



# Sonatus AI Technician

## Speed up vehicle development and deliver great ownership experiences



Leverage AI-driven diagnostics and issue resolution throughout the vehicle lifecycle, from pre-SOP test and validation to post-sales vehicle services.



### **Improve time-to-SOP and vehicle quality**

Accelerate pre-SOP development with precise diagnostics, multi-domain data correlation, and early root-cause identification—reducing validation cycles, speeding issue resolution, and improving vehicle quality.



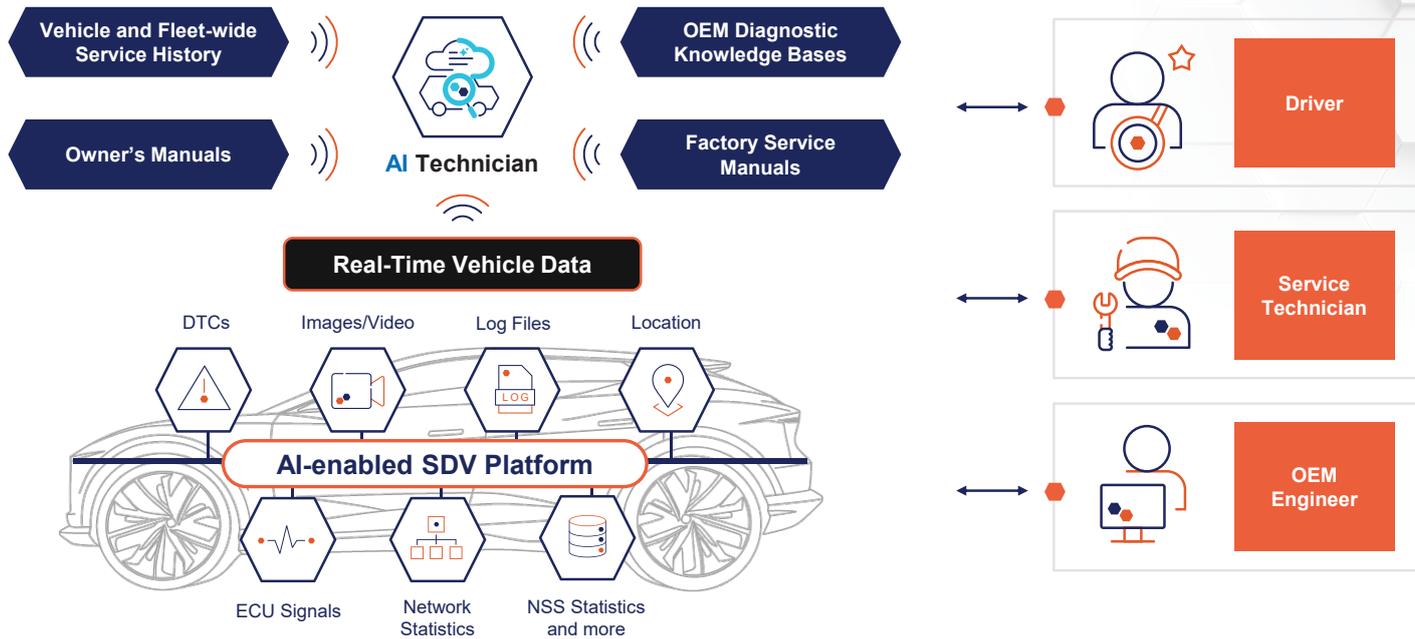
### **Simplify vehicle ownership and improve customer satisfaction**

Enhance customer satisfaction with AI Technician's proactive and precise diagnostics recommendations, reducing guesswork and frustration. Simplified maintenance boosts confidence, fostering long-term loyalty.



### **Boost after-sales parts and services revenue**

Improve after-sales service efficiency by accelerating troubleshooting and diagnosis with upfront fault incident data, optimizing repairs and reducing wait times—driving customers to service centers and capturing more after-sales revenue.



## Features and Capabilities

AI Technician is an orchestrated, agentic diagnostics system that synthesizes vehicle data and OEM knowledge to deliver grounded recommendations, guide next steps, and automate follow-up actions—powering faster resolution across pre- and post-SOP workflows.

### Agent orchestration

Coordinates specialized agents (e.g., vehicle diagnostics, log analysis, analytics) to execute end-to-end troubleshooting workflows.

### Multi-source knowledge synthesis

Correlates service content, engineering docs, TSBs, repair history, telematics, DTCs, and ECU logs into a unified case view.

### Guided investigation loop

Recommends the next-best vehicle questions and data to collect to confirm or rule out likely causes with fewer iterations.

### Grounded, explainable outputs

Provides traceable recommendations with evidence links and confidence scoring to reduce guesswork and limit hallucinations.

### Actionable outcomes

Triggers follow-up steps—data capture, escalation packages, and workflow actions—based on diagnostic conclusions.

AI Technicians deliver tangible benefits and cost savings at multiple points in the vehicle development, pre-SOP testing and validation, and post-sales vehicle ownership services.

### Pre-SOP: Development, test, and validation

AI Technicians help engineering teams resolve complex vehicle issues faster by turning fragmented test evidence into grounded root-cause guidance and next-step actions.

- **Accelerate root cause:** Correlate ECU logs, network traces, DTCs, requirements, and test context to pinpoint likely causes quickly.
- **Reduce iteration and re-tests:** Recommend the next-best data to collect and the key checks needed to prove (or rule out) each likely cause.
- **Improve cross-domain debugging:** Correlate interactions across ADAS, body, infotainment, powertrain, and gateways to uncover system-level faults.
- **Standardize troubleshooting:** Capture repeatable diagnostic playbooks and institutional knowledge across teams and programs.
- **Optimize test vehicle utilization and costs:** Run multiple diagnostic investigations in parallel on shared test vehicles—reducing retests and manual log review while expanding coverage across builds, trims, and variants.

### Post-SOP: Preventative diagnostics, service, and quality

AI Technicians improve service and quality outcomes by providing explainable, vehicle-specific recommendations that reduce “no fault found,” unnecessary parts replacement, and repeat visits.

- **Faster time-to-diagnosis:** Synthesize service docs, TSBs, repair history, telemetry, and logs into guided troubleshooting with traceable reasoning.
- **Fewer unnecessary hardware swaps:** Distinguish software/config issues from true hardware faults using evidence-backed recommendations.
- **Solve intermittent, hard-to-reproduce issues:** Drive an iterative investigation loop that narrows causes as new evidence is captured.
- **Prevent repeat issues at fleet scale:** Detect emerging patterns across vehicles and recommend targeted actions before they become widespread.
- **Lower warranty and service costs:** Reduce labor time, repeat visits, and spending on parts while improving first-time fix rate and ownership experience.