

ATHARVA ROBOTICS CENTER

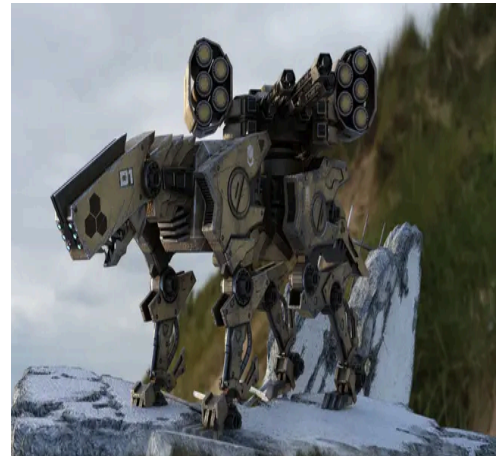
Daily News on Innovation & Technology

6th October, 2025

China tests robot dogs to unlock moon's best kept secrets, could help build lunar base

By Christopher McFadden October 06, 2025

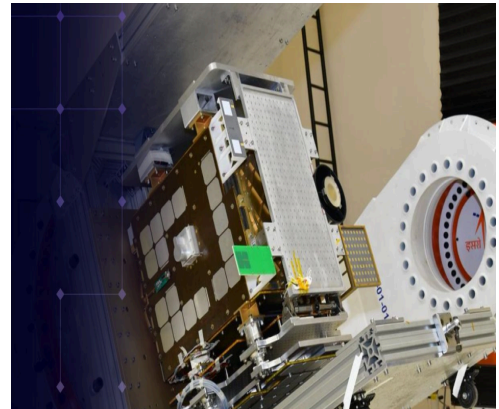
A team of researchers from Peking University has developed a pair of robotic dogs designed for lunar exploration. Specifically, they have been designed to explore lava tubes or underground tunnels formed by ancient volcanic activity that may exist on the moon. These tunnels are important because they could protect future astronauts and bases from radiation, micrometeorites, and extreme temperatures. According to the team, they have been testing the robots in a lava tube-like cave near Jingbo Lake in Heilongjiang province, Northeastern China.



India's Space Start-up GalaxEye's 2-in-1 Satellite Clears Structural Tests, Launch Set For Feb 2026

By Orbital Today, October 04, 2025

Indian space startup GalaxEye Space Solutions Private Limited took a critical step towards orbiting its Drishti satellite with a SpaceX rocket next year with a model of spacecraft successfully undergoing a series of structural tests at a ISRO facility, said Pranit Mehta, Co-Founder. The structural model of the Drishti satellite was tested at the U R Rao Satellite Centre (URSC) belonging to Indian Space Research Organisation (ISRO).



Google Quantum AI buys startup to scale its quantum chips

By StartupHub AI, October 05, 2025

Google is acquiring MIT-spinoff Atlantic Quantum in a strategic move to accelerate its ambitious quantum computing roadmap. The company announced today that the Atlantic Quantum team will be joining Google Quantum AI, bringing its specialized hardware expertise in-house to tackle one of the biggest hurdles in the field: scale.



[Space Forge signs MoU with United Semiconductors on microgravity chips manufacturing](#)

By UK&IRELAND, VENTURE CAPITAL, October 03, 2025

UK-based Space Forge has announced a Memorandum of Understanding (MoU) with United Semiconductors in the US, outlining plans to design processors and equipment for advanced semiconductor manufacturing in space. Space Forge launched its first manufacturing satellite, ForgeStar-1, on June 23 aboard SpaceX's Transporter-14, which was the first British-built satellite of its kind in history. The machine's mission is to determine the feasibility of microgravity manufacturing, mostly in crystal formation for use in advanced semiconductors, also in industries like metallurgy and pharmaceuticals.



[Robot that reads wind direction, offers accuracy competes with archers in Korea event](#)

By Jijo Malayil, October 04, 2025

Spectators witnessed a unique showdown: South Korea's elite archers facing off against Hyundai Motor Group's cutting-edge shooting robot. The face-off happened during the 2025 Hyundai Motor Chung Mong-koo Cup Korea Archery Championship that happened on October 3. The robot is fitted with sensors to read wind direction and speed, adjusts its launch angles with millimeter accuracy. During the competition, after a storm, it recalibrated and delivered a streak of perfect 10s, but still fell short of the national team by a single point.



[US firm's advanced pressure sensor for high-purity industries to boost semiconductor making](#)

By Prabhat Ranjan Mishra, October 05, 2025

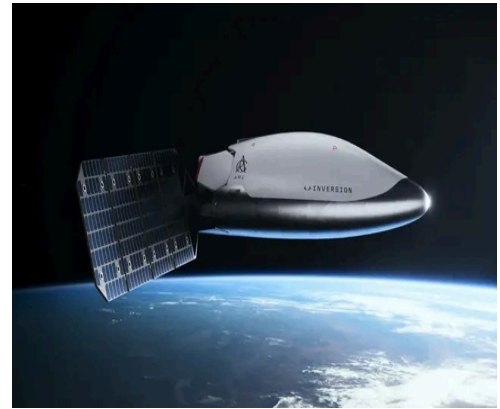
A North Carolina-based company has introduced a new type of advanced pressure sensor that can help in semiconductor manufacturing. Developed by Honeywell, the pressure sensor designed for cleanroom environments. 13MM Pressure Sensor supports manufacturing in high-purity industries, such as semiconductor production, where minimizing contaminants and defects and maximizing yield are essential.



[World's first space delivery vehicle can bring supplies anywhere on Earth in an hour](#)

By Aamir Kholam, October 03, 2025

Inversion, a young aerospace and defense company based in Los Angeles, has unveiled its first flagship spacecraft, Arc. The reentry vehicle is designed to deliver up to 500 pounds of mission-critical cargo from orbit to almost any point on Earth in less than an hour. The company revealed the spacecraft during an event at its factory. Co-founders Justin Fiaschetti and Austin Briggs, who started the company in 2021, presented Arc as a new kind of logistics platform.



News Articles

World atlas of innovation

Why no country can claim monopoly on transformative tech & how it's an opportunity India has to seize

40HIT HIRA

MEHHRAN GUL'S *The New Geography of Innovation* argues that the global distribution of breakthrough technology and innovative capacity is shifting rapidly, challenging long-held assumptions about where transformative innovation arises. The author investigates how different regions around the world – from Silicon Valley and Shenzhen to London, Helsinki, and Seoul – have created fertile ground or new technology ecosystems, and what makes them sustainable or vulnerable to disruption.

While the world has habitually focused on the US (especially Silicon Valley) and China as dominant innovators, the map is changing. Many other countries and regions are becoming powerful engines of technology creation. Several instances that are cited such as Finland (Supercell), South Korea (Samsung, Coupang), Germany (DeepTech), and Southeast Asia (Singapore's Sea Group, Grab) back this hypothesis, as does the extensive data collected and shared in the book. The author measures innovation both through the more obvious financial markers (number of billion-dollar startups, venture capital inflows, cumulative tech company market caps) and holistic indices (like the WIPO Global Innovation Index), while acknowledging the limits and biases of each. One insight that struck me is that innovation is not only defined by the number of startups or sheer funding, but also by the depth of the ecosystem, talent recycling, research output, policy environment, and societal attitudes toward risk and failure.

India, sadly, falls short on this metric, which probably explains why it beats China to become the largest source of international students rushing to American universities, and to careers thereafter. Given the recent tariff-led faceoff between two of the world's largest democracies, and the anxiety spike among Indian students in America, will the exodus decelerate? Unlikely, because of the shallowness of our own ecosystem, I suspect. It is in this context that Mehran Gul's central theme of ecosystems maturing more than individuals explains why some places are more fertile grounds for innovation. He uses the analogy of soil; innovative companies are seeds, but

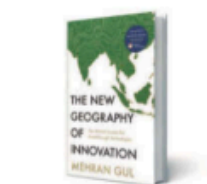


A file photo of Samsung's headquarters in Suwon, South Korea. Many other countries and regions like South Korea are becoming powerful engines of technology creation, writes the author

only environments with rich, well-tended 'soil' – world-class universities, vibrant investment climate, supportive public policy, openness to talent, safety nets, and tolerance for failure – can consistently produce world-changing technology.

In one of the professional hats I wear, I operate at the heart of a nurturing venture capitalist, and while that does make available difference, it is an exception in a country where founders struggle to cut through red tape and inherent attitudinal biases. Gaming company Supercell's huge success, for instance, is inseparable from Finland's education, public funding, and social infrastructure. Stories of Toronto's Creative Destruction Lab based at the University of Toronto's Rotman School of Management or Paris's Station F (a former rail freight depot that has metamorphosed into a startup business incubator) further show how strategic convergence of mentors, talent, capital, and risk-taking can catalyze innovation outside traditional powerhouses.

The book also dissects the US (Silicon Valley) versus China (Shenzhen, Beijing) rivalry. America has unparalleled advantages in world-class research, top universities, immigration-driven talent recruitment, access to global capital, and a risk-hungry investment culture (and remember the book was written before this year's assault on the US's research



The New Geography of Innovation: The Global Contest for Breakthrough Technologies
Mehran Gul
HarperCollins
Pp 368, ₹599

and educational systems), while China has moved from 'copycat' to 'precocious student', now capable not just of implementing but rapidly deploying cutting-edge technologies (AI, electric vehicles, batteries) at massive scale and speed. However, true breakthrough invention and Nobel-level research still originate in the US. But, clearly, both nations are experiencing decoupling, with growing

economic and political nationalism, making it harder for their tech industries and investors to collaborate or invest across borders. Another insight emerges from these parallels: the biggest advances are where world-class research and ruthless, disciplined deployment meet – Silicon Valley often creates, but China frequently commercialises and scales at unmatched speed. And while some lament 'Peak Valley', the region remains the epicentre for AI and killer-app creation, with new hubs arising but rarely surpassing the 'soil quality' of Silicon Valley. China, on the other hand, continues to face headwinds when it comes to Nobel-level discovery, and has a tendency for applied rather than fundamental breakthroughs, increased regulatory risk, and crackdowns on tech giants and capital controls. What's revealing is that the author also highlights Europe and the UK as places where innovation has succeeded: London's rise (DeepMind, FinTech), Station F in Paris, Germany's DeepTech strengths in university research, and 'values-driven' model (privacy, ethics, public benefit) are among those he mentions.

At the same time, gaps persist, such as the struggle to scale new companies to trillion-dollar status, and challenges in mobilising risk capital to create repetitive cycles of wealth. Talent and innovation often leak out via acquisitions by US

firms (like DeepMind by Google in 2014). Continental preference for 'good over big' is especially visible in Switzerland, which ranks high in innovation indices but produces few global tech giants. Further east lies South Korea: from war-torn poverty to world technology leader, propelled by the chaebol model (Samsung, Hyundai, SK Group), then by a new wave of global platform companies (Coupang), and now a third generation of AI and DeepTech challengers operating in global networks.

Korea's 'hyper-gap' philosophy is about achieving an execution edge so wide that international competitors simply give up trying.

Similarly, Singapore's 'Smart Nation' strategy demonstrates that state-driven, highly planned ecosystems can nurture tech leaders (Sea, Grab) by leveraging education, imported talent, state investment, and strategic regional integration. Singapore has become the regional hub for many Southeast Asian and even Chinese companies fleeing mainland regulatory risk.

While Mehran Gul argues that innovation cultures are shaped by deep-rooted values, including America's open immigration, high risk tolerance, venture capitalist's 'fear of missing out', and a culture that rewards big bets and accepts failure, the fact is that these are now being questioned, and only time (or a sequel to this book) will prove if they are resilient enough to survive. For India, though the country is mentioned in passing, our policymakers and influential industrialists must read the book. It spells out why no country or region can claim a permanent monopoly on transformative technology – and this itself can be an opportunity for India to seize. The health of the broader ecosystem – institutions, openness, risk capital, cultural attitudes – determines whether seeds (companies, talent) flourish. Beyond invention lies deployment which creates larger value: if Make in India is to go beyond a platitudinal slogan, we have to make infrastructural investments alongside seismic policy overhauls. Geopolitical risk and decoupling are reshaping investment and innovation, driving regional differentiation and self-reliance – caught in the crosshairs between America and Russia, India is experiencing this in real life. Finally, policy and culture shape outcomes, with every region balancing size, speed, risk, and public purpose differently. These are the fundamental tenets of *The New Geography of Innovation*.

Mohit Hira is co-founder, Mriard Communications, and venture partner at YourNest Capital Advisors

WHILE THE WORLD HAS HABITUALLY FOCUSED ON US AND CHINA AS DOMINANT INNOVATORS, THE MAP IS CHANGING

Source: Financial Express Newspaper, 0-10-2025

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