Google Cloud

Harness vehicle data to drive insights for production innovation

Knit all of your vehicle data sources together at scale and in real time

Vehicle data is growing rapidly in volume and value. This telemetry data can be used to create better and safer cars.

- Location data can be used to understand vehicle driving patterns
- Collision data can be used to create better car safety features
- Maintenance data can be used to provide servicing recommendations
- Camera and sensor data can be used to improve automated vehicle R&D

However, unlocking actionable insights from this information requires infrastructure that can successfully collect, organize and process telemetry data at scale and in real time.

A car equipped with ADAS (advanced driver assistance systems) generates **4000 GB data** every day, with just one hour of driving [1]

Over **50%** of annual car volumes are adopting **Android as the built-in system**[2]

In-vehicle **connectivity will be standard on 70%** of all vehicles by 2023, growing close to ubiquity in the following 5 years[3]

By 2030, car-generated data will be worth $450 - $750B, with **$180B value to OEMs as key drivers for vehicle improvements**[4]

Google Cloud's Connected Car Telemetry Platform enables Original Equipment Manufacturers (OEMs) to collect, manage and activate telemetry data at scale

Google Cloud built a connected car telemetry platform that manages, collects, stores data so customers can analyze and share it conveniently.

Knit huge amounts of disparate data sets together to drive key insights.

Connect sources such as:

- Speed data
- Location data
- Camera footage
- Vehicle part performance
- Vehicle health
- Collision data
- Driving history
- Radar data

Sources: [1] NetworkWorld, [2] The Verge, [3] IDC, [4] McKinsey

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Google Cloud's car telemetry platform drives new opportunities

Insights driven R&D

Reduce R&D and material costs

Gather product field data for development cost reduction and warranty or recall cost avoidance

Reduce customers costs

Analyze actual usage patterns to reduce repair and downtime cost

Improve customer satisfaction

Gather product field data for development cost reduction and warranty/recall cost avoidance

Post-sales monetization

Monetize telemetry

Collect, analyze, and prepare data safely and securely for sharing or resale to third parties

Real time vehicle health

Reduce time for intervention

Collect and forward warnings in real time, pointing customers in the right direction

Why Google Cloud for your car telemetry platform

- A fully integrated, managed and supported SaaS platform

- Fixed predictable costs

- Scalability to manage millions of vehicles

- Reduce the cost and risk associated with failures and recalls with fault prediction

- Enable new post sales monetization scenarios

- Google has expertise in auto, cloud, AI, and Android

Improving telemetry every step of the way

Collect

Collect huge amounts of real-time sensor data

Manage

Automatically sift through terabytes of redundant, non-valuable data to identify critical telemetry data

Store

Extract data and store it in the cloud in real time at a fixed cost

Analyze

Organize and optimize your data in real time for visualization and analytics

Share

Effectively prepare analyzed data for external sharing to share your new insights

Utilize our solution accelerator to get a PoC running in 2 hours instead of months

The demo environment is ideal for proof of concepts

- Android Automotive client application collects vehicle health data
- Cloud back-end stores and analyzes data at scale using a preconfigured dashboard
- Vehicle simulator mimics Android vehicle data
- Open and customizable architecture freely available to all Google Customers

Build a proof of concept in the demo environment to understand your organization's specific use cases – in under one hour.

Ready to start your journey?

Learn more on our Google Cloud for Manufacturing site

Reach out to a sales representative