



INSIGHTS



Cyber Security

National Technology Day 2026: When self-reliance meets cyber sovereignty



Representational image



By **Govind Rammurthy**
Published May 11, 2026

India celebrates National Technology Day by remembering the Pokhran-II nuclear tests of May 11, 1998, when the nation demonstrated technological capability that shifted global perceptions. Twenty-eight years later, the conversation has evolved from nuclear deterrence to digital sovereignty, but the underlying question remains identical: can India build critical technology infrastructure independently, or will we remain perpetually dependent on foreign solutions?

The answer is increasingly encouraging, though challenges persist. India now produces semiconductors, develops indigenous satellite systems, and builds supercomputers that rank globally. What's less visible but equally critical is the cybersecurity infrastructure protecting these achievements – the digital equivalent of national defence that operates silently until it's tested.

Consider what happened during Operation Sindoor in May 2025, when coordinated cyberattacks targeted India's power grid with thousands of assault attempts. The attacks succeeded not because Indian organizations lacked security awareness, but because critical infrastructure often relies on foreign security solutions with update mechanisms controlled elsewhere, response times dictated by distant time zones, and threat intelligence optimized for different geographies.

This dependency creates subtle but significant vulnerabilities. When ransomware specifically targets Indian payment systems during festival seasons, when attackers exploit uniquely Indian regulatory frameworks like the DPDP Act, when social engineering leverages cultural contexts foreign vendors don't understand – response effectiveness depends on proximity, cultural awareness, and regulatory alignment that distant vendors struggle to provide.

Indian cybersecurity companies have spent decades building capabilities that match global standards while understanding local contexts. Solutions developed here detect threats targeting Indian organizations specifically, support regional languages natively, align with Indian regulatory requirements automatically, and provide support during Indian business hours rather than requiring midnight calls to American time zones. Technologies like data loss prevention systems now prevent sensitive information from leaving organizational boundaries through collaboration platforms that Indian workforces actually use, while endpoint and extended detection systems defend against attack techniques specifically prevalent in the Indian threat landscape.

The maturity milestone isn't just building technology – its building technology that solves actual Indian problems rather than importing solutions designed for American or European contexts and hoping they translate. It's understanding that a healthcare organization in Bangalore faces different compliance requirements than one in Boston, that a manufacturing facility in Pune

encounters different operational technology risks than one in Paris, and that a government agency in Delhi operates under different data sovereignty constraints than one in Dubai.



Govind Rammurthy, CEO and MD, eScan

National Technology Day celebrates past achievements, but its real purpose is focusing attention on ongoing work. India's technology self-reliance isn't about isolation – it's about having indigenous options when dependence becomes vulnerability. The nuclear tests of 1998 proved India could build what others refused to share. The cybersecurity infrastructure being built today proves India can protect what it's built, which might be the more important capability in an increasingly digital century where data breaches cause more damage than conventional weapons and cyber sovereignty matter as much as territorial integrity.

The question facing India isn't whether we can build advanced technology – we've proven that repeatedly. The question is whether we'll prioritize building it before the next crisis forces us to, because self-reliance isn't achieved during emergencies. It's built during peacetime through consistent investment, strong government support, patient development, and refusal to accept dependence on solutions controlled elsewhere.

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