

# Questions and answers about the Silicon Economy

**Artificial Intelligence** | *Catalyst for the digital transformation of logistics*

**Platform Economy** | *Central business model of the future for logistics*



## What is the Silicon Economy?

The Silicon Economy – a project at the Fraunhofer Institute for Material Flow and Logistics IML supported by the German logistics industry – will help a decentral and open platform economy in Germany and Europe to achieve a breakthrough as an alternative approach to Silicon Valley. Silicon Valley stands for the platform economy in the B2C sector which still has relatively simple business models. The Silicon Economy, however, is the B2B platform economy with AI-driven processes. It is therefore both an open and federal ecosystem for artificial intelligence.

## Why do we need the Silicon Economy?

Today, individual companies on their own are not in a position to develop solutions for the platform economy of the future in a fast and agile way. The approach of the Silicon Economy is therefore decentral, federal and mutual. In this way, logistics companies have the opportunity to use new technologies internationally, to organize their processes more efficiently, flexibly and resiliently and to develop new business models.

## How is the Silicon Economy being implemented?

At Fraunhofer IML, with support from the logistics industry, the Silicon Economy is being driven ahead in two large implementation projects. One of these is the »Silicon Economy Logistics Ecosystem«, the other is »Blockchain Europe«, a project to establish the European Blockchain Institute in North-Rhine Westphalia (NRW). In both implementation projects, functional and platform components are being created for specific applications as part of numerous agile developments.

## What does the technical concept of the Silicon Economy look like?

The basis of the Silicon Economy is generally open source. Software and hardware components from the implementation projects are published in a library (»Repository«). Each company can use these open source components to map its own business model or work on the corresponding standards. An organization is currently being established that will coordinate





»LedgerMan« is a campaigner for »Blockchain Europe«, a Silicon Economy implementation project.

and control the involvement of the industry and future developments of the Silicon Economy and make it available for companies beyond the implementation projects.

#### **Who can take part in the Silicon Economy?**

It is very easy for companies to participate in the Silicon Economy. Any company can download components and set up its own business model on it. This is a unique opportunity that will set standards and be disruptive at the same time.

#### **What benefits does the Silicon Economy offer for companies?**

The goal is to ensure that each company – whether it is a corporation, an SME or a start-up – can maintain sovereignty and control over its data in the Silicon Economy and does not need to be afraid of revealing its business model, surrendering its data or being infiltrated.

#### **What is the significance of International Data Spaces and Gaia-X?**

In highly distributed and federal ecosystems like the Silicon Economy, data spaces are needed in which data can be traded and exchanged in a secure and sovereign way. International Data Spaces is an initiative aiming at creating a secure, cross-domain data space that enables companies of all sizes and from different industries to manage their data assets in a sovereign way. Gaia-X is a project to establish a high-performance and competitive, secure and trustworthy data infrastructure for Europe. Both projects meet companies' requirements for data protection and data sovereignty as they are understood in Germany and Europe. Logistics is an important use case for both initiatives.



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