

# Significant cost savings and superior customer experience, for a global manufacturer of tools and diagnostics products.

Embedded electronics play a significant role in automobile products. This demands greater collaboration, innovation and governance from engineering services partners.

Here's how Mindtree partnered with a global manufacturer of tools and diagnostics products, to engineer and sustain a leading product.

# The challenge

The customer has a telematics product, which is an on-board, wireless and web based system, for remote monitoring and diagnostics of on-the-road trucks and fleet vehicles. The customer needed a solution that would extend the product utility to vehicles other than J1708 and ISO 9141 trucks. They also wanted to offer value added services such as fuel tax collection, vehicle insurance and automatic toll payment to fleet operators.

The use of proprietary technologies was considered a barrier in extending the product reach. At the same time, support for open source components was scarce. This put pressure on the customer to contain the number of components and realize savings in BOM. They needed an end-to-end supply chain ownership to manage sourcing risks and ensure timely delivery.

The hardware and software design needed to support multiple communication protocols, vehicle-specific interfaces and porting across proprietary real-time OS and Windows CE.

Mindtree owned the system, software integration, compliance testing and conducted field trials to ensure reliable product performance. We created a new open standards based product and introduced modularization. We also developed backend applications, server software components and a graphical user interface.

### **Business** impact

- Achieved significant cost saving and lowered sourcing risks
- Delivered a superior end-customer experience through greater integration, portability and user interface design
- Enabled access to new markets

Our extensive experience in hardware design, manufacturing, performance and compliance testing enabled us to advise the customer, on the tests needed to ensure field performance and meet industry compliance standards.

### Our approach

Mindtree reduced component sourcing risks for the customer, by taking full ownership of PCB and electronic components supply chain and vendor management. We collaborated with vendors to realize significant cost savings with on-time delivery.

We adopted a prototype based design approach to mitigate risks associated with evolving standards, technologies and delays with field testing. We have designed more than 100 prototypes to ensure that reliability, compliance and performance standards are met.

To secure continuity of operations and realize cost savings, we set up a dedicated ODC with a secure, high bandwidth direct link to customers.

## **About Mindtree**

Mindtree delivers digital transformation and technology services from ideation to execution, enabling Global 2000 clients to outperform the competition. "Born digital," Mindtree takes an agile, collaborative approach to creating customized solutions across the digital value chain. Powered by unrelenting dedication, expert thinking and collaborative spirit and our deep expertise in infrastructure and applications management, we help turn IT into a strategic asset. Whether you need to run your business more efficiently or accelerate revenue growth, Mindtree can get you there.

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