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Daily News on Innovation & Technology

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Tanuj Mathur: Cyber Security Hitting the Fast Lane with AI Guided Resiliency and Compliance

By Priyanka Gupta, August 4, 2025

Tanuj Mathur uses AI and machine learning to create a cybersecurity framework, improving patch management, regulatory compliance, and hybrid infrastructure resilience.



CSIS Launches Commission on Cyber Force Generation

By WASHINGTON, August 4, 2025

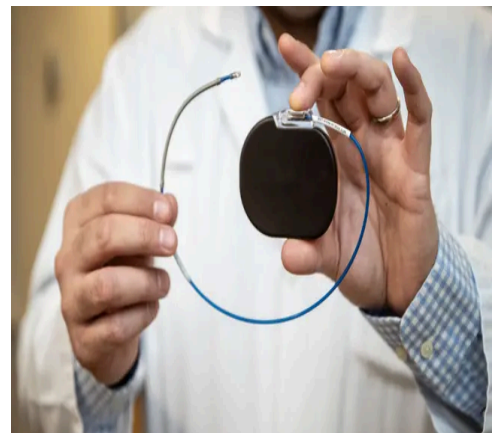
The Commission, in partnership with the Cyber Solarium Commission 2.0, will provide recommendations on how to organize a new military service that would ensure and defend the United States's strategic superiority and security in the cyber domain.



Ultrasound tech charges implant batteries in under two hours, no surgery required

By Aamir Kholam, August 4, 2025

As the demand for implantable medical devices surges worldwide, so do concerns about their long-term usability and patient safety. Devices like pacemakers, neural stimulators, and drug delivery systems are becoming increasingly common due to aging populations, chronic diseases, and accidental injuries.



[Video: Japan's falcon-inspired drone can land safely on your palms, no cushions needed](#)

ByMrigakshi Dixit, August 04, 2025

A flapping-wing drone can safely perform a soft landing on a person's hand like a Falcon. Developed by the University of Tokyo's DRAGON Lab, this system combines human gestures with flight planning. Flapping-wing drones are ideal for human interaction because of their low noise and flexible wings.



[NASA's Europa Clipper radar passes key test during Mars flyby](#)

BySharmila Kuthunur, August 04, 2025

NASA's Europa Clipper radar instrument captured echoes from radar signals that bounced off Mars, producing this radargram. The skyline-like pattern reveals topographic features beneath the spacecraft—such as impact craters, hills, and steep slopes—across a 560-mile-long (900-kilometer-long) stretch near Mars' equator. (Image credit: NASA/JPL-Caltech)



News Articles

Jobs at Risk AI's Reality Check

India's white-collar workforce has started feeling the tremors of job displacement due to AI with India's largest IT employer TCS announcing it will cut 12,000 roles. While the country's technology industry has witnessed several downturns in the past—from the post-Y2K hull to the 2008 financial crisis and the Covid-era freeze—the current shift is unlike any before. AI is rewriting job descriptions, replacing repetitive roles and forcing a reset on what skills are truly futureproof. It's part of a broader trend. Recruitment firms report the erosion of jobs across the board, from finance and insurance to marketing and customer service.

According to the World Economic Forum's 2025 Future of Jobs report, the structural labour market shift will impact 22% of today's jobs globally although it foresees an overall rise. Nearly 8% (52 million) will be lost, while 14% (170 million) new jobs will be created. This will result in net growth of 7% in total employment, or 78 million jobs in 2025-2030, it said. For India, 38% of existing core skills are expected to change.

The traditional job pyramid of the Indian white-collar workforce—wide at the base with repetitive roles—is being compressed, experts said. Hiring is becoming more selective, with companies placing a premium on value creation over volume.

Rule-based and pattern-driven processes are already being replaced with AI's speed and accuracy, said Sachin Ajjag, CEO of recruitment firm NLB Services. "We're already seeing it in roles such as customer service agents, data entry operators, invoice processors, and junior audit staff. In many cases, AI handles the first layer of work, such as responses, validations, and summaries, faster and with fewer errors."

The BPO and KPO (business and knowledge processing outsourcing) sectors, India's largest employment engines, are also under pressure. Voice-based customer service agents, chat support, transcription and data-cleaning roles are all at risk due to co-pilots and conversational bots. Nearly 60% of retail jobs and up to 70% of financial reporting tasks could be automated in the coming years, said Neeti Sharma, CEO at recruitment firm TeamLense Digital.

"Already about 30% of global customer service requests are handled by AI, and junior roles in legal and audit are being reduced as AI reviews documents and checks compliance," she said. "The squeeze isn't immediate but seems inevitable."

"While these roles are not vanishing overnight, many organisations, especially in captive centres and large shared services setups, are seeing a slowdown or freeze in hiring unless driven by fresh investments or expansion mandates," said Sanjith Chennappa IG, director and business head, professional staffing at Alectro India. The cascading effect of job displacement is creating higher entry barriers for younger people entering the workforce, he said. It may create urban unemployment clusters, particularly in cities with a high concentration of BPO/KPO jobs, and enhance income inequality. AI disruption isn't confined to entry-level workers. Mid-career professionals are increasingly vulnerable, especially those with 15-25 years of experience in functions now becoming redundant, said Shyam Menon, co-founder of the

AI is putting white-collar roles at risk and darkening the dreams of India's aspirational youth, reports Himanshi Lohchab

Facing the Axe: Roles at Risk

Finance & Accounting

- Accounts payable/receivable executives
- Reconciliation analysts
- Junior tax processors
- Budget and forecasting assistants
- Entry-level investment analysts and risk modellers

Audit & Compliance

- Junior auditors
- Document validation
- AML/KYC verification staff
- Risk reporting associates

Insurance

- Claims processing executives
- Policy issuance/back-end processing agents
- Underwriting assistants

Marketing

- Email campaign executives
- Ad copywriters
- Social media scheduling/content assistants
- Data/reporting analysts
- SEO content writers

Legal Services

- Document review lawyers/paralegals
- Contract summarisers
- Legal researchers (entry-level)
- Compliance documentation staff

Customer Service / BPO / KPO

- Voice-based call centre agents
- Chat support executives
- Order processing and status update staff
- Data entry operators
- Basic transcription services
- Feedback collection and routing roles

Retail & eCommerce

- Inventory and procurement analysts
- In-store customer query reps
- POS billing support staff
- Order fulfilment coordinators



World Economic Forum

22% of today's jobs globally will be impacted between 2025-2030

8% (52 million) will be lost

14% (170 million) new jobs will be created

7% (78 million) net employment growth

In India: 37% of workforce will need reskilling

22% will be upskilled and redeployed

12% are unlikely to upskill

31% fall in share of tasks completed by humans from 48%

34% increase in technology tasks share from 22%

entering the workforce, he said. It may create urban unemployment clusters, particularly in cities with a high concentration of BPO/KPO jobs, and enhance income inequality. AI disruption isn't confined to entry-level workers. Mid-career professionals are increasingly vulnerable, especially those with 15-25 years of experience in functions now becoming redundant, said Shyam Menon, co-founder of the Bharat Innovation Fund. He noted that this cohort is at risk due to outdated skills and limited exposure to newer tools. He also noted that the narrative around AI is heavily skewed towards coding and data science. "This creates a perceived 'tech wall' for professionals in fields like human resources, marketing, sales, and arts," he said. According to Maya Nair, executive director at Grafton Recruitment India, companies are beginning to prioritize productivity over manpower. "In manufacturing and healthcare sectors, automation or data entry folks and base level roles in finance, admin, HR are where chatbots are being introduced to provide solutions to queries raised within minutes which previously took two days by employees doing the same role," she said.

Source: THE ECONOMIC TIMES Newspaper, 05-08-2025

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ATHARVA COLLEGE OF ENGINEERING, MALAD-MARVE ROAD, CHARKOP NAKA, MALAD (WEST), MUMBAI-400095

AI Helps Big Tech Score Big Numbers

The April-June quarter of 2025 proved stellar for the big technology pack: Alphabet, Meta, Microsoft, and Amazon, with each company surpassing market expectations. Alphabet's revenue showed that AI-led search is boosting earnings instead of cannibalising. Meta outperformed estimates due to AI-powered ad optimisation and Zuckerberg's aggressive vision for personal superintelligence. Microsoft Azure cloud surpassed \$75 billion in annual run rate for the first time, boosting the stock to \$4 trillion valuation – a feat achieved hitherto by AI hardware titan Nvidia. Cumulative capital spending across these firms ranges between \$331 billion and \$377 billion, and consumes up to 40% of sales and 80% of operating cash flow at some companies. Himanshi Lechhab brings out what stood out.

Alphabet

Q2 Revenue: **\$96.4b**, up 14% YoY

Cloud Revenue: **\$13.6b**, grew 32%

- Annual Capex guidance increased to **\$85 billion from \$75 billion**.
- CEO Sundar Pichai said "AI is positively impacting every part of the business."
- Over **2 billion** monthly users of AI Overviews and **1.6 billion** monthly users of AI Mode in the US and India.
- Analysts note AI features driving incremental query volume rather than replacing it.

Meta Platforms

Revenue: **\$47.52b**, up 22% YoY

Annual Capex guidance lifted to **\$66-72 billion**, projected to hit **\$66-69 billion** by 2026.

CEO Mark Zuckerberg described plans for "personal superintelligence for everyone," emphasizing major investments in compute infra-structure and AI talent.

Analysts raised Meta's price targets, calling it a "stronger quarter fueled by AI." Shares target **12%** on release, daily volume the company at **\$2 trillion**.

Microsoft

Revenue: **\$76.4b**, up +18% YoY

- Azure Cloud surpassed **\$75 billion** in annualised run-rate for the first time.
- CapEx target remained firm at **\$80-\$120 billion**.
- CEO Satya Nadella highlighted Microsoft's leadership in enterprise AI, noting its AI business run rate has surpassed **\$13 billion**.

Amazon

Revenue: **\$167.7b**, up 13% YoY

AWS Q2 Revenue at: **\$30.9b**

- Capex expected to exceed **\$100-\$105 billion**, up from **\$83 billion** in 2024.
- CEO Andy Jassy emphasised 2025's demand outpacing its ability to scale.
- Though AWS growth lags Azure and GCP, the scale of AI investment is seen as essential.

Source: THE ECONOMIC TIMES Newspaper, 05-08-2025
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Winning with AI A fortnightly column on the tips and tricks that will help propel you ahead in the AI race. By **Parminder Singh**

A Second Brain with AI

Did you know AI can supercharge your second brain?

- ▶ **Like many of you**, I juggle multiple roles and tasks daily. A few years ago, I discovered the PARA method - projects, areas, resources, archive - for "building a second brain" developed by Tiago Forte. It helped me bring structure to my notes and reduce the mental "open tabs" in my head.
- ▶ **But even** with a solid system, I hit a wall. Information was stored, but not quite working for me. Notes sat quietly in folders. Ideas got buried.
- ▶ **That changed** when I brought AI into the mix. Here's a primer on how you can use an AI supercharged PARA system, using four macro folders:



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