SHARING DATA CONFIDENTLY:
NETWORKING SUPPLY CHAINS WITH THE INDUSTRIAL DATA SPACE

CONTROLLED AND SECURE DATA SHARING

Data has taken on a new role thanks to digitalization. It is no longer the waste product of doing business, but rather a strategic resource that helps create innovative digital service offers.

Logistics is an example of an industry where data and its quick availability plays a big role. Speed, reliability and flexibility are of the essence in logistics. But what happens when deadlines cannot be met because a delivery vehicle is stuck in traffic or has broken down? Quick information sharing is immensely important in such situations to prevent a substantial loss for the dispatcher and the consignee. To counter this, the Fraunhofer Institute for Software and Systems Engineering ISST and the Fraunhofer Institute for Material Flow and Logistics IML have developed an app that drivers can use to quickly and securely send data to their forwarding company and customers. The app allows drivers, logistics companies and consignees to easily share information on delays and arrange for timely rescheduling of loading and unloading processes.

A VIRTUAL DATA SPACE FOR COMPANIES

This app is an example of how the »Industrial Data Space« can be used in the logistics sector. The »Industrial Data Space« is a major project funded by the German Federal Ministry of Education and Research. This project is supported by more than 60 companies that share a common goal: sharing data securely and confidently beyond company boundaries, thus paving the way for new value chains.
**INDUSTRIAL DATA SPACE: RESEARCH FOR A DIGITAL CORPORATE FUTURE**

Digitalization is changing the dynamics of traditional industries and the mechanics of conventional business models. Companies are securing their competitiveness by tapping the innovation potential of digitalization. Data-driven innovation enables tailored products, also in small batches; more service – for example, via dynamic route planning; and optimum processes, such as continuous product availability.

The Industrial Data Space helps companies optimize their digital transformation. The virtual data space is a mammoth project, with a total of 12 Fraunhofer Institutes working together to build a »Fraunhofer Data Space Architecture«. It enables companies of all sizes and across all industries to confidently share data, while ensuring that the company that shares data will retain sovereignty thanks to decentralized data storage. The »Industrial Data Space« aims to establish a standard for sharing business data in a virtual data space.

Fraunhofer ISST is not just leading the way with its reference work in logistics, but also spearheading the whole project consortium for the »Industrial Data Space«.

**INDUSTRIAL DATA SPACE: BUILT ON TRUST**

More than 60 international companies and research organisations are already collaborating to build the »Industrial Data Space«. They are all convinced that data sovereignty in this virtual data space is a top priority. In addition, none of them wants to become dependent on any one cloud service provider.

As a result, they have combined forces in the »Industrial Data Space Association« (www.industrialdataspace.org) to support Fraunhofer researchers in building a reference architecture and defining sample applications.

In early 2017, the first company applied the logistics use case in practice. It is clear that the »Industrial Data Space« approach works and companies can rely on this standard when looking for new, digitalization-based business models.

The »Industrial Data Space« initiative is not limited by geographical boundaries: its association is open to new members from Europe and the rest of the world.

**OUR OFFER: YOUR INDUSTRIAL DATA SPACE CHECK**

Fraunhofer ISST developed a base connector as part of the project. It acts as a proof of concept that the architecture of the Industrial Data Space works and can be utilized.

But companies do not start from scratch without their own structures and systems. That is why Fraunhofer ISST offers an »Industrial Data Space Check«. We will analyze your system landscape and create a tailored strategy that explores how the »Industrial Data Space« connectors can be implemented based on the existing structures in your company.

We will define sample scenarios together with you, allowing you in turn to determine the value that data sharing by means of the »Industrial Data Space« can bring to your company. Using your data, we will also help you to create new business models and pave the way for you to become part of a digitalized, modern and cooperative value chain.

We look forward to hearing from you and would be happy to assist you!