

CONNECTED PRODUCTS CLOUD

Infosys specializes in offering best in class Engineering and Technology consulting on Cloud based IoT platforms across industries including connected and autonomous vehicles, home automation, fleet management, smart farming etc.



Our service offerings include:



Telematics platform development on AWS, GCP, Azure, Thingworx. Service delivery and orchestration, cloud security etc.



Embedded systems design and development, HMI, Telematics Control Unit and Connectivity Modules



High performance analytics & Reporting, customer 360 analytics, warranty analytics and data governance



Android based navigation system development & code porting, Enterprise Mobility strategy & roadmap design and architecture



Operational Support – Customer Service, Billing, Tech, Warranty, Emergency support services



Application Innovation: Location based services, personalization engine and commerce platform solutions

Listed below are few of our service delivery examples:

- End to end Engineering and consulting for developing bespoke Telematics platforms on the Cloud
- Support and maintenance of in-market vehicles for Telematics services
- Infotainment platform specification and development
- Development and maintenance of after-market diagnostic and digital service records platform on the Cloud
- Integration of field components such as soil sensors with backend platform to gather field data and generate analytics, and integrating with 3rd party platforms like weather data providers, agronomists etc.
- Custom IoT Cloud platform development for consumer appliances like vending machines, lifts, coffee machines etc.
- A Telematics solution to enable remote monitoring and diagnostic capabilities including vehicle access control, system maintenance, condition sensing and location tracking. Research and development partner for OEMs in building Autonomous vehicles

Our Solutions with Real World Applications:



Innovation Hubs:

We have established an innovation lab for Autonomous vehicles with capabilities to develop and validate Advanced Driver Assistance system and other autonomous features. We have established Center of Excellence for Electric Vehicles, Railroad engineering, Fleet Management and Consumer Products development.

Frameworks and Accelerators:

- Infosys Advanced Driver Assistance platform (comprehensive platform that provides several ADAS features which can be integrated into any vehicle)
- Device Simulator on the Cloud (simulator for any vehicle engine control unit for testing and validation)
- Reference architecture for Telematics platforms

Challenges & Solutions



One of the biggest challenges in the Connected product industry is data privacy and data protection.

With billions of devices connected and tera bytes of data being transmitted through worldwide networks and being processed on the Cloud, there is a tremendous risk of data theft and misuse. At Infosys, we recommend an integrated Cyber Security approach and build systems that are designed with security in mind from the conceptual stages as opposed to an afterthought. All aspects of data, data-at-rest, data-in-motion and data-in-use should be considered in every stage of product development with appropriate use of relevant tools for encryption, access management and protection.



A major challenge in adopting electric vehicles is lack of robust ways in which charging system operators, drivers and power generators/distributors

can connect with each other.

Infosys is working on a platform that will integrate Charging system operators, Grid services and Fleet Management operators. This will enable end customers (drivers/fleet operators) to charge their vehicles on-demand, allow charging operators to balance load dynamically between renewable and fossil fuel-based sources and greater visibility into their fleet operations



With the advent of ADAS (advanced driver assistance systems), extensive in-vehicle entertainment systems and stricter emission norms, building a robust vehicle that is connected, autonomous and electrified requires handling massive hardware and software integrations.

Our Software first reference architecture for Autonomous and connected vehicles, considers all aspects of an electric, connected and autonomous vehicle. It provides a robust, scalable and modular architecture which can allow independent development and validation of in-vehicle software components, cloud components, embedded system components and ADAS components.

For more information, contact askus@infosys.com

Infosys[®]
Navigate your next

© 2023 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/or any named intellectual property rights holders under this document.