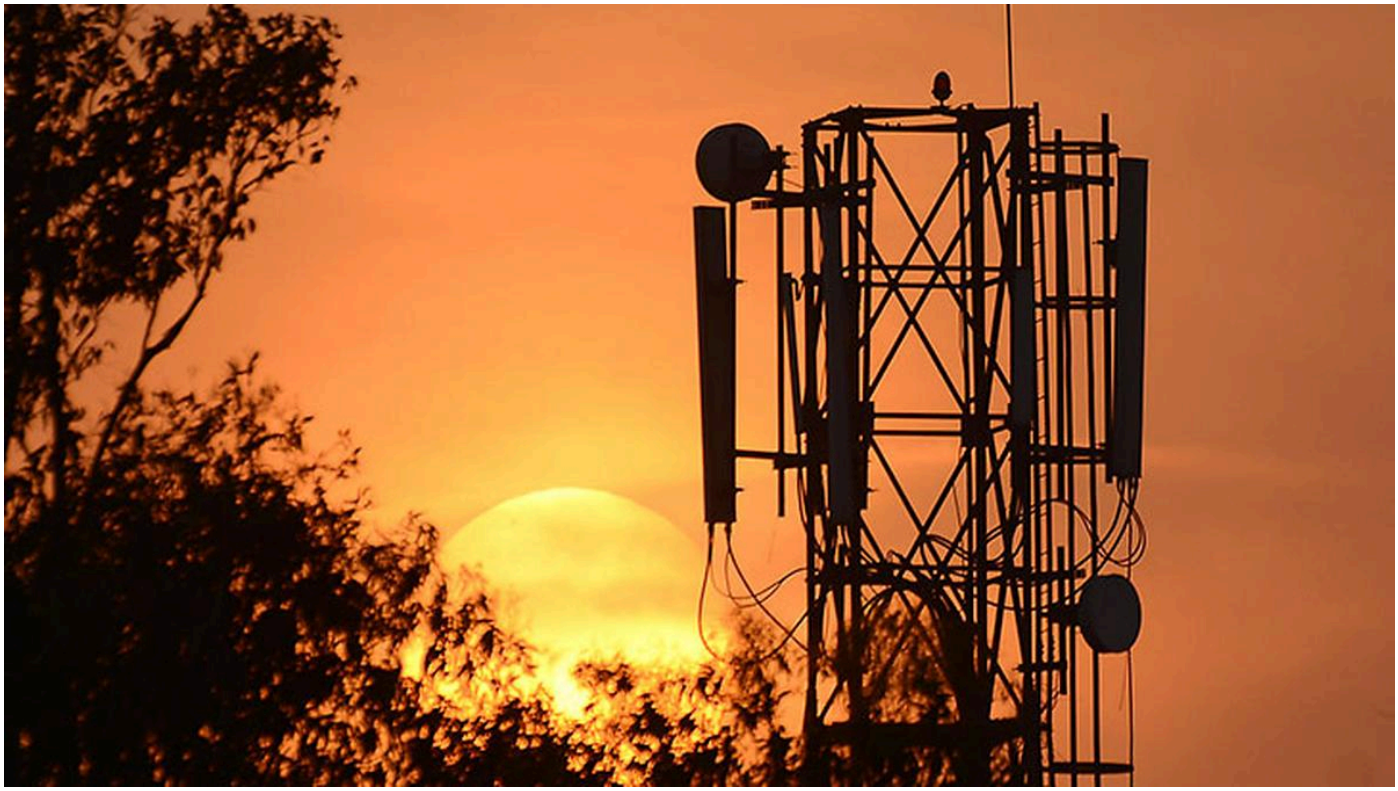
Companies look to localise data storage, telecom tech

Moving away from China, firms are pushing for producing networking equipment in India; data storage within the country is slowly picking up pace as local servers and data centres come up

Updated - January 13, 2025 06:50 am IST - NEW DELHI

AROON DEEP



Indian tech firms capitalise on policy changes to localize hardware and software, with CloudPhotonix and DigiBoxx leading the charge. File | Photo Credit: The Hindu

From data centres to telecom equipment, Indian firms are capitalising on key policy developments to indigenise the Indian tech stack, from both a hardware and software point of view. The main movers are emerging from markets that sell to large businesses. One firm, CloudPhotonix, recently established by veterans of the transceiver industry, has quickly started selling the product to telecom firms, as networks look to move away from foreign, specifically Chinese-made components.

Meanwhile, at least one firm, DigiBoxx, is offering cloud storage and enterprise backup locally in India, anticipating demand from firms seeking to pre-emptively comply with localisation requirements in the wake of laws like the Digital Personal Data Protection Act, 2023.

While the Act doesn't currently require data localisation within Indian borders, it leaves that possibility open in some sectors; the Reserve Bank of India already requires Indians' payment data to be stored locally.

Late last year, CloudPhotonix co-founder Tarun Sibal hosted a small event in Delhi gathering academics and industry players, outlining the importance of transceivers, a key component in networking and telecom equipment to transmit and receive data, hence the portmanteau.

Mr. Sibal and his other co-founders are well into their 50s, hardly a common age for start-up founders. He pointed out that making transceivers and dealing with the science of photonics, which most telcos and data centre firms import into India, is a "dark art," a term that his colleagues repeated in subsequent presentations. They seek to leverage not just the shift away from Chinese technology in telecom networks, which started after the border clashes in 2020, but the growing impulse to make and market the tech locally.

Essentially, very few people have accrued the yearslong expertise needed to make transceivers, making it a difficult market for freshly minted graduates. As per an estimate by the Mohali-based Roots Analysis, the optical transceiver market worldwide could grow to $47.64 billion by 2035, over four times its current value. The firm's CTO Sunil Khatana said in a presentation that a significant share of data centre and network infrastructure expenditure was on imported transceivers.

Local storage options

DigiBoxx, meanwhile, bills itself as the "first swadeshi SaaS [Software as a Service]-based digital storage and sharing platform," and its "servers and data centers are based in India, so customers can be assured their digital assets and IP are stored safely in the country," its CEO Arnab Mitra said. Security isn't always a function of the location of data, but over the years, localisation mandates like the RBI's have pushed firms in other industries to seek local storage options, even if they are more expensive due to a lack of scale.

The rise of local storage as an option is “becoming an even hotter topic is obviously the rise of privacy,” Mr. Mitra said in an interview. He admitted that local storage was more expensive but added that firms looked out for their reputation when making storage decisions for regulatory purposes. “So, it’s in many ways priceless,” he said, adding that the firm was also trying to avoid imposing hidden costs like some of its global competitors.

Union Secretary for Electronics and Information Technology S. Krishnan welcomed the growing introduction of local options in telecom equipment and data storage in an interview with *The Hindu*, saying, “These are commercially driven decisions, and that’s the way it ought to be.”

IT Minister Ashwini Vaishnaw in an interview with *The Hindu* on January 8, 2025, touted the success of the OpenRAN technology deployed on thousands of towers in India, and would soon be exported.

Published – January 13, 2025 06:05 am IST