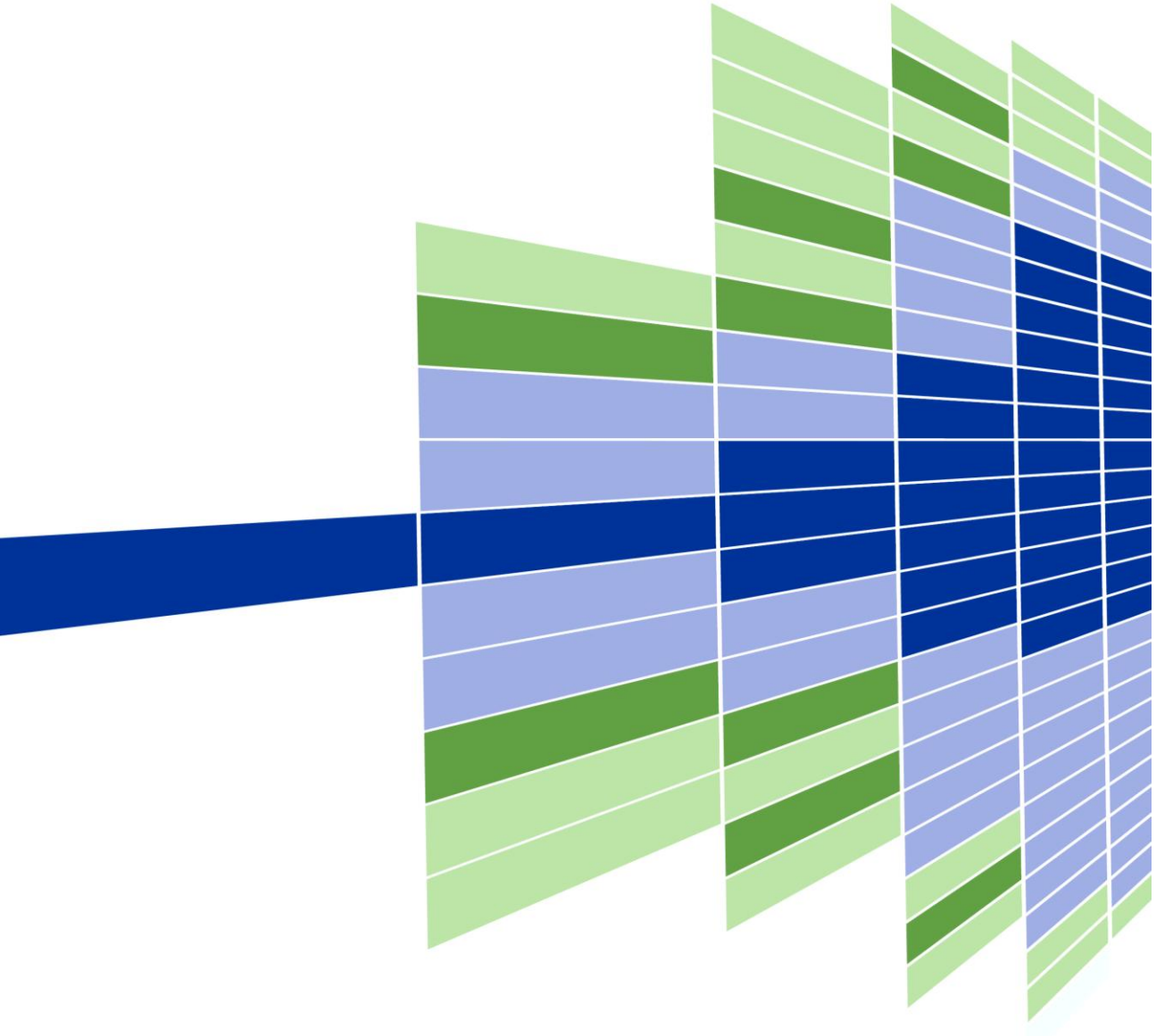


Fostering Digital Transformation and Data Valorisation in EUSALP

Enhancing Competitiveness and Innovation through Data Spaces

Index and methodology

Deliverable 1: Data Valorisation Strategies	Deliverable 2: Data Spaces	Deliverable 3: Policy Recommendation
Why and how should companies and public entities create value from their data ▪ Desk analysis	Which main features and open issues characterize data spaces How the data space model is implemented in the Manufacturing and Water Management sectors across Europe ▪ Desk analysis ▪ **11 interviews** with data space partners, technology providers, and European research organisations	Why and how should policy makers support the spread of the data space approach and solutions in the Alpine Region

D1-
Data Valorisation Strategies
From Storage systems to Data-Driven Business Models

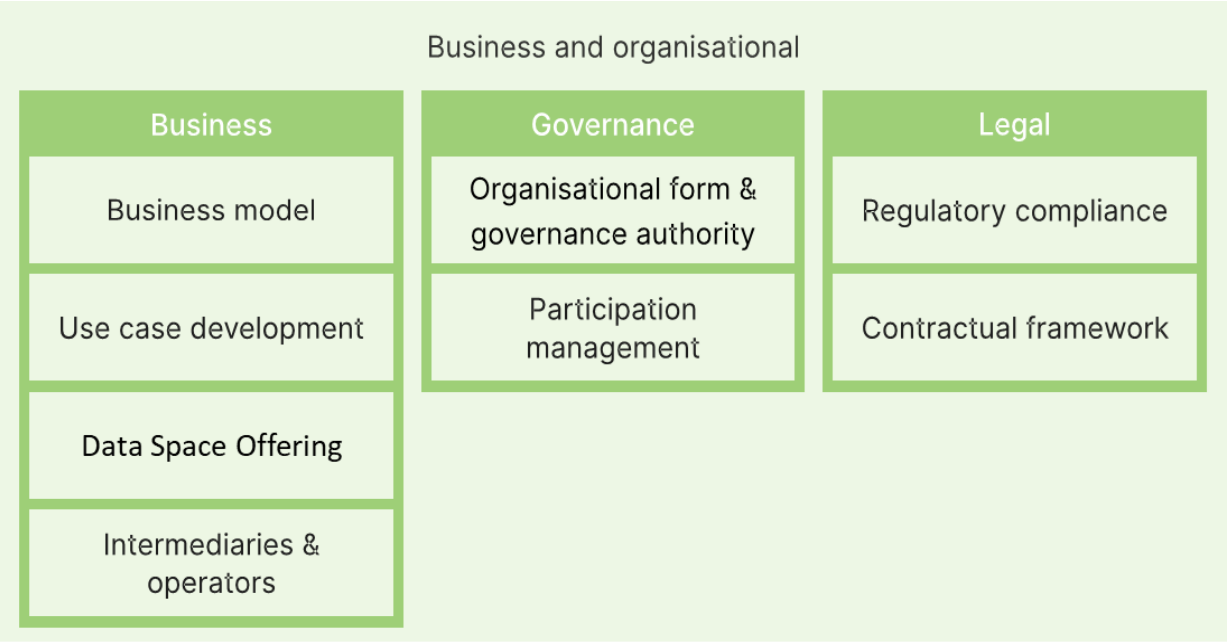
Deliverable 1 analyses established and emerging business models for data collection, sharing, governance, and valorisation, aiming at raising awareness on the importance and benefits of data to foster economic growth and provide new services to citizens.

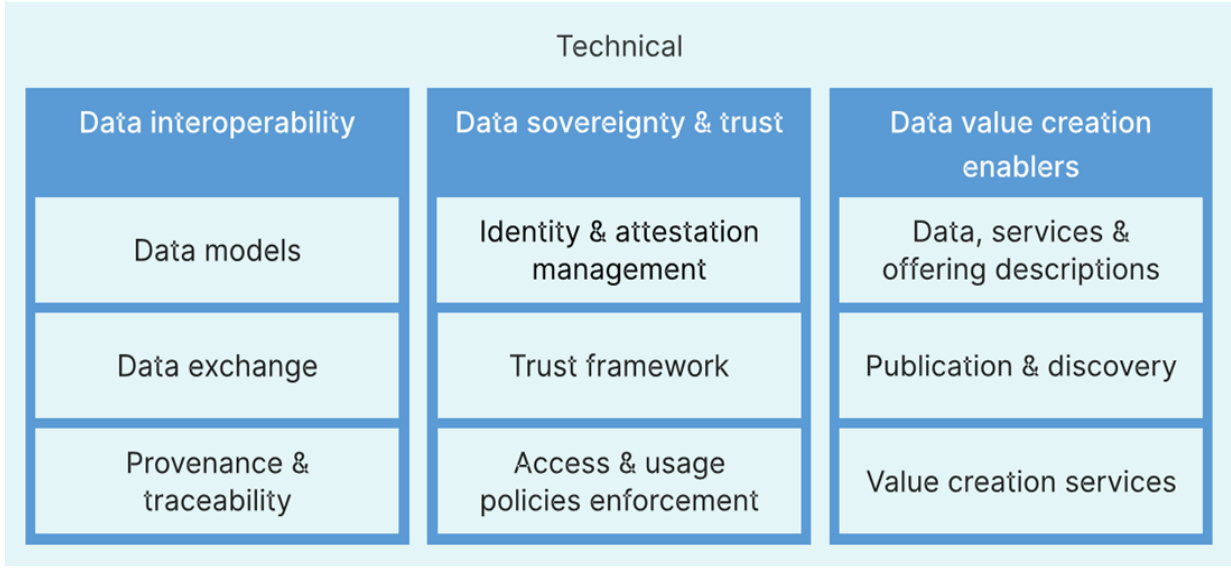
Architectures and models explored

- Data Warehouse
- Data Lake
- Data Lakehouse
- Data Marketplace
- Open Data Portal

D2-
Data Spaces
A new comprehensive approach: theory and practice

Deliverable 2 examines the Data Space model from both a theoretical point of view, describing its building blocks, and a practical one, delving into some European implementation experiences concerning Manufacturing and Water Management sectors





Importance of supporting data spaces through public policies

As observed in Deliverables 1 and 2, the following are key reasons motivating why it is important that policy makers promote the development and adoption of ecosystem and systemic approaches when it comes to data sharing, management and valorization, such as **data spaces**:

- Fragmented Context: The EUSALP region faces significant fragmentation, with small and medium-sized enterprises (SMEs) and numerous local public administrations, many of which have low digital maturity. This hampers their ability to engage with complex data ecosystems.
- Digitalization Needs: To increase economic competitiveness and attractiveness, promoting data spaces in the Alpine regions is crucial. Supporting the digitalization of SMEs and local authorities is essential for equitable access to these data spaces, which are typically dominated by larger companies.
- European Alignment: Aligning with European strategies, such as Digital Europe and European Digital Innovation Hubs (EDIH), is important to standardize practices, ensure interoperability, and share best practices from existing projects.
- Sector-Specific Focus and culture: Key sectors like manufacturing and water management are particularly relevant in the Alpine region. Digitalization and data spaces can improve the quality and accessibility of water-related data and support the growth of SMEs in the manufacturing sector, but first there is a need to focus on the ecosystem culture and on the data space approach.

D3-
General Recommendations

R1. Support digitalisation as an enabling factor and access condition to the data space ecosystem

Digitalisation is essential for improving the economic competitiveness and attractiveness of the Alpine region. It is necessary to promote the digitalisation of SMEs and local authorities to ensure equitable access to data space ecosystems.

R2. Promote the standardisation of experiences and their alignment with European policy guidance

Data space initiatives in the Alpine region must align with EU standards and promote interoperability to enable participation across ecosystems. Strong political coordination and the sharing of best practices and case studies are essential to guide future investments and support data space development.

R3. Foster the dissemination of knowledge and the growth of skills

The dissemination of data culture and the growth of skills are crucial for the economic development of the Alpine regions. Providing qualified training pathways is essential to increase digital literacy across all sectors.

R4. Establish services to facilitate access to the data space ecosystem

To facilitate broader participation in data spaces, it is essential to offer services supporting technical compliance, regulatory alignment, impact measurement, and risk assessment, helping especially smaller entities to access, trust, and benefit from these ecosystems.

R5. Evaluate targeted investments in support of data spaces

EUSALP policymakers should support investments aligned with scientific research and foundational activities for data spaces, strengthening the Alpine region's ecosystem and enabling future targeted initiatives in sectors like Manufacturing as a Service and Water Management.

D3- Recommendations for the Manufacturing Sector

R6. Ensure a high level of data security and protection

SMEs in the manufacturing sector hold sensitive data. It is necessary to strengthen security measures to increase trust in data space ecosystems, promoting the adoption of internationally recognized security certifications.

R7. Encourage the increase of use cases involving small and medium-sized enterprises in the Alpine region in the manufacturing sector through a dedicated technological infrastructure

It is important to create a dedicated technological infrastructure for the manufacturing sector to reduce the economic burden on SMEs and encourage their participation in data spaces, ensuring neutral governance and compliance with European standards.

Recommendations for the Water Sector

R8. Improve the quality, quantity, and accessibility of water-related data

Water management is a cross-cutting priority. It is necessary to adopt advanced technologies and sensor systems for real-time monitoring of the resource, establishing common standards for data collection and sharing.

R9. Promote a unified approach to water management at Alpine level through a dedicated technological infrastructure

The cross-sectoral nature of water management requires a unified approach. It is suggested to monitor data valorization experiences and evaluate the possibility of implementing a flagship project on water management, supporting investments in a dedicated technological infrastructure.

THANK YOU!

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