

Android Based In Vehicle Infotainment Development project for an Automotive OEM

The Client

A prominent Automotive OEM focused on innovation and quality in vehicle technology.

Motherson Technology services partnered with an automotive OEM to pioneer the development of an Android-based infotainment and instrument cluster system. This project involved integrating a hybrid architecture combining Android and Linux platforms to elevate functionality and user experience standards.

Overview

The project focused on creating a sophisticated infotainment and instrument cluster solution that would set new benchmarks in automotive technology. MTSL's role encompassed developing and integrating features essential for modern vehicles, enhancing both driver convenience and vehicle performance.

Expertise

The Project expertise encompassed Android-based infotainment and instrument cluster development, hybrid architecture integration, and specialized capabilities in Human-Machine Interface (HMI) design. They focused on implementing advanced features like the Range feature for energy management and energy consumption graphs.

The Solution

The project began with the development of the Range feature, designed to display vehicle travel distance based on energy consumption and remaining energy levels. MTSL optimized the HMI to ensure clarity and removed leading zeros for improved readability. They also implemented a unit conversion from kilometers to miles, supporting international usability. Additionally, MTSL developed a proof of concept for energy consumption graphs, providing visual insights into energy usage trends. Automation testing using UNITAS and GTS tools ensured the reliability and functionality of features delivered through the Central Infotainment Display and Instrument Cluster. System-level validation further validated product quality and compliance with OEM standards.

Benefits Delivered

We delivered high-quality software solutions tailored to the OEM's requirements, leveraging Tier1 proprietary tools UNITAS and GTS. The optimized HMI design and intuitive information display enhanced user experience, while the Range feature improved vehicle energy management. Rigorous automation testing and system-level validation ensured increased reliability and performance, accelerating time-to-market for the OEM.

Business Impact

Through this collaboration, the Automotive OEM enhanced its product offerings with cutting-edge Android-based infotainment and instrument cluster systems. These advancements strengthened customer satisfaction and brand loyalty by improving vehicle connectivity and driver experience. MTSL demonstrated its capability to innovate in automotive technology solutions, solidifying its role as a trusted partner in advancing vehicle connectivity and technological integration for OEMs.