About the Client
The client is a global automotive OEM driving innovation in connected mobility, autonomous systems, and in-vehicle user experience. With R&D hubs worldwide, the client sought a strategic partner to support software development across infotainment, safety, and engineering operations through specialized staffing and embedded software services.

Industry
Automotive | Product Engineering | Embedded Systems | Digital Mobility

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Project Title
Comprehensive Engineering and Staffing Solutions for In-Vehicle Systems and Program Acceleration

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Scope

- Feature development for infotainment, HMI, and safety control systems
- Embedded engineering across C++, AUTOSAR, MATLAB, and CAN protocols
- Full-stack, QA, and data science staffing across 5+ business units
- Rapid scaling of engineering teams to support delayed programs
- Support for PoCs, safety modules, and UI/UX integration
- Offshore delivery management and agile resource deployment

Challenges

- Shortage of skilled engineers in embedded, QA, UI, and analytics
- Urgent hiring required to unblock delivery across multiple divisions
- Complex protocol integration (CAN, LIN, FlexRay) in time-sensitive environments
- Coordination across global engineering teams and varied product tracks
- Pressure to reduce time-to-market and accelerate PoC initiatives

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Solutions

- Established a flexible, phased ramp-up model with 20+ engineers onboarded in <45 days
- Deployed experts in Embedded C/C++, QNX, AUTOSAR, HMI, Selenium, and Data Science
- Delivered critical safety control modules with CAN, LIN, and FlexRay stack

- Designed interactive UIs using HTML, AngularJS, WPF, and C#
- Built a resource matrix aligned to project goals with monthly performance reviews
- Maintained continuous hiring and onboarding cycles with compliance and cultural alignment
- Enabled cross-technology staffing across QA, Full Stack, and ML model validation

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Tech Stacks Used

Domain	Tools/Technologies
Embedded Systems	C, C++, QNX, AUTOSAR, Hypervisor, CAN, LIN, FlexRay
HMI/UI Development	C#, WPF, MFC, HTML, CSS, Gulp.js, AngularJS
Full Stack Engineering	JavaScript, Node.js, React, REST APIs
Data Science	Python, R, Pandas, NumPy
Testing & QA	Selenium, JIRA, TestNG, Manual & Automation QA
Modeling & Simulation	MATLAB

Suventure's Role as Strategic Partner

✅ **Professional Services**

• Delivered specialized engineering and QA staffing across key domains
• Ensured SLA-driven delivery and performance tracking
• Implemented hybrid engagement models with remote readiness

✅ **ADM**

• Developed infotainment, UI, and safety features across embedded platforms
• Provided end-to-end module development, testing, and post-release support
• Enabled full-cycle delivery of PoCs and feature modules
• Integrated protocols and interactive UIs for next-gen in-vehicle systems
• Supported systems for autonomous driving, infotainment, and connected mobility

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Results Achieved

- **20+** engineers deployed in under **45 days**, enabling rapid execution
- Filled **100%** of requested roles across **6+ technical domains**
- Recovered **4 delayed product tracks** within **2 months**
- Delivered all **critical safety and infotainment modules** on time
- Achieved **3x faster team ramp-up** and **40% increase** in development velocity
- Reduced internal hiring cost by **35%** through optimized offshore model
- Enhanced UI performance with **30% fewer bugs**
- Supported **5+ business units** and enabled **3 new PoCs**

Testimonial

"Suventure has consistently delivered high-caliber engineers across embedded systems, UI, and analytics. Their domain expertise, rapid hiring turnaround, and agile execution model helped us accelerate delivery and recover critical programs with confidence."

— Director, Software Programs, Global Automotive OEM