Use Case

Providing Vehicle Data for Insurance Risk Management

Easily Select Data, Configure Requests, and Calculate Costs. Enabling Data Monetization using VSS.

/ Product Demo

Efficient Vehicle Data Provision: A Streamlined Process

aicas' product demo showcases a demonstration of VSS-based vehicle data provision using the example of insurance risk management. This solution streamlines an easy to operate process of providing vehicle data to external parties for data brokerage and data monetization purposes.

/ Summary

WHO: A provider of vehicle data

WHAT: Streamlined process for providing vehicle data to external data consumers such as insurers.

HOW: Data consumers can easily request specific vehicle data parameters from OEMs or data brokers through a user-friendly interface.

VALUE: Simplified time-saving data monetization process, enhanced revenue generation, and strengthened partnerships between data providers and consumers such as insurance companies.

/ Challenge

Unleashing Vehicle Data's Untapped Potential

Modern vehicles, especially EVs, are equipped with a variety of sensors and telematics systems that can capture detailed insights into vehicle performance, usage behavior, and environmental conditions. Utilizing this data in a way that generates meaningful revenue is a significant hurdle. Without monetizing data, automakers are missing out on untapped potential and opportunities for revenue growth.

Data users, like car insurers, possess a significant stake in dependable vehicle data. The insurance of electric vehicles in particular is uncharted territory. Reliable vehicle data, e.g., on the condition of the battery or charging cycles and much more, is imperative for effective, reliable risk management and the computation of accurate insurance premiums.

Driving Revenue: Accelerating Automotive Data Monetization

Automotive manufacturers aim to maximize the value of their vehicle data. The challenge is to establish a quick and efficient process for leveraging vehicle data to boost additional revenue streams and strengthen partnerships with data consumers like insurers. A solution is needed to streamline data distribution, configuration, calculation, and negotiation, in order to simplify and accelerate the data monetization process for OEMs. The solution must enable the quick processing of data inquiries from interested parties and promptly deliver precisely selected data. This allows the data consumer, such as an insurer, to utilize the data for their needs in the shortest possible time.

Tailoring Vehicle Insights: Easily Create Data Requests

The aicas solution provides a user-friendly data campaign management tool utilizing VSS. It enables non-technical users interested in vehicle data, such as insurance companies, to request specific vehicle data parameters directly from the data broker, the OEM, or a subsidiary of the OEM. The requests are created as part of a data campaign in which the signals to be collected and the collection interval are defined. The solution enables quick selection and visualization of available vehicle data. The graphical user interface (GUI) provides information on the cost of the campaign and the amount of data transmitted. The data broker can then review the request and approve or reject it. The solution also includes data dashboards where the data consumer can review the requested live data.
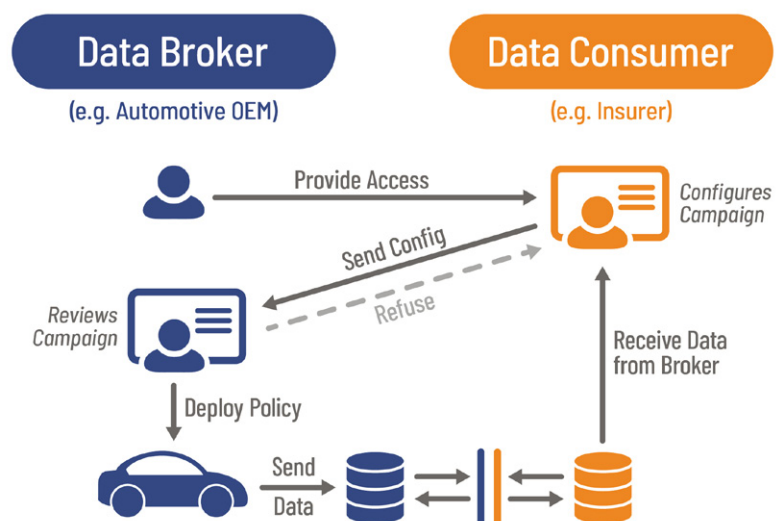
Efficiency Unleashed: Interactive Data Selection Made Easy

The enormous time-saving is the special benefit of the solution: Both data providers and data consumers access the same GUI, enabling a seamless, interactive data selection process. Users gain insight into the available data catalogue, make selections, and instantly visualize configurations.

Data providers promptly review selections and respond, resulting in rapid outcomes with minimal iterations. Costs and offerings can be calculated quickly. Absolutely time-saving for everyone.

Moreover, data campaigns can be created effortlessly and executed without profound technical or programming knowledge. This ensures prompt fulfillment of data requests with utmost precision. The process eliminates waiting times and is absolutely lean and efficient.

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As an insurer, our success hinges on effective risk management. With comprehensive vehicle data provided by automotive partners, we stabilize risk assessment and financial stability. But when making requests we typically deal with an overwhelming amount of inaccurate data, leading to significant time wastage. The aicas' tool allows to achieve our objectives much more swiftly, enabling efficient selection of relevant data for our risk management needs right from the start.

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Insurance Prospect after watching the Demo

/ Process Benefits
Provide Vehicle Data with VSS: Streamlined and Easy

Standardizing Vehicle Information	Formalizing the Data Process	Accesible for any Job Role
• Standardizing Data via VSS • Data Agent as in-vehicle Software	• Defined Data Acquisition Process • End-to-End Data Flow	• Intuitive GUI • Guided Job-related Journeys

/ Solution Components
Harmonious Fusion: Seamlessly Integrating aicas EdgeSuite Components

The solution leverages various components from the aicas EdgeSuite product portfolio, showcasing the seamless integration and harmonious synergy within the portfolio. The custom graphical user interface (GUI) enables users to easily configure the data collection campaigns. The aicas Edge Device Portal (EDP) ensures deployment of aicas' implementation of the AWS IoT FleetWise Agent on aicas' JamaicaCAR, operating within the vehicles. JamaicaCAR utilizes JamaicaVM's virtualization and realtime capabilities to securely and safely deliver data. To visualize live data for data consumers, the aicas Edge Data Gateway (EDG) automatically generates dashboards based on selected signals in requests. VSS by COVESA defines the syntax for vehicle data.

Streamlined Campaign Configuration for EV Data

This product demo exemplifies the setup of a data campaign tailored for electric vehicle data selection. Within the dashboard, the "Campaign Designer" role allows the campaign creation. The chosen signals include:

- Fuel System: Range
- Fuel System: Temperature
- Electric Motor: Temperature
- Transmission: Speed

- Brakes: Brake Pedal Pressure
- Engine: Throttle Position
- Current Location: Latitude
- Current Location: Longitude

- Raindetection: Intensity
- Chassis: OutsideTemperature
- Chassis: OutsideHumidity

The selected data is transmitted to the cloud. The minimum sampling interval determines how frequently aicas' implementation of AWS IoT FleetWise should query the data source. The demo applies the following data collection settings to each signal: Max Sample Count: 100, Minimal Collection Interval: 100 ms, Campaign Collection Interval: 10,000 ms. The settings control that the agent queries the data source every 100 ms for each signal, i.e., 100 times within 10,000 ms. This means that the system collects 100 data points of each signal every 10,000 ms or every 10 s.

Following the selection of the target fleet, the cost estimation for data collection is initiated. Here, the data consumer – the insurer – can compare the anticipated value of the data with the estimated cost before finalizing the campaign creation. Adjustments to the campaign can be made, such as cost reduction measures, before the data request is submitted. This avoids the need to launch a campaign to assess its financial viability.

/ Benefits

Transforming Data Into Value: Driving Efficiency for OEMs and Insurers

The use case showcases how the process for both technical and non-technical users can be simplified, enabling them to easily create data campaigns, negotiate terms, and monitor data transmission. This solution streamlines the data monetization process, empowering automotive manufacturers to effectively capitalize on their vehicle data assets. For insurers, accurate and granular data means more precise risk modeling and better claims forecasting. By better aligning premiums with actual risk exposure, insurers can improve customer satisfaction, reduce claims costs, and increase profitability.

- Increased efficiency in providing vehicle data to external or internal data consumers through a streamlined process.
- Easy to use for non-technical data consumers or sales teams.
- Simplified data monetization to maximize revenue.
- Strengthened competitiveness by empowering OEMs to capitalize on their vehicle data assets.

- Accelerated sales cycles enabled by quick selection and visualization of vehicle data.
- Empowerment to sell fleet data during testing phases.
- Enhanced partnerships with data consumers.
- Improved risk management for insurers based on reliable data.