

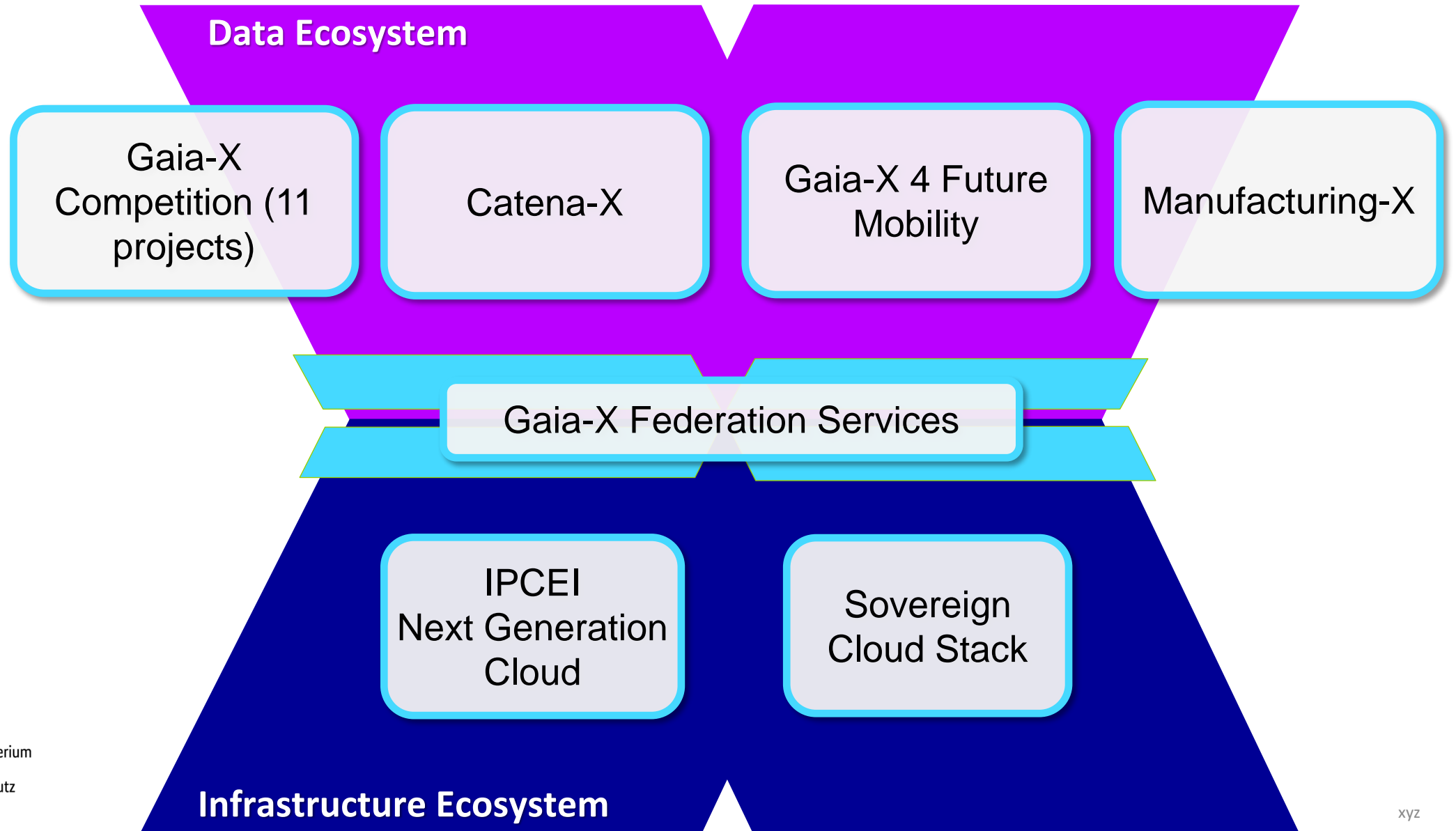


Bundesministerium
für Wirtschaft
und Klimaschutz

Ernst Stoeckl-Pukall

Eclipse AOSS – June 6th

Creation of a Data Driven Economy – Design Principles and Activities



#1 | Motivation & „Big Picture“

Vision and mission for Manufacturing-X

Manufacturing-X Vision

- 1 Connects value chains and manufacturing networks across sectors and countries
- 2 Implements the global foundations for resilient, sovereign and climate-neutral production
- 3 Enables innovative value creation in an interoperable and sovereign data ecosystem



- 1 Develops use cases on collaborative use of data in all sectors of manufacturing industry
- 2 Implements the basic infrastructure to deploy federated data-ecosystem
- 3 Provides easy-to-use applications to scale the ecosystems dynamically
- 4 Sets-up organizational structures to facilitate the cooperation of the global MFX-community

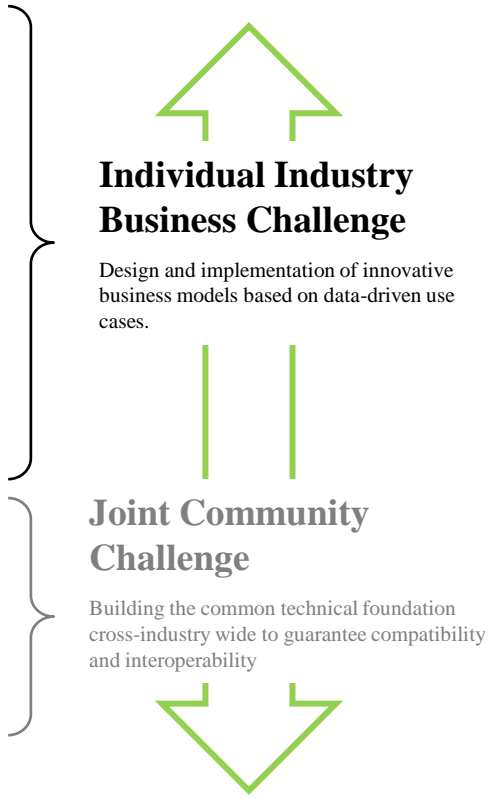
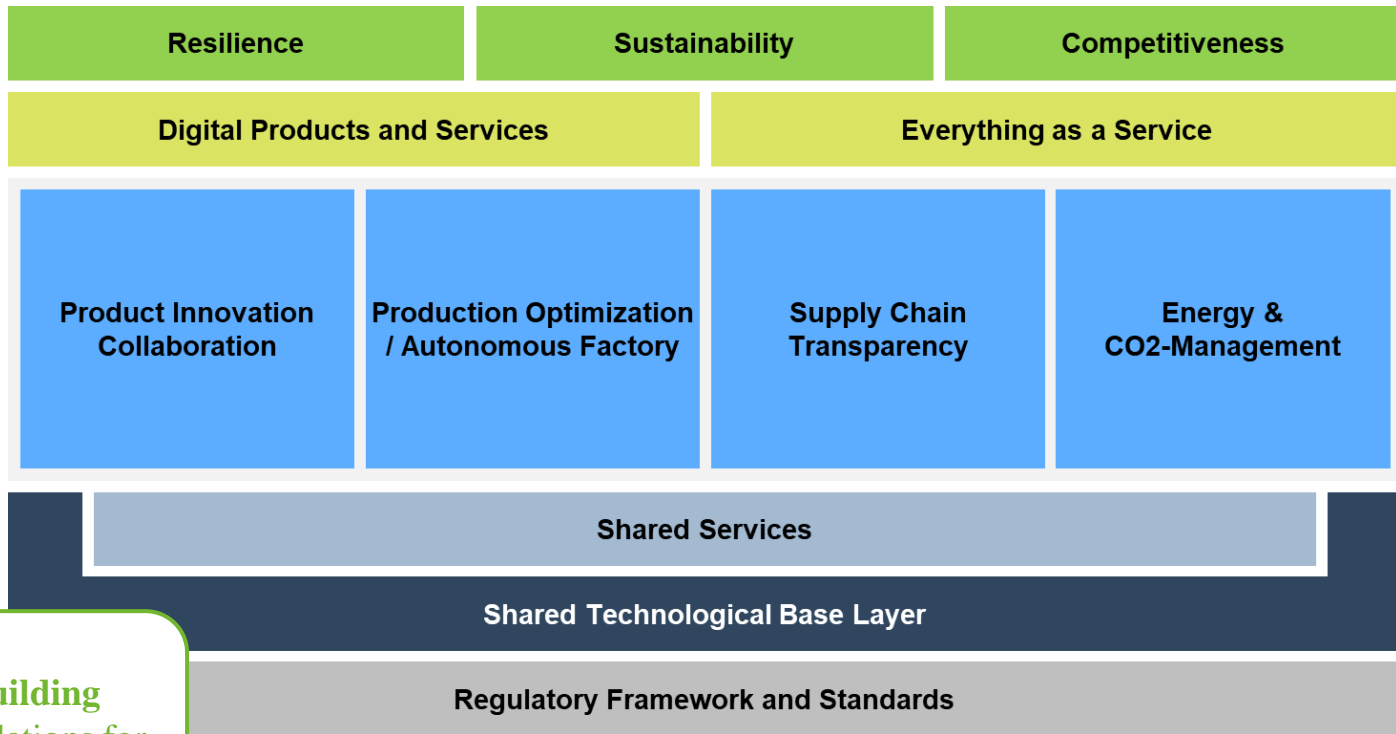
Manufacturing-X Mission

#1 | Motivation & „Big Picture“

The Foundational Framework for Manufacturing-X

The Foundational Framework as common guideline for Manufacturing-X activities & inter

2
Iterative interplay between **individual implementation** of use cases & **joint development** of basic infrastructure



1
Fitting of **established building blocks** as modular foundations for Manufacturing-X

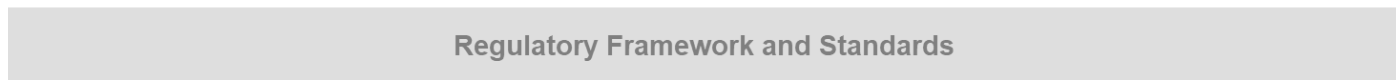
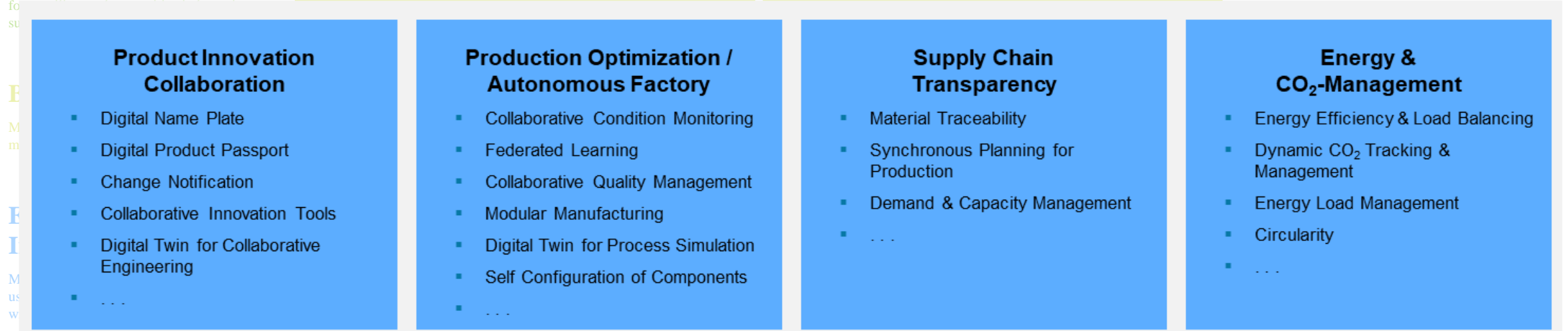
#2 | Use Cases & Application

Manufacturing-X Use Cases

Manufacturing-X implements cross-industry use cases and application with both: High business impact and significant ecologic benefit.

Strategic Goals

Manufacturing-X develops the foundations for sustainable



Manufacturing-X builds on a common technical, organizational and legal framework and contributes to the future development in cooperation with European and international legislative.

#3 | Architecture & Technology

Core elements for a cross-industry architecture

Common building blocks of a unique technical architecture ensure cross-industry and inter-application interoperability



An **overarching technical architecture** for Manufacturing-X is THE key-enabler for interoperability within and across manufacturing industries.



MFX-architecture aims to ensure the **technical integration** of existing and to-be-developed systems within manufacturing data spaces.



MFX-architecture is being built based on a **number of building blocks**. Those building blocks shall be developed in a designated cooperative approach.







#4 | Conclusion & Next steps

Manufacturing-X

Make data work. Competitive, Resilient & Sustainable.

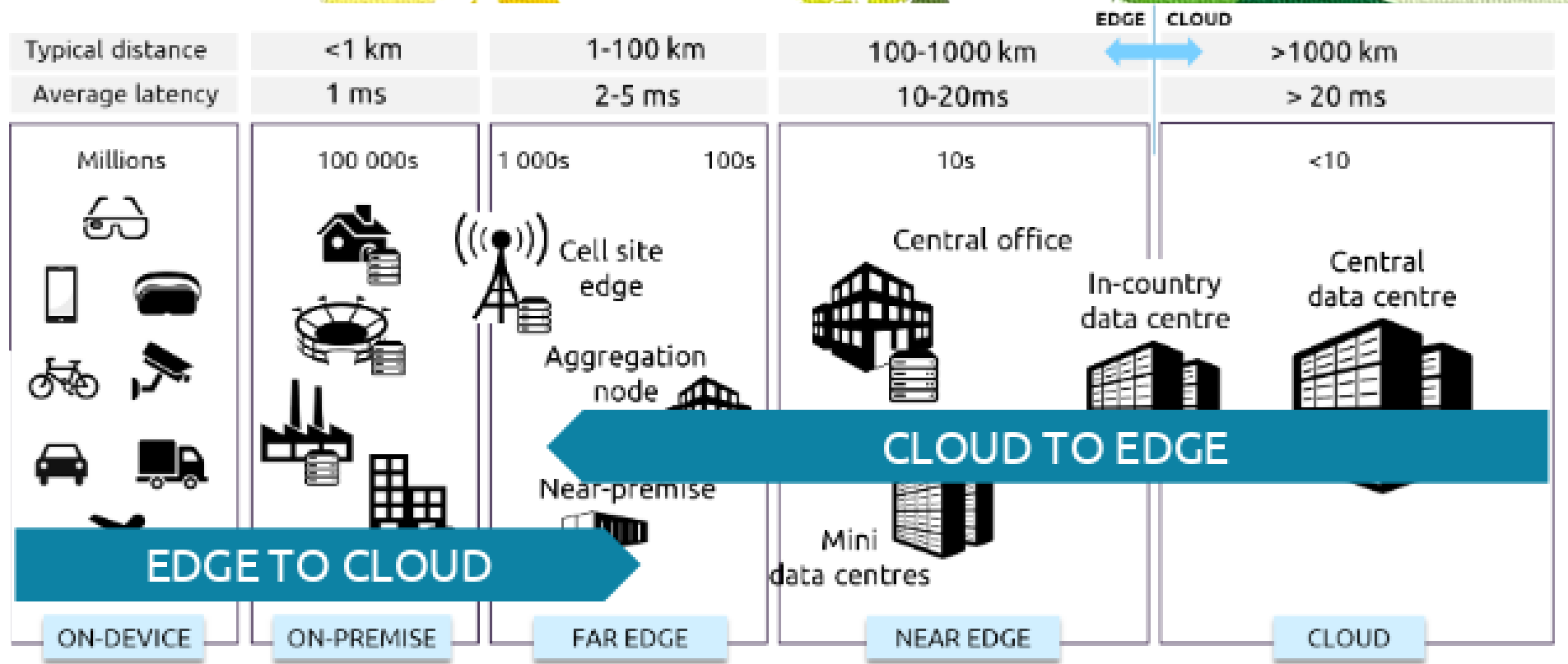
Manufacturing-X implements the basic infrastructure to deploy **federated data-ecosystems for industrial applications:**

-  In an international **approach** Manufacturing-X connects value chains and manufacturing networks across all industrial sectors.
-  A **common technical core** build on basic cornerstones from recent developments of Industrie 4.0 guarantees interoperability.
-  A use-case based approach focuses on the **economic & ecologic impact** of collaborative use of data and ensures a dynamic scaling of the ecosystem.
-  Setting-up an organizational structure will facilitate the **open cooperation of the global MFX-community**.

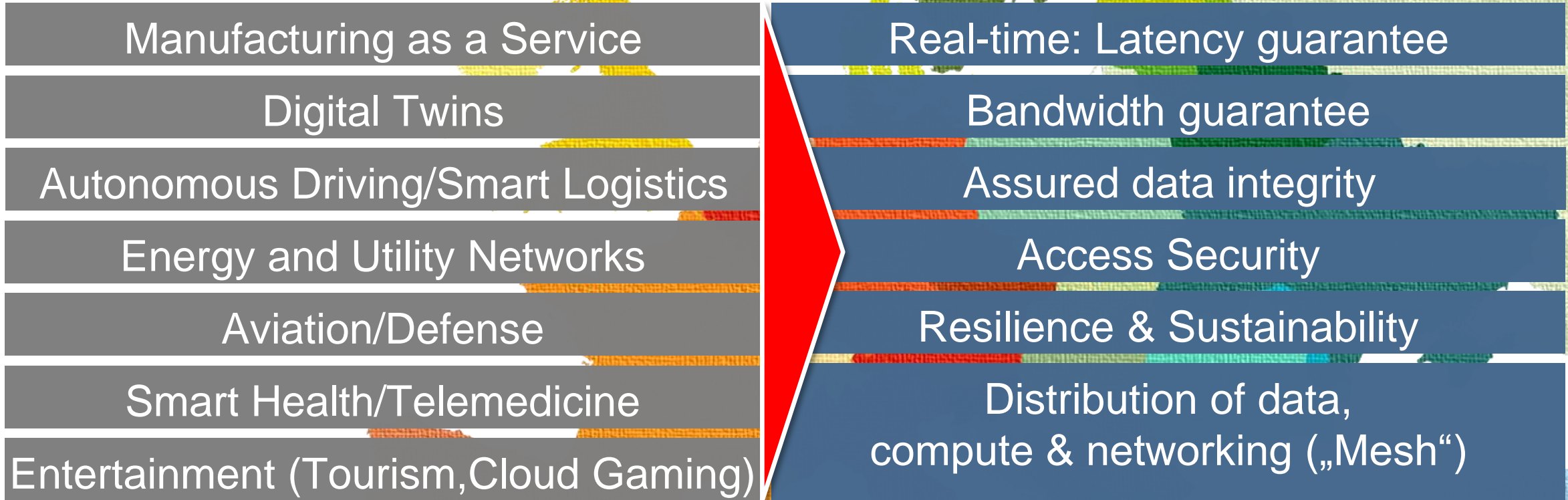


**Join in, participate and contribute to the collaborative development
of the Data Space Industrie 4.0!**

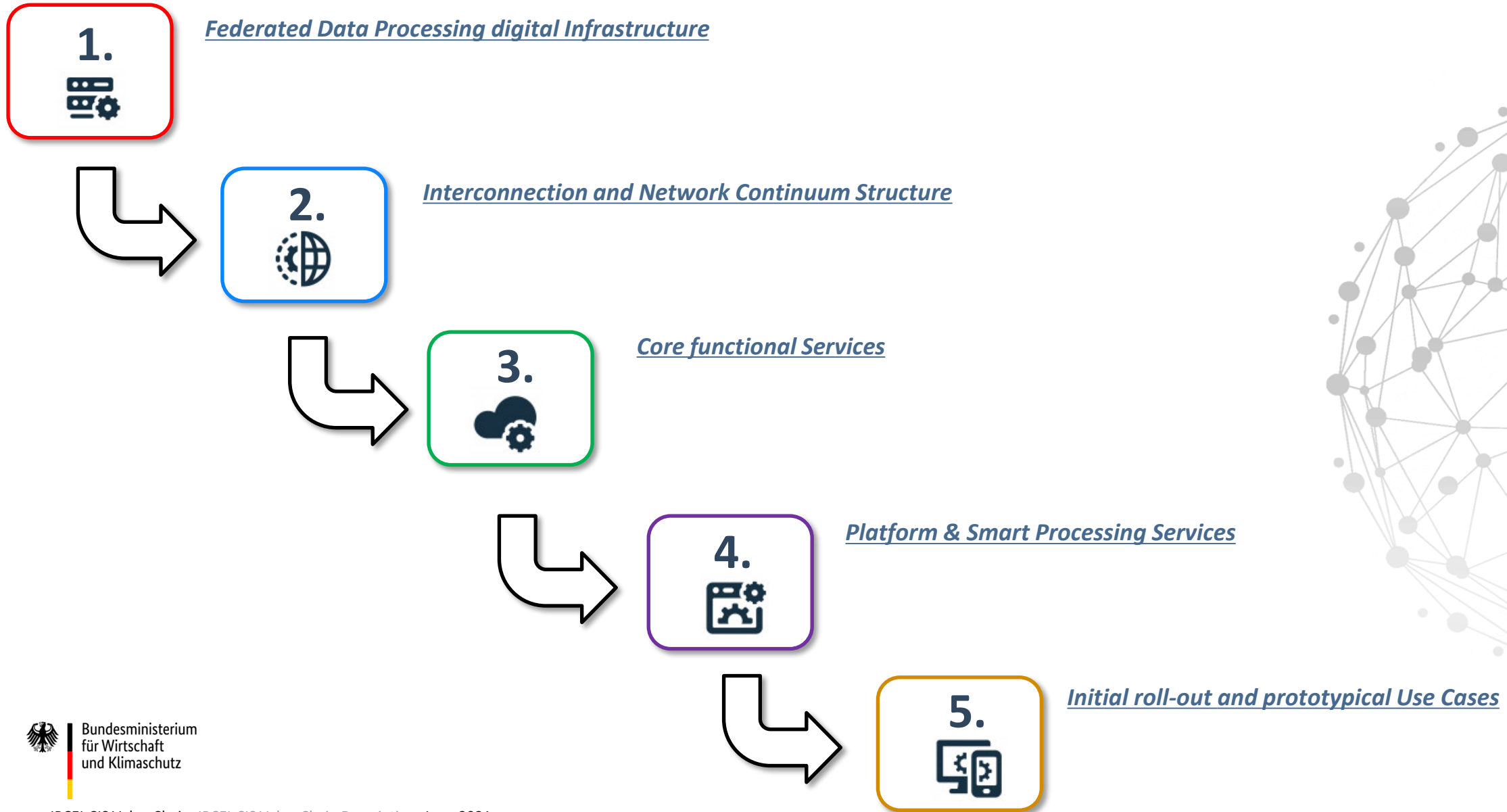
IPCEI-CIS: the way to a “Multi-Provider Cloud Edge Continuum”



Edge and Cloud: Use Case Requirements



IPCEI-CIS Value Chain (Multi Provider Cloud-Edge Continuum)



Thank you!