



Real time positioning of moving assets



To improve current management of the logistics in pilot plant by localizing in real-time the main moving assets. This real-time data will allow to identify current inefficiencies and areas of improvement on the logistics and production processes



Gestamp facility to be monitored

Factory 4.0 Big Data Pilot Motivation

- Manual operational processes (Material reception, storage & supply)
- Manual cycle counting process
- Manual reporting of assets allocation
- Changeover time impact related to dies position and status control






Indoor assets location for internal logistics process

- Effectiveness' improvement in terms of availability of shop-floor
- Cycle counting process automated with instant updating through real-time allocations control
- More dynamic and flexible the allocation of resources (Automatic)

Competitive Advantages

- [KPIs New data for support on decision taking
- Optimize movements of logistic assets. (forklift, AGV, crane...)
- [OEE improvement by reducing downtimes in the production lines]
- Anticipate production lines' needs: Operational effectiveness
- Improvement on stock management

Big Data Pilot Lifecycle Scope

	Digital Engineering	● ● ● ○ ○
	Production Planning	● ● ● ○ ○
	Smart Operations	● ● ● ● ○
	Smart Production	● ● ● ● ●
	Smart Services	● ● ○ ○ ○

Big Data Pilot Site



MN2 stamping plant Gestamp
Navarra, Orkoien

Pilot Partners

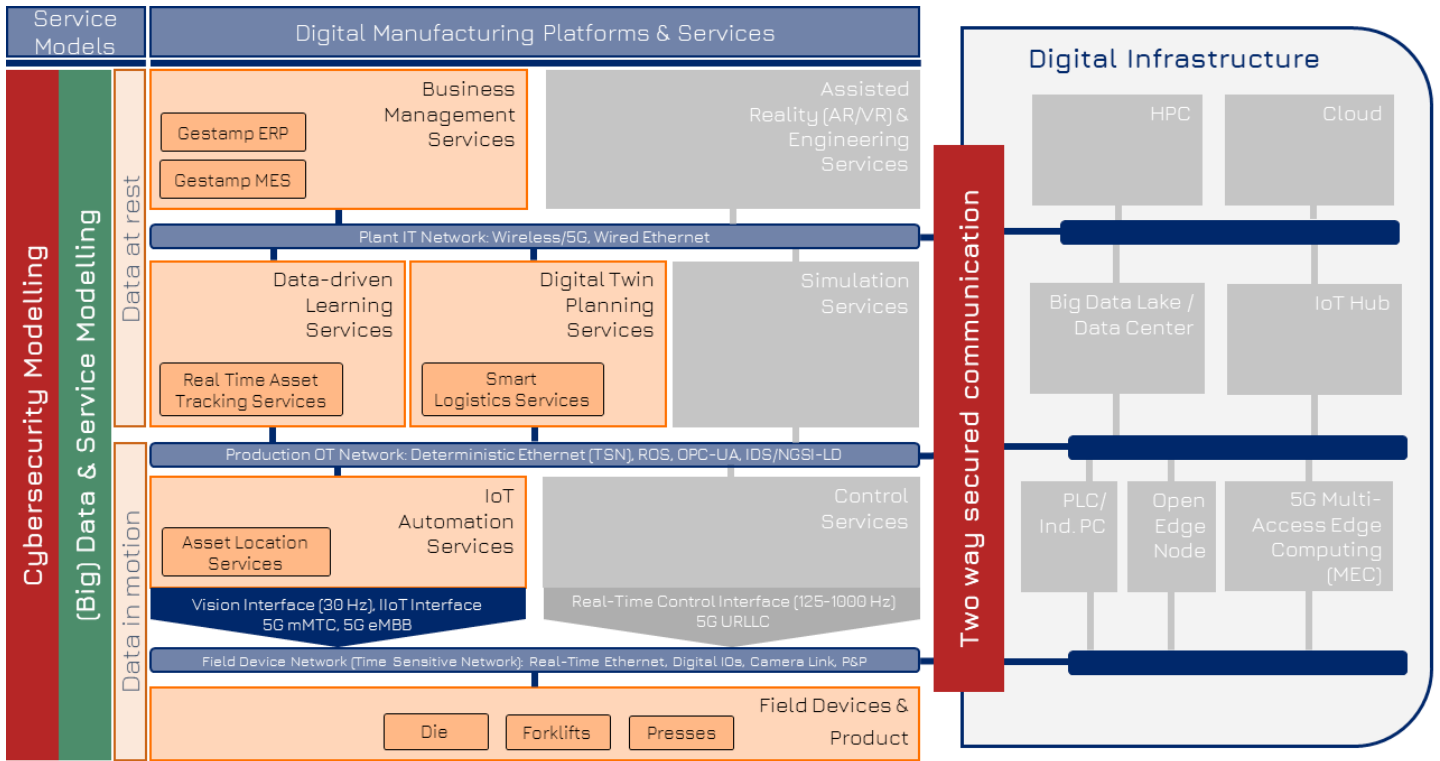


Automotive Lighthouse Factory



I2track Geolocation

14.0 Big Data Pilot Solution Framework



Boost 4.0 big data solution framework leverages on Big Data Europe (BDE) big data pipeline technologies, International Data Spaces Association (IDSA) specifications for data sovereignty, FIWARE NGSI-LD API for open IDS implementation and Hyperledger technologies for transaction traceability. Boost 4.0 big data platforms and technologies align to RAMI 4.0 and are integrated under the Digital Shopfloor Alliance (DSA) autonomous service framework to ensure reduced cost, time and effort in solution deployment and extensibility (<https://digitalshopflooralliance.eu/>).



14.0 Big Data Pilot Features

Sector / Product: Automotive

Manufacturing Process: Logistics

Big Data Analytic Techniques: Neuronal networks, Deep Learning

Big Data Platforms:

- I2Track - www.i2cat.net/projects/i2track/

IDS-FIWARE Connectors & Standards:

- ETSI Context Information Management (CIM)
- ProStep IVP

Open 14.0 Big Data Pilot Pillars

INTERNATIONAL DATA SPACES ASSOCIATION

IDSA defines a reference architecture and an ecosystem, which supports sovereign exchange and sharing of data between industrial partners.

FI-WARE

FIWARE is a curated framework of open source platform components to accelerate the development of smart solutions for Industry 4.0.

HYPERLEDGER

HYPERLEDGER is an open source collaborative effort created to advance cross-industry blockchain technologies.

BIG DATA EUROPE
Empowering Communities with Data Technologies

The BDE offers an open source platform, allowing to build several Big Data components into a pipeline through a simple graphical UI.