Plattform Industry 4.0

Nature of the Initiative	Platform	National Project	European Project	International Project
Mission	To secure and expand Germany's leading international position in the manufacturing industry
Sector(s) addressed	Manufacturing	Public Administrations	Media	EOSC (Research)
Leading organisation	Led by the German Federal Ministry for Economic Affairs and Climate Action as well as the Federal Ministry of Education and Research, and high-ranking representatives from industry, science and the trade unions.
Members (approx.)	6,000 member companies
Founded (Year)	2015
Social Media Presence	LinkedIn	Twitter - X
Relevance for Industry 4.0	Platform Industrie 4.0 promotes the development of Industrie 4.0 in Germany by: • developing pre-competitive concepts and solutions and putting them into practices (to be found in the online library) • supporting companies with recommendations for action, information and use cases for practical application (for example, in the Industrie 4.0 map with more than 350 use cases and participation in the SME Transfer Network) • feeding their ideas into the international Industrie 4.0 discourse and participating in international standardization processes (through more than ten international cooperations)

Key Information	Levels	Important Links
Data Space Technical Specifications	★	Website
Data Space Governance	★★	GitHub/Eclipse Link: N/A
Data Space Demonstration	★	Online Library
Data Space Adoption	★★★★	Industry 4.0 map, Publications, Results of Plattform Industry 4.0
Connected Data Space 4.0 Initiatives	Smart Industry, Industria Conectada 4.0,	

Additional Information	
Contact (Name/E-mail)	You can contact them through this link

Report

What is Plattform Industrie 4.0?

It refers to the intelligent networking of machines and processes for industry with the help of information and communication technology. There are many ways for companies to use intelligent networking. These are some of the possibilities:

- **Flexible production**: In manufacturing a product, many companies are involved in a step-by-step process to develop a product. In being digitally networked, these steps can be better coordinated and the machine load better planned.
- **Convertible factory**: Future production lines can be built in modules and be quickly assembled for tasks. Productivity and efficiency would be improved; individualized products can be produced in small quantities at affordable prices.
- **Customer-oriented solutions**: Consumers and producers will move closer together. The customers themselves could design products according to their wishes—for example, sneakers designed and tailored to the customer's unique foot shape. At the same time, smart products that are already being delivered and in use can send data to the manufacturer. With this usage data, the manufacturer can improve his or her products and offer the customer novel services.
- **Optimised logistics**: Algorithms can calculate ideal delivery routes; machines independently report when they need new material—smart networking enables an optimal flow of goods.
- **Use of data**: Data on the production process and the condition of a product will be combined and analysed. Data analysis provides guidance on how to make a product more efficiently. More importantly, it's the foundation for completely new business models and services. For example, lift manufacturers can offer their customers "predictive maintenance": elevators equipped with sensors that continuously send data about their condition. Product wear would be detected and corrected before it leads to an elevator system failure.
- **Resource-efficient circular economy**: The entire life cycle of a product can be considered with the support of data. The design phase would already be able to determine which materials can be recycled.

Mission & Vision

- 2030 Vision for Industrie 4.0: Shaping Digital Ecosystems Globally

In this 2030 Vision, the stakeholders of Plattform Industrie 4.0 present a holistic approach to the shaping of digital ecosystems. Working from the specific situation and established strengths of Germany's industrial base, their aim is to create a framework for a future data economy in line with the requirements of a social market economy: emphasising open ecosystems, diversity and plurality and supporting competition between all the stakeholders on the market. The Vision is primarily addressed to industry and commerce in Germany, but explicitly highlights the importance of openness and a willingness to work together with partners in Europe and around the world.

Three closely interlinked strategic fields of action are crucial for a successful implementation of Industrie 4.0: **autonomy, interoperability and sustainability**. The stakeholders on Plattform Industrie 4.0 commit jointly to these fields of action as guiding principles for the coming decade of the incipient scaling-up of Industrie 4.0 in Germany, Europe and globally. In a dialogue with all the stakeholders in the industrial society, the aim is to establish a framework for action so that – building on the current outstanding position of German industry in global terms, the digital transformation of German industry can take place in a sustainable manner, and Industrie 4.0 can be successfully established throughout a flourishing German Mittelstand.

The goal of the Plattform Industrie 4.0 is to secure and expand Germany's leading international position in the manufacturing industry. For this, the participants of the platform discuss appropriate and reliable framework conditions. As an initiator, moderator of various interests and messages, the Plattform Industrie 4.0 ensures a space for pre-competitive exchange between relevant stakeholders from politics, business, academia, trade unions and associations. The platform is one of the world's leading Industrie 4.0 networks. The Plattform Industrie 4.0:

- develops core concepts in working groups on how to tackle challenges on the pathway to Industrie 4.0.
- provides concrete recommendations for academics, companies and politicians.
- drives national and international exchanges through numerous bilateral and multilateral cooperation – particularly in the areas of IT security and standardisation.

Events

- <u>Hannover Messe 2024</u>

Plattform Industrie 4.0 addressed industrial data ecosystems at Hannover Messe. Together with the Gaia-X community they organised a joint 500m2 stand. It could be seen how IPCEI-CIS is setting up the next generation of cloud infrastructures and services in Europe and how digital sovereignty is being achieved based on Gaia-X principles. Moreover, the Leaders' Dialogue was well attended. Under the motto "Scaling. Together. International.", more than 350 guests attended and saw a high-calibre panel, including Dr Robert Habeck, State Secretary Prof. Dr Sabine Döring (Federal Ministry of Education and Research) and Leonore Gewessler (Federal Minister for Climate Protection, Environment, Energy, Mobility, Innovation and Technology, Austria). The main topics discussed in the event were internationalisation and Manufacturing-X.

The following link contains more information about event: **https://www.plattform-i40.de/IP/Redaktion/DE/Kurzmeldungen/2024/04_HannoverMesse24-R%C3%BCckblick-LD.html**