

Department of Data Science
Weekly Data Science Bytes

India's next big priority is to become self-reliant in tech: PM Modi



- [Prime Minister Narendra Modi](#) on Sunday said the journey to a [Viksit Bharat](#) will move forward hand in hand with Digital India, and the next big priority will be becoming self-reliant in technology. Inaugurating as well as laying the foundation stone of metro projects worth around Rs 22,800 crore in Bengaluru, Modi said India is now racing towards becoming one of the top three economies.
- According to the [International Monetary Fund \(IMF\)](#), India is expected to become the fourth-largest economy in 2025 and the third-largest by 2027-28. India is aiming to become a developed nation by 2047, the 100th year of Independence.

Elon Musk clashes with Sam Altman after accusing App Store of favouring OpenAI



- OpenAI CEO Sam Altman called the accusation “remarkable” in a response on X on Tuesday, adding that Musk was alleged to “manipulate X to benefit himself and his own companies and harm his competitors and people he doesn’t like”
- Elon Musk has accused Apple of unfairly favouring ChatGPT on its App Store and threatened legal action, [triggering a fiery exchange with OpenAI CEO Sam Altman on Tuesday](https://www.thehindu.com/sci-tech/technology/elon-musk-clashes-with-sam-altman-after-accusing-app-store-of-favouring-openai/article69929228.ece).

**DeepSeek's launch of new AI model delayed by Huawei chip
issues, FT reports**



**Chinese artificial intelligence company DeepSeek has delayed the
release of its new model after failing to train it using Huawei's chips,
highlighting the limits of Beijing's push to replace U.S. technology,
the Financial Times reported on Thursday.**

Galaxies flying away from us: How Hubble's redshift led us to the Big Bang



- When light from a moving source is stretched to longer wavelengths, we call it redshift — much like the way a passing train's whistle drops in pitch as it moves away. Hubble discovered that the farther a galaxy was, the greater its redshift — meaning the faster it was receding. This became the Hubble–Lemaître law, a simple but revolutionary equation showing that the universe is expanding.
- A common analogy is raisin bread dough rising in the oven — as the dough expands, every raisin moves away from every other raisin, and the farther apart two raisins start, the faster they separate. Crucially, the bread isn't expanding into the kitchen; the dough itself is the “space.” In the same way, the universe isn't expanding into some empty void — it's the distance scale itself that's growing. This is why galaxies farther away show greater redshift: they're not just distant in space, they're distant in time, and the intervening space has been stretching for billions of years.

NASA's Rovers Keep Getting Stuck and We Just Found Out Why



- When a multimillion-dollar spacecraft becomes bogged down in soft sand or gravel, as happened to NASA's Mars rover Spirit in 2009, the task of rescuing it falls to engineers back on Earth. Acting like a remote-controlled tow crew, they send a sequence of carefully planned commands to move its wheels or reverse its path, a slow and delicate process aimed at freeing the vehicle so it can resume its mission. Spirit never broke free, but future missions might avoid similar setbacks if rover designs are tested more effectively on Earth before launch.
- Mechanical engineers at the University of Wisconsin–Madison have used computer simulations to reveal a flaw in current Earth-based testing methods. This oversight often results in overly optimistic predictions about how rovers will handle the actual terrain of the Moon or Mars. A key part of mission planning is understanding how a rover will move across extraterrestrial surfaces in low gravity so it can steer clear of hazards like soft soil or rock fields.