



Let's Solve



# Cloud-agnostic Connected Car Implementation for Leading Japanese Automobile Company



## Executive Summary

LTI is engaged with a leading automobile company for a connected car implementation on AWS. We have implemented a real-time integrated solution, where a device is installed in a smart car, with a developed mobile app that allows to control ignition, air condition start/stop of the car with a smartphone.

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## Client

The client is a Japanese public multinational conglomerate corporation, primarily known as a manufacturer of cars, motorcycles, and power equipment.

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## Challenges

- The client is using a connected car platform which captures the sensor data to give insights about the car's health, position, and enables the driver to operate the car from a mobile device.
  - With the number of connected car users increasing rapidly, there is a need to modernize the connected car platform to a cloud-native solution for limitless scalability, reliability, best performance, and reduced TCO.
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## Business Need

- Need for a connected car solution to perform basic operation of a car using a mobile device and perform automated deployment on the hybrid cloud.
- Leverage multiple technologies catering to Microservices Architecture and Mobile Apps, with flexibility to change Cloud Service Providers.

- Execute multiple pilots around API Management on AWS and evaluate various tools and applications for the same.
- Architect API Management solutions using various applications and tools on AWS Cloud and On-premise (Hybrid Cloud model) and benchmark performance and features.

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## LTI Solution

The goal was to implement a connected car element for a reliable Internet of Things (IoT) solution. The solution is designed to implement connected car solutions using modern, cloud-native technologies to ensure high scalability, reliability, and best performance. Moreover, infrastructure automation and application deployments are performed using DevOps and Kubernetes platform. Additionally, LTI also helped with evaluating various tools for API Management for features and performance, IBM API Connect 2019, and IBM DataPower on AWS Cloud and on-premise in a Kubernetes-based containerized deployment.

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## Business Benefits

- **Helped in improving** Sprint Velocity
- Reduced **80% reduction** tickets
- Reduction in lead time by **up to 50%**
- Reduction in MTTR by **up to 70%**

## Why AWS

The client chose AWS to host its microservice-based architecture on AWS virtual machine using the containerization technology. AWS met our needs by quickly providing the required infrastructure and services to develop and deploy a connected car solution. The connected car solution is using Amazon Elastic Compute Cloud (Amazon EC2) instance on Linux machine and managed services like API Gateway and IoT services. CloudFormation template, Jenkins used to perform automated deployment on microservices.

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## Why LTI

LTI and Amazon Web Services (AWS) help enterprises to migrate seamlessly and confidently to the cloud—with proven solutions that are scalable, secure, reliable, and cost-effective. LTI provides proven methodologies, in-house tools, and solution accelerators for cost-effective, seamless cloud migrations and governance.

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LTI (NSE: LTI, BSE: 540005) is a global technology consulting and digital solutions company helping more than 360 clients succeed in a converging world. With operations in 30 countries, we go the extra mile for our clients and accelerate their digital transformation with LTI's Mosaic platform enabling their mobile, social, analytics, IoT and cloud journeys. Founded in 1997 as a subsidiary of Larsen & Toubro Limited, our unique heritage gives us unrivaled real-world expertise to solve the most complex challenges of enterprises across all industries. Each day, our team of more than 30,000 LTIites enable our clients to improve the effectiveness of their business and technology operations, and deliver value to their customers, employees and shareholders. Find more at [www.Ltinfotech.com](http://www.Ltinfotech.com) or follow us at @LTI\_Global