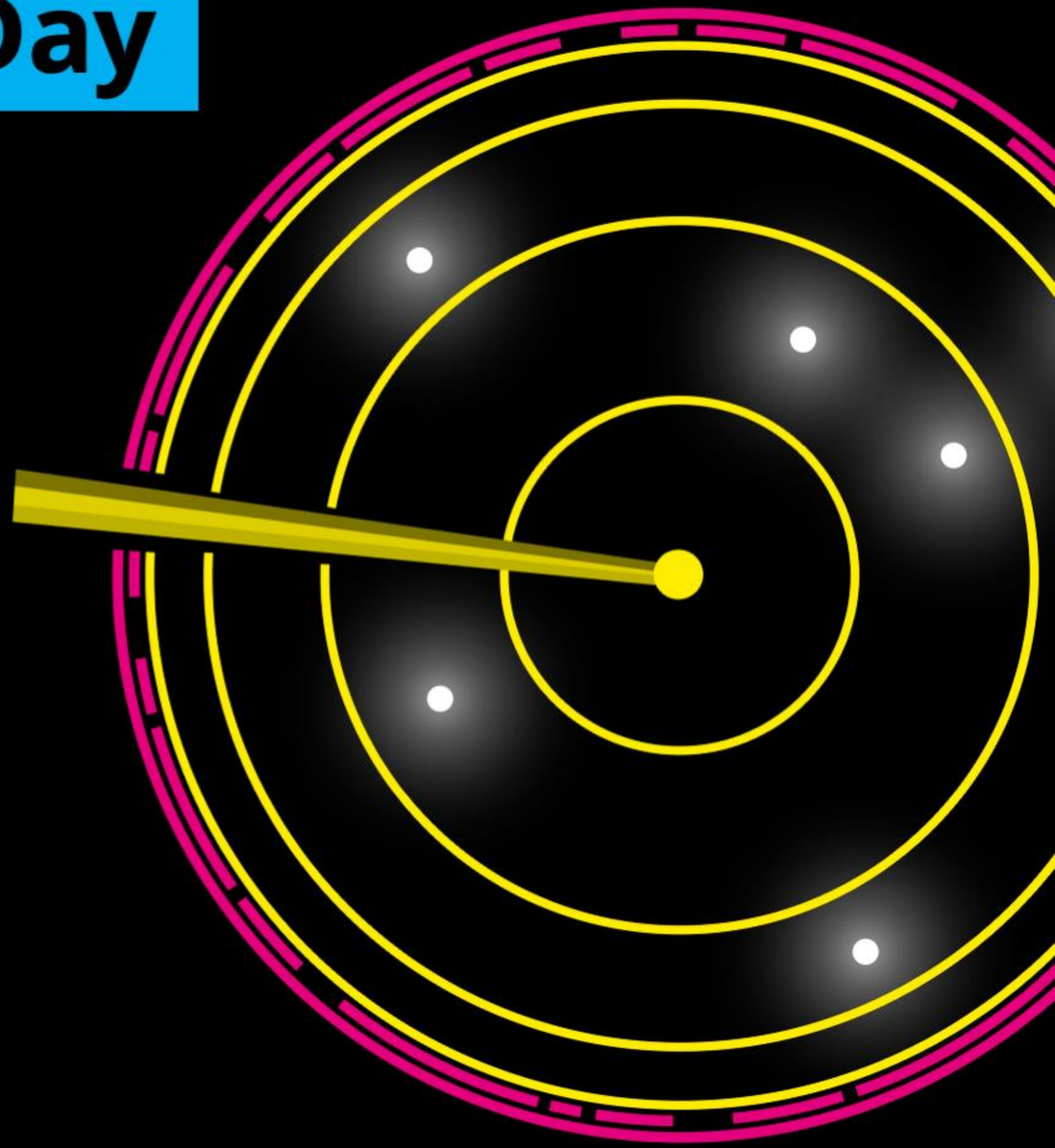
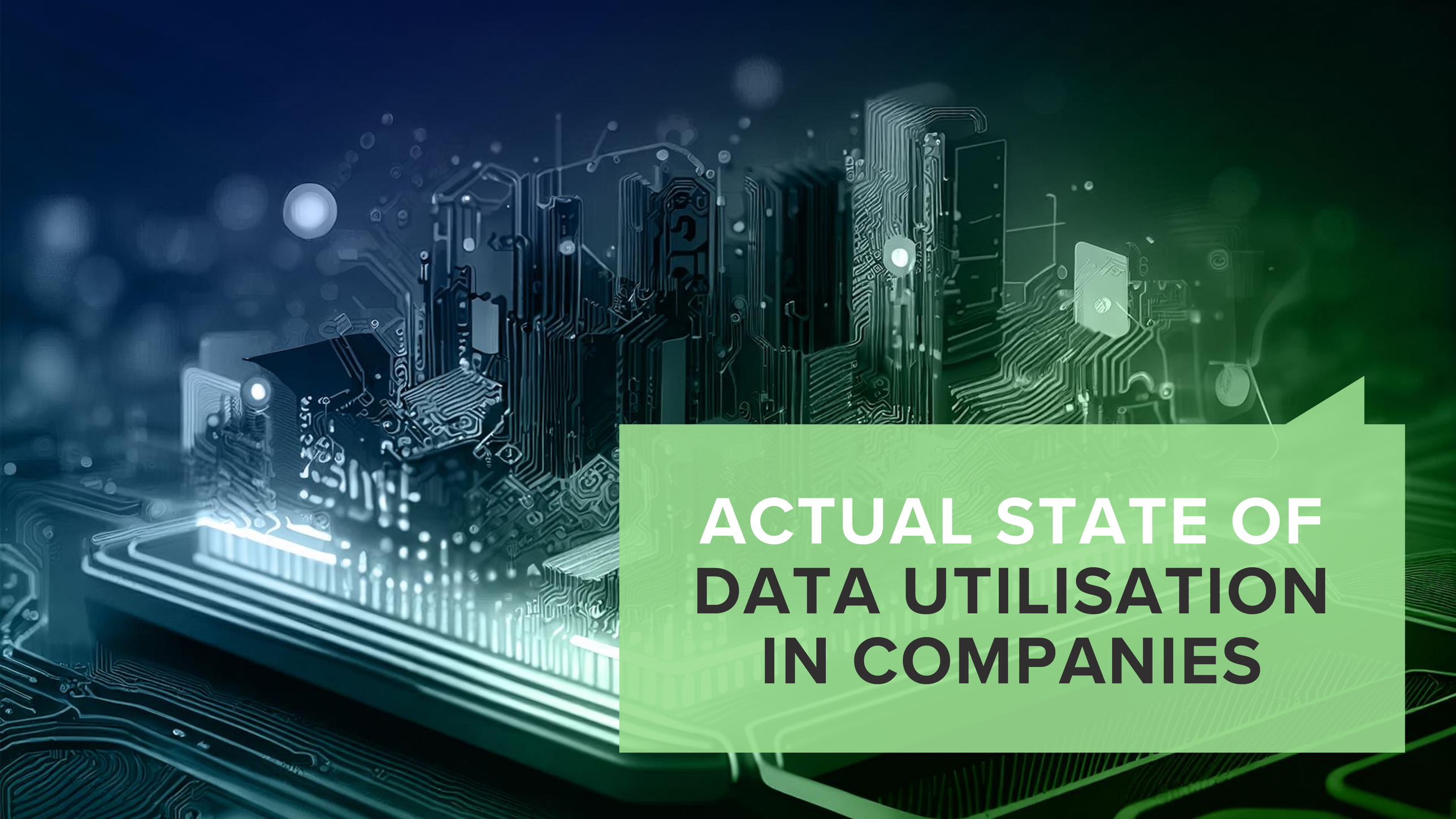
Data Spaces Discovery Day

October 19, 2023 | Vienna



dataSChare – Data Spaces for Supply Chains

Dr. Angela Fessl
Know-Center



ACTUAL STATE OF DATA UTILISATION IN COMPANIES

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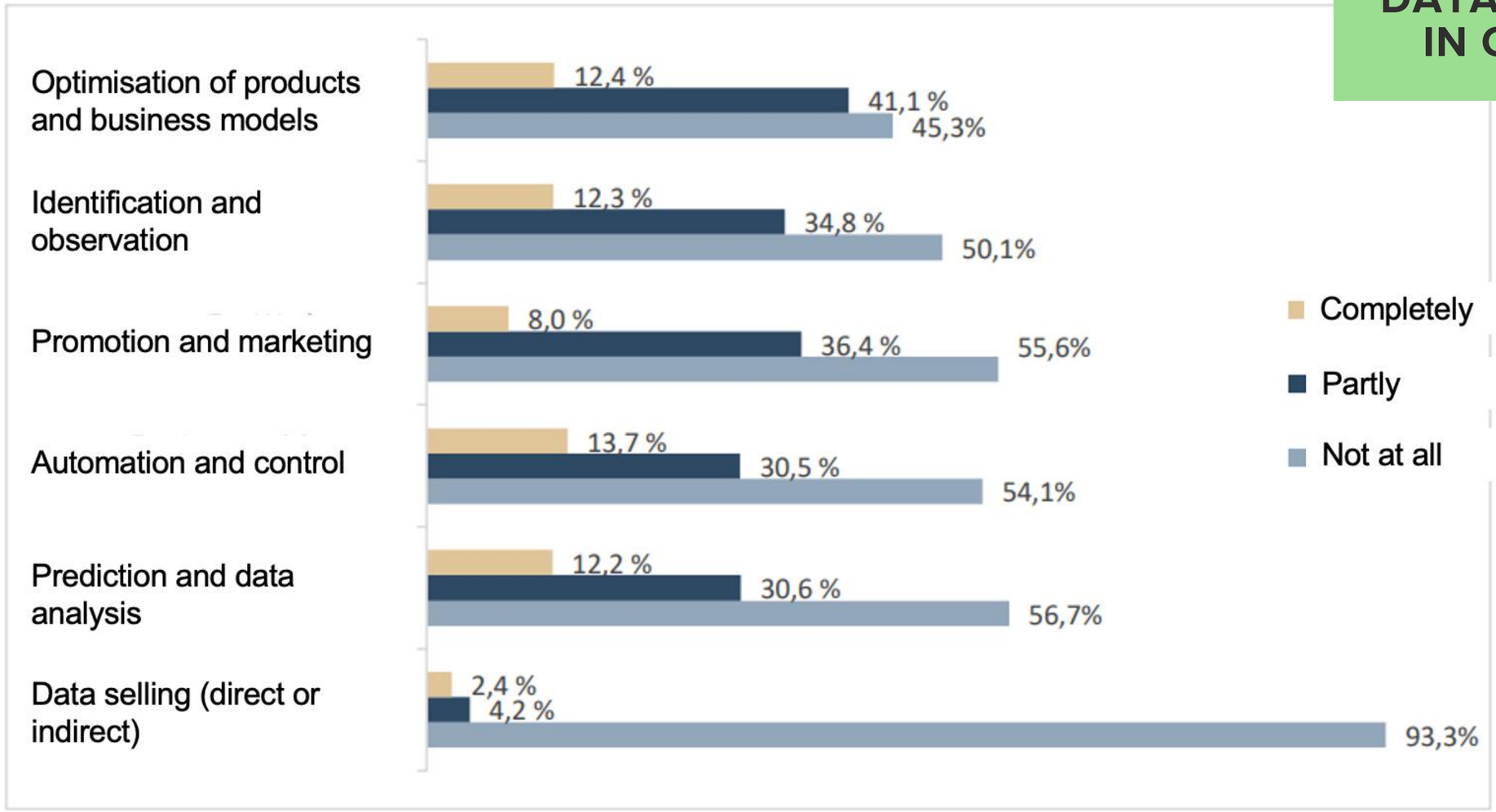

BARRIERS TO INCREASED ECONOMIC USE OF DATA

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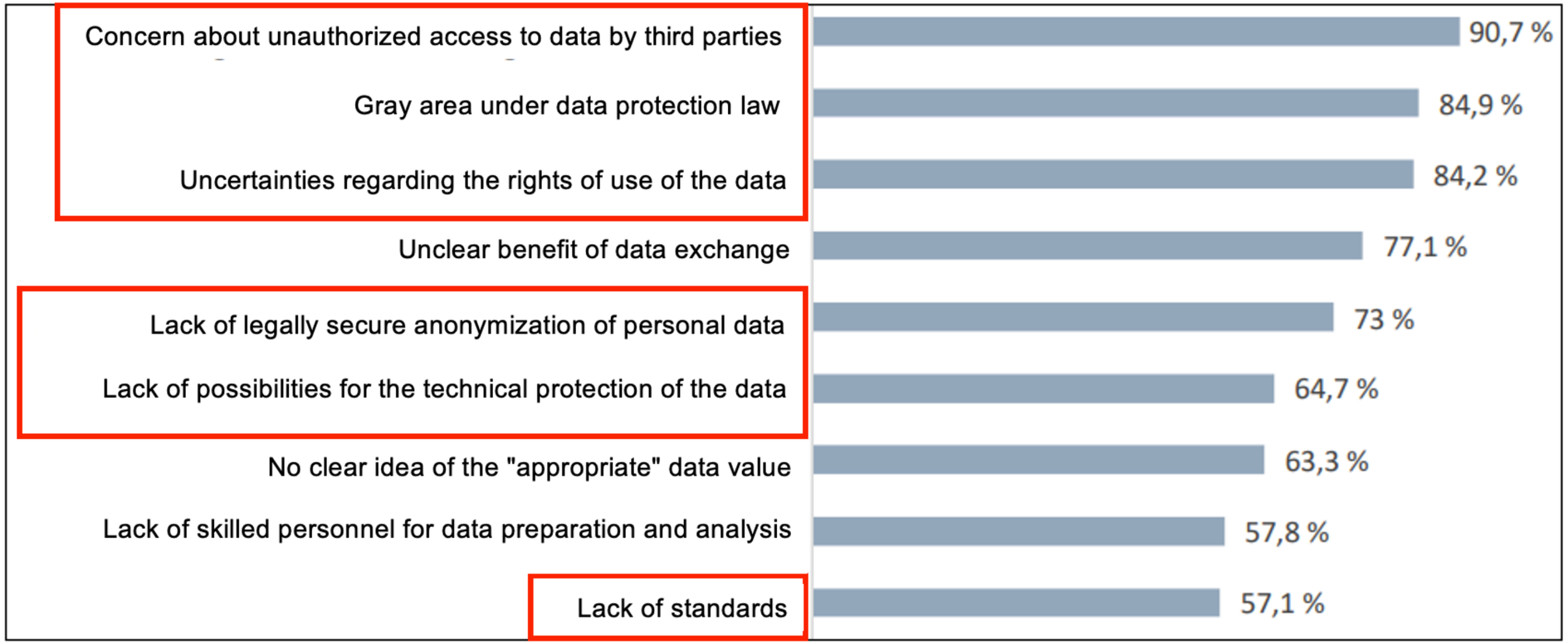

Possible Solution: Utilisation of Data Spaces !!

USING DATA SPACES FOR SHARING DATA ALONG THE SC IS NOT A THING OF THE FUTURE, IT IS REALITY

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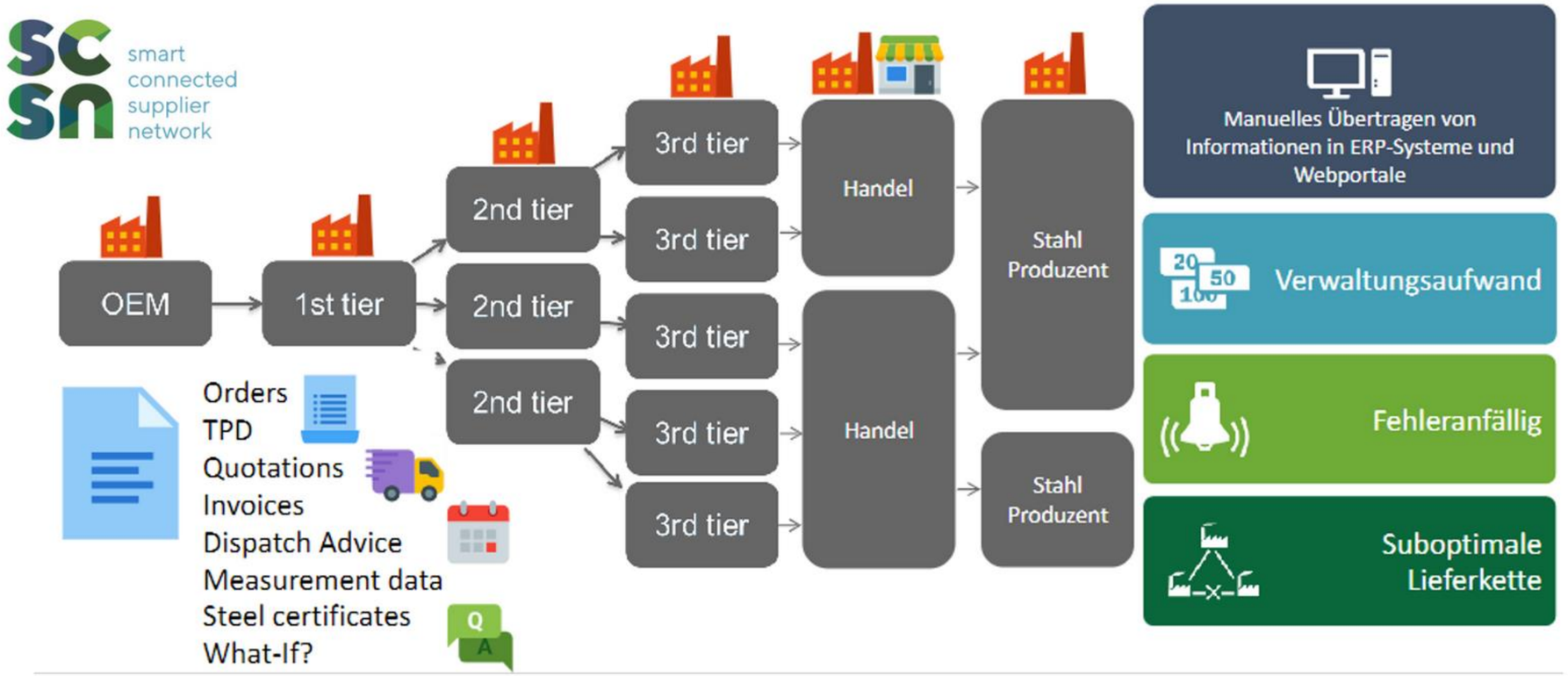

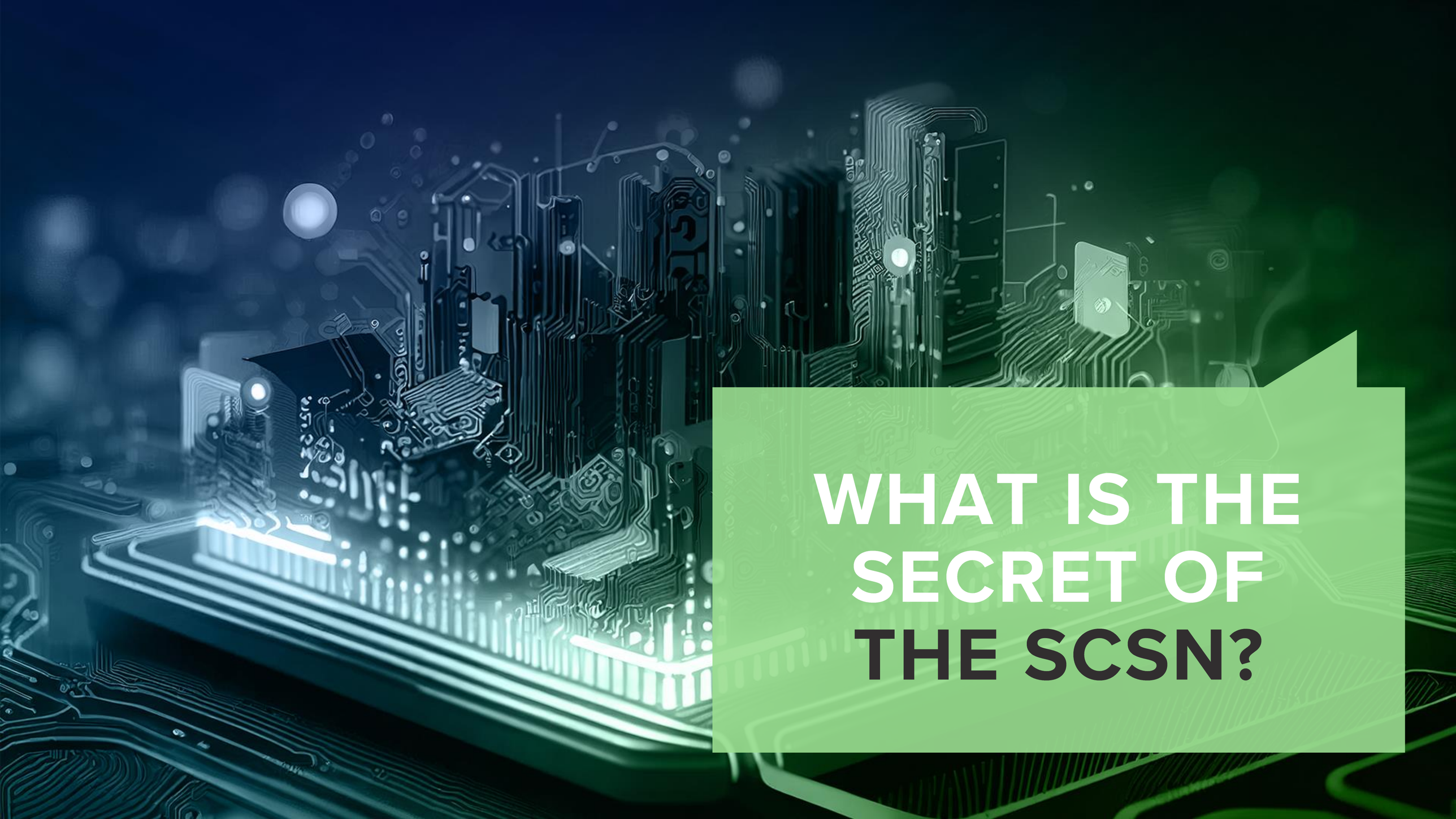

WHAT IS THE SECRET OF THE SCSN?

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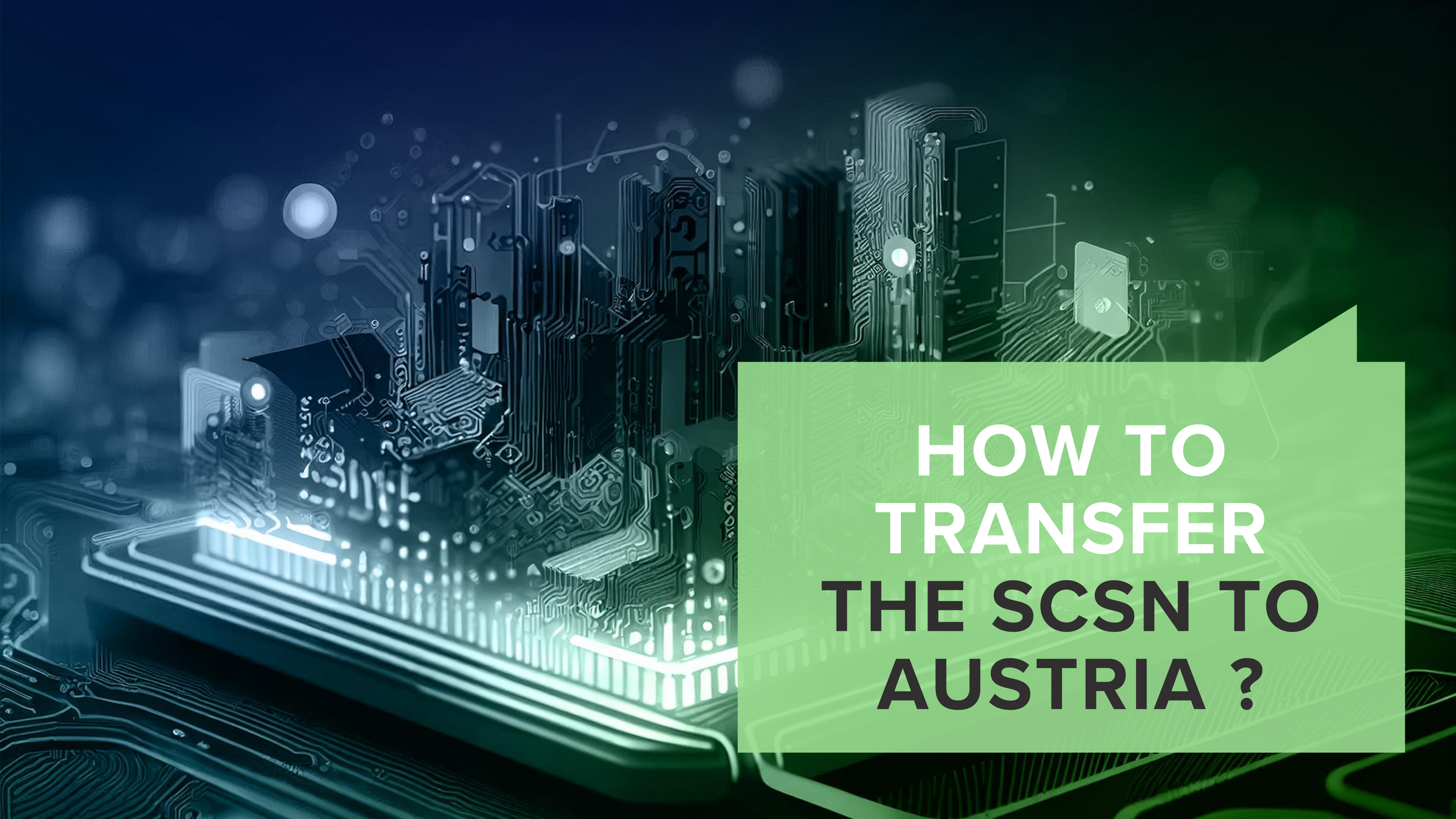
SCSN is a data standard that makes the exchange of information in the supply chain more efficient, allowing companies to share data more easily, quickly and reliably.

Result: 20% higher productivity in the supply chain through fast, secure and interoperable exchange of information between companies.



HOW TO TRANSFER THE SCSN TO AUSTRIA ?

HOW TO TRANSFER THE SCSN TO AUSTRIA ?

Supply
|
dataSChare
|
Chain

FFG IKT Research Project „dataSChare“

FH OÖ - Logistikum/ Know-Center/ DIO

Development of a concept for the implemention of a Supply Chain Data Space

- Cross-organisational data exchange is essential for supply chain challenges
- Data Spaces enable sovereign data exchange

Goal: Identify and concretize SC use cases that are relevant to industrial data spaces. Based on these UC, a concept for a supply chain data space is derived.

- Subsequent provision of the project results to the public

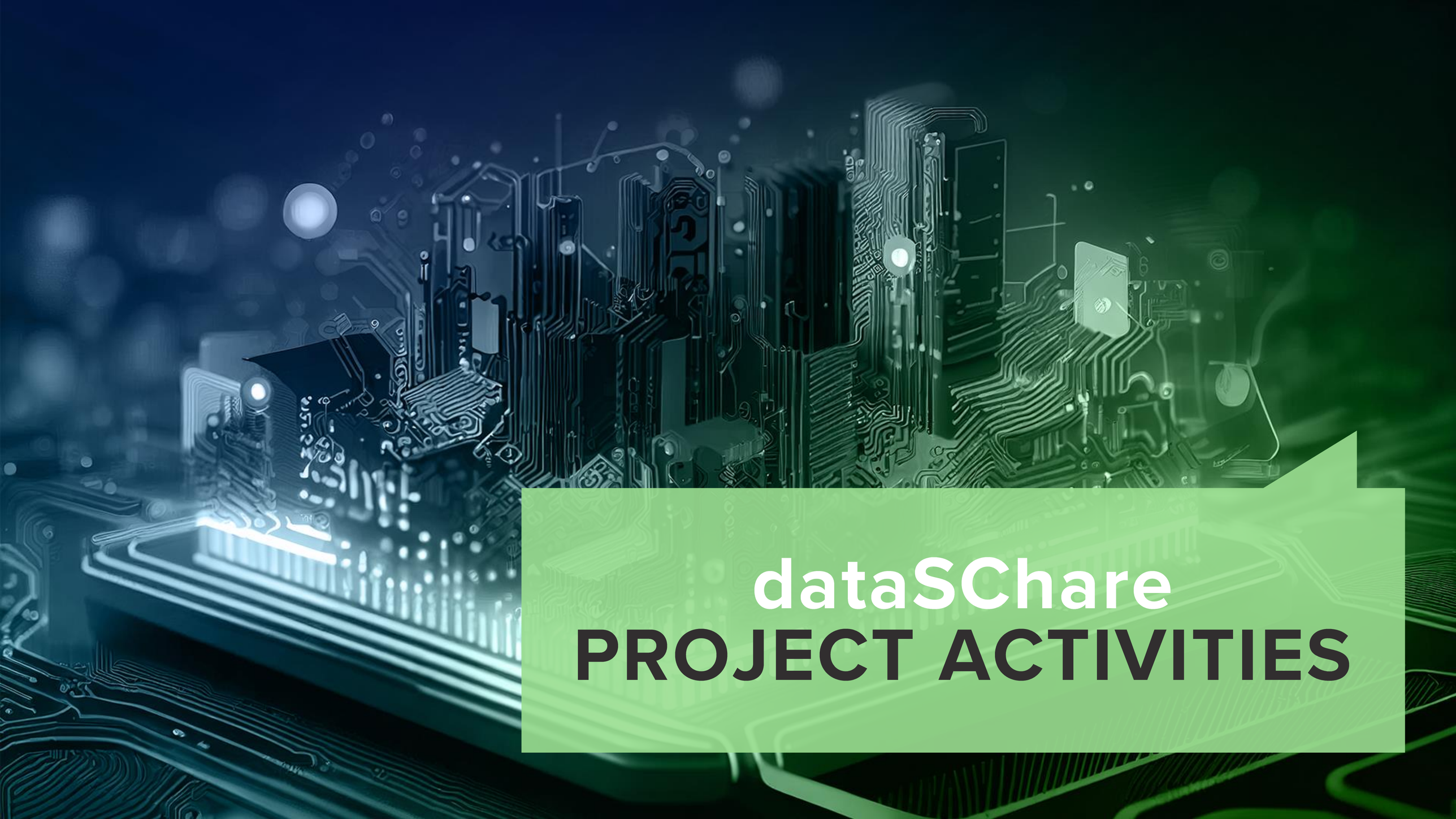
FH OBERÖSTERREICH UNIVERSITY OF APPLIED SCIENCES UPPER AUSTRIA

LOGISTIKUM CHALLENGE ACCEPTED

DIO Data Intelligence Offensive
Verein zur Förderung der Datenwirtschaft

Bundesministerium Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie

FFG Forschung wirkt.



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PROJECT ACTIVITIES

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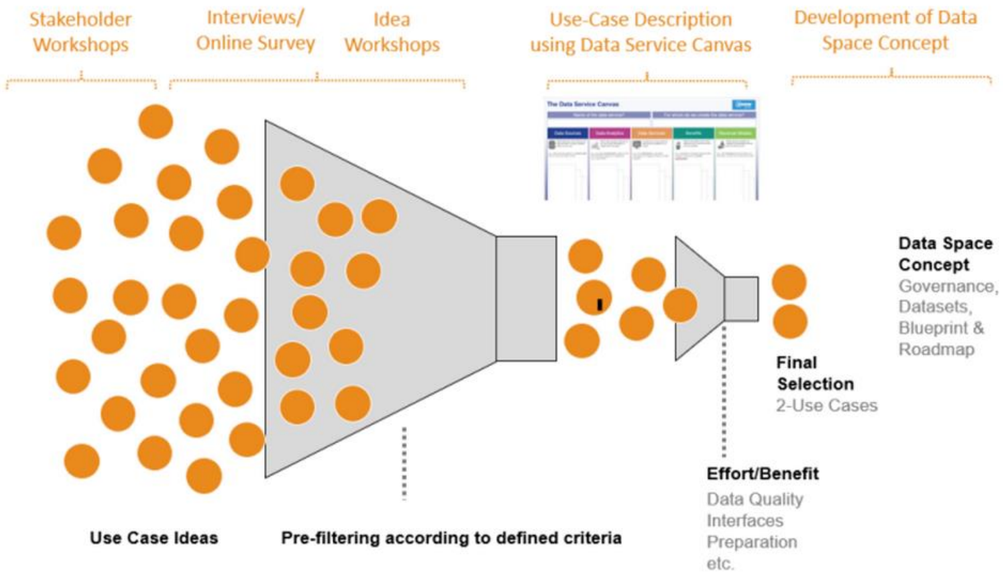
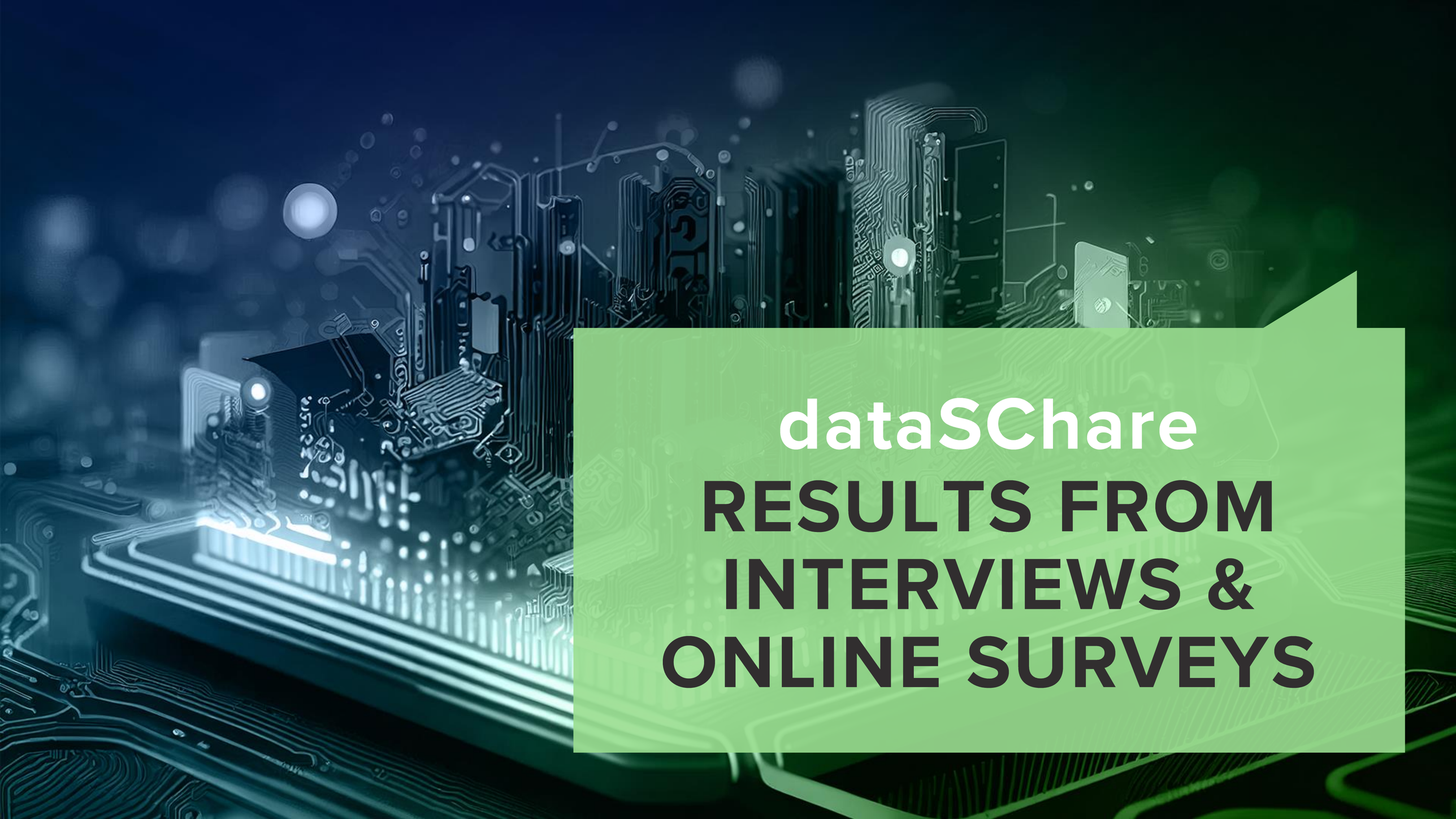
PROJECT ACTIVITIES

- Literature review including identification of relevant supply chain domain topics and stakeholders
- Online questionnaire for the concretisation of the topics
- Workshops on Use Case Ideation & Stakeholder Needs
- Interviews & online questionnaire for selection of the use cases
- Creation of the blueprint for the development of the CS Data Space





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RESULTS FROM INTERVIEWS & ONLINE SURVEYS

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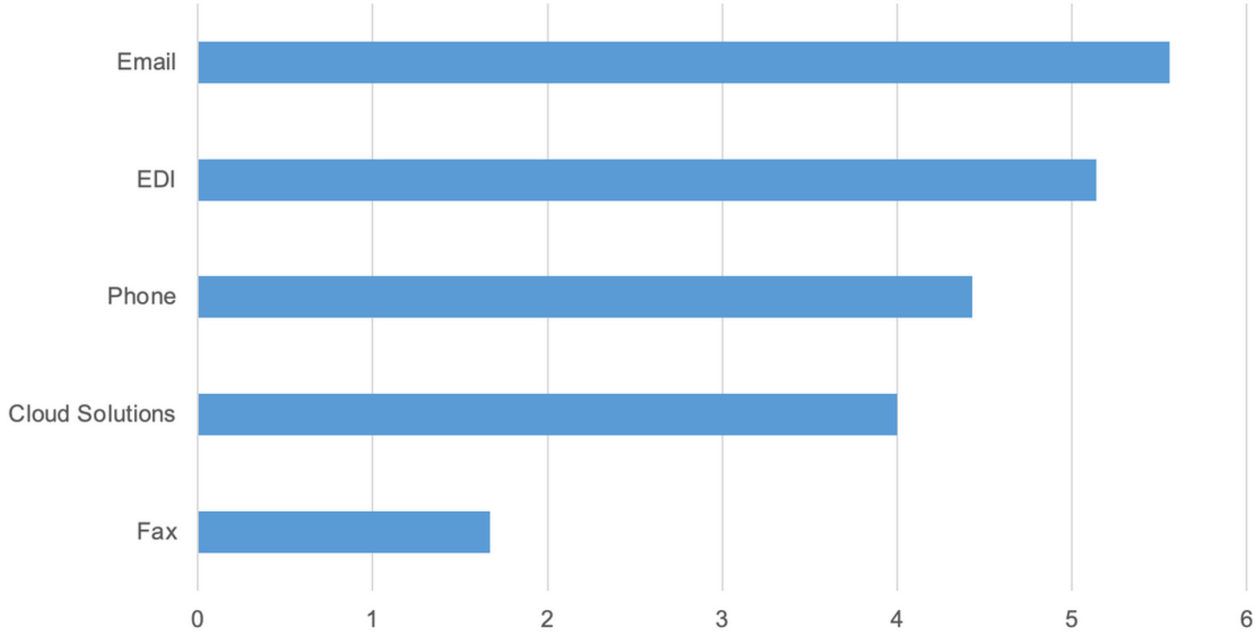
RESULTS FROM INTERVIEWS & ONLINE SURVEYS

Which media are currently used to exchange data with supply chain partners?

Ranking of the proposed options according to frequency of use in the company, N=17)



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RESULTS FROM INTERVIEWS & ONLINE SURVEYS

Barrieres to the use of Data Spaces

- Basic technical requirements in the supply chains were critically questioned ("Is my partner even able to do this?")
- Low availability of resources
- Uncertainty due to the novelty of the topic
- Participation of supply chain partners questionable
- Lack of trust internally as well as externally

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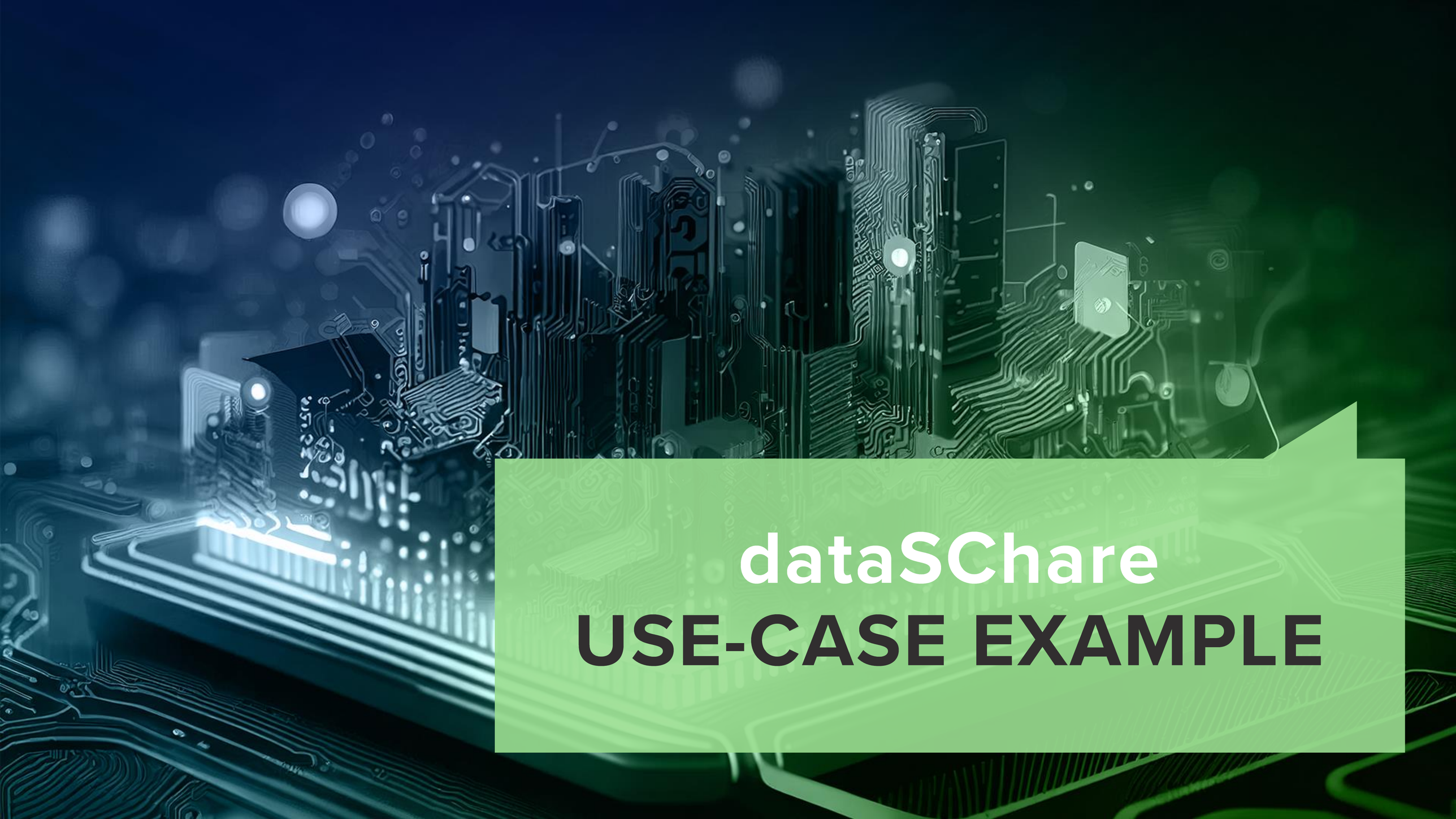
RESULTS FROM INTERVIEWS & ONLINE SURVEYS

Requirements for the use of Data Spaces

Technical Requirements	Organisational Requirements	Legal Requirements
• Encrypted data transmission	• Transparency about cost and pricing models	• Data security through legal liabilities
• Cybersecurity Standards	• Transparency about data availability	• Intellectual property agreements for data
• Usage of international Data Space Standards	• Standards for assigning values for data	• Ensuring data sovereignty
• Usability / UX	• Trust in the Data Space Partners	• Liability agreements



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USE-CASE EXAMPLE

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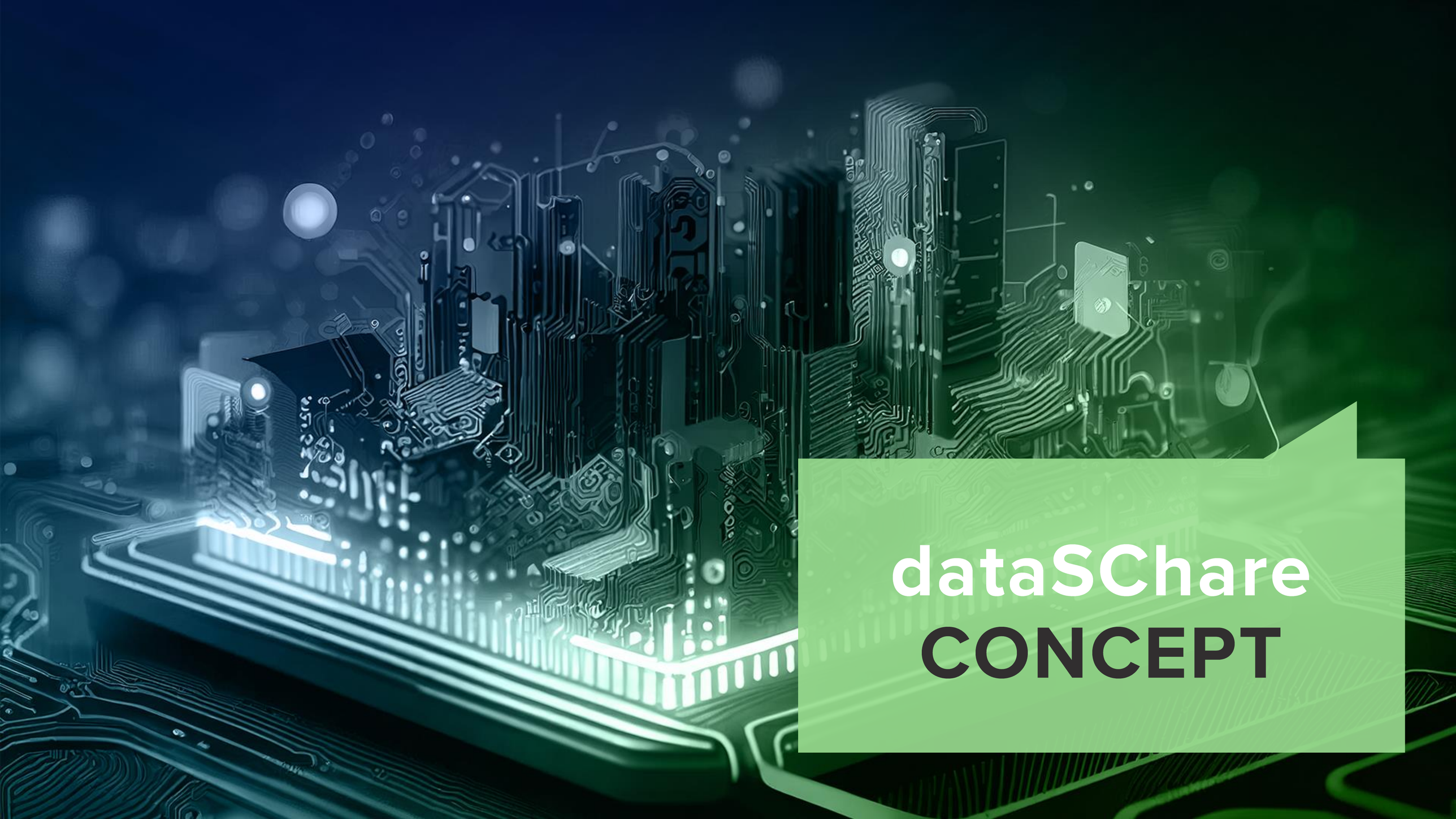
USE-CASE EXAMPLE

	C-Supplier without standardised data exchange
Problem Statement	• No standardized data exchange along the SC, especially for C-suppliers • Complex and unstructured exchange by post, e-mail, platforms, etc., etc. → Variety of systems • Up to now only bilateral data exchange - no integration of intermediaries
Objectives	• Simplification of the order process and data exchange with C-suppliers → make the process more sustainable and efficient → Standardisation
Value	• Automation of the currently still largely manual ordering processes with C-suppliers. • Automation with low setup costs compared to e.g. EDI connections. • Secure trusted data exchange platform that enables seamless interaction between all business partners along the supply chain. • Easy access to the Data Space for small and medium-sized enterprises (SMEs)
Stakeholder	• Partner company (customer or supplier) • DS-Operator/Host (etc. ERP or EDI supplier) • DS or IT-Provider (e.g. implementation of connectors to the existing ERP system)



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CONCEPT

dataSChare CONCEPT

Data Space Service Provider

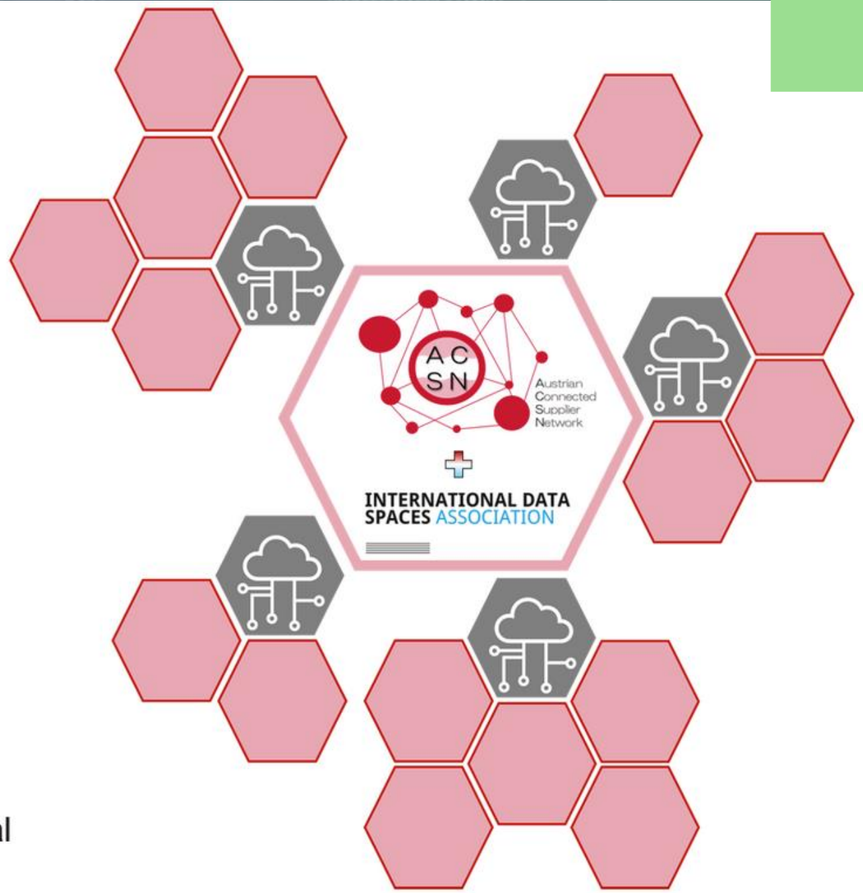
- Digital platforms connected by seamless agreements.
- Independent "address book" to search for the destination of the information/data.
- Offers selection opportunities from many data providers with different data

Company / Supply Chain Partner

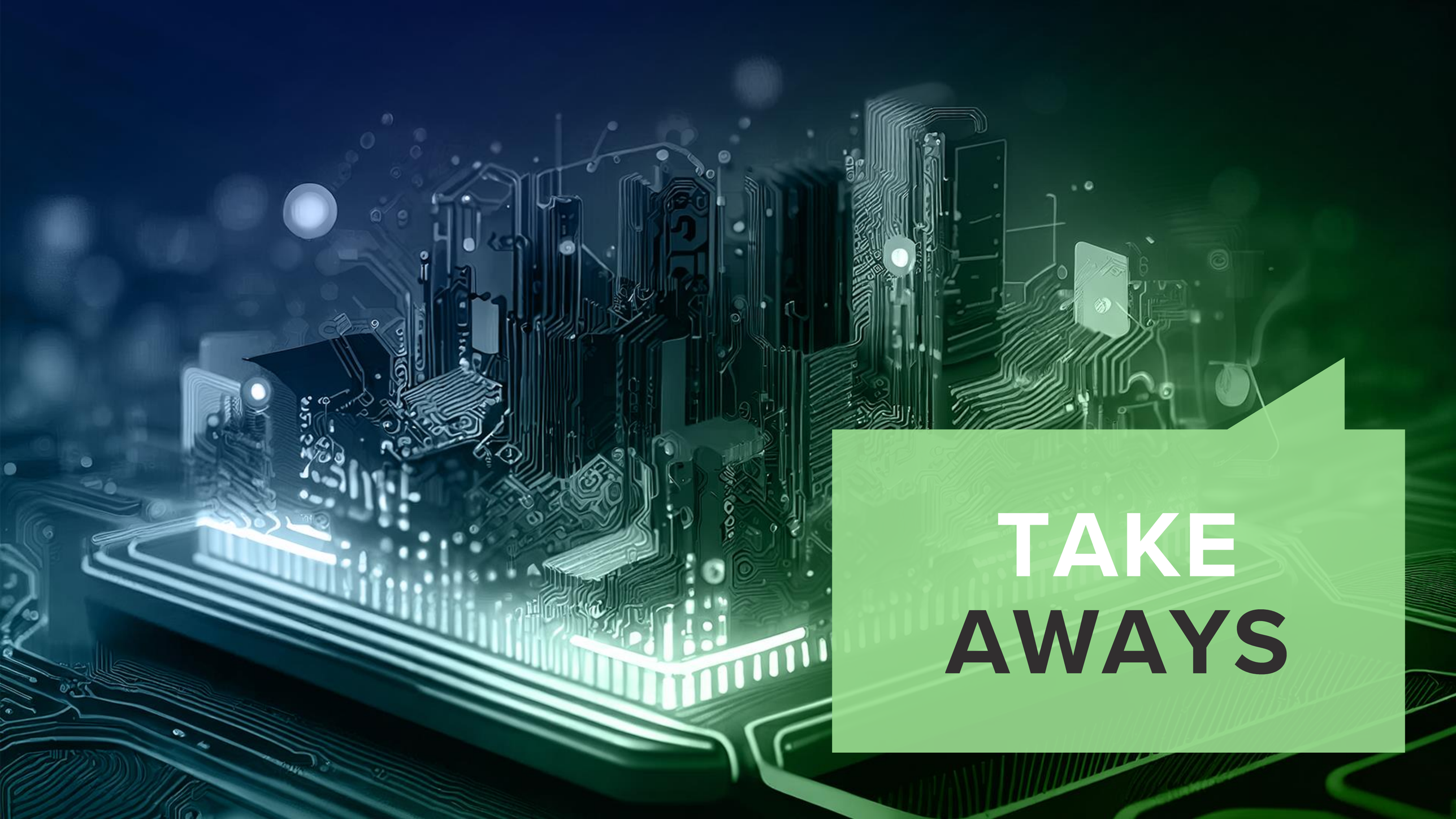
- Connect only once the own ERP-system with the help of standardised connectors
- Be only once added to the ACSN address book

Data Space Operator

- Continuous management, maintenance and improvement of ACSN standards.
- Coordination and management of the technical infrastructure, including address book
- Representing the interests of all ACSN members



Source: https://smart-connected.nl/de/uber-scsn/funktionsweise



TAKE AWAYS

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Data Spaces can contribute to **overcoming barriers** around data sharing

The implementation of a **Data Space** is not "Rocket Science"

An ACSN would make information sharing in the **supply chain more efficient**

An ACSN allows companies (SMEs as well as large industrial companies) to share data more **easily, reliably and securely**

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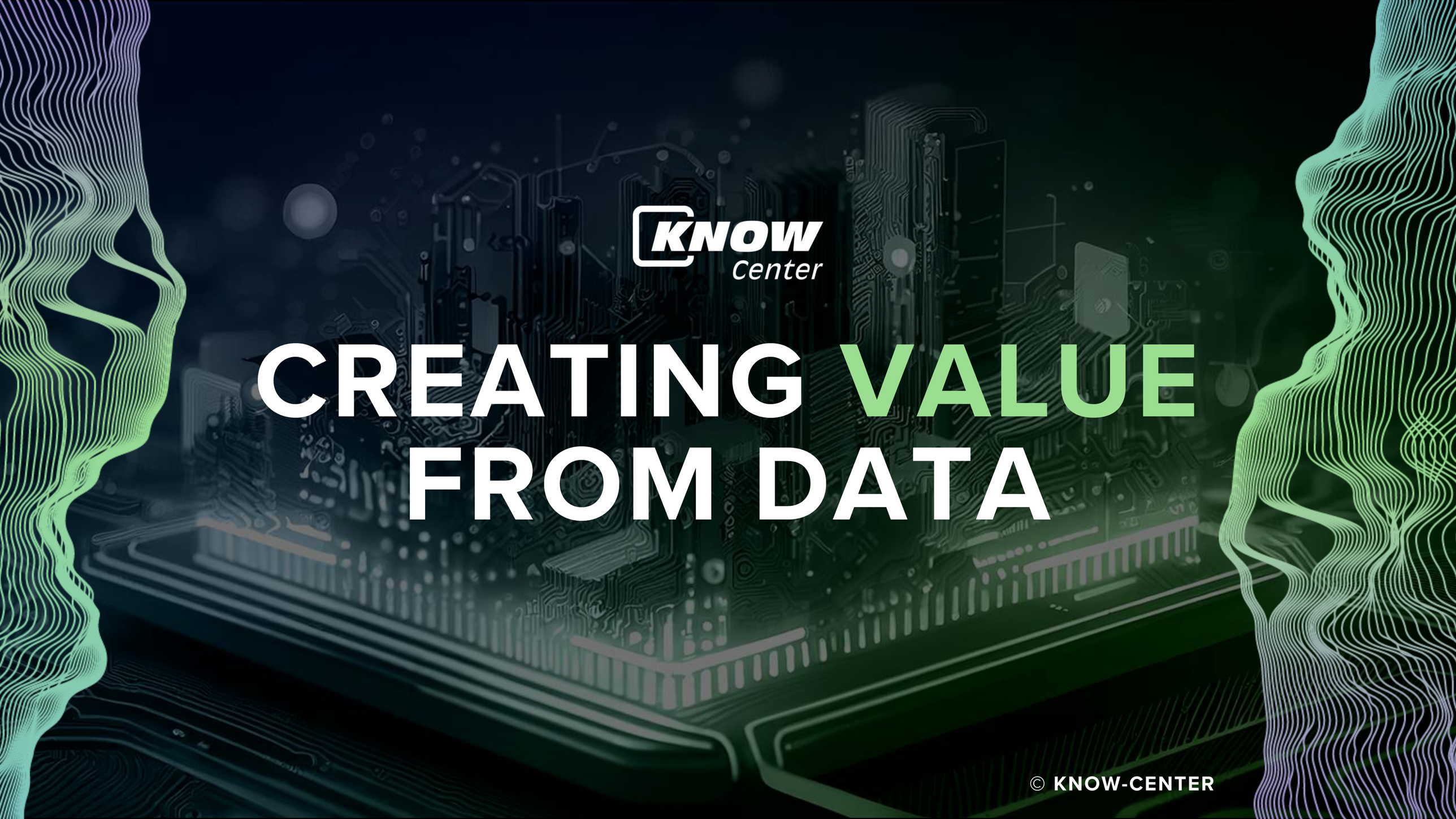
Join the dataSChare 2.0 implementation project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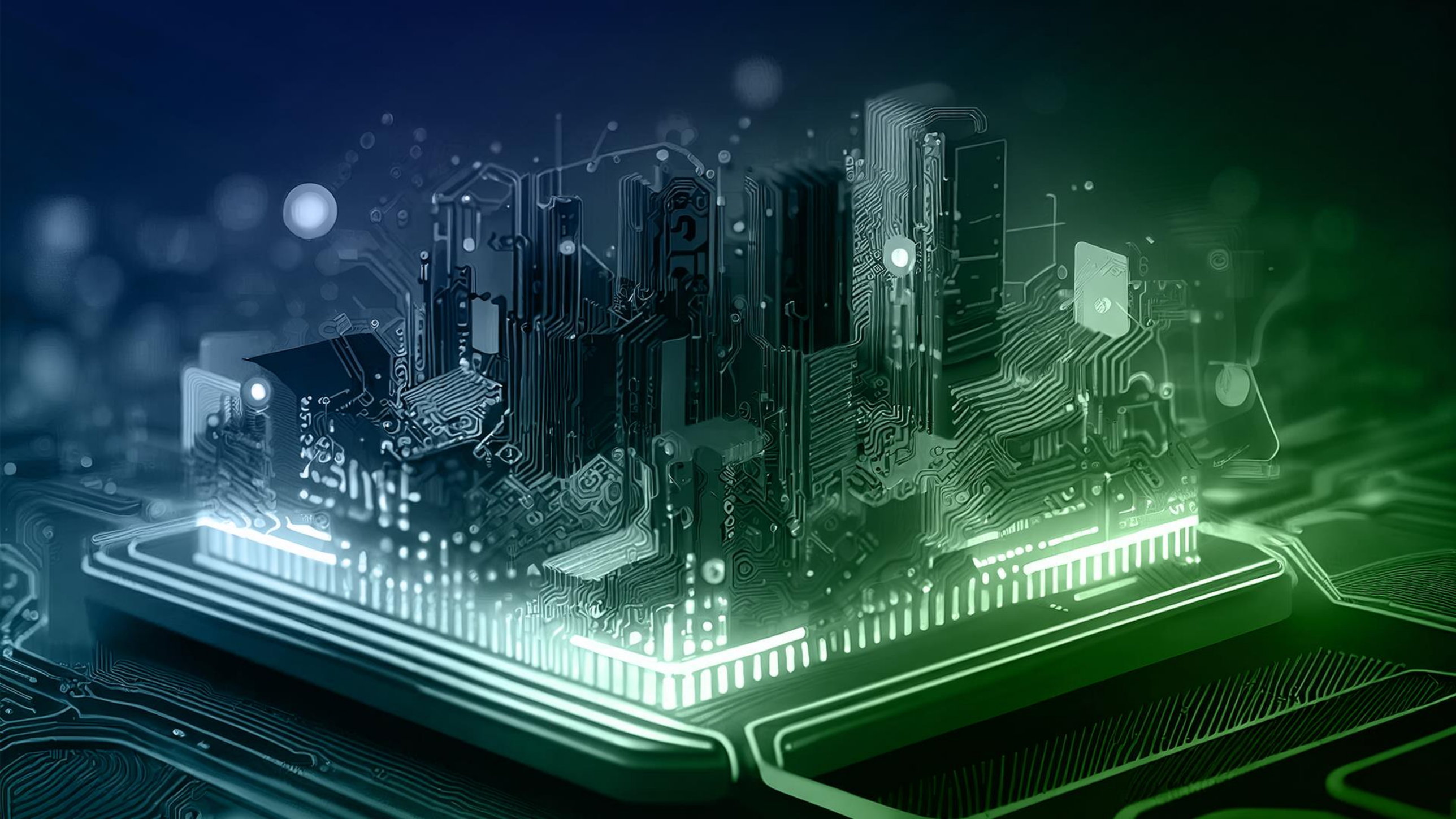
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