

Modeling a Generative India-Singapore AI Partnership

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Summary

Artificial intelligence's transformative potential generates opportunities for India and Singapore to advance their digital economic goals.

India and Singapore can collaborate on artificial intelligence (AI) across multiple domains, including research, policy, regulation, innovation and skilling. Both countries recognise AI's transformative potential and have complementary strengths that can be harnessed through structured bilateral or minilateral cooperation. AI encompasses technologies simulating human intelligence, including the abilities to learn, reason, perceive, solve problems and process language. These include machine learning, which extracts patterns from data; deep learning, using neural networks for tasks like image and speech recognition; natural language processing, enabling systems to understand and generate human language; and robotics.

India and Singapore are well-positioned to build a strategic AI partnership, grounded in trust, innovation and digital sovereignty. By aligning regulatory approaches, investing in joint research and development and enabling AI for public good, the two countries can ground regional and global conversations on responsible and inclusive AI.

India

In 2018, India launched its first [National Strategy for Artificial Intelligence](#) that laid the foundation for the development and application of AI across sectors including healthcare, finance, defence, agriculture and education. In 2024, the [IndiaAI Mission](#) was launched to bolster India's global leadership in AI, foster self-reliance and bridge gaps in the AI ecosystem. The mission outlined [seven key pillars](#) to lay the foundation of the AI ecosystem in India: compute capacity, foundational models, data, applications, talent, startup financing and research and development (R&D). India's large population with linguistic, geographic and socioeconomic diversity makes it a testbed for inclusive AI solutions. Moreover, India's vibrant startup ecosystem, strong information and communications technology talent, academic institutions and government-backed missions can accelerate AI adoption. The alignment of AI with areas where public welfare is essential (healthcare, agriculture and education) means AI adoption can generate sizeable social returns.

Singapore

In 2014, Singapore identified AI as a crucial component of its digital transformation to enhance public services, economic productivity and quality of life. The [AI Singapore](#) (AISG) programme was launched in May 2017 to catalyse AI research, talent development and industry adoption. The program accelerated Singapore's AI adoption, making it a key node

in the global AI value chain. The [National AI Strategy](#) was launched in 2019, a comprehensive plan to develop, deploy and scale the impact of AI solutions by 2030. The strategy identified key sectors, including transport, smart cities, healthcare, education and security for targeted national AI projects and outlined the development of an ecosystem to support innovation, research and ethical AI governance. The AISG is organised around [five pillars](#): AI research; AI technologies; AI innovation; AI products and solutions; and AI governance. A vibrant startup ecosystem, robust investment flows, progressive regulatory frameworks and comprehensive skill development initiatives underpin Singapore's strengths in AI.

India-Singapore AI Cooperation

The plethora of initiatives under the India AI Mission and AI Singapore provide a good framework for bilateral cooperation. The primary focus of India's AI strategy is twofold: ensure the availability of AI hardware or compute capacity and developing Indian large language models. A heavy focus on compute has ostensibly come at the expense of other elements of the AI stack, especially developing talent, building datasets and investing in R&D.

Singapore's AI ambitions are constrained by a small domestic market and limited access to large datasets. Despite Singapore's focus on development and scaling of AI models across sectors, significant talent shortage, fragmented data infrastructure and lack of use-cases and datasets are key impediments. Despite AI's great potential, both countries also face challenges like ethical governance, data privacy, workforce disruption and the need for robust, adaptable technology policies that advance innovation while ensuring trust, safety and accountability.

Bilateral cooperation can be expanded in several ways:

- **AI Talent:** Joint research projects between the institutions and universities should be prioritised. Private sector involvement with academia in tier-specific training, such as data scientists and cutting-edge research (top-tier), domain experts and application developers (mid-tier) and project managers and implementers (low-tier), can help bridge AI talent development gaps.
- **Developing Large Language Models and Small Language Models:** India and Singapore use multilingual data as well as existing archival, multilingual and multimodal (text, image, voice and video-based) data to create non-English language models. Singapore can also produce and can benefit from partnerships to produce and test its own AI models.
- **Applications:** There are opportunities to develop and deploy a diversity of applications in the Indian market. Singapore has a technological advantage in testing AI applications. Indian companies and startups can get AI products and services built in India and tested in Singapore.

- **R&D:** India needs to build its AI R&D capabilities. Singapore can offer significant opportunities for AI research and collaboration. Singapore's well-structured digital infrastructure, robust data governance frameworks and advanced research institutions provide fertile ground for joint projects, ranging from multilingual AI models to applied AI solutions across healthcare, education and manufacturing.

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