

Special Feature Article

Artificial Intelligence and Data at the Core of Competitiveness — CES 2026 Reflects Transformation in the Automotive Industry —

CES 2026 was held in Las Vegas, USA. The event organizer, the Consumer Technology Association (CTA), has rebranded the “Consumer Electronics Show” simply as “CES,” continuing to position the event not as a home electronics exhibition but as the world’s largest technology trade show. The former framework of a “consumer electronics fair” has now largely faded. In 2026 in particular, CES further strengthened its character as an industrial technology exhibition, with a strong focus on AI, semiconductors, cloud technologies, and mobility.

Attendance on a Recovery Trend

CES 2026 attracted approximately 148,000 visitors. While this figure did not reach the pre-pandemic peak, it maintained a steady recovery trend. Some attendees even commented that the scale was “just right,” noting that excessive congestion can detract from visitor satisfaction.

In contrast, the number of exhibitors declined from roughly 4,500 the previous year to about 4,100. In particular, participation in the startup zone “Eureka Park” decreased, highlighting the growing challenge for emerging companies to justify the cost-effectiveness of exhibiting in Las Vegas.

The venue primarily consisted of three areas. The largest exhibition area, the LVCC (Las Vegas Convention Center) district, concentrated on industrial technologies such as mobility, AI, and semiconductors, covering approximately 230,000 square meters. This is equivalent to about twice the size of Tokyo Big Sight (Koto Ward, Tokyo) and roughly three times that of Makuhari Messe (Mihama Ward, Chiba). The Venetian district focused on healthcare, smart homes, and startups, while the C Space district showcased companies related to advertising and marketing.

AI as Industrial Infrastructure

Within this overall structure, the keyword that symbolized CES this year was “Physical AI.” Over the past two years, AI itself has increasingly taken center stage in exhibitions. Today, however, AI is being embedded within products and services, functioning as a foundational technology that users can utilize without being consciously aware of it. This trend—including AI’s role in invisible areas—signals that AI is beginning to take root as industrial infrastructure.

Mobility is, in fact, the field where this shift is most clearly reflected. CES was once known as a venue where automakers unveiled concept cars, but its character has changed significantly in recent years. While large-scale displays by finished vehicle

manufacturers have declined, participation by mobility-related companies has instead increased. Depending on classification criteria, the number of mobility-related exhibitors has expanded from around 300 several years ago to approximately 700 at CES 2026.

The nature of the exhibits has also evolved. Whereas futuristic passenger cars once dominated, automobiles are now positioned not as standalone products, but as components of Physical AI powered by AI and data. In addition, “working mobility” such as logistics vehicles, autonomous delivery vehicles, industrial robots, and construction machinery stood out prominently.

Growing Presence of Semiconductor Companies

It is undeniable that the relative presence of finished vehicle manufacturers has diminished. General Motors (GM), once a symbolic presence at CES, did not appear this year, and large-scale exhibits by automakers are generally on a downward trend. Some companies have shifted toward holding independent events or making online announcements instead.

In contrast, automotive suppliers have become increasingly prominent. Companies engaged in sensors, semiconductors, software, communications, and cloud services have stepped forward as providers of foundational technologies for vehicle development.

Symbolizing this trend was the strong presence of semiconductor companies. In particular, AI semiconductor leader NVIDIA drew significant attention.

The company positions itself not merely as a semiconductor manufacturer but as an “AI computing company,” deepening its involvement in the automotive industry. At CES, NVIDIA emphasized a comprehensive platform strategy encompassing not only AI chips, but also SDKs (software development kits) for autonomous driving and vehicle software development, simulation environments, and data training infrastructure. NVIDIA’s AI platforms have already been adopted by numerous automakers. For example, Mercedes-Benz and China’s leading EV manufacturer BYD are advancing their use of NVIDIA platforms as vehicle AI foundations.

This movement is closely linked to the trend toward SDVs (Software-Defined Vehicles), in which vehicle functions are updated through software. As a result, in-vehicle computing power and AI processing capabilities have become critically important. Against this backdrop, semiconductor and software companies have emerged as core players in the automotive industry.

Transformation of the Development Process

Another important point is that the vehicle development process itself is undergoing change. Conventional automotive development relied heavily on physical vehicle testing, but virtual development using simulations and digital twins is becoming mainstream. AI-based autonomous driving development requires massive volumes of

virtual driving data, rapidly expanding the role of cloud services and data centers.

As a result, the role of suppliers is shifting from simple component provision to the provision of “technology platforms.” Semiconductor companies are taking on the central role in vehicle computing. Software companies provide vehicle operating systems and AI development environments. Telecommunications companies support cloud integration of vehicle data. It has become increasingly clear that mobility is established through the aggregation of these technologies.

From B to C to a B to B-Centered Event

Another major change is the overall shift of CES from a BtoC-oriented exhibition to a BtoB-centered one. Consumer products such as televisions and smartphones once took center stage, but today the focus is on enterprise-oriented technologies, including industrial AI, robotics, data centers, and mobility.

Automobiles are no exception. Vehicles are increasingly being redefined not merely as means of transportation, but as massive computer systems that collect and process data. Through the convergence of AI, cloud technologies, semiconductors, and communications, the mobility industry is transforming into a new industrial domain distinct from the traditional automotive industry.

In this sense, CES 2026 can be described as an event symbolizing a shift in industrial structure. The era in which automakers were the main protagonists is giving way to one in which companies controlling AI platforms, semiconductors, and software compete for leadership. The primary battleground of the mobility industry appears to be moving away from the vehicle itself toward “technology platforms.”

Looking ahead, competitiveness in the automotive industry will be determined not only by the ability to manufacture vehicles, but by how effectively companies can integrate AI, data, and software. The exhibits at CES vividly outlined the contours of this new industrial structure.