Predictive Maintenance in Steel Industry

Customer Background

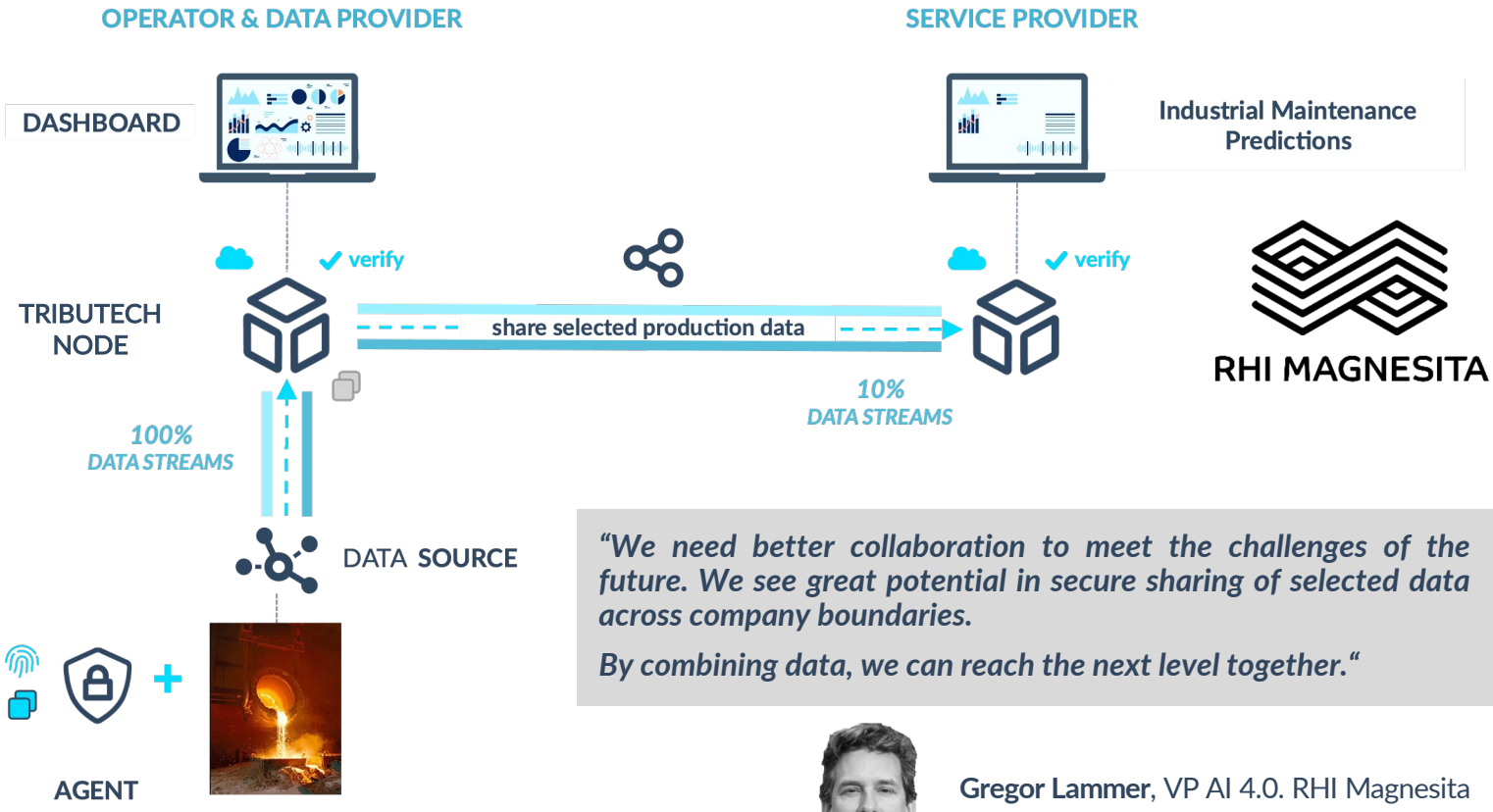
RHI Magnesita is a world market leader in the supply of refractory materials for blast furnaces in the steel industry. In combination with the materials RHI Magnesita wants to offer their predictive maintenance service APO (Automated Process Optimization), that predicts when the materials need to be changed.

Challenge

In order to offer APO to their customers RHI Magnesita needs production data of the steel producers. With the help of this data the APO algorithm is trained to predict the maintenance of the materials. Unplanned maintenance and shutdowns of blast furnaces can cost steel producers millions of Euros every day. Therefore, the risk of data poisoning needs to be eliminated.

Solution

- Establish trust in data from source to consumer to prevent data poisoning & hijacking
- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Significantly reduce time-to-market for predictive maintenance service



"We need better collaboration to meet the challenges of the future. We see great potential in secure sharing of selected data across company boundaries.

By combining data, we can reach the next level together."

Gregor Lammer, VP AI 4.0. RHI Magnesita

Connecting & Securing High-Power Chargers

Customer Background

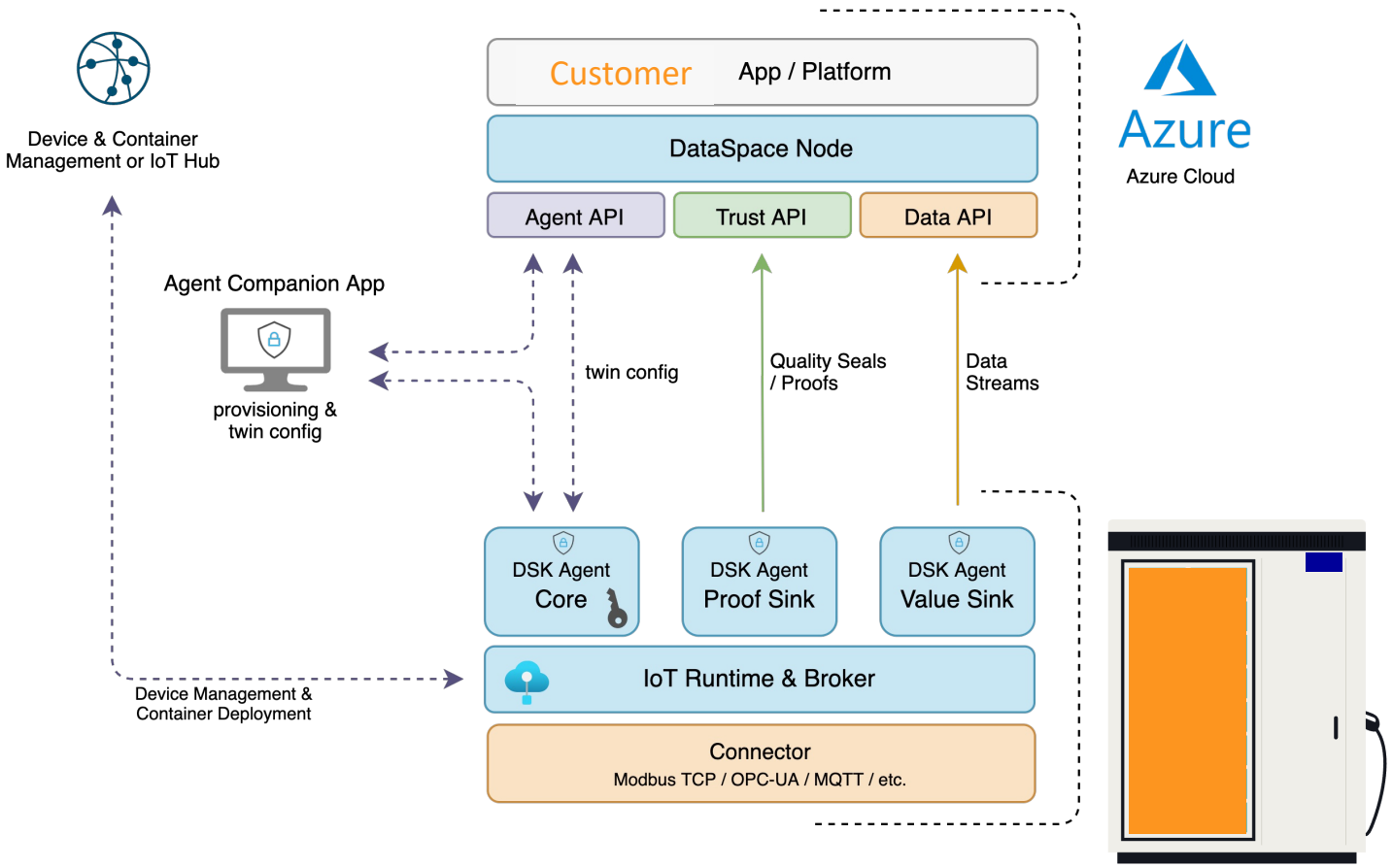
The customer is a leading manufacturer of high-power chargers and battery packs. Currently, the customer is in the process of scaling the production and roll-out of their high-power chargers. Every high-power charger will be delivered as a smart product.

Challenge

To allow the customer to keep up with their ambitious roll-out plan they needed a highly scalable and easy to manage IoT solution. As the high-power chargers will be placed all over Europe, even in remote locations, it is necessary to accurately monitor the condition of the charger at any time, leaving no space for poisoned data. Another must-have was the ability to configure and manage the high-power chargers over the air.

Solution

- Significantly reduce time-to-market for connected High-Power Charger
- Enable effortless & secure data interoperability for any product, device or service
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



Pay-Per-Use/Equipment-as-a-Service

Customer Background

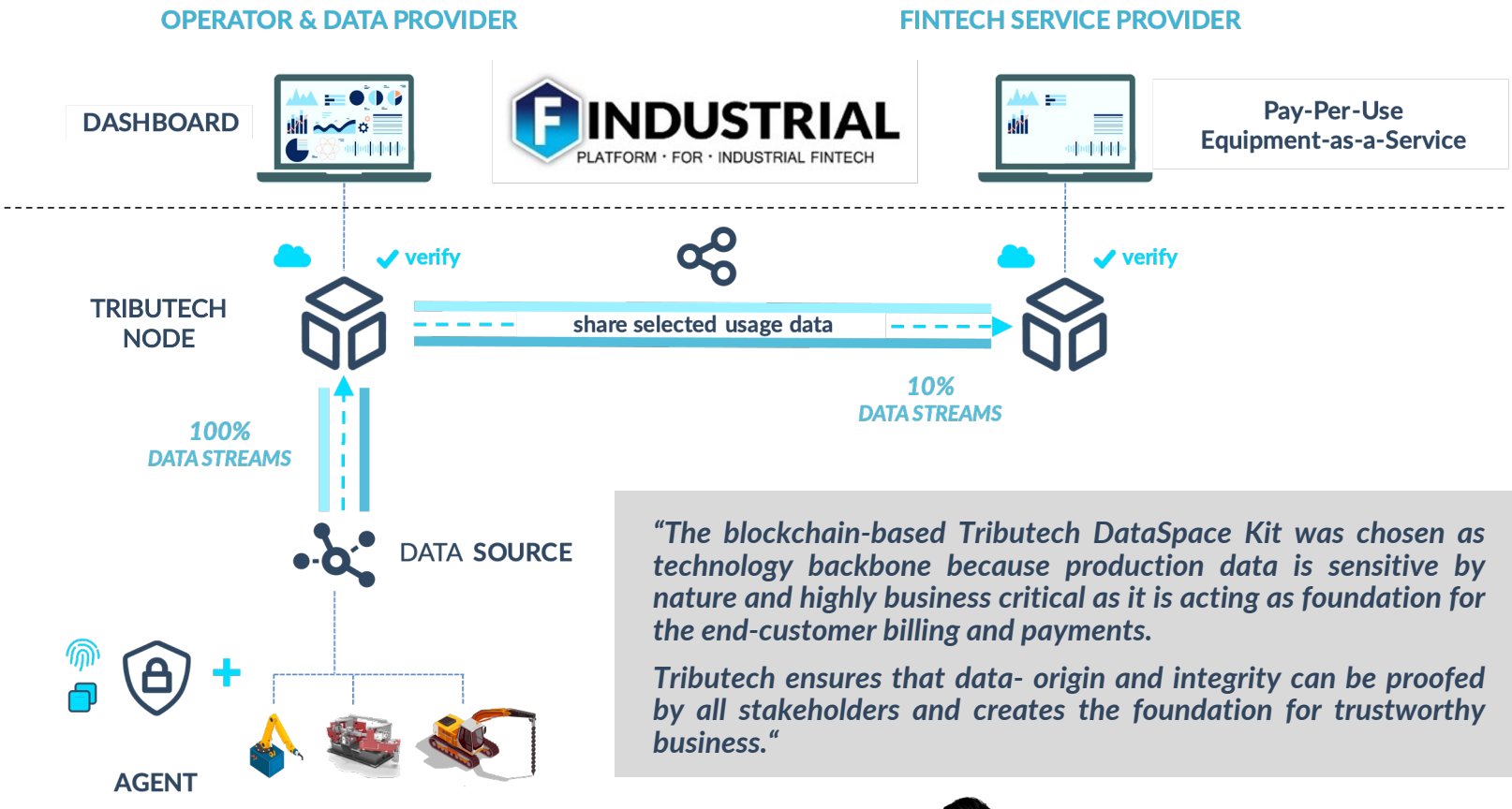
Findustrial is a Fintech start-up that is specialized in the development of Pay-Per-Use and Equipment-as-a-Service business models. The aim of Findustrial is to be a leading one-stop-shop for companies that want to implement PPU or EaaS business models.

Challenge

Connecting equipment manufacturers (OEMs) and equipment operators to the Fintech platform requires a broad compatibility with different infrastructure and data sources. When calculating the utilization of an asset, it is necessary to access selected data from an operator and to have proof of origin and integrity.

Solution

- Establish trust in data from source to consumer to prevent data poisoning & hijacking
- Significantly reduce time-to-market for launching pay-per-use platform
- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data



"The blockchain-based Tributech DataSpace Kit was chosen as technology backbone because production data is sensitive by nature and highly business critical as it is acting as foundation for the end-customer billing and payments.

Tributech ensures that data- origin and integrity can be proofed by all stakeholders and creates the foundation for trustworthy business."

Günter Hehenfelder, CEO Findustrial

Artificial Intelligence & Machine Learning

Customer Background

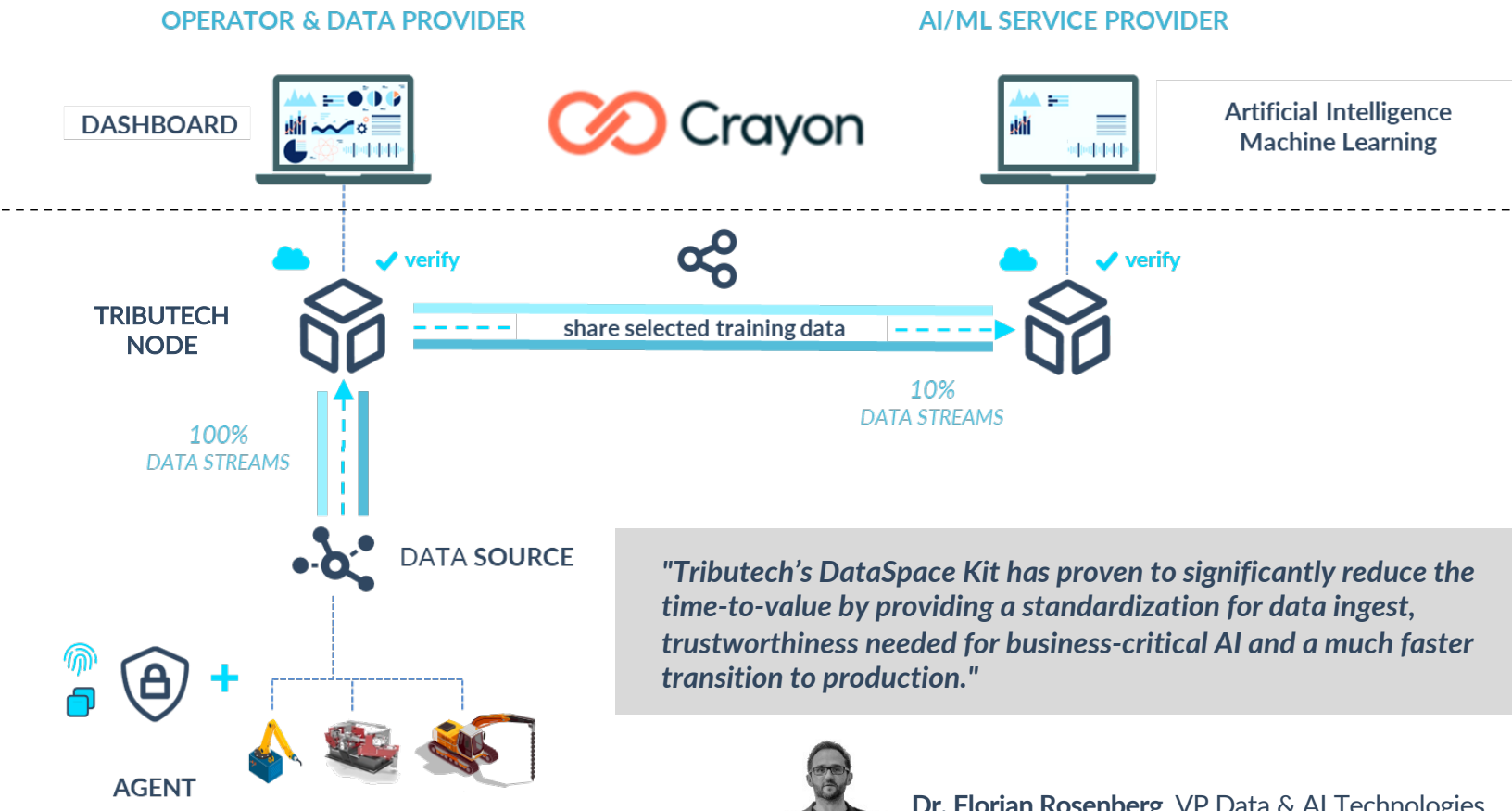
Crayon helps clients choose the best solutions for their business needs and budget to succeed and innovate with software, cloud solutions, data foundations and AI. As a world market leader, Crayon offers high quality solutions to their customers.

Challenge

In Crayon's global Data and AI Practice, we typically see our data scientists and engineers spending up to 60% of their time in a project on gathering, understanding, and preprocessing data before they can start building AI models. In order to deliver the best AI models, we must not train the models with poisoned data.

Solution

- Significantly reduce time-to-market for AI / ML services
- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



"Tributech's DataSpace Kit has proven to significantly reduce the time-to-value by providing a standardization for data ingest, trustworthiness needed for business-critical AI and a much faster transition to production."

Dr. Florian Rosenberg, VP Data & AI Technologies

Recycling Process Optimization

Customer Background

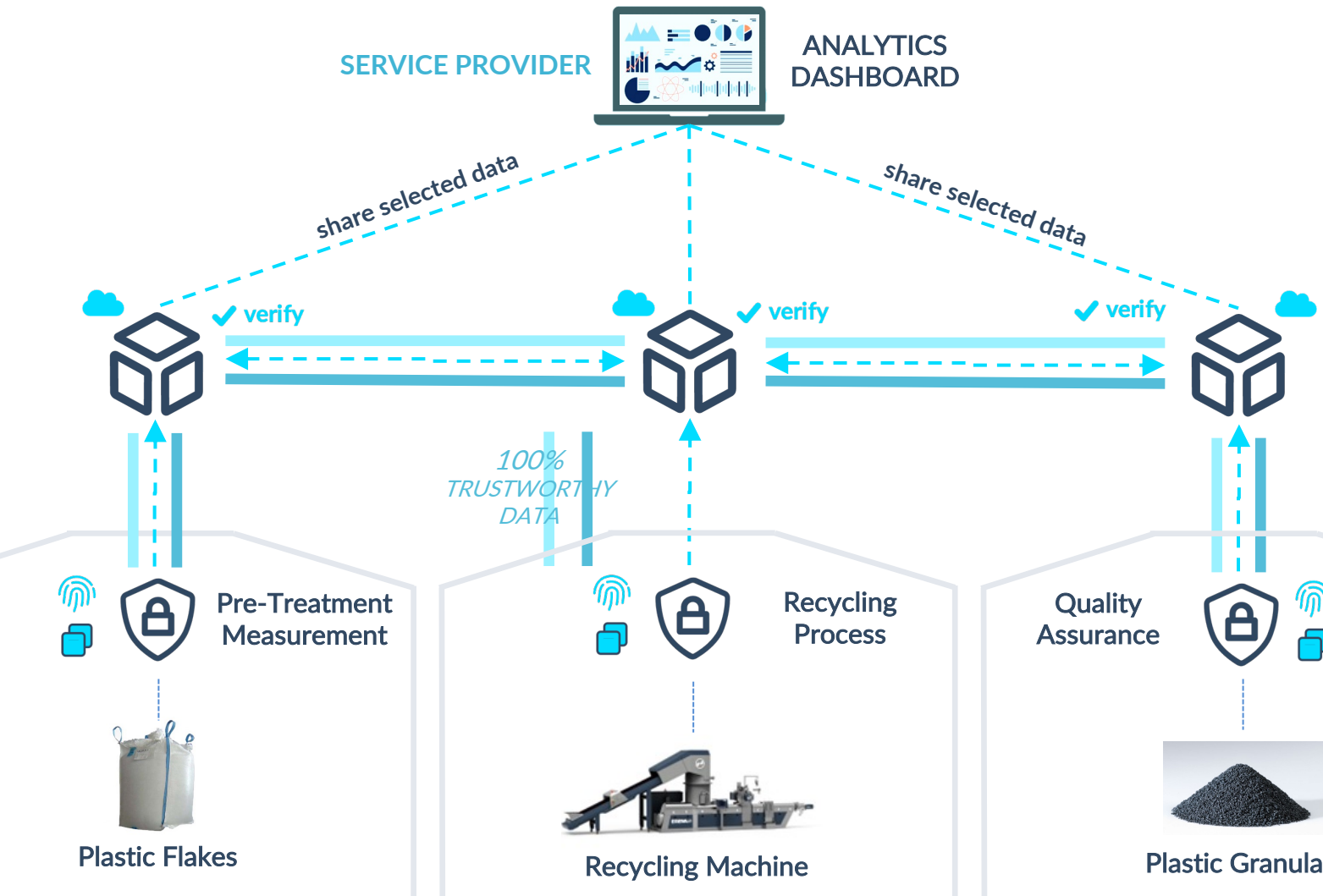
The customer is a research institution that is highly specialized in the chemical process industry and on the plastic production process. In cooperation with leaders of the industry, machine OEMs and technology providers, the customer executes lighthouse research projects in these industries.

Challenge

In order to improve the recycling process, in which the single steps are executed across multiple companies, the customer needs a solution that enables the companies to document the single process steps and selectively share highly sensitive production data with the research institution. The ability to selectively and transparently share sensitive data, to traceably document the whole recycling process and to verify data before analyzing it are crucial for the success of the project.

Solution

- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Significantly reduce time-to-market for launching data platform
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



Digital Battery Passport

Customer Background

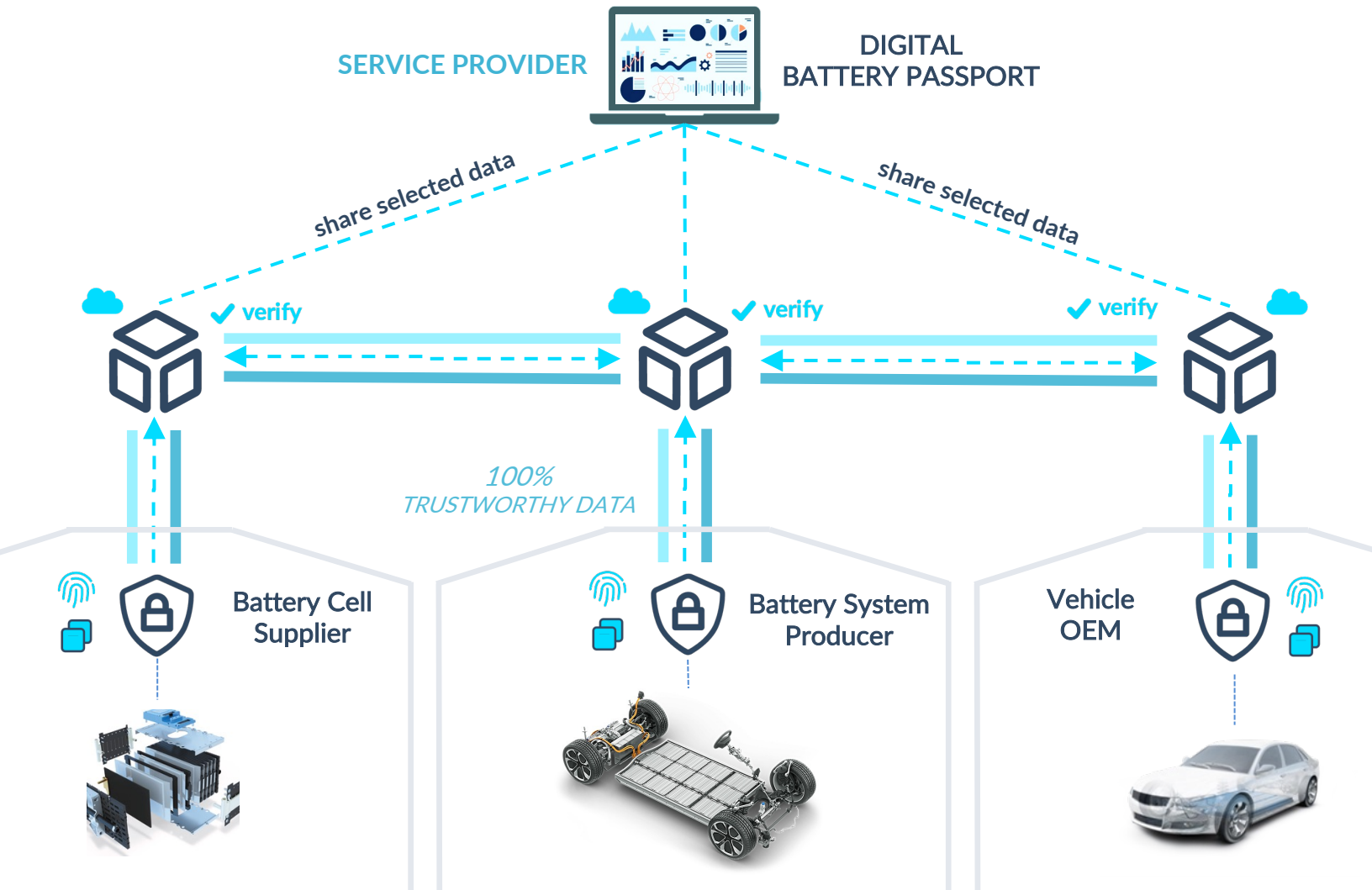
The customer is one of the world's leading mobility technology companies for development, simulation and testing in the automotive industry, and in other sectors. The company provides concepts, solutions and methodologies for a greener, safer and better world of mobility.

Challenge

By 2024 battery system producers must comply with the EU Product Passport Regulation and provide a battery passport that contains the carbon footprint of the battery system. In order to calculate such a wholistic product carbon footprint the customer needs a technology to integrate different data sources and share relevant data along the value chain.

Solution

- Significantly reduce time-to-market for offer the data service "digital battery passport"
- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



Product Carbon Footprint

Customer Background

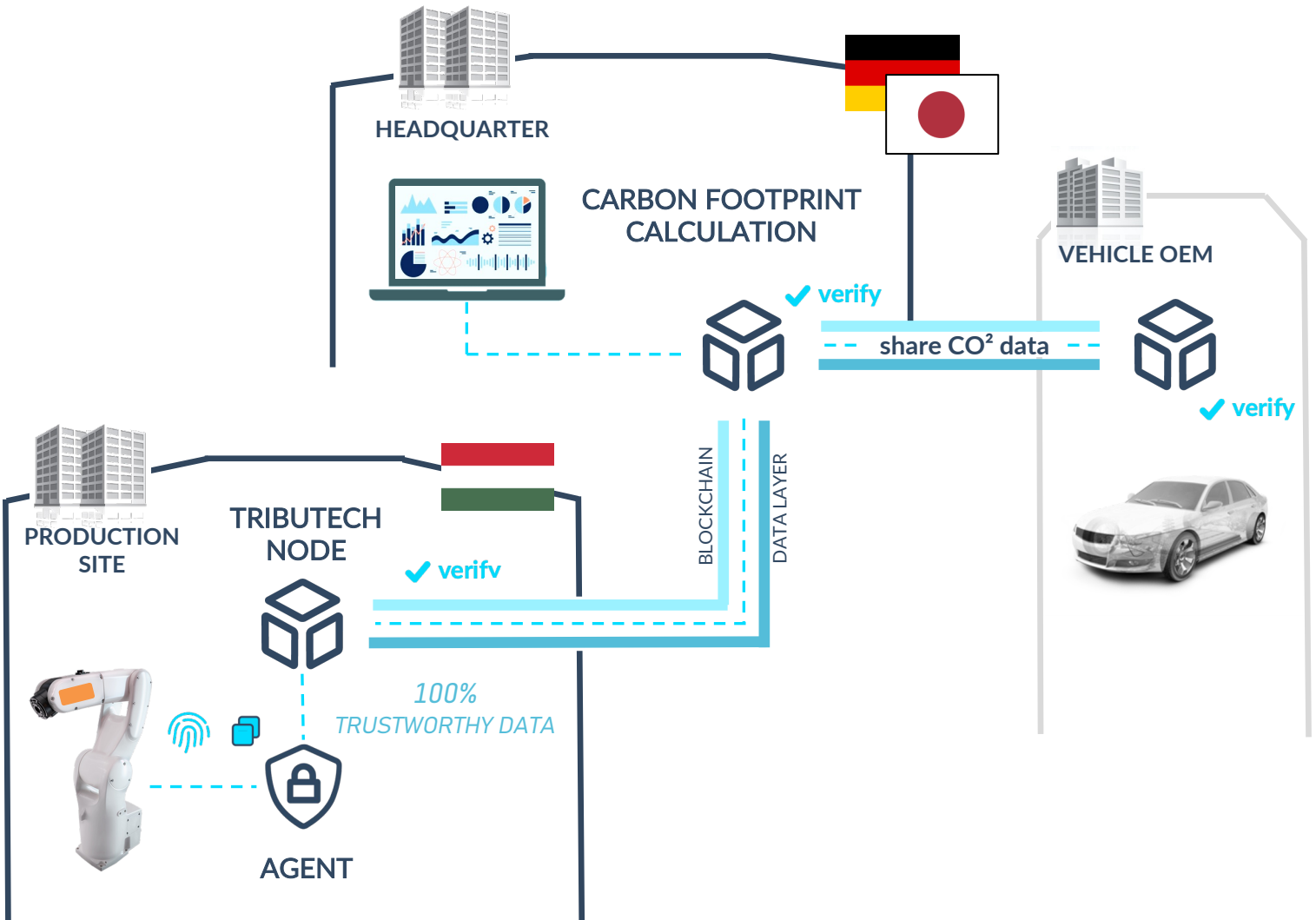
The customer is a trusted Tier 1 automotive supplier and influencer providing thermal, powertrain, mobility, electrification, & electronic systems to carmakers and other manufacturers around the world. As a global Fortune 500 company, the customer has a broad product portfolio and widespread global impact.

Challenge

The automotive OEMs and EU regulations on CO^2 tracking force our customer to share the carbon footprint of the supplied systems with the automotive OEM. As the production site of the customer is located in Hungary and the Headquarter in Germany, the customer needed a solution to share relevant data across infrastructures and companies. In order to avoid any mistakes in the carbon footprint calculation based on wrong data, the customer needs a solution that allows for data verification at any point in time.

Solution

- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Significantly reduce time-to-market for launching data platform
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



CO^2 Tracking of Scope 3 Emissions

Customer Background

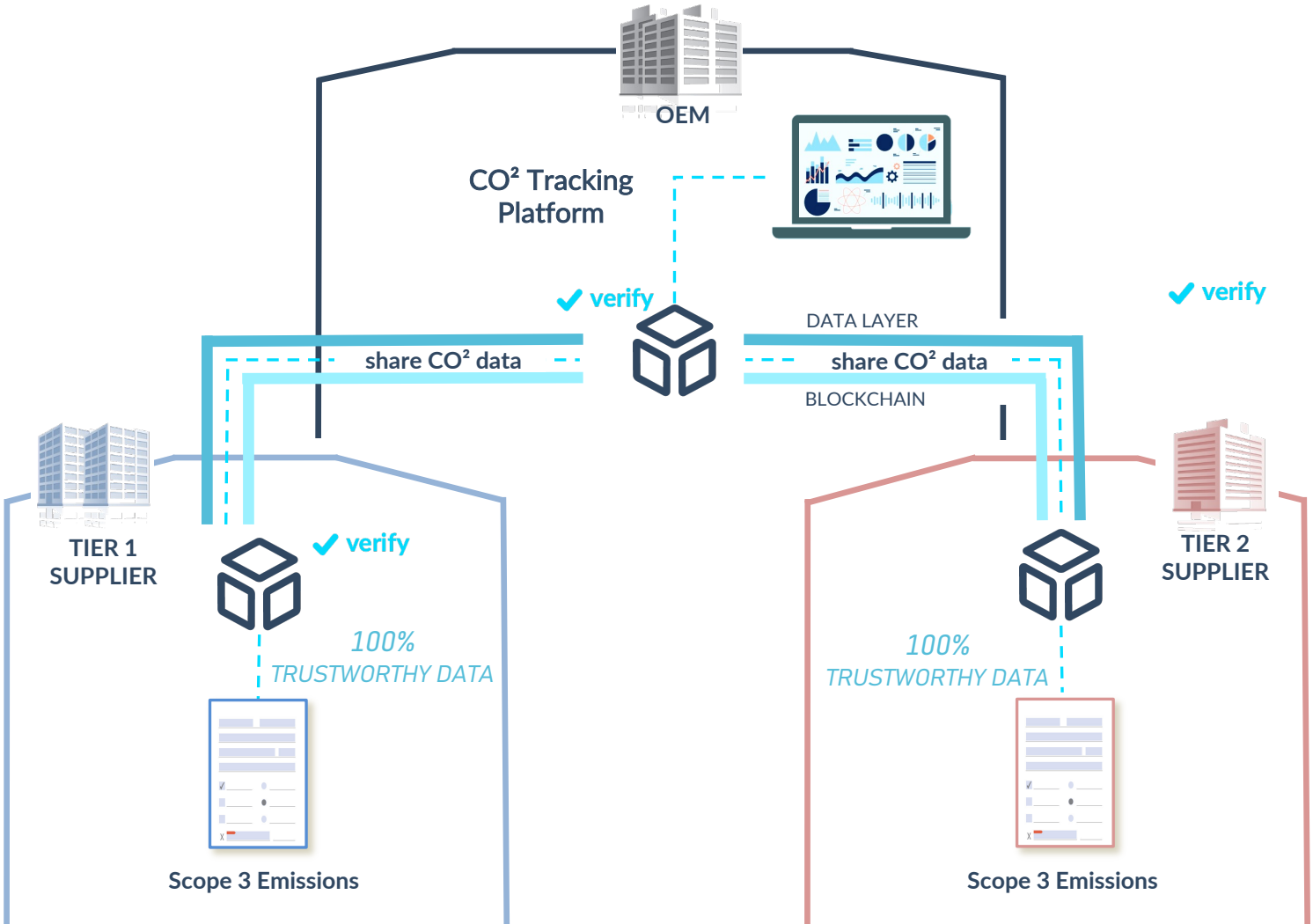
The customer is a globally operating management and technology consulting company that has Fortune 500 companies among their customers. With this project the customer wants to offer a managed solution for the traceable tracking of Scope-3 Co2 emissions that prevents green washing at all costs.

Challenge

Corporate sustainability reporting will be required in the future and companies will have to publish regular reports. Scope 3 GHG emissions are typically the greatest component of carbon footprint reaching up to 90% of total impact. At the same time Scope-3 emissions data is the hardest to collect as it originates from complex value chains including suppliers, clients, lending and investment across different countries and industries.

Solution

- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Significantly reduce time-to-market for launching data platform
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



Traceable Quality Assurance

Customer Background

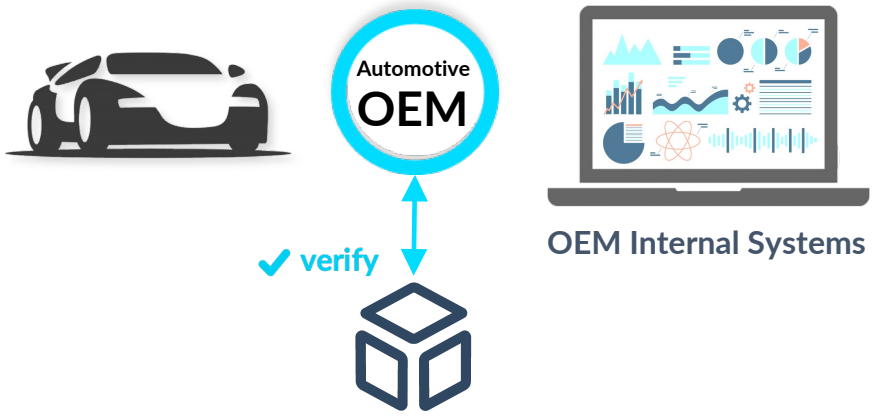
Digital Moulds helps companies to increase the production quality of the injection molding process. **NeXonic's** Digital Shop Floor Control gives operators full transparency on the whole production process. The aim of this project is to combine the insights of both solutions for best-in-class quality assurance across companies

Challenge

Nowadays automotive OEMs demand detailed insights from the production process and the resulting product quality of the parts produced at the contract manufacturers. In order to combine the insights of the two different solutions Mould Monitoring and Digital Shopfloor Control the customers needed a solution to combine the insights from the two solutions and share selected data with the automotive OEM. Additionally, the automotive OEM needs to verify the shared data as it will be used for documentation.

Solution

- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data
- Add cross-platform data stream governance to any connected product, device, or service
- Establish trust in data from source to consumer to prevent data poisoning & hijacking



Pay-Per-Use for Excavators

Customer Background

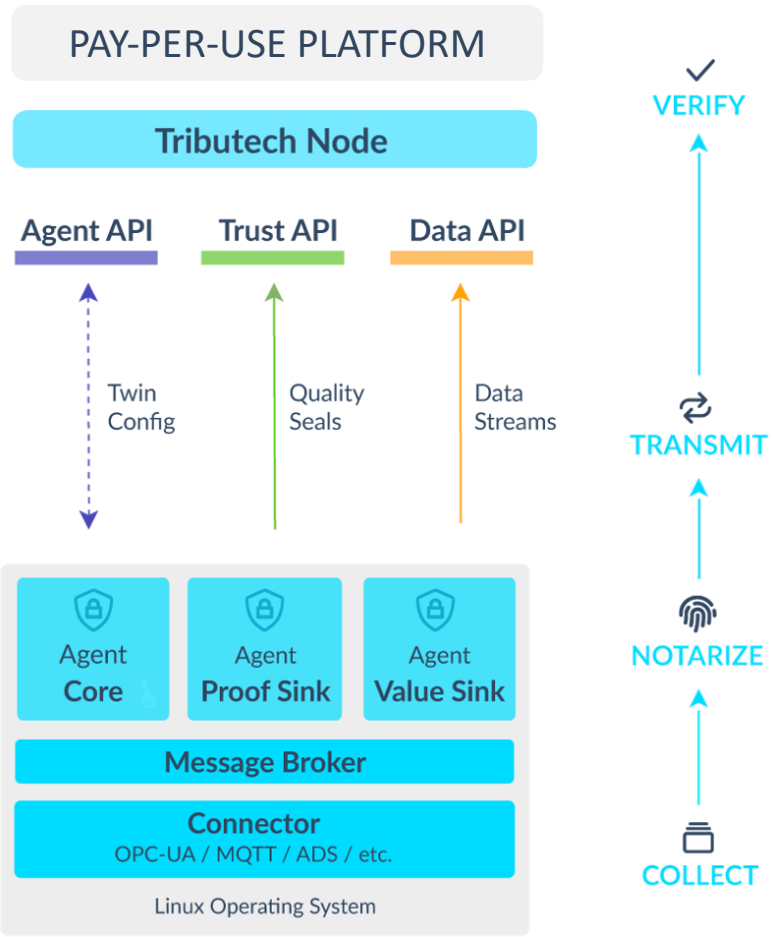
The customer is a leading manufacturer of excavators. Currently, the customer is in the process of changing the business model from a one-time purchase to a Pay-Per-Use subscription model to increase their sales and attract a larger customer base.

Challenge

In order to change their business model to a subscription-based Pay-Per-Use model, the OEM needs to collect usage data of the excavators in operation at the customers' construction sites. The usage data transmitted to the OEM will be used as the basis for billing and payments.

Solution

- Establish trust in data from source to consumer to prevent data poisoning & hijacking
- Enable effortless & secure data interoperability for any product, device or service
- Integrate & share data in a unified, sovereign, and trustworthy manner to unlock the full potential of data



Condition Monitoring in Remote Locations

Customer Background

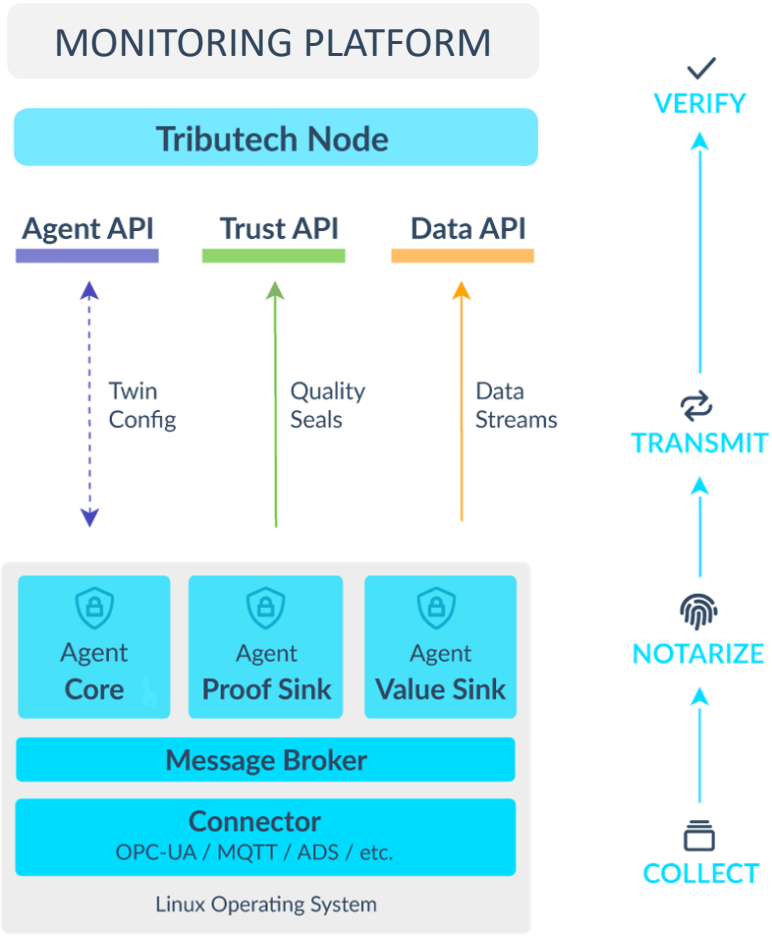
As the world market leader in mobile crushing and screening, the customer produces highly sophisticated mobile crushers, which are mainly used in the construction sector.

Challenge

The mobile crushers are located on remote construction sites all over the globe. Therefore, the customer wants to remotely monitor the condition of their machines by collecting usage data, and thereby improve maintenance intervals and offer better support services to the end customers. However, unstable connection in remote locations increases the risk of wrong or uncomplete data being sent to the headquarters.

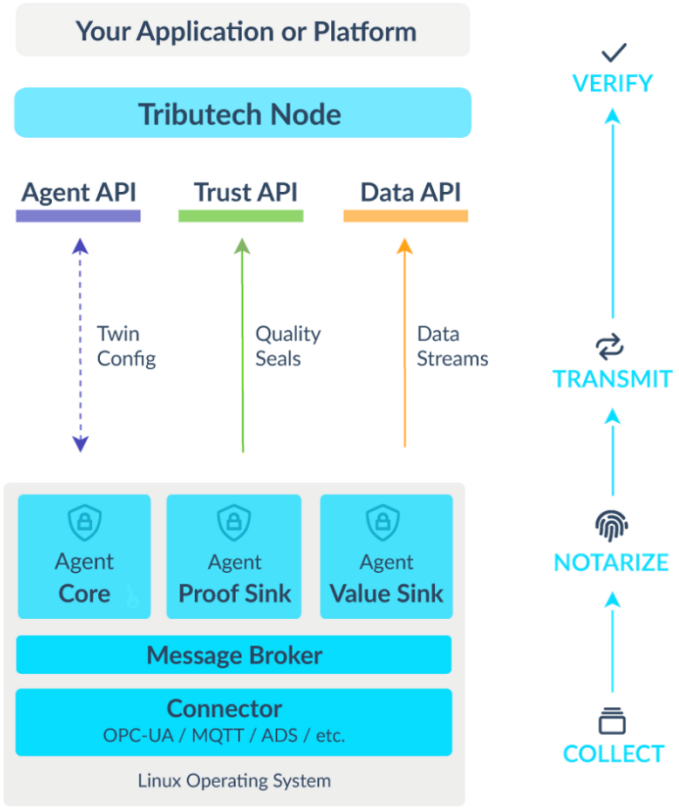
Solution

- Establish trust in data from source to consumer to prevent data poisoning & hijacking
- Significantly reduce time-to-market for condition monitoring solution
- Enable effortless & secure data interoperability for any product, device or service



Connecting & Securing Heavy Machinery

Tributech and their partners provide a trustworthy data foundation for the heavy machinery industry by offering an IoT & data middleware with a new level of data security and interoperability.



Trustworthy data-as-a-service

Tributech's IoT and data middleware provides trustworthy data-as-a-service as foundation for data-based decision of processes and algorithms within your platform or application

Device2Cloud Connectivity

Tributech provides a secure connection between device and cloud for telemetry data, data quality seals and over-the-air configurations

Trusted from source to consumer

Our patented data notarization process creates crytograhic data quality seals that a stored inside a blockchain-based security layer to enable the verification of data origin and integrity.

Unified data integration

Tributech's middleware provides a powerful data integration layer that allows to connect any IoT device and API.

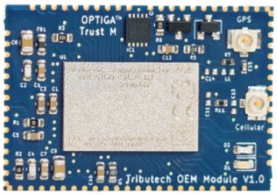
Tributech Agent

The Tributech Agent is compatible with any Linux based IoT gateway on the market (e.g. Siemens Industrial Edge, Welotec, Ultimaco, etc.).

- Trustworthy data-as-a-service
- Secure device2cloud connectivity
- Over-the-air configuration
- Fastest path to market
- High data volume and processing power

Tributech OEM Module

The Tributech OEM Module provides connectivity and data notarization for embedded devices and can be integrated into the hardware design.



- Trustworthy data-as-a-service
- Secure connectivity via LTE-M / NB-IoT
- Over-the-air configuration
- High-end hardware security
- Low/mid data volume and processing power
- Cost-efficient IoT applications