INFOSYS GENOME SOLUTION NAVIGATES THE ROAD AHEAD FOR THE AUTOMOTIVE INDUSTRY

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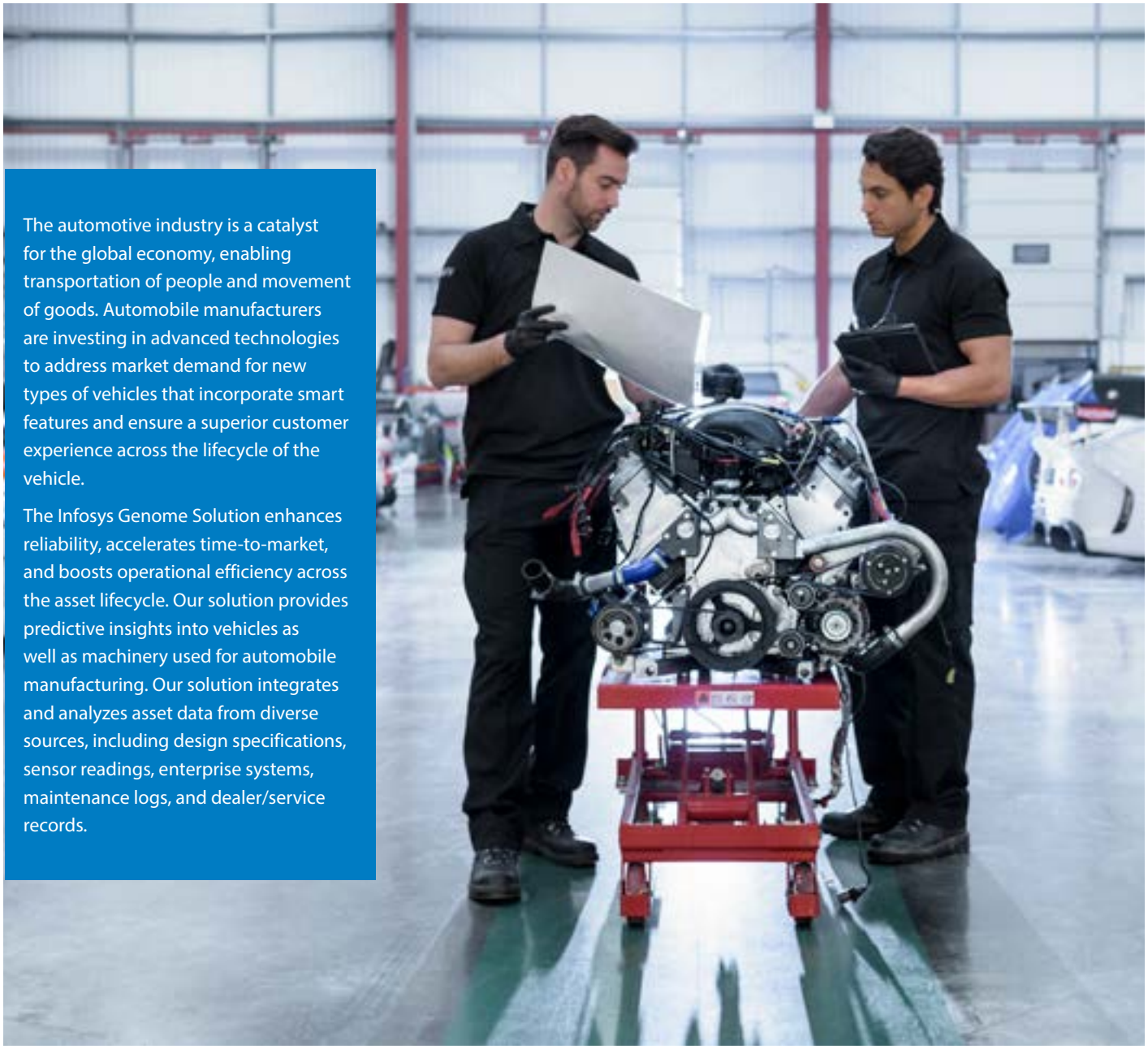

The automotive industry is a catalyst for the global economy, enabling transportation of people and movement of goods. Automobile manufacturers are investing in advanced technologies to address market demand for new types of vehicles that incorporate smart features and ensure a superior customer experience across the lifecycle of the vehicle.

The Infosys Genome Solution enhances reliability, accelerates time-to-market, and boosts operational efficiency across the asset lifecycle. Our solution provides predictive insights into vehicles as well as machinery used for automobile manufacturing. Our solution integrates and analyzes asset data from diverse sources, including design specifications, sensor readings, enterprise systems, maintenance logs, and dealer/service records.

Deliver smart technology on wheels

Auto companies are designing, assembling and distributing 'connected' vehicles that communicate with stakeholders – the Original Equipment Manufacturer (OEM), owner, driver, passenger, insurer, and dealer. Smart vehicles are loaded with sensors and telematics systems that monitor parts, measure consumables and wear and tear, and track movement of the vehicle as well as driver behavior / performance. Premium models onboard algorithms for image / video processing and voice recognition to provide advanced driver-assistance system (ADAS), personalized infotainment service, and enhanced safety via collision avoidance systems.

The Infosys Genome Solution enhances engineering systems and factory programming by enabling manufacturers to use data from connected vehicles across the product lifecycle. It facilitates a superior driving experience by processing asset information gleaned from diverse sources for predictive insights.

Our analytics platform empowers auto OEMs to better understand parameters influencing the performance of vehicles and modify elements to comply with emerging safety, fuel efficiency and emissions guidelines. Moreover, predictive insights into the value chain enable automobile manufacturers to capitalize on real-time data and explore new revenue streams through ancillary services such as personalized offers and driving behavior-based insurance.

Automate maintenance services

Digital consumers expect seamless after sales support during and after the warranty period. It requires auto manufacturers to foresee issues in a vehicle and prevent emergency repairs, avoid roadside breakdowns, and provide prompt assistance in the event of malfunction. This is possible through optimal use of data from smart sensors, IoT devices, and telemetry systems for remote diagnostics and real-time intervention.

The Infosys Genome Solution framework helps auto OEMs provide timely service to maintain the reliability and safety of vehicles by accurately predicting failure of parts / components. Our predictive analytics platform correlates discrete vehicle data, such as speed, tire pressure, usage, and driver behavior, with historical maintenance and repair records. It identifies performance anomalies and estimates the lifespan of critical components. In addition, it can trigger safety alerts and notifications for periodic maintenance.

Our solution generates health reports, and predicts vehicle condition as well as events based on hundreds of performance parameters. Visibility into maintenance issues enables auto manufacturers to plan predictive maintenance and automate scheduling. Significantly, our data analytics solution minimizes Mean Time To Repair (MTTR) and rationalizes warranty costs.

Optimize spare parts distribution

Auto manufacturers need to strike a balance between timely availability of spare parts across dealer locations / distribution centers and the cost of inventory. The answer lies in predicting demand for components to streamline supply chain operations and ensure cost-efficient spare parts management.

The Infosys Genome Solution makes sense of data from connected vehicles and applies predictive analytics to rationalize costs and mitigate risks across the supply chain. It enables OEMs and dealers to synchronize remote diagnostics tools and schedules for periodic / predictive maintenance with supply chain management applications. Manufacturers use our solution to predict a maintenance issue (for example, replacement of an end-of-life battery), and ensure adequate inventory of the required part / component at a service center in close proximity to the customer.

Our predictive algorithms aggregate service data – warranty repairs, common maintenance issues, and defective part replacements – across vehicle lines and models. Insights from the data can be incorporated into causal analysis tools to improve design or modify development as well as traceability solutions for product recall. Further, the Infosys solution helps service center networks of auto manufacturers track the movement of connected fleets on interactive maps and rationalize the inventory of spare parts and components.

The Infosys Genome Solution enables automobile manufacturers to deliver superior user experiences through predictive analytics. It provides a data model which can be leveraged for multiple analytical models that can increase productivity by 10%-25%, decrease maintenance costs by 10%-40%, and reduce asset downtime by up to 20%.

For more information, contact askus@infosys.com

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