

MANUFACTURING-X



Nature of the Initiative	International Project Data Space	
Mission	<p>To implement a decentralised, federated, and collaborative ecosystem for smart manufacturing.</p> <p>To enable open, global and cross-sector international operation of cost-effective data networks.</p>	
Sector(s) addressed	Manufacturing	
Leading organisation	Plattform Industrie 4.0 is the hub of the Industrie 4.0 community, in order to specify and implement Manufacturing-X.	
Members (approx.)	+30 German Members in Steering Committee	
Founded (Year)	2023	
Social Media Presence	LinkedIn Twitter - X	
Relevance for Industry 4.0	<p>Focus on advancing digital transformation and innovation in manufacturing. Enables agile manufacturing practices and transforms manufacturing sector towards smarter, more connected and efficient production systems.</p> <ul style="list-style-type: none"> - Innovation hub - Collaborative ecosystem - Connected, intelligent and data-driven future for manufacturing industries 	
Key Information	Levels	Important Links
Data Space Functional & Technical Specifications	★★★★★	Website
Data Space Governance	★	GitHub/Eclipse Link: N/A
Data Space Demonstration	★★★★	Document Library Link
Data Space Adoption	★★★	Info Link
Connected Initiatives	Catena-X / Gaia-X / DSSC / Mobility Data Space / ...	
Additional Information		
Contact (Name/E-mail)	<p>Mail: manufacturing-X@plattform-i40.de</p> <p>Contact Form: Plattform Industrie 4.0 contact form</p>	

Report

What is Manufacturing-X?

X stands for “Exchange” (exchange of data and collaboration across different industries).

Supported by governments, large associations, research institutions and leading companies, the Manufacturing-X is an international initiative aims to create a single market that allows free data flow within the EU, opening new possibilities for cross-industry data exchange and cooperation and achieving a resilient, sustainable, and fully interconnected industry.

- Federal data spaces = platform for efficient, secure, and high-quality data exchange¹
- Interoperability
- Companies will autonomously and jointly be able to use data across the entire production and supply chain.



Mission & Objectives²

Enable efficient and effective value creation for a resilient, sustainable, and competitive industry. The platform will enable creating new business models for a sustainable economy; create a more resilient answer to disruptions and value networks and securing and expanding the competitive strength of the German industry.

Manufacturing-X has the power to significantly change manufacturing and the steps involved in creating, producing, and delivering goods. For industrial businesses prepared to embark on a new course towards an agile, networked, customer-centric production landscape, it offers a unique challenge as well as an opportunity. It will enable industrial companies and system operators to reduce production costs while improving product quality, accelerating time-to-market, and increasing the efficiency of their manufacturing processes.

How does the International Manufacturing-X Council work?

By establishing the International **Manufacturing-X Council**³, a joint effort of partners from science, politics, and business to advance on the establishment of IMX.

Countries are represented by council members, selected by their respective industry initiatives. They will discuss policies, trust, and legal frameworks.

Initiatives involved in the IMX Council include Industrie 4.0 Osterreich (Austria), Smart Industry Programme (Netherlands), CESMII (US' Smart Manufacturing Institute) (US), KOSMO (South Korea), RRI (Robot Revolution Initiative) (Japan) ... and more!

Use cases

Manufacturing-X offers use cases focused on the implementation of practical added value. We find decarbonisation, Product Passport Management, efficient and fast traceability of delivered parts, supply chain, among others.

Interesting links/ documents

- [Manufacturing-X Data Space study](#)
- [Digital Genial - ProALPHA Manufacturing-X \(Spotify\) \(German\)](#)
- [Manufacturing-X FAQ](#)
- [Manufacturing -X: A data room for Industrie 4.0 \(Fischer\)](#)

¹ [\(proALPHA\) The Digital Transformation of the Mid-Market: Opportunities Offered by Manufacturing-X](#)

² [Resilience. Sustainability and competitive strength – platform-i40.de](#)

³ Currently under development

