Accelerate autonomous driving development
DXC Robotic Drive

Enable autonomous driving research and development by expediting end-to-end engineering and testing cycles.

Benefits

- **Speed time-to-market** – Reduce "time to drive" with an offload speed of 6 GB/s to 8 GB/s and reduce "time to analyze" from weeks to hours using data science analytical procedures in native vehicle data formats.

- **Reduce cost** – Maximize return on investment for test vehicles with improved efficiency in R&D equipment, computing capacity and labor resources.

- **Improve market leadership with innovation** – Harness hundreds of petabytes of automotive data with high velocity to rapidly progress through the sequence of AD levels.

The race is on to build fully autonomous vehicles. The first automaker to achieve the highest level of autonomous driving (AD) by building the better driver will not only lead the market, but also define transportation of the future. To do this, AD research and development (R&D) engineers and IT teams must collect and store a staggering amount of sensory data for analysis and interpretation to produce control systems that perceive information and accurately navigate the vehicle.

Research engineers must sift through millions of hours of recorded data to extract, analyze and interpret relevant content, with a goal of producing control systems that accurately navigate the AD vehicle in its surroundings. To accelerate this R&D cycle, autonomous vehicle manufacturers must harness artificial intelligence (AI) and use innovative tools to accelerate this R&D cycle.

Transform with speed, agility and innovation

DXC Robotic Drive provides the platform, toolkit and expertise that AD R&D and IT teams need to collect, manage and analyze massive amounts of sensor data from around the globe at significant speed to reduce time- and cost-to-market in the race to develop fully autonomous vehicles.

DXC Robotic Drive expedites data analysis and algorithm development and provides the computing power, accelerators and automation for evolving AI. The AD platform enables simulations, open- and closed-loop software, and hardware functional testing.

Built with standard components on an open-source ecosystem, DXC Robotic Drive enables a spectrum of advisory, discovery, implementation and managed services tailored to client needs.

Speed time to market

DXC Robotic Drive accelerates end-to-end engineering and testing in AD development. Our solution ensures ever-increasing amounts of environmental data — such as perception and location data — are collected, stored, analyzed and made available for algorithmic training as quickly and efficiently as possible.

DXC Robotic Drive enables engineers to analyze data using native in-vehicle data formats, saving time spent converting data into other formats and expediting the R&D process. Results that once took days or weeks to achieve can now be produced in minutes or hours, accelerating time to market.

One major automaker has reported faster ingest rates, shorter simulation cycles and improved algorithmic performance up to 100 times. Using DXC's technologies, this client was able to reduce time to market by half.

Empower R&D

DXC Robotic Drive is available within cloud, on-premises or hybrid platforms, with flexibility to move workloads. Our solution enables teams to leverage applications that perform analysis in native automotive formats at the sensor level and interpret environment and perception data quickly. Teams can train AI models with deep learning clusters, a core task for data fusion and motion control. Pioneered by DXC Technology, deep learning clusters significantly expedite object and scenario recognition by managing the AI and machine learning algorithms end to end. The solution automates deployment of functional testing to road test the autonomous vehicle's reliability and safety and achieve road approval.

By increasing R&D efficiency, developers can rapidly progress to the next AD levels. DXC Robotic Drive captures and processes sensory data for algorithmic training as quickly and efficiently as possible. Reduce cost through R&D efficiencies and lower investment to support underlying infrastructure. Increase competitive advantage with the ability to collect, manage and analyze high-volume and high-velocity data

quickly. Meet today's standards and regulatory requirements with best-in-class technology delivered in a secure environment. Enable agile development across dynamic, global teams.

DXC's partners

The DXC Partner Network includes some of the world's leading business and technology companies. Together we thrive, powering the digital enterprise and delivering business results to our clients around the globe.

Why DXC?

- **We understand AD development** — DXC understands the technical and logistical challenges of AD R&D. We know that "fit for purpose" building blocks can aid in managing the size and technical complexity of AD projects.

- **We solve complex AD challenges end to end** — DXC Robotic Drive helps engineers ingest files from R&D vehicles, eliminate data conversion, avoid duplication and enable AI training, saving time and cost in the R&D process.

- **We have the demonstrated ability to support an agile approach in AD development** — DXC Robotic Drive enables engineers and IT professionals to adopt agile methodologies and best practices to work more collaboratively with a standard software development accelerator and platform.

- **We provide a technology-independent and cloud-ready AD development platform** — DXC Robotic Drive is built with state-of-the-art technology on open source software. DXC's technology independence allows us to deliver the best solutions with the scale, speed and agility required by leading enterprises — all while minimizing client risk and without vendor lock-in.

- **We deliver AD development on a global scale** — With extensive global experience serving the automotive industry, we provide an established network of automotive centers of excellence for partners and clients to collaborate, build and deliver innovation.

Engage with us today

Schedule a session with us to validate the current state of your AD challenges and uncover opportunities. Engage our experts to learn more about how DXC can help your firm accelerate end-to-end engineering and testing of AD to reduce time to market, lower costs, and pull ahead in the race to autonomous mobility.

Learn more at www.dxc.technology/roboticdrive

Get the insights that matter.
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