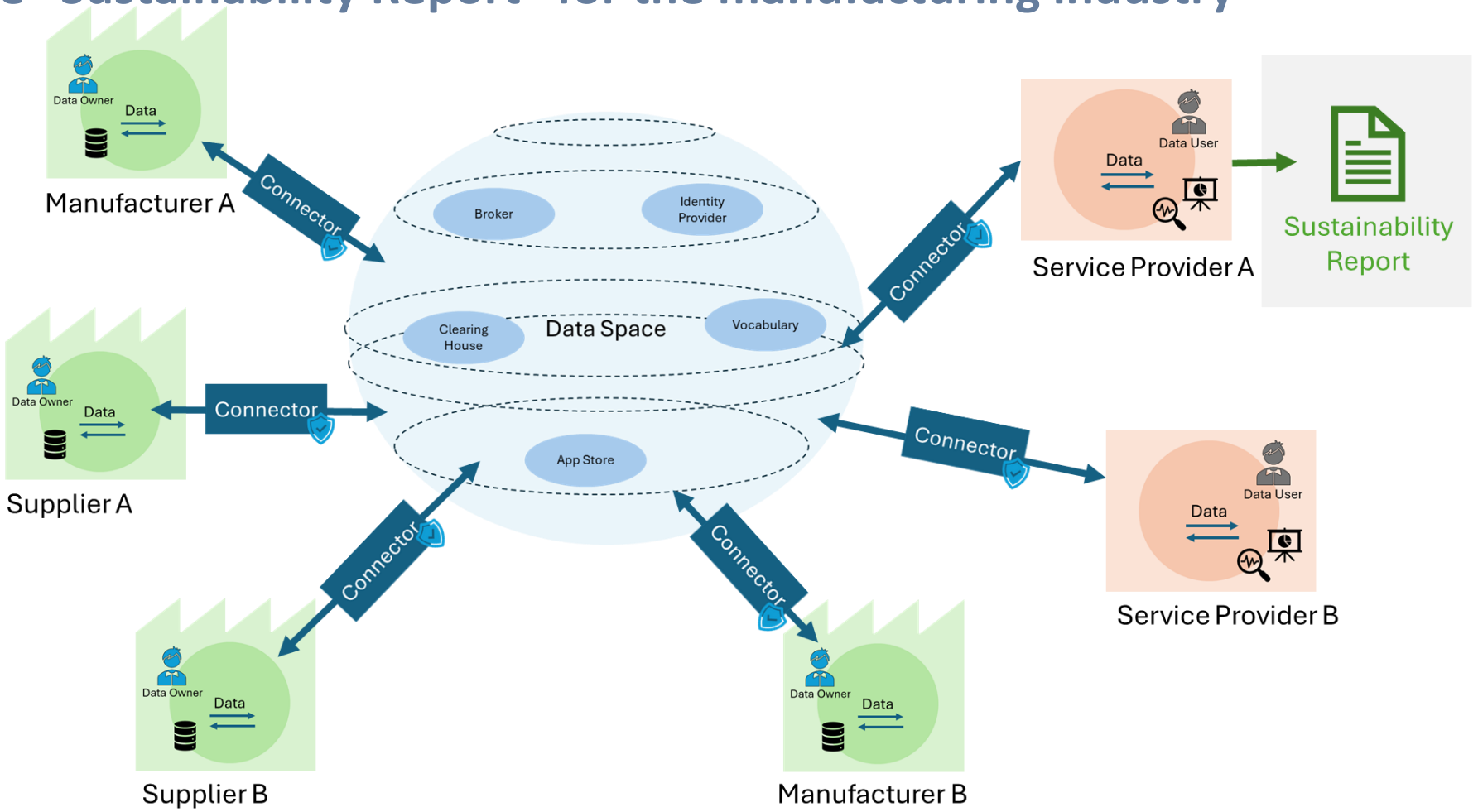
Pilot case

Use case “Sustainability Report” for the manufacturing industry



Data spaces enable secure, trusted data sharing for sustainability reports.

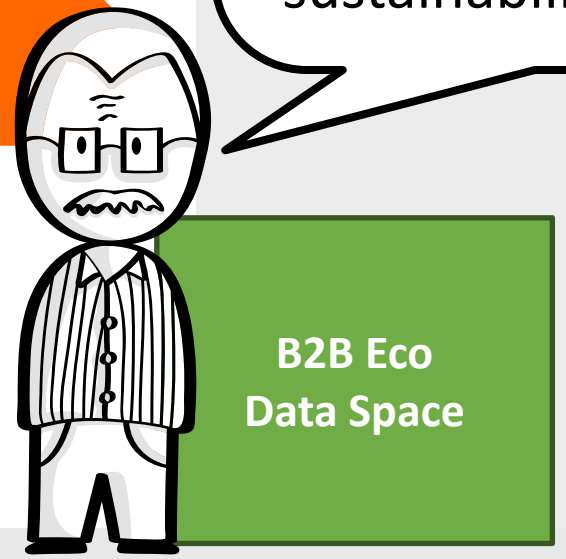
Conclusions and next steps
A data space enabling sustainability reporting

Data spaces are enablers for
secure, efficient, and sovereign data exchange.

The real-world application demonstrates sustainability reporting.

Next Step: Implementing a technical pilot in manufacturing.

Call to Action
Collaboration opportunities with stakeholders in manufacturing and sustainability sectors.



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