



Pudu Robotics Highlights Its “One Brain, Multiple Embodiments” Physical Agent at WAIC 2026

Descrizione

COMUNICATO STAMPA “CONTENUTO PROMOZIONALE”

SHANGHAI, July 17, 2026 /PRNewswire/ “Pudu Robotics, the global leader in commercial service robotics, today hosted its Pudu AI Technology Briefing on the opening day of the 2026 World Artificial Intelligence Conference (WAIC) in Shanghai. During the event, the company shared the latest progress of its “One Brain, Multiple Embodiments” technology architecture, offering an in-depth look at its Physical Agent architecture while presenting the PUDU D7, its industrial-grade semi-humanoid robot, in its first offline public showcase.

As Embodied AI moves from research to large-scale commercial deployment, the industry’s next challenge is no longer developing more capable AI models, but building a continuous loop that connects technology, products, commercial deployment, and real-world data. Ranked No. 1 globally in both revenue and shipment volume for commercial service robots, Pudu Robotics is leveraging its large-scale real-world deployment to accelerate the development of Physical AI.

Robots Are Bringing AI into the Physical World

Recent advances in large language models, multimodal foundation models, and AI agents have enabled AI to evolve from generating content to understanding increasingly complex tasks. As capabilities in perception, reasoning, planning, and execution continue to mature, AI is extending beyond digital environments into the physical world.

According to Frost & Sullivan’s 2025 Global Embodied Intelligence and Commercial Service Robot Independent Market Research Report, the rapid advancement of foundation models and AI agents is accelerating AI’s transition from content generation to real-world task execution. Equipped with perception, mobility, interaction, and manipulation capabilities, robots have become one of the most critical hardware platforms in the era of Physical AI.

The report highlights that commercial service robots covering delivery, cleaning, and guiding scenarios directly address industry pain points such as rising labor costs and operational inefficiencies, providing the practical foundation for immediate, large-scale commercial deployment.

One Brain, Multiple Embodiments: A Unified Platform for Robotics

As embodied AI advances toward commercialization, the industry faces several common challenges, including the availability of real-world data, engineering and manufacturing capabilities, sustainable commercial deployment, and global scalability. To address these challenges, Pudu Robotics continues to advance its “One Brain, Multiple Embodiments” technology philosophy, enabling different robot forms to share the same underlying intelligence through a unified model and software architecture.

“By building a unified intelligence foundation, we enable different robot forms to share the same brain,” allowing robotics to evolve from standalone intelligence to a platform-based intelligence ecosystem,” said Shawn Wu, General Manager of the General Embodied AI Product Line at Pudu Robotics.

Building a Three-Layer Architecture for Platform-Level Intelligence

Under this philosophy, Pudu has developed a three-layer Physical Agent architecture. Together, these layers enable robots to complete the full operational loop of perception, understanding, planning, execution, and feedback in real-world environments.

The robot body layer serves as AI’s physical interface with the real world. Pudu continues to develop multiple product forms tailored to diverse scenario demands, including specialized, semi-humanoid, and humanoid robots. Different forms handle distinct tasks: specialized robots tackle high-frequency, highly standardized tasks; semi-humanoid robots operate in complex industrial and commercial environments; and humanoid robots explore open-ended human-robot collaboration.

Serving as the central intelligence hub connecting models, skills, and robot bodies, Pudu introduced PuduAgent OS. Utilizing interactive Visual-Language-Models (VLM), long/short-term memory modules, and safety guardrails, it manages task comprehension, planning, experience accumulation, and safe operation. Its core value lies in allowing diverse robot forms to share the same “brain,” enabling cross-body and cross-scenario skill migration by reusing existing capabilities through a unified system.

The skill layer determines what robots are capable of doing in the physical world. Pudu’s embodied intelligence foundation model, PuduFM features a physical VLM module, a Physics Intuition Model (PIM), and action-expert modules to provide the robot with real-world understanding, reasoning, and execution capabilities. Unlike traditional robots that rely on pre-programmed rules, PuduFM aims to empower robots to understand environments, predict outcomes, autonomously plan tasks, execute actions, and continuously optimize based on feedback.

PUDU D7 Makes Its First Offline Appearance

As an important example of the “One Brain, Multiple Embodiments” philosophy, PUDU D7 made its first offline public appearance at WAIC 2026.

Powered by the PuduFM, PUDU D7 supports payloads of up to 14 kg and an operating height of 2 meters, enabling complex tasks such as material handling, high-reach picking, and warehouse logistics, making it highly adaptable for real-world applications across manufacturing, warehousing, and retail environments.

From service delivery and commercial cleaning to industrial delivery and general embodied AI, Pudu Robotics continues to expand both the range of robot forms and application scenarios supported by its unified intelligence platform, turning the vision of “One Brain, Multiple Embodiments” into practical deployments.

From Product Leadership to Platform Intelligence

According to Frost & Sullivan’s latest 2025 report, Pudu Robotics leads the global commercial service robotics industry in revenue and shipments, ranks first among Chinese commercial service robotics companies by overseas market share, and holds the top position globally in commercial cleaning robotics revenue.

As the robotics industry enters a new stage of development, Pudu Robotics is building on more than a decade of experience in commercial robotics to transform real-world operational data into continuously evolving embodied intelligence. The company is extending its expertise in technology, products, and commercialization into a unified AI platform that supports multiple robot forms.

About Pudu Robotics

Pudu Robotics, a global leader in the commercial service robotics sector, is dedicated to empowering easier work and better lives through AI and robotics, with a vision of building a global intelligent robotics infrastructure that serves 10 billion people worldwide.

Pudu Robotics has developed key core technologies and components, including robotic joint modules and motion controllers, and has filed more than 1,900 patent applications worldwide. Built on three core technologies—Embodied Navigation, Embodied Manipulation, and Embodied Interaction—Pudu Robotics has pioneered a “One Brain, Multiple Embodiments” architecture, establishing a comprehensive product portfolio that includes specialized, semi-humanoid, and humanoid robots.

Currently, Pudu offers four major product lines: service delivery, commercial cleaning, industrial delivery and general embodied AI. Its solutions are widely deployed across industries such as retail, hospitality, manufacturing, real estate and property services, healthcare, entertainment and sport, education, and public services.

To date, Pudu Robotics has shipped over 130,000 units globally, with a presence in more than 85 countries and regions.

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