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TECHNICAL COMMITTEE

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Meta and Netflix Show Resilience Amid Tech Downturn



In February 2025, the tech sector faced a downturn, with companies like Tesla and Nvidia seeing sharp stock declines. However, Meta Platforms and Netflix managed to stay strong and within their "buy ranges," defying market expectations. Meta's push into the metaverse and AI-driven solutions, along with Netflix's continued success in original content and global expansion, allowed them to weather the storm. Both companies demonstrated their ability to adapt to shifting market conditions, reassuring investors amidst broader uncertainty in the tech world.

[investors.com](https://www.investors.com)

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President Trump Reviews UK Tech Laws, Potential Tariffs Loom

Former President Donald Trump initiated a review of the UK's tech laws, particularly the Online Safety Act and the Digital Markets, Competition and Consumers Act, in February 2025. The review focuses on potential discrimination against U.S. companies, leading to concerns over new tariffs on UK imports. The scrutiny is part of broader discussions on global tech trade tensions and the impact of regulatory policies on the competitiveness of U.S. firms abroad. The outcome could affect everything from digital services to international collaborations in the tech space.



[thetimes.co.uk](https://www.thetimes.co.uk)

AI Conference Circuit Gains Momentum

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AI Conference Circuit Gains Momentum

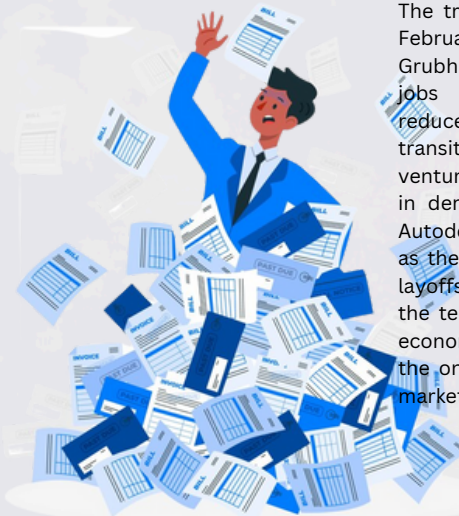
The AI conference circuit continued to gain momentum in February 2025, with events like the World Economic Forum and the Artificial Intelligence Action Summit drawing large crowds. These conferences have become key platforms for discussing AI's potential to revolutionize industries like healthcare, finance, and education. In particular, the AI Action Summit focused on economic opportunities and the challenges of regulating AI. The growing prominence of AI at these events highlights the rapid advancements in the technology and its increasing influence on the global economy.



[businessinsider.com](https://www.businessinsider.com)

Tech Layoffs Continue: HP, Grubhub, Autodesk, Ibotta Cut Jobs

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The trend of tech layoffs continued in February 2025, with companies like HP, Grubhub, Autodesk, and Ibotta cutting jobs to streamline operations and reduce costs. HP focused on transitioning toward more profitable ventures, while Grubhub faced a decline in demand for food delivery services. Autodesk and Ibotta made similar moves as they refocused on core areas. These layoffs reflect the broader challenges in the tech sector, as companies navigate economic pressures, competition, and the ongoing need to adapt to changing market conditions.

[fastcompany.com](https://www.fastcompany.com)

5 Massive Crypto Heist: Hackers Steal \$1.5 Billion from Bybit Exchange



In one of the largest crypto heists ever recorded, hackers exploited a vulnerability in Bybit's security system to steal \$1.5 billion in digital assets. The breach raised serious concerns over the security of crypto exchanges and their ability to protect investor funds. Bybit confirmed the attack and vowed to strengthen its security measures. This incident underscores the growing risks in the cryptocurrency sector and the increasing need for better cybersecurity protocols to prevent similar attacks.

btw.media

8 AI Action Summit Held in Paris



The AI Action Summit in Paris brought together over 1,000 delegates to discuss AI's economic potential. Experts and policymakers explored AI's role in transforming industries such as healthcare and finance. Key discussions focused on the opportunities AI presents for economic growth and the importance of developing ethical frameworks for its use. The summit highlighted the increasing importance of AI on the global stage.

en.wikipedia.org

Nokia Appoints Intel's AI Chief as New CEO

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Nokia appointed Justin Hotard, Intel's former AI Chief, as its new President and CEO, effective April 1, 2025. Hotard's appointment is seen as a strategic move to boost Nokia's focus on AI and 5G technologies. His leadership is expected to help the company compete more effectively in the telecommunications and networking sectors, marking a new chapter as Nokia navigates challenges from competitors like Ericsson and Huawei.



technologymagazine.com

Gartner Identifies Top 10 Strategic Technology Trends for 2025

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Gartner released its list of the top 10 strategic technology trends for 2025, highlighting key developments such as AI-driven automation, quantum computing, and increased cybersecurity measures. The report emphasized the need for businesses to adopt these technologies to stay competitive and innovative. Gartner's predictions offer a guide for companies looking to navigate the evolving tech landscape in the coming years.

gartner.com

7 EU Launches InvestAI Initiative



The European Union launched the €200 billion InvestAI initiative in February 2025, aimed at advancing AI research and establishing Europe as a global leader in AI. A major part of the initiative includes investing €20 billion in AI gigafactories across Europe. The move is designed to reduce Europe's reliance on U.S. and Asian tech giants and foster growth in the AI sector, positioning Europe for long-term technological leadership.

en.wikipedia.org

10 OpenAI Research Highlights UK's Rapid AI Adoption

OpenAI's research showed that the UK has been rapidly adopting AI technologies across sectors like government services and healthcare. AI's integration is driving efficiencies, particularly in public services and medical diagnostics. The UK's focus on AI innovation positions it as a leader in global AI adoption, paving the way for further advancements in industries such as healthcare and government.



technologymagazine.com

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US Justice Department Sues to Block HPE-Juniper Deal

The U.S. Department of Justice filed a lawsuit in February 2025 to block Hewlett Packard Enterprise's (HPE) acquisition of Juniper Networks, citing antitrust concerns. The DOJ argued that the merger could reduce competition in the networking sector, which could hurt consumers and businesses. The case raises questions about market consolidation in the tech industry and its potential impact on innovation and pricing.



[btw-media](https://www.btw-media.com)

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Mizuno USA Suffers Data Breach

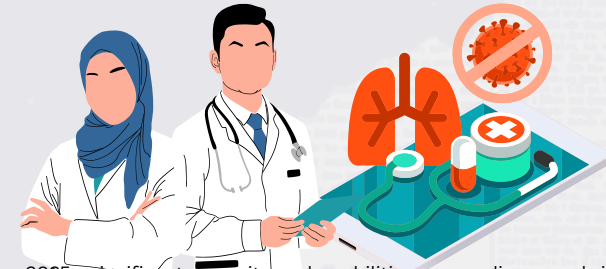
Mizuno USA reported a data breach in February 2025, in which hackers compromised sensitive customer information over several months. The breach exposed personal details such as names and financial data. Mizuno has launched an investigation into the attack and is working to strengthen its cybersecurity measures. This incident highlights the growing risks to consumer data in the retail sector, prompting calls for better data protection practices.



[techradar.com](https://www.techradar.com)

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Patient Monitors Found with Security Flaws



In February 2025, significant security vulnerabilities were discovered in patient monitoring devices, raising concerns about both patient safety and the protection of sensitive healthcare data. These flaws, found in devices used to monitor critical health metrics, could allow unauthorized access to patient information or disrupt device functionality. Experts have called for immediate patches to address the vulnerabilities, as these devices are widely used in hospitals. The issue highlights the growing need for stronger cybersecurity in medical technology as healthcare becomes an increasingly targeted sector for cyberattacks. Ensuring the safety of both patients and healthcare providers depends on robust security measures in the digital age.

[techradar.com](https://www.techradar.com)

Nvidia's DLSS 4 Driver Causes System Crashes

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Nvidia's new DLSS 4 driver, launched in February 2025, was designed to enhance gaming performance by upscaling images for better visuals. However, it has caused system crashes and Blue Screen of Death (BSoD) errors in several games. While the technology promises to improve frame rates and overall graphics quality on RTX 5000 series GPUs, users have reported stability issues. Nvidia acknowledged the problem and is working on a patch to fix the crashes. Despite these setbacks, DLSS 4 remains a significant innovation, and gamers are hopeful that the upcoming updates will restore its benefits without compromising system stability.



[techradar.com](https://www.techradar.com)

Nvidia's New Smooth Motion Technology

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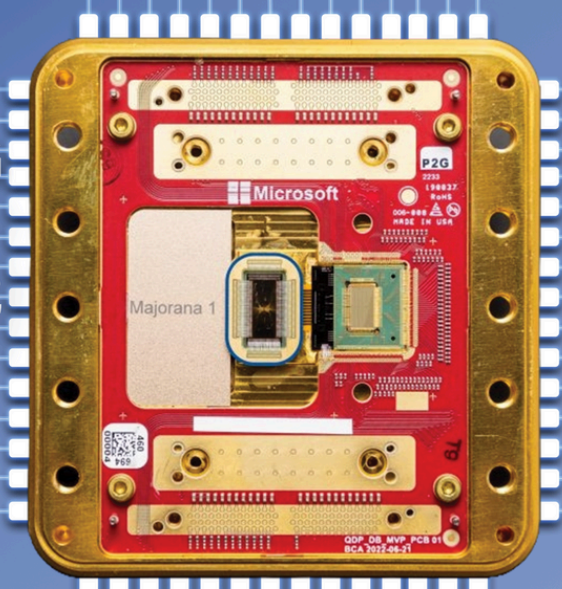


Nvidia introduced Smooth Motion technology for its RTX 5000 series GPUs, which enhances frame rates and motion clarity for a smoother gaming experience. The feature aims to reduce screen tearing and stuttering, making it ideal for fast-paced games. Nvidia plans to expand the technology to its RTX 4000 series, further improving gaming performance and solidifying its leadership in the GPU market.

[techradar.com](https://www.techradar.com)

NEW MATTER, NEW CHIP, NEW COMPUTING

Till now we knew that matters are of three types - solid, liquid & gases. According to Microsoft, now there is a new matter in the world, named "Majorana ZeroMode(MZM)" by which the quantum chip Majorana-1 is made, which is the future of Quantum Computing. Let's understand quantum computers' past, present and future:



MAJORANA - 1

- Majorana ZeroMode introduced new technology
- Majorana is named after an Italian Scientist, who went missing at the age of 22
- MZM together processes data
- Its new state is made by topocconductors.
- Majorana-1 is the first topological processor
- Topocconductors Qubit are fast and small
- The chip is scalable upto 10 lakh Qubits



WHAT WILL CHANGE ?

- Assist in turning pollutants into useful productions.
- Use of enzymes in health and better use in farming.
- Assist in increasing fertility of soil.
- With the help of AI, assist in making new recipes.

DEBATE

Application of Behavioural quantum computing is not possible before 15-20 years. - Jensen Huang, CEO, NVIDIA

After the coming of Majorana, we now believe we are not decades but only years away. - Chetan Nayak, Technical Fellow, Microsoft

TYPE OF CHIPS

Superconducting Qubits: IBM, Google, Leading Chinese

Trapped Ion: IonQ, Quantinuum

Photonic: Increment of Canada, China

QUANTUM SAGA

19th Century theory

According to Jain Syādvāda

Similar to Chinese Ying-Yang



Imagine a chip that fits in the palm of your hand and can solve those problems which even today all computer together can't solve

- Satya Nadella, CEO, Microsoft

QUANTUM INVESTMENT

America Quantum Law in 2018, Budget of \$1.2 Billion	China Announcement of Quantum Com Strategic Industry in 2016	UK National Quantum Strategy started in 2013	Canada 50 million dollar invested in Quantum Technology in 2016

INDIAN MISSION

In 8 Years Medium range capacity of 50 to 1000 cubits	1000 Physical Qubit Computer will be made in next 8 Years	2023-2030 mission will be led, with an expenditure of Rs. 6003.65 crores
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QUANTUM KEYWORDS

- Quantum Computer**: A Treasure chest with the ability to try all keys at once
- Quantum State**: As soon as blurry picture is cleaned, everything disappears
- Qubit**: Like head and tails, 0 and 1 come together
- Topoconductor**: New state matter makes fast and stable Qubit
- Topological Qubit**: Likes a ropes knot, it stays intact even after shaking

1. Catastrophic Forgetting

This occurs in neural networks when a model trained on new data forgets previously learned information. It is a common issue in continual learning (when a model needs to learn new tasks over time). Example: A self-driving car learns to drive in the city but forgets how to drive on highways when trained on urban roads. Solution: Techniques like elastic weight consolidation (EWC) or replay-based learning help retain past knowledge.

2. Hopfield Network

A type of recurrent neural network (RNN) that stores and recalls patterns (like human memory). It is used for associative memory, where partial or noisy input is completed into a full memory. Example: Used in image recognition where a blurred image can be reconstructed from stored patterns. The network is energy-based and converges to a stable state when recalling patterns.

3. Kolmogorov Complexity

Measures the shortest possible description of an object (e.g., a string or dataset) using a computational model. It is used in algorithmic information theory to assess data compression and randomness. Example: The string "AAAAA" has a lower complexity than "XDFGHT" because it can be described more concisely. Applications: Data compression, machine learning model evaluation, and randomness detection.

4. Tsetlin Machine

A logic-based AI model that learns patterns using propositional logic instead of numerical weights like neural networks. It is inspired by finite-state automata and is interpretable, efficient, and energy-saving. Example: Used in text classification, medical diagnosis, and game-playing AI. Advantage: More transparent than deep learning models and works well with small datasets.

5. Strassen's Algorithm

A fast matrix multiplication algorithm that reduces computational complexity from $O(n^3)$ to $O(n^{2.81})$. Instead of using 8 multiplications in a standard divide-and-conquer approach, it reduces them to 7. Example: Used in deep learning, computer graphics, and scientific computing to speed up matrix operations.



Top 10 Programming Languages Shaping the Tech Industry in 2025



Python

Why Popular: Simple syntax, vast libraries.
Used For: AI, machine learning, data science, web development.
Key Feature: User-friendly, beginner-friendly.
Source: WEBCREEK.COM



JavaScript / TypeScript

Why Popular: Essential for web development.
Used For: Dynamic and interactive websites, web apps.
Key Feature: Adaptable, scalable for large applications.
Source: WEBCREEK.COM



Java

Why Popular: Robust, platform-independent.
Used For: Enterprise software, Android apps.
Key Feature: "Write once, run anywhere."
Source: ANALYTICSVIDHYA.COM



C# (C-Sharp)

Why Popular: Developed by Microsoft, easy yet powerful.
Used For: Game development (Unity), enterprise apps.
Key Feature: Great for Windows apps and gaming.
Source: PLURALSIGHT.COM



Rust

Why Popular: Safe and fast.
Used For: Systems programming, high-performance apps.
Key Feature: Memory safety without garbage collection.
Source: ACADEMIAMAG.COM



Go (Golang)

Why Popular: Simplicity and speed.
Used For: Cloud services, scalable apps.
Key Feature: Built-in concurrency.
Source: PLURALSIGHT.COM



Kotlin

Why Popular: Modern Android development.
Used For: Mobile apps, replacing Java on Android.
Key Feature: Concise and interoperable with Java.
Source: ACADEMIAMAG.COM



Swift

Why Popular: Apple's official language.
Used For: iOS, macOS apps.
Key Feature: Fast, modern syntax.
Source: ANALYTICSVIDHYA.COM



C++

Why Popular: High-performance.
Used For: Game development, system software.
Key Feature: Control over system resources.
Source: TECHREPUBLIC.COM



SQL

SQL (Structured Query Language)
Why Popular: Essential for databases.
Used For: Querying relational databases.
Key Feature: Indispensable in data management.
Source: ACADEMIAMAG.COM