

## DIGITALEUROPE

### Data Act proposal and data sharing

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## Transforming manufacturing through industrial data sharing

Industrial data holds great potential to relaunch European manufacturing industries.

Digital platforms are fostering data access and exchange among industries, creating a collaborative environment that accelerates innovation.

This is encouraging more and more companies to take up technologies such as artificial intelligence and Industrial Internet of Things.





of manufacturers are considering sharing data with other manufacturers to improve operations<sup>1</sup>

<sup>1</sup>Source: World Economic Forum, Share to Gain: Unlocking Data Value in Manufacturing, 2020

What is...

...industrial data?

It's data derived from machinery and plants in different industrial sectors.

...a digital industrial platform?

It's an online intermediary service that connects two or more industrial actors and facilitates data and information exchange.

Why...

...is data sharing crucial for the future of industry?

It unlocks new data analytics opportunities to reduce carbon footprint, boost productivity and fuel innovation in Europe.



## Industrial data sharing: what can the EU do?

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Promote transparent

Enable fair competition between digital industrial platforms

Encourage data access and use through fair and transparent contractual arrangements

This ensures that customers and business partners can determine and control which data is accessed and for what purpose it is used. Ensure data security throughout the product's lifecycle, from design to management

A basic requirement for data sharing and use is security – of access, processing, storage, and handling of data. Support the portability and interoperability of data to enhance competitiveness

Interoperable data formats and information models based on freely accessible standards will enable different applications, promoting competition and collaboration.

Industrial platform users should track and control the use and exploration of their data in industrial platform operations through suitable opt-in/opt-out functions.

operations of digital

industrial platforms

The design of industrial platforms should encourage fair competition by ensuring migration capability of data and simultaneous use of multiple platforms.

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Encourage data access
and use through
fair and transparent
contractual
arrangements

In principle, each company should be able to decide how to handle the data it generates. In an industrial context, this is best achieved through fair contracts that take the interest of all involved parties into account.

Usually, these address important issues of know-how protection and data confidentiality, while ensuring that more sensitive types of data sharing – such as localisation – remain voluntary.

#### **Skywise by Airbus**

Created by **Airbus**, Skywise is the leading Enterprise Data Platform for the aviation industry. It includes 100+ airlines of every size and geography.

The platform is designed to handle integrations of commercial and operational systems, processing large volumes of data,

both structured (operational and maintenance data) and unstructured (technical documents). It provides tools for users to prepare, aggregate, analyze data and templates to create applications inside the platform.

Further information: skywise.airbus.com



#### **Microsoft Connected Factory Solution**

competitiveness

collaboration.

Interoperability between devices and assets is critical for today's factories, which are increasingly bringing new and legacy systems online and modernizing their plants and facilities.

**Microsoft's** Azure IoT Suite Connected Factory solution enables manufacturers to take advantage of the Open Platform

Communications Unified Architecture (OPC UA) interoperability standard that simplifies interoperability and enables manufacturers to get a head start on transforming their assets into smart factories.

Further information: <u>azure.microsoft.com/</u> <u>en-us/features/iot-accelerators/connected-factory/</u>



Promote transparent operations of digital industrial platforms

An industrial platform interconnects different actors who can pursue different interests, including the platform operator itself. Maximum transparency on the content and functionality of the industrial platform – say, the order of search results – is necessary to all platform users.

Through suitable opt-in/opt-out functions, users can track and control the use and exploration of their data at any time.

#### Schneider Electric Exchange

Schneider Electric Exchange is a first-ofits-kind, open business platform dedicated to solving real-world sustainability and efficiency challenges by empowering digital collaboration. It brings experts and peers together in a new digital ecosystem, unifying different fields of disciplines in one collaborative community. Through ready-to-use Analytics, Datasets, APIs and Toolkits, Exchange enables End Users, Technology Suppliers, System Integrators to work collaboratively and make the most of the data.

Further information: <a href="mailto:exchange.se.com">exchange.se.com</a>

Accelerating with Schneider Electric Exchange



Technical resources & toolbox

Best-in-class management of API, data science, data sets, and SDKs



Public & private communities

Collaborators co-innovating digital solutions, all content indexed and searchable



Digital marketplace

Full publisher lifecycle management capability and a global payment integrating lead generation Enhance fair competition between digital industrial platforms

Industrial data sharing should enable fair competition to accelerate innovation, rather than monopolisation of data – for example, by preventing users from switching to other industrial platforms. This is possible by ensuring migration capability of data as well as the simultaneous use of multiple industrial platforms.

### **SERENA predictive maintenance** by Dell and other European partners

Dell Technologies has joined forces with European manufacturers, leading academic institutes and systems integrators, as part of the H2020 SERENA project<sup>1</sup>, to develop technologies that enable predictive maintenance of industrial equipment.

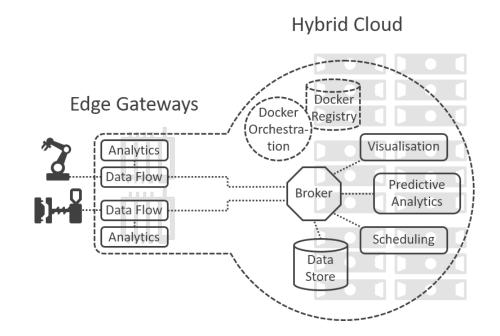
The project partners are working on a reference implementation for a holistic edge to cloud solution, which is technology- and deployment environment-agnostic. Machine learning models are trained in the cloud from raw sensor data collected at the edge; the models can then be distributed to edge devices or the cloud, as appropriate, and used to produce "smart data", which is highly condensed and can be used to estimate the Remaining Useful Life (RUL) of the equipment.

The initial concept is being considered for maintenance of industrial manufacturing robots. Objective is to help manufacturers reduce their overall maintenance costs and improve productivity.

The SERENA system has been designed from the ground up to be platform- and location-agnostic, and has been deployed on virtual environments, private and third-party clouds. It has also shown how parts of the same system can be distributed and communicated across various types of environments, thus giving the customer the ability to deploy the solution however and wherever they want, without the fear of vendor lock-in.

Further information: serena-project.eu

<sup>1</sup>The SERENA project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 767561.







#### **Key recommendations 1/2**

#### **Definitions**

- The scope of several definitions needs to be clarified, for instance:
  - 'Data' to be limited to raw data;
  - The Regulation should apply to 'finished connected products';
  - Data holders should be identified based on the notions of control and ability to make data available.

#### >> B2B & B2C data sharing

- Safeguards for trade secrets and against risk of reverse-engineering.
- Protections against developing competing products and services.
- Clearer obligations and penalties against data misuse by data recipients.
- Recognition of the need for data holders and data recipients to agree on suitable contractual and compensation terms.



#### **Key recommendations 2/2**

#### >> B2G data sharing

- Clearer scope to ensure proportionality and necessity of data requests.
- More stringent conditions to prevent the risk of public bodies' misuse of data.

#### >> Cloud switching

 Switching rules must reflect the variety of cloud services, volume and complexity of data and shared responsibilities between providers and customers.

#### >>International access and transfers

- Art. 27 should be deleted: although aimed at non-personal data, these rules address laws that tend
  to involve personal data, already covered by the GDPR.
- Clearer rules on the relationship with the EU data protection and privacy frameworks must be stipulated.

# Thank you for your attention



