Why India Isn't Leading the Global IT Industry Yet

By Sanjay Kumar

India's IT sector has long been hailed as a symbol of the country's ascent on the global economic stage. From back-office operations in the 1990s to sophisticated software development, cloud services, and AI solutions today, Indian IT firms have come a long way. Despite these milestones, India still plays a primarily supporting role in the global tech ecosystem rather than taking center stage as a leading global IT player.

India's Strong Foundation

India's IT sector contributes around 7.5% of the country's GDP and employs over 5 million people. India is home to IT giants such as TCS, Infosys, Wipro, and HCL Technologies, which serve Fortune 500 clients worldwide. It is also a global leader in IT services exports, accounting for nearly 55% of the global outsourcing market.

India has also made strides in digital public infrastructure. Platforms like Aadhaar, UPI, and CoWIN have showcased India's ability to build scalable, inclusive, and impactful tech solutions. Its startup ecosystem is now the third-largest globally, with over 100 unicorns, many of them in fintech, health tech, and enterprise tech.

India's Limitations in IT Space

Despite these achievements, India is still perceived more as the "world's back office" rather than as an originator of groundbreaking technology or disruptive innovation. Several interlinked challenges contribute to this perception.

Unlike Silicon Valley or China's tech hubs, India's tech industry is service-centric. While we excel in delivering solutions, we lag in building globally dominant products. There is inadequate funding and focus on deep-tech R&D, with most innovation driven by short-term business contracts rather than long-term technological advancement.

Many of India's top tech minds continue to move abroad due to better opportunities and research facilities. Within the country, there is a mismatch between academic training and industry needs, particularly in areas such as semiconductors, AI, robotics, and quantum computing.

India's IT exports are heavily reliant on North America and the European Union. This dependence limits risk appetite and strategic independence. Companies often prioritize volume-driven service contracts over IP-led innovation due to client demands.

India's strength lies in software, but without a robust hardware and semiconductor base, the country cannot be a full-spectrum tech leader. Despite recent initiatives, such as the India Semiconductor Mission, we are still far from achieving self-reliance in chip manufacturing and electronics production.

Unlike Apple, Google, and Microsoft, headquartered in the US, or Huawei, Alibaba, and Tencent, headquartered in China, India has not yet created a global consumer tech brand. This leads to the development of perception and soft power in the global tech landscape.

How Can India Bridge the Gap?

India's rise to global IT leadership is not a pipe dream; it just needs decisive and sustained action. The country must invest heavily in deep-tech incubators, offer R&D tax incentives, and promote public-private partnerships in AI, machine learning, quantum computing, and cybersecurity. Startups developing global products should be supported through patent protection, mentorship, and market access programs.

Revamp curricula in engineering colleges to focus on design thinking, product development, and emerging technologies. The traditional rote-learning approach in most Indian engineering institutions must be replaced with a more hands-on, problem-solving pedagogy that encourages

critical thinking and creativity. Courses should incorporate real-world case studies, multidisciplinary projects, and iterative design processes that help students transition from theory to practical innovation. Special emphasis should be placed on emerging technologies such as artificial intelligence, machine learning, blockchain, quantum computing, robotics, the Internet of Things (IoT), and cybersecurity — fields that are rapidly shaping the future of the global tech landscape. Collaborations between academia and industry can be strengthened to ensure that the curriculum remains relevant and aligned with evolving industry demands. The collaboration can include joint research initiatives, faculty development programs, guest lectures by industry experts, industrial internships, hackathons, and sponsored labs.

Corporates can also play a key role in establishing centers of excellence within campuses, focusing on specialized domains. These partnerships help create a robust pipeline of job-ready graduates while simultaneously encouraging research-oriented talent to pursue innovation, patents, and entrepreneurship.
Ultimately, such systemic reforms in tech education will not only improve the quality of India's talent pool but also foster a mindset of product ownership and technological leadership from a young age. India needs to pursue its semiconductor policy aggressively, attract global chip manufacturers, and create electronic manufacturing clusters. The PLI (Production Linked Incentive) scheme is a start, but execution and infrastructure support are key.

Indian companies must be encouraged to build global brands, not just win global contracts. Government support in intellectual property protection, international marketing, and access to venture capital can fuel this ambition.

India's success in building platforms like Aadhaar and UPI can be exported to developing countries as part of a "Digital India for the World" strategy. This not only opens new markets but also repositions India as a product exporter, not just a service provider.

Concludingly, India is uniquely positioned to capitalize on its demographic dividend, IT expertise, and entrepreneurial spirit. But to go from being a digital delivery hub to a global digital leader, the country must focus on innovation, self-reliance, and strategic vision. The question is not whether India can lead the global IT industry but whether it will choose to lead through bold reforms, taking calculated risks, and investing in its long-term potential.

About the Author

Sanjay is an experienced journalist with a diverse career that includes working for prestigious media organizations. His background includes roles at the Times Group, NDTV, Hindustan Times, and the India Today Group. He has also served as the Managing Editor of Microsoft News and was the Editor-in-Chief of the UK-based International Finance Magazine. Additionally, he held the position of Senior Vice President and Managing Editor at Geospatial World.