

News Release

Hyundai Motor Group Announces AI Robotics Strategy to Lead Human-Centered Robotics Era at CES 2026

- Hyundai Motor Group debuts real-world human-centered AI Robotics at CES 2026
- The Group to secure optimal capabilities, including its expansive Group-wide value chain and product portfolio, to lead the Physical AI industry
- The Group to also connect global Physical AI industries, including Korea and the U.S., to build a differentiated core foundation
- CES Theme ‘Partnering Human Progress’ represents the Group’s bold roadmap for advancing human-robot collaboration, underpinned by three foundational partnerships
- Partnering humans and co-working robots to commence the era of AI Robotics, starting in manufacturing environments
- ... Boston Dynamics unveils the product version of its new Atlas® robot
- ... Atlas to be deployed at HMGMA by 2028 for sequencing tasks, advancing human-centric smart factory innovation
- ... Atlas reduces human physical burden by performing higher-risk tasks; lays the groundwork for robot commercialization and collaborative human-robot environment
- Partnering Group Value Network with Boston Dynamics to lead AI Robotics training, commercialization, and expansion
- ... Group affiliates – including Hyundai Motor, Kia, Hyundai Mobis, and Hyundai Glovis – to collaborate and build an End-to-End (E2E) AI Robotics value chain
- ... enhance robotics capabilities through data-driven production and validation systems, such as the Robot Metaplant Application Center (RMAC) and Software-Defined Factory (SDF) platform
- ... drive world-class AI Robotics development through strategic partnerships with NVIDIA and other initiatives

- ... leverage Group's global manufacturing expertise to accelerate AI Robotics mass production, and expand Robotics-as-a-Service (RaaS) offerings
- Partnerships with global AI leaders to initiate joint innovation for human progress
- ... accelerate technological development of next-generation humanoids through Boston Dynamics and Google DeepMind collaboration
- ... drive safe and efficient deployment of humanoids by integrating cutting-edge robotics and AI technologies
- The Group to showcase Atlas, Spot®, and MobED with AI Robotics integration at its CES 2026 booth, featuring interactive experiences and live demonstrations

SEOUL/LAS VEGAS, January 5, 2026 – Hyundai Motor Group (the Group) today unveiled its transformative **AI Robotics Strategy** at the Consumer Electronics Show 2026 (CES 2026), presenting a bold roadmap for advancing human-robot collaboration under the theme 'Partnering Human Progress'.

This year's theme builds on its [CES 2022 theme](#), 'Expanding Human Reach', evolving hardware-driven robotics into adaptive, artificial intelligence-driven robots designed to amplify human potential. At the heart of this progression is the Group's human-centered AI Robotics, created to assist and collaborate with individuals.

To achieve this goal, the Group's AI Robotics Strategy is underpinned by three foundational partnerships to drive progress and unlock entirely new possibilities for industry and society:

1. **Partnering humans with co-working robots:** Robots designed to assist and collaborate with people starting from manufacturing environments, performing hazardous and dangerous, as well as repetitive tasks.
2. **Partnering the Group Value Network with Boston Dynamics:** Combining Boston Dynamics' expertise in AI Robotics with Hyundai Motor Group's global scale and manufacturing capabilities to create safe training grounds and an End-to-End (E2E) AI Robotics value chain.
3. **Partnering with AI leaders:** Collaborating with global AI pioneers to open new chapters in AI Robotics innovation and drive the vision of 'Progress for Humanity'.

Based on this strategy, Hyundai Motor Group plans to position itself as a human-centric leader in the Physical AI industry by leveraging its Group-wide value chain and extensive product portfolio. Physical AI refers to the tangible realization of technologies that collect data using hardware in real-world environments to make autonomous decisions — spanning areas such as robotics, smart factories, and autonomous driving.

As the Group secures essential data for Physical AI implementation across the entire value chain — from manufacturing and logistics to sales — it will establish a cycle of continuous improvement by digitizing real-world data for AI learning, applying this to products. This approach will enable the expansion of industries from mobility to robotics.

The Group will also promote the establishment of the Hyundai Motor Group Physical AI Application Center, which will play a key role in advancing the Physical AI ecosystem. In addition, the Group plans to build a robot manufacturing and foundry plant based on customized robotics technologies developed through Physical AI.

1. Partnering Humans with Co-Working Robots: Opening the Era of Human-Centered AI Robotics

Boston Dynamics has been a pioneer in pushing the boundaries of robotics for more than 30 years, inspiring millions of people worldwide with its innovations. Hyundai Motor Group has already demonstrated tangible results and scalability by deploying Boston Dynamics robots in industrial settings to enhance safety and improve efficiency.

Spot, the agile quadruped, is now operational in more than 40 countries, performing critical tasks such as data collection and safety monitoring in industrial sites. And Stretch®, the warehouse robot, has unloaded more than 20 million boxes globally since its launch in 2023, transforming warehouse automation by addressing labor-heavy tasks under extreme conditions.

By combining the Group's manufacturing data, and proven manufacturing expertise and capabilities with Boston Dynamics' world-class R&D leadership, the Group aims to establish a safe and collaborative relationship between humans and robots, starting with manufacturing environments.

What is Boston Dynamics Atlas Robot Designed For?

Unveiled at CES 2026, the **Atlas humanoid robot** presents a groundbreaking leap in robotics innovation designed for industrial applications. As a general-purpose humanoid, Atlas is built to integrate with existing facilities, ensuring the flexibility to adapt as business needs evolve while prioritizing safety, reliability, and predictability.

The **Atlas prototype** serves as a research model, testing core capabilities essential for future products. Equipped with advanced rotational joints and sensors, Atlas can navigate complex industrial environments, perform repetitive tasks, and leverage AI-driven learning to quickly adapt to new roles. Its mechanical design enables dynamic movement, ensuring it can operate in spaces traditionally suited to humans.

The **Atlas product** ushers in a new phase of industrial robotics. With 56 degrees of freedom (DoF), most with fully rotational joints, and human-scale hands with tactile sensing, Atlas is engineered to handle demanding tasks autonomously. It supports a range of applications, including material sequencing, assembly, and machine tending, while prioritizing safety, reliability, and collaboration in shared workspaces.

Atlas's Industry-Defining Capabilities

Atlas offers a range of industry-defining capabilities, including:

- **Ease of task training:** Most tasks can be taught in under a day, streamlining deployment timelines.
- **Autonomy and self-sufficiency:** Atlas operates independently from day one, with capabilities such as automatic battery replacement and continuous operation.
- **Strength and precision:** Able to lift up to 110 lbs (50 kg) and perform precision tasks, Atlas excels in environments requiring repetitive and exhausting manual labor.
- **Durable and weatherproof:** Atlas is water resistant, designed for washdowns, and operates at its full capabilities – including strength capacity – between -4 and 104 degrees Fahrenheit (20°C to 40° Celsius)

Hyundai Motor Group expects humanoids to become the largest segment of the Physical AI market in the future and has set a goal to mass-produce the Atlas product model, deploying units at scale across industrial sites as production-ready humanoid robots.

To achieve this, the Group plans to integrate Atlas across its global network, including Hyundai Motor Group Metaplant America (HMGMA) in Savannah, Georgia, enabling it to perform real-world tasks on-site.

The Group will gradually expand the deployment of Atlas robots through process-by-process validation. Beginning in 2028, Atlas will be introduced on processes with proven safety and quality benefits, such as parts sequencing. By 2030, applications will extend to component assembly, and over time, Atlas will also take on tasks involving repetitive motions, heavy loads, and other complex operations — ensuring safer working environments for factory employees. As its performance is validated, the Group aims to progressively scale adoption across entire production sites.

This partnership exemplifies the Group's vision for 'human-centered automation', where people maintain full control while fostering a harmonious collaboration between humans and robots. Robots will handle labor-intensive or high-risk tasks, allowing human workers to focus on training the robots and providing oversight.

In the long term, AI Robotics will naturally integrate into everyday life, generating new value and enriching human experiences. This approach establishes a foundation for large-scale robot

commercialization and creates a future where humans and robots coexist and collaborate seamlessly.

2. Partnering the Group Value Network with Boston Dynamics: Leading AI Robotics Commercialization

Hyundai Motor Group is building a **Group Value Network** – the Group’s central AI Robotics Strategy leveraging Group capabilities.

At the core of the Group Value Network is an End-to-End (E2E) AI Robotics Value Chain, leveraging the Group’s world-class automotive production infrastructure, know-how for safety and reliability, and the diverse technological capabilities of its affiliates. This approach enables the advancement of AI Robotics capabilities, accelerates mass production, and expands service applications – forming a core strategy for the Group to lead the Physical AI era.

Within this framework, Atlas robots will first undergo extensive training using the Group’s manufacturing environment to ensure safe readiness for real-world applications. By seamlessly integrating capabilities in robotics, components, logistics, and software, the Group adds global scale and tangible value. This cohesive approach accelerates robot development and deployment, enhances customer services, and delivers superior ROI, further solidifying the Group’s leadership in the AI Robotics sector.

Detailed Information on the Group Value Network:

The Group Value Network enables the advancement of AI Robotics capabilities, faster scaling of production, and expansion of services.

1) Accelerating Robot Capabilities: Utilizing Data-Driven Manufacturing Facilities

- **Software-Defined Factory (SDF)** – SDF is an advanced smart factory powered by data and software, maximizing flexibility and agility across the entire manufacturing process to lead the future of manufacturing innovation. The Group’s SDF approach was first introduced at Hyundai Motor Group Innovation Center Singapore (HMGICS), evolving to realize the latest SDF platform at HMGMA, with plans for strategic deployment across global facilities based on a detailed analysis of diverse environments and conditions.

The Group’s SDF approach integrates real-world production data to optimize robots’ learning and performance. In these smart manufacturing platforms, robots are continuously updated by analyzing vast process datasets and sharing insights with manufacturing facilities.

- **Robot Metaplant Application Center (RMAC)** – RMAC serves as the ‘engine’ of the Group’s AI Robotics business, where robots learn human collaboration by mapping

movements such as lifts, turns, and recoveries into precision training for repetitive and complex tasks. Behavioral datasets combining training data from RMAC and real-world operational data from SDF create a cyclical synergy that enables continuous retraining. This iterative process ensures robots evolve to become faster, smarter, and safer, constantly improving their capabilities for effective human-robot collaboration.

RMAC anchors the Group's AI Robotics roadmap, with the facility set to open in 2026, in the U.S. By 2028, RMAC-trained Atlas robots will be deployed for highly repetitive sequencing tasks, progressing to complex assembly work by 2030. This iterative training process ensures that Hyundai Motor Group robots deliver measurable impact in diverse industries, from logistics and construction to energy and facility management.

- **NVIDIA Partnership** – To achieve these goals, the Group is strategically partnering with global leaders. Since last January, the Group has continued to strengthen its [strategic partnership with NVIDIA](#). As ideal partners to bring NVIDIA's vision of Physical AI into the real world, the Group plans to leverage NVIDIA's AI infrastructure, simulation libraries, and frameworks to accelerate innovation and maximize development efficiently.

Recently, the [Ministry of Science and ICT of the Republic of Korea, Hyundai Motor Group, and NVIDIA signed an MoU](#) to enhance national Physical AI capabilities, further strengthening future competitiveness and advancing AI expertise based on this existing partnership.

2) Accelerating Commercialization of AI Robotics: Utilizing Manufacturing Expertise and Infrastructure

- By consolidating affiliate strengths under its AI Robotics strategy, the Group aims to create a unified approach that drives robotics innovation and accelerates the growth of the Physical AI industry. The Group is leveraging its extensive manufacturing expertise and uniting affiliates within the Group Value Network to apply mass-production capabilities from automotive to AI Robotics.
- The contributions of key Group affiliates include:
 - **Hyundai Motor Company and Kia Corporation** – Provide manufacturing infrastructure, process control, and large-scale production data.
 - **Hyundai Mobis Company** – Works closely with Boston Dynamics to develop high-performance actuators and mark its official entry into the global robotics components market. Leveraging its expertise in automotive component design and mass production, Hyundai Mobis will standardize key components and build a robust supply chain for the Group's robotics platform by optimizing designs for manufacturability, securing competitive quality and cost advantages.

- **Hyundai Glovis Company** – Optimizes logistics and supply chain management to ensure efficient delivery.
- The Group will also leverage a broad range of affiliates to fully realize the strength of its Group Value Network. By combining the unique strengths and specialties of its diverse affiliates, the Group will build a robust E2E value chain that ensures flexibility, quality, and excellence at every stage of the robotics lifecycle, including development, learning, validation, mass-production, and service operations.

In addition, the Group has a unique advantage in extending its electrification value chain and leveraging its supply chain capabilities, as well as applying AI-based software from Software-Defined Vehicles (SDVs) to robots and other Physical AI products.

By 2028, the Group aims to establish a scalable production system capable of manufacturing **30,000 robot units annually**. Within the Group Value Network, the product version of Atlas surpasses any other enterprise-grade humanoid, underscoring the Group's commitment to scaling Atlas for broader industrial and commercial markets.

3) Expanding Integrated Customer Management Services Through Increased Investments and Diversifying into New Industries

- To ensure a seamless customer experience, the Group provides ongoing support beyond deployment. This includes over-the-air (OTA) software upgrades as well as hardware maintenance, repair, and overhaul (MRO) services, backed by remote monitoring and control. These capabilities ensure sustained reliability and unleash continuous performance improvements driven by real-time operational data.
- **One-Stop RaaS and Expansion Plans:** The Group's innovative RaaS model transitions robotics from a one-time sale into a flexible, ongoing service. Delivered through subscription plans, this model reduces upfront costs, enhances cash flow, and provides customers with immediate ROI. By handling maintenance, software updates, hardware scaling, and remote monitoring, the Group ensures long-term value for its customers while maintaining performance improvements through real-world data integration.

The RaaS model has already been deployed with global partners such as DHL, Nestlé, and Maersk, showcasing its versatility across diverse industries. This end-to-end RaaS strategy positions the Group not only as an AI Robotics manufacturer, but also as a long-term service and operations partner, enabling customers across multiple industries to benefit from sustainable, real-world robotics solutions.

- The Group plans to enhance utilization through early commercialization by implementing a phased rollout strategy for Atlas. Based on the Group's global network, this is expected to generate demand for tens of thousands of Atlas units. Through Atlas, the Group aims to

continuously learn from accumulated real-world data and improve usability, moving beyond automobiles into other manufacturing sectors.

Spot and Stretch are already being widely utilized and through this validation will be expanded to external markets, including logistics, energy, construction, and facility management.

- Further to this, the Group recently announced an [investment of KRW 125.2 trillion in Korea](#) over the next five years starting from 2026. This investment will primarily focus on advancing robotics powered by AI technologies, aiming to secure future growth engines while fostering an innovative robotics ecosystem in Korea. In addition to robotics, this large-scale investment is expected to accelerate the development of a green energy ecosystem and ultimately strengthen Korea's position as a global mobility innovation hub.
- The Group also plans to [invest USD 26 billion in the United States](#) over four years from 2025. This will expand collaboration with leading U.S. companies in robotics, AI, autonomous driving, and other future technologies. As part of this initiative, a new robotics facility with an annual capacity of 30,000 units will be established, positioning the location as a key production hub for the growing robotics ecosystem. The Group anticipates that these investments will deepen economic cooperation between South Korea and the United States, stimulate economic growth in both countries, and create new business opportunities across various sectors, reinforcing the Group's competitiveness in mobility and future technologies.

3. Partnering with leaders in AI: Opening A New Chapter in AI Robotics Innovation

Expanding beyond the Group Value Network, Boston Dynamics has announced a strategic partnership with Google DeepMind to accelerate technological development for next-generation humanoid robots.

This collaboration will integrate Boston Dynamic's leadership in robotics with Google DeepMind's cutting-edge robot AI foundation models, driving the development of breakthrough technologies.

Boston Dynamics is a global leader and pioneer in robotics and brings world-class expertise in this industry.

Google DeepMind is one of the leading frontier labs and in recent years has been advancing its robot AI foundation models – including Gemini Robotics – built on the powerful large-scale multimodal generative AI model, Gemini. Its models are designed to allow robots of any shape and size to perceive, reason, use tools, and interact with humans.

Boston Dynamics and Google DeepMind will usher in a new era of robotics research by integrating cutting-edge robotics with advanced AI technologies. This strategic partnership is set to become a driving force in transforming the future of the mobility industry.

Together, the two partners aim to accelerate research on AI models to control complex robots for high-impact tasks, and to scale robot adoptions safely and efficiently.

“The convergence of robotics and AI represents more than a technological advancement. It is a transformative innovation that will make human life safer and more enriching. By combining capabilities of Boston Dynamics and Google DeepMind through this strategic partnership, we are taking a significant step toward redefining the future paradigm of the industry.” – **Zachary Jackowski, Vice President and General Manager of Atlas at Boston Dynamics.**

“We are excited to begin working with the Boston Dynamics team to explore what’s possible with their new Atlas robot as we develop new models to expand the impact of robotics, and to scale robots safely and efficiently.” – **Carolina Parada, Senior Director of Robotics at Google DeepMind.**

What Interactive AI Robotics Experiences Are on Display at Hyundai Motor Group’s CES 2026 Exhibition Booth?

From January 6–9, 2026 at the Las Vegas Convention Center, visitors to Hyundai Motor Group’s booth can explore the capabilities of its cutting-edge AI Robotics through live demonstrations and immersive exhibits showcasing AI Robotics in everyday life and industrial applications.

These include Boston Dynamics’ Spot, Stretch and Atlas; Hyundai Motor Group Robotics LAB’s X-ble Shoulder, ACR (Automatic Charging Robot), and MobED (Mobile Eccentric Droid), which won the CES 2026 Best of Innovation Award; Motional’s IONIQ 5 Robotaxi; and Hyundai WIA’s AMR (Autonomous Mobile Robot), Cobot (Collaborative Robot), and Parking Robot.

Exhibition Highlights:

- **Atlas demonstrations** – The Atlas prototype will demonstrate advanced industrial applications.
- **Spot in action** – Spot will perform industrial site management tasks, including inspection and gauge monitoring, powered by Orbit facility management software.
- **MobED versatility** – Demonstrations will highlight the next-generation mobile robot platforms, MobED Basic and MobED Pro (the version equipped with autonomous navigation).
- **Future mobility technologies** – The IONIQ 5 Robotaxi, ACR, and Parking Robot will demonstrate autonomous driving, parking, and automatic charging capabilities.
- **Collaborative manufacturing** – X-ble Shoulder hands-on experience and Spot AI Keeper demonstration will highlight enhanced accuracy and reduced worker fatigue.
- **Streamlined logistics** – Stretch, Cobots, and AMR will demonstrate seamless operations.

- **Tech insights** – Hourly sessions will provide deep dives into the capabilities of Atlas, Spot, and MobED.

Hyundai Motor Group unveiled its [official brand video for CES 2026](#) under the theme ‘Partnering Human Progress’. The video showcases innovative human-centered AI Robotics technologies designed to assist and collaborate with people, which is available on Hyundai Motor Group’s [official YouTube channel](#). Additional CES 2026 updates will continue to be shared through the Group’s official social media channels.

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About Boston Dynamics

Boston Dynamics is the global leader in developing and deploying highly mobile robots capable of tackling the toughest industrial and safety challenges. Our robots are equipped with advanced mobility, dexterity and intelligence, enabling automation in unstructured or hard-to-traverse and unsafe spaces, from manufacturing facilities, power plants, and construction sites, as well as warehouses and distribution centers. We have three robots in our portfolio: Spot®, a quadruped that conducts industrial inspections for enterprise asset management and keeps people out of harm’s way through public safety applications; Stretch®, a box-moving robot currently being deployed with logistics and retail customers; and Atlas®, our electric humanoid platform currently in development. For more information on our company and our technologies, please visit www.bostondynamics.com.

About Hyundai Motor Group

Hyundai Motor Group is a global enterprise that has created a value chain based on mobility, steel and construction, as well as logistics, finance, IT and service. With about 250,000 employees worldwide, the Group’s mobility brands include Hyundai, Kia and Genesis. Armed with creative thinking, cooperative communication, and the will to take on any challenges, we strive to create a better future for all.

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