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Private space race expands as SpaceX, Blue Origin target orbital AI data centers

By Chris Young, December 11, 2025

The world is gearing up for the generative AI boom, for better and worse. Scientists are warning that AI will create a massive, unsustainable energy demand. The data centers used to train and run these AI systems consume a huge amount of power, and this is expected to skyrocket in the coming years.



World's first six-armed humanoid robot that promises 30% more output unveiled in China

By Georgina Jedikovska, December 11, 2025

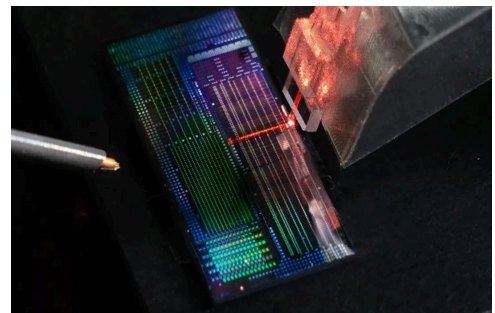
A Chinese appliance company has taken a major step into the future of industrial automation by launching a six-armed, wheeled "super humanoid" robot designed to exceed human performance on the factory line.



Optical chip smaller than a hair uses 80× less power to help scale quantum computers

By Neetika Walter, December 11, 2025

A chip smaller than a human hair may be the missing link to truly scalable quantum computers. Researchers have unveiled a new optical phase modulator that is nearly 100 times smaller than the width of a human hair, and it could finally unlock the massive qubit counts needed for next-generation quantum machines.



Ghost Robotics unveils new robotic arm for UGV

By Meredith Roaten, December 11, 2025

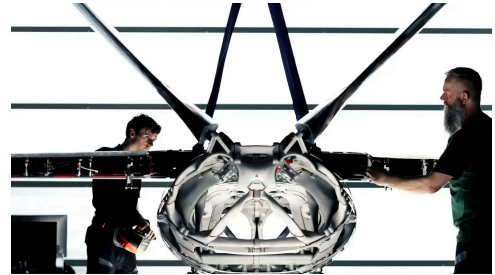
Mechanised arm accessories for the Ghost Robotics Vision 60 quadruped unmanned ground vehicle (Q-UGV) have been sold to some undisclosed customers, an executive told Janes on 10 December.



[World's first software-defined fuselage designed to enhance agility of combat aircrafts](#)

By Kaif Shaikh, December 11, 2025

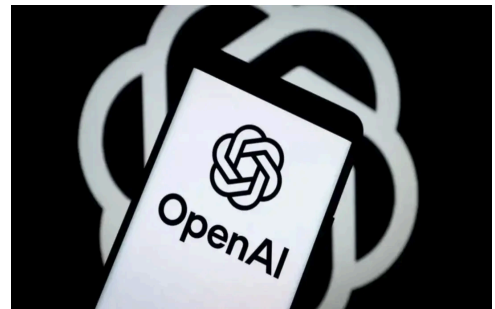
Swedish aircraft manufacturer Saab has announced what it calls the world's first software-defined aircraft fuselage, developed in collaboration with Divergent Technologies.



[GPT-5.2 release signals OpenAI's push to reclaim leadership in high-end AI models](#)

By Aamir Kholam, December 11, 2025

OpenAI released its new frontier model, GPT-5.2, on Thursday as competition with Google intensifies. The company positions the model as its most advanced yet, aimed at developers and everyday professionals.



[World's first 16-ton drone mothership that can launch swarms mid-air flies in China](#)

By Kapil Kajal, December 11, 2025

China has successfully flown its Jetank unmanned aircraft, a heavy-lift drone called "airborne UAV carrier" by state media, for the first time.



News Articles

● IMAGINATION AGE

NEED TO PREVENT ANY REGULATORY OBSTACLE IN THE EARLY DEVELOPMENT OF AI IN INDIA

AI and Industrial Revolution 4.0

THE FOURTH INDUSTRIAL Revolution is upon us, and is being powered principally by artificial intelligence (AI) combined with accompanying technologies such as advanced robotics, Internet of Things, machine-to-machine communication, and gene editing. As these converge into a single ecosystem, the innovations are game-changing—like the emergence of intelligent automation supported by agentic AI, mountains of data analytics, AI medical diagnosis at stunning speeds, individualised learning, and soon.

India has its own AI ambitions. Recently, BVR Subrahmanyam, the CEO of Niti Aayog, said that this “is a foundational transformation that will redefine how nations create wealth, deliver justice, and secure peace”, and that “The nations that harness AI responsibly will lead the next century”. He aptly called it “the Cognitive Revolution, where intelligence itself is being industrialised”. Some have termed this as the Imagination Age.

India's vision for AI is wide, though admittedly, in some ways, we are catching up with the US and China who are competing for global AI supremacy. But India's AI plans do not visualise this. They are more focused on AI sovereignty and shared prosperity with an emphasis on human and ethical values. According to a study by MDI Gurugram for the Competition Commission of India (CCI), the AI market is expanding at a bewildering pace. In India alone, it has grown from a mere \$3.20 billion in 2020 to \$6.05 billion in 2024, and is expected to expand to \$31.94 billion by 2031.

The study observes that AI is progressively transforming Indian businesses. It holds the potential to boost productivity and innovation, and it is reshaping competition dynamics, business operations, and regulatory responses. AI is fundamentally restructuring how companies make decisions, with data analytics and automated deci-



sion-making aided by AI agentic. However, research indicates that the core area of work for almost 67% of respondent AI start-ups in India lies in the layer of building AI applications. Notably, 76% of the start-up respondents build their application solutions using open-source technologies which dominate India's market.

Similarly, a joint survey by EY and CII notes that there is a strong momentum in AI adoption among Indian enterprises. Nearly half of the responding entities reported multiple live use cases of AI, and 76% of them believe GenAI will have a significant business impact. Over two-third of the enterprises feel ready to leverage AI, so it has to be seen to what extent AI fulfils its business potential. The survey further notes that AI is being widely used in banking, financial services, and insurance, healthcare, retail, e-commerce, logistics, and marketing, with applications including dynamic pricing, personalised recommendations, demand forecasting, and automated decision-making. In financial services, AI plays a critical role in streamlining operations, improving risk management, detecting fraud, assessing credit risk, and automating customer service. In healthcare, AI-driven diagnostics and drug discovery are gaining traction. Education, global positioning system and navigation, agriculture, social media, gaming,

and astronomy are also witnessing AI integration.

India enjoys some significant advantages fuelled by its outstanding talent, rapidly growing economy, and vibrant start-up ecosystem, with reportedly 1,900 start-ups focussed on AI-driven solutions. In September, the Niti Aayog came out with a significant paper titled *AI for Viksit Bharat: The Opportunity for Accelerated Economic Growth*, which outlined the potential outcomes for AI-led value creation, raising productivity and efficiency, and measures for leap-frogging innovation. The ministry of electronics and information technology has launched an India AI Mission designed to foster and democratise AI growth by making the infrastructure for AI use, public data unique to our

The services of big players are the enablers of our vibrant start-up ecosystem and the widespread use of AI services by the ordinary Indian consumer

country and culture, and facilities for AI use in Indian languages widely available. It seeks to drive the development of indigenous large language models based on uniquely domestic data.

In India, the infrastructure for AI services is being provided by major digital players such as Microsoft, Amazon, and Google as well as by relatively new players like OpenAI, Perplexity, and Anthropic. They are competing fiercely and ramping up their capabilities, with many services being provided for free.

Huge investments are flowing into this field. TCS has announced an invest-

ment of \$7 billion to set up a new data centre and Google has announced an even bigger investment of \$15 billion for a mega data centre in Andhra Pradesh, with regional clouds for Delhi and Mumbai. In addition, Microsoft, AWS, Reliance, and Adani have announced substantial investments. The services of these players are the enablers of our vibrant start-up ecosystem and the widespread use of AI services by the ordinary Indian consumer.

Some players like Microsoft and Google have integrated their AI services into their other products, making them much more convenient to use. This has the potential to improve decision-making by automating mundane tasks, saving valuable time and providing intelligent assistance. For research, AI has made it easy to obtain a summary extracted from dozens of sources in one place. This demonstrates how AI, a general-purpose technology, can be used to meet different ends. The announcement of Google's Gemini 3 model's launch, with its extraordinary capabilities, has shaken up competition in this field.

Rival AI companies have an understandable grievance that integrating of their own AI into other products gives companies like Microsoft and Google an unfair competitive advantage in deploying and popularising their AI services such as Copilot and Gemini, and call upon regulatory action to curb such AI use. Such an approach, however, amounts to placing restrictive rails around a new and growing technology whose full potential is still unfolding. It would chill innovation in this area. Nothing should be done by an Indian regulator that becomes an obstacle in the early development of AI in India, especially when it promises immense benefits for the Indian consumer, enterprises, and research.

Co-authored with **Rakshit Rana**, Associate at Touchstone Partners

Source: The Financial Express Newspaper, 12-12-2025

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Link: <https://epaper.financialexpress.com/4092767/Mumbai/DECEMBER-12-2025#page/7/2>

Centre plans second paper on AI-generated content

OJASVI GUPTA
New Delhi, December 11

AFTER RECOMMENDING A compulsory blanket-licensing regime for training AI systems in its first working paper, the government panel is set to release a second working paper on authorship and copyrightability of AI-generated content, in the next two months, a senior government official said on Thursday.

The officialsaid the committee's work on the forthcoming

paper will analyse the copyrightability of machine-generated works, the boundaries of authorship and the extent to which human intervention, such as prompting can be treated as creative labour.

This is described as a natural progression from the first working paper, which dealt exclusively with the use of copyrighted content in AI training.

The group spearheading this was constituted on April 28 this year by the Department for Promotion of Industry and Internal

Trade (DPIIT). The eight-member panel is headed by Additional Secretary Himani Pande and includes lawyers, academics and industry representatives.

"The same committee will continue to work on the second working paper which will be on copyrightability of the AI generated works and their operations," Pande said while speaking to reporters.

The first paper, unveiled earlier this week, proposed a "One Nation, One Licence, One Payment" model that mandates a

blanket licence for AI developers over all lawfully accessed copyrighted works. The committee argued that creators have been left uncompensated even as large AI models routinely ingest their work, while AI firms insist that any restriction on training data risks undermining model accuracy and amplifying bias. To resolve these competing pressures, the working paper extends blanket access to AI companies but requires them to share a portion of future revenues with creators.

Source: The Financial Express Newspaper, 12-12-2025

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Link: <https://epaper.financialexpress.com/4092767/Mumbai/DECEMBER-12-2025#page/7/2>



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