

CES 2026: KPIT's vision for the software-defined vehicle

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Q&A with KPIT

As the automotive industry accelerates toward software-defined, electrified and connected mobility, the Consumer Electronics Show (CES) 2026 has become a critical forum for technology-led transformation. In this interview from CES 2026, Omkar Panse, chief technology officer of KPIT Technologies, outlines how the company is refining its strategic focus — both in how it engages at global events and in the solutions it brings to market.



Source: Getty Images/BeeBright

Panse explains that KPIT's participation at CES is not about scale, but selectivity and impact. With a data-driven approach to return on investment (ROI), KPIT evaluates CES alongside other key industry events, using a combination of quantitative metrics — such as engagement and pipeline growth — and qualitative measures, including client relationships and thought leadership. This disciplined approach ensures CES remains a high-value platform for shaping conversations with original equipment manufacturers and partners.

The discussion also highlights KPIT's expanding technology portfolio, which spans agentic AI for reimagining the software development life cycle, autonomous validation through Scenario Foundry, scalable electrical/electronic (E/E) architectures, open-source software-defined vehicle (SDV) acceleration, AI-powered testing, cybersecurity and seamless cockpit experiences. Panse details how AI and machine learning are applied across autonomous driving, predictive maintenance, human-machine interface (HMI) and cybersecurity, while also addressing challenges in multimodal interaction and system complexity.



Omkar Panse [Source: KPIT]

The following is an edited transcript of the conversation.

S&P Global Mobility: How does KPIT measure the ROI and strategic outcomes of exhibiting at CES compared to other automotive tech events?

Omkar Panse: Over the last five to six years, KPIT has sharpened its focus on mobility and automotive technologies, with an emphasis on relationships with a select cohort of clients. As part of this strategy, KPIT participates in a curated set of global industry events, including CES, to strengthen client relationships, capture mindshare and showcase solutions that address emerging challenges. Each event is meticulously planned and tracked, with follow-ups aligned to client priorities.

ROI measurement at CES is data-driven and multidimensional. KPIT evaluates success through:

- Client engagement metrics
- Brand and thought leadership
- Feedback and insights
- Pipeline impact

These indicators are compared across other strategic events to assess relative impact. By integrating quantitative metrics (such as engagement and pipeline growth) with qualitative outcomes (relationship strength and perception of innovation), KPIT ensures that CES participation delivers measurable business value and informs future event strategy.

What new platforms or solutions is KPIT presenting at CES 2026 to address evolving challenges in automotive software, electrification and connectivity?

At CES 2026, KPIT is introducing innovative platforms and solutions to address the automotive industry's rapidly changing needs. Agentic AI for software development life cycle (SDLC) reimagination accelerates the design-to-deployment cycle, enabling rapid cockpit software updates and efficient issue triaging.

Scenario Foundry accelerates autonomous driving validation by generating scenarios for robust end-to-end AI stack training and validation.

Automotive Smart Core delivers a scalable E/E architecture with modular reference design, high-speed data communication and a future-ready integration platform.

KPIT's open-source SDV acceleration ensures full source-code ownership and vendor-neutral integration, while the AI-powered test house enables early, reliable validation with high automation and cost efficiency.

Seamless cockpit integration enhances user experience through edge AI-powered assistants and adaptive features. Agile cybersecurity solutions offer compliance and resilience throughout the vehicle life cycle.

Finally, the E/E architecture benchmarking solution equips OEMs with actionable insights to optimize E/E architecture design and deployment. These innovations collectively empower OEMs to accelerate SDV strategies, improve sustainability and deliver next-generation mobility experiences.

How is KPIT applying AI and machine learning to improve autonomous driving, predictive maintenance and cybersecurity in vehicle systems?

KPIT leverages AI and machine learning to transform critical aspects of mobility software. For autonomous driving, the Scenario Foundry utilizes multimodal AI to generate diverse, geospecific driving scenarios, enabling robust AI stack training and validation through digital twins and foundation models.

KPIT offers edge AI-powered conversational assistants and do-it-yourself diagnostics for predictive maintenance and proactive fault detection, providing clear maintenance guidance that reduces downtime and enhances vehicle reliability.

KPIT offers a cutting-edge suite of cybersecurity products and solutions, including integrated AI-driven risk assessment, real-time anomaly detection, and automated security testing. These

systems continuously update risk models, simulate vulnerabilities, and automate remediation processes, ensuring compliance and resilience throughout the vehicle life cycle. By reimagining the SDLC with Agentic AI, KPIT accelerates the design-to-deployment process, improves quality and delivers future-ready solutions for OEMs.

What technical advancements has KPIT made in multimodal HMI integration, and what challenges remain for seamless driver and passenger interaction?

KPIT has advanced multimodal HMI solutions through edge AI-powered conversational assistants, leveraging edge AI, along with a smartphone as a companion device for occupants. Unified integration of driver monitoring systems (DMS) and advanced driver assistance systems within the cockpit enhances safety and regulatory compliance.

Modern user interface/user experience (UI/UX) designs for large displays support wireless CarPlay, cluster integration and simultaneous voice command systems, creating a more intuitive and connected in-vehicle experience. KPIT also enables socially connected features such as shared playlists and access to social applications.

However, challenges remain in ensuring seamless and context-aware operation across diverse environments, integrating multiple voice assistants and maintaining a consistent, intuitive user experience as vehicle systems grow increasingly complex and interconnected.

How is KPIT optimizing its software and engineering services to help OEMs achieve greater energy efficiency, sustainability and scalability?

KPIT has a two-pronged strategy to help OEMs achieve their sustainability and scalability goals without compromising speed and quality, utilizing automotive hardware and software solutions and related integration services. KPIT solutions optimize software and engineering through scalable E/E architectures. This approach features modular reference designs and zonal electronic control units (ECUs), which lead to a reduction in the amount of copper in the wiring harness, granular power life cycle management and efficient data communication. This results in optimum energy consumption and sustainable product development that allows OEMs to achieve more with less consumption of energy and materials to produce vehicles.

Through the static and dynamic behavior benchmarking of E/E architecture, KPIT provides OEMs with actionable insights to optimize cost, performance and feature deployment. Adoption of open-source solutions minimizes vendor lock-in and supports sustainable, flexible strategies. AI-driven validation and automation enable early integration and high test automation, reducing resource usage and accelerating time to market.

Additionally, KPIT fosters a collaborative ecosystem with leading technology providers, ensuring solutions remain future-ready and scalable to meet evolving industry needs. These efforts collectively help OEMs achieve energy efficiency, sustainability and long-term scalability.

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