

## **ATHARVA ROBOTICS CENTER**

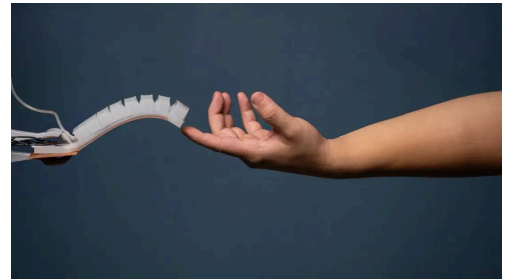
### **Daily News on Innovation & Technology**

28<sup>th</sup> November, 2025

#### **Programmable soft materials unlock asymmetric motion for next-gen robot designs**

By Neetika Walter November 27, 2025

New HKUST soft composites offer programmable, directional responses, enabling smarter soft robots and devices. A new class of soft, programmable composites that can twist, stiffen, and move differently depending on direction may soon redefine how robots sense and act in the world.



#### **Bubble fears rise in China's humanoid robotics boom as funding outpaces real demand**

By Aamir Khollam, November 27, 2025

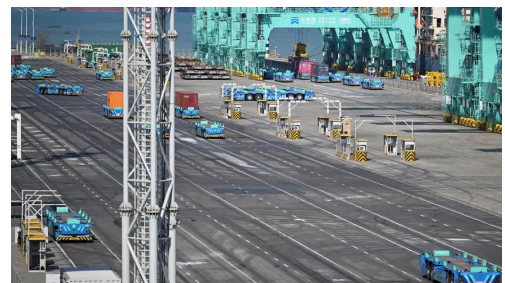
With more than 150 companies racing to build robots, Beijing wants guardrails to prevent duplication and protect long-term innovation. China is racing to lead the future of humanoid robotics, but its top economic planner is now signalling caution.



#### **How smart ports are rebuilt from the system up**

By Maria Bolevich November 26, 2025

Smart ports are shifting from manual, asset-heavy operations to digitally orchestrated, sensor-driven ecosystems. What were once physical loading points are now data environments integrating AI, IoT, automation, predictive maintenance, and real-time coordination across ships, yards, warehouses, and equipment.



### [314-petaflop: Mexico aims to build Latin America's most powerful supercomputer](#)

By Sujita Sinha, November 27, 2025

Mexico took a landmark step toward technological leadership on Wednesday, unveiling plans to build what it calls Latin America's most powerful supercomputer.



### [Quantum networks fused in first-of-its-kind demo that teleports entanglement instantly](#)

By Neetika Walter, November 26, 2025

Planet exploration would be shaped by ingenious robotic rovers that have ventured across the Moon, Mars, and even asteroids. These vehicles represent humanity's determination to explore distant worlds and answer fundamental questions about our universe.



### [Saudi Arabia Trains One Million Citizens in AI Skills Under SAMAI Initiative](#)

By CDO Magazine Bureau, November 27, 2025

The Saudi Data and Artificial Intelligence Authority (SDAIA) has trained over one million Saudi citizens in artificial intelligence skills through its national SAMAI initiative — marking a major milestone in advancing digital literacy and AI readiness across the Kingdom.



### [Space startup ecosystems in great shape: Astronaut Shukla](#)

By Sudarsan Maharana, November 27, 2025

India is on the path to conduct its own human spaceflight mission and plans to land someone on moon by 2040, said astronaut Shubhanshu Shukla here on Wednesday.



**TAKING A CUE FROM SPACE INDUSTRY**

## PM: Private Cos to Get Opportunities in Nuclear Sector

Says key reform will strengthen India's energy security, tech leadership



**Our Bureau**

**Bengaluru:** Prime Minister Narendra Modi on Thursday promised opportunities for private companies in the nuclear sector, which he said would be opened in the same way as the space industry.

"We are now taking steps in another very important sector: We are moving toward opening the nuclear sector as well. We are laying the foundation for a strong role for the private sector in this field, too," Modi said, speaking after virtually inaugurating private space launch company Skyroot's Infinity campus in Hyderabad.

This will create opportunities for the private sector in small modular reactors, advanced reactors and nuclear innovation, he said, adding: "This reform will give new strength to our energy security and technological leadership."

Referring to the space sector, Modi said the youth, especially

Today, Bharat's space sector is becoming an attractive destination for global investors

Gen Z, responded enthusiastically and took full advantage of the opportunities. "Today, more than 300 space startups in Bharat are giving new hope to the future of Bharat's space journey. And what's special is that most of our space startups began with very small teams," he said, adding that he met many of them over the past five-six years.

Gen Z engineers, designers, coders and scientists are creating new technologies today, the prime minister said.

'Gen Z Brings New Solutions' >>> 13

Source: Economic Times, 28-11-2025

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# Artificial Intelligence Haazir Ho!



**C Raj Kumar**

Earlier this week, after being sworn in as 53<sup>rd</sup> CJI, Surya Kant talked about how 'a scientific and comprehensive approach is essential to address the challenge of pendency across all tiers of the judiciary'. He had earlier observed that 'the judiciary has begun exploring AI-based tools for research, transcription, and data analytics, always with the guiding principle that technology must augment, not replace, the human mind's discernment', adding that 'the law, after all, is not a mere algorithm — it is the reflection of human conscience shaped by empathy, moral reasoning, and an understanding of context that machines cannot replicate'.

While there is a greater degree of consensus that has already enabled use technology in our courts, its scope, content, context, contours and impact are up for debate and discussion.

The most compelling case for the use of AI in courts is in relation to massive pendency. The sheer scale of the number of cases stuck in courts

— more than 5 cr — is daunting. A digitally-enabled judiciary already includes the e-Courts project and National Judicial Data Grid. They can serve as a foundation. But they are woefully inadequate to clear the huge pile-up in a time-bound manner.

Making AI a significant part of adjudication requires recognising causes for delays, and for insufficient impact of technology so far: Procedural delays, insufficient administrative capacity, increased dependency on manual paperwork, high levels of inefficient case scheduling, and limited access for citizens are some of the major reasons. Out of the 5 cr-plus cases pending, a large number are in district and subordinate courts (above 4.3 cr), compared to those in the Supreme Court (80,000) and high courts (60 lakh). Hence, AI-enabled and tech-driven reforms need to be democratised significantly with a strong emphasis on lower courts.

5 areas of AI use and adaptation within the judicial context can be considered:

- **Case management & scheduling** There should be a focus on developing automated cause lists using machine-learned predictions, and real-time and dynamic scheduling to reduce adjournments.
- **Natural language-processing tools for document processing** This includes, but is not limited to,



**All rise**

document classification, translation, summarisation, AI-assisted drafting for routine orders, notices, bail formats, and speech-to-text for court transcription and translation in real time.

- **Virtual courts, remote and hybrid hearings** These need to go beyond traffic challans. There is a case for AI-supported digital kiosks for litigants across rural India. AI-based adaptive, and generative legal research should be undertaken for basic matters like precedent search, extraction of ratios, lines of reasoning, and flagging conflicting precedents or overruled cases.

- **Blockchain** For evidence and court records, blockchain tech can enable the administrative apparatus to ensure tamper-proof digital evidence storage and chain-of-custody verification. More targeted technologies to spot deepfakes is also needed. This will save significant time and improve court efficiency, which has a direct bearing on addressing administrative delays.
- **Analytics** Real-time backlog

analytics and judicial productivity dashboards can help significantly. But one must ensure that every idea relating to AI use in courts is subject to fundamental and non-negotiable principles of transparency, accountability and ethical compliance.

A 2023 Harvard Kennedy School paper, 'AI, Judges and Judgement: Setting the Scene', observes, '...some public scepticism of AI's extension in the courtroom is useful in ensuring algorithms remain accountable and fair: The performance of models can be overhyped and exaggerated, amplifying a common misconception that these algorithms always surpass human-level reasoning. There is a fine balance to strike — once AI justice is inevitably and gradually improved — in boosting popular confidence in these tools while tempering unrealistic expectations of their capabilities.'

The new CJI should evaluate the options and opportunities for considering AI use in courts to develop a technology-enabled judiciary. There is a case for establishing a national task force chaired by Kant with judges, lawyers, government officials, tech experts and academics to develop a white paper to build awareness and chart the course for action.

*The writer is founding vice-chancellor, OP Jindal Global University*

Source: Economic Times, 28-11-2025

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## India Inc Pushes for AI Fluency in Staff Performance Metrics

Nudges staff and adds AI usage in employees' key responsibility areas to drive wider adoption, faster upskilling and enhanced accountability

**Brinda Sarkar & Sreeradha Basu**

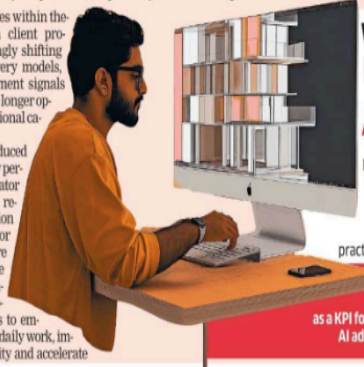
**Bengaluru:** Integrate artificial intelligence (AI) into performance or risk falling behind — that's the message India Inc is sending to employees as large-scale disruption pushes companies across sectors to accelerate use of the technology.

Firms such as Deloitte, Lenovo, Mphasis and Accenture are nudging employees to weave AI into their everyday work and including AI usage in employees' key responsibility areas (KRAs) to drive wider adoption, faster upskilling and enhanced accountability.

Senior leaders are part of the push as well, undergoing AI training and being held responsible for integra-

ting AI-first practices within their functions. With client programmes increasingly shifting to AI-enabled delivery models, leadership involvement signals that AI fluency is no longer optional but a foundational capability.

Deloitte has introduced 'innovation' as a key performance indicator (KPI) centred on responsible AI adoption and AI skilling. Senior business teams are expected to promote the use of organisation-approved AI tools. "This KPI aims to embed innovation into daily work, improve delivery quality and accelerate



### When AI is Real Work

**FIRMS NUDGING EMPLOYEES TO INCLUDE AI IN THEIR KRAs ARE:**  
 Deloitte, Lenovo, Mphasis and Accenture

Senior leaders being held responsible for integrating AI-first practices in their functions

Deloitte introduced 'innovation' as a KPI focused on responsible AI adoption and AI skilling

our tech transformation. Our partners and executive directors also undergo tailored training — their KPIs include the development and implementation of at least one AI tool use case, ensuring leadership-led adoption," said Deepti Sagar, chief people and experience officer, Deloitte India.

The company is also planning to introduce an AI skill badge as a KPI to help employees signal their level of AI expertise. Lenovo has similarly integrated AI into KRAs across functions to build a future-ready workforce. For sales teams, AI-linked KRAs are tied to performance metrics to ensure alignment with business goals.

Across product and technical teams, AI-focused KPIs have become standard, reinforcing expectations around GenAI understanding and integ-

ration. "Our rewards ecosystem also reflects this shift; our bonus structure is tied to strategic priorities such as AI, ensuring employees are recognised for driving impact," said Priya Tikare, head of HR at Lenovo India.

At Mphasis, more than 70% of the tech workforce has already been trained on AI tools, and KRAs have been recalibrated to ensure adoption and effective use. "The shift has been rolled out organisation-wide, supporting employees at every level. Its impact is particularly visible in roles where AI can meaningfully accelerate innovation and productivity," said Ravi Vasantraj, global delivery head, Mphasis.

Accenture is encouraging employees to set personal goals outlining how they will incorporate AI into everyday work.

Source: Economic Times, 28-11-2025

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# Chilling effect of a privacy upgrade

SHREY MADAAN

A few days ago, the government notified the Digital Personal Data Protection Rules, 2025, touted as proof that India is finally taking privacy seriously. On paper, they promise stronger citizen rights, greater trust, and real accountability in the digital economy. However, as the fine print makes clear, India's new data framework does something very different: it grants sweeping powers to the State while imposing heavy burdens on journalists, start-ups, and everyday consumers.

For a country that prides itself on being the world's largest democracy and a rising digital superpower, this should worry us. On paper, the DPDP framework promises control and consent. But for millions of Indians, especially those who rely on an independent press and the Right to Information to hold power accountable, these rules threaten to shrink the very transparency that keeps democracy healthy.

Two of the country's most important media watchdogs, DIGIPUB and the Editors Guild of India, have sounded the alarm. Their message is simple: the new rules could make journalism itself a consent-based activity. If routine newsgathering is reinterpreted as "data processing,"

reporters may need consent from the very people they are investigating. That's not privacy protection. That's a muzzle.

And the consequences do not stop at the newsroom. The rules weaken the RTI framework by diluting the public-interest override, a principle that enables journalists and citizens to access and publish sensitive information, when public interests outweigh potential harm caused by disclosure. This safeguard has enabled people to uncover corruption, exposed wrongdoing, and empowered ordinary citizens for nearly two decades.

At the same time, Rule 23 gives the government the authority to demand personal data from any platform or company, without notifying the user whose data is being accessed. Companies are explicitly prohibited from telling you when the State comes knocking.

So, while citizens may soon be forced to jump through more hoops to access information, the State gets an express lane. This imbalance carries a heavy cost. India's digital economy thrives because consumers trust platforms with their information. Start-ups innovate because they aren't bogged down by compliance paperwork. Journalists investigate because they can protect their sources. RTI activists ask difficult questions because they know the law backs them.

Under the new regime, these pillars wobble. Small Firms and startups now face the same stricter audits, annual impact assessments, and compliance certifications that even global tech giants follow. This is a huge blow for India's start-up ecosystem, which is already struggling funding winters and regulatory whiplash, this is not protection: it's a hurdle. When young companies are compelled to divert their scarce resources into paperwork instead of developing products, innovation suffocates, competition and consumers pay the ultimate price.

And for journalists, researchers, and public-interest watchdogs, the chilling effect is immediate. When the line between reporting and "processing personal data" becomes blurry, over-compliance becomes the safe, and undemocratic, choice.

This isn't about rejecting data protection. Indians deserve better privacy protection norms, transparent rules, stronger safeguards and greater accountability from platforms that handle our data. But privacy cannot come at the cost of undermining the institutions that defend our freedom. A law that claims to empower citizens while tightening its grip on press and limiting transparency neither safeguards democracy nor consumers.

The world already shows us what happens when data laws go too



far. Europe's GDPR, despite its good intentions, created a compliance maze that hurt small businesses and cemented the dominance of Big Tech. Innovation stalled, smaller players suffered and consumers lost out on competition and choice. India risks repeating the same mistakes, but this time it could lead to weaker transparency at home and a press that's even more constrained to question the authority. A smarter path is possible. The government must introduce an explicit journalistic exemption to protect reporters, whistleblowers, and public-interest investigations, and reinstate the RTI public-interest override that has long empowered citizens to hold power accountable.

And it must ensure that privacy safeguards don't morph into more surveillance or unchecked access to personal data.

India has built bold digital public infrastructure before, UPI, CoWIN, and DigiLocker. But the success of these systems came from clarity, openness, and trust. Not opacity. Not uncertainty. Not silence in the face of democratic concerns.

A fair data regime should empower the citizens, not intimidate them. It should strengthen their control over personal data, not create rules that leave them second-guessing the State. Protect consumers, not burden innovators.

(The writer is Indian Policy Associate, Consumer Choice Center)

Source: The Statesman, 28-11-2025

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## *AI at work: Transforming India's businesses, workflows and trust*

**RITWIK MUKHERJEE**  
Kolkata, 27 November

Artificial Intelligence is no longer an experimental concept in India—it has become a strategic force quietly rewiring boardrooms, workflows, and long-term business blueprints across sectors. At a time when the country's digital economy is expanding at unprecedented speed, AI is emerging not merely as a technological advantage but as a foundational pillar shaping competitiveness, governance, and sustainable innovation. Management consultant and AI strategist Dipra

Bhattacharya, who is also a Guest Faculty at Indian Institute of Social Welfare & Business Management (IISWBM) offers a deep, nuanced perspective on how this technological wave is redefining India's business landscape, and what organisations must do to harness its full potential responsibly. India's businesses, he argues, are moving decisively from intuition-driven decisions to data-led intelligence. "From agriculture to finance, startups to large enterprises, AI is pushing digital transformation into its next phase—where operational efficiency and intelligent automation

become the norm rather than the aspiration." With the country's robust tech ecosystem and a young, innovation-oriented workforce, India has the ingredients to emerge as one of the world's most powerful AI-driven economies. Yet, Bhattacharya insists that AI is only useful when it solves real business challenges. Whether it is predictive maintenance in manufacturing, fraud detection in banking, or demand forecasting in retail, the value lies in measurable outcomes. Organisations that treat AI as a strategic enabler rather than a decorative feature are the ones

witnessing genuine impact—faster decisions, deeper customer insight, and stronger competitive differentiation. Long-term alignment, he stresses, is the true test of AI maturity. "AI must move beyond pilots and sit at the heart of customer experience, operations, and risk management." When integrated into the enterprise's core vision—whether scaling markets, improving agility, or deepening product personalisation—AI becomes a silent partner powering resilience and growth. On the widely debated question of job displacement,



Bhattacharya offers a balanced view: AI will transform work, not eradicate human contribution. Routine tasks will be automated, but roles requiring creativity, empathy, and complex judgment will become more important

than ever. For him, the future workforce is not human versus machine, but human and machine-augmented, not replaced. But the rise of AI brings with it profound ethical concerns. Bias, opacity, and misuse remain real risks. "Algorithms are only as ethical as the humans who design them," he cautions. From hiring to healthcare, biased data can lead to discriminatory outcomes if left unchecked. Continuous audits, fairness checks, and diverse development teams are essential to mitigating these risks. Regulation, therefore, is not just necessary—it is

inevitable. Bhattacharya advocates for balanced, forward-looking policies that enable innovation while protecting citizens. India, with its evolving digital laws, has the opportunity to set global standards in responsible AI governance. Trust, privacy, and security sit at the heart of user acceptance. He believes that data protection must go beyond compliance and become a core organisational value. Encryption, consent, data minimisation, and clear accountability frameworks are no longer optional—they define digital credibility. Ultimately, enterprises

must recognise that AI excellence rests as much on people as on technology. Training, upskilling, and building cross-disciplinary competence will determine how meaningfully AI is adopted. "Technology alone doesn't transform organisations—people do," he concludes. In a rapidly shifting global landscape, India stands at the threshold of an AI-powered transformation. Whether the country emerges as a global leader will depend not only on innovation, but on the ethics, governance, and human capability that guide it.

**Source: The Statesman, 28-11-2025**

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