Putting India on the road to becoming an AI superpower

Recommendations of the Bangalore Expert Group on Artificial Intelligence hosted by the Takshashila Institution

Bangalore Expert Group

The members of the independent, non-partisan expert group contributed to these recommendations in their personal capacities.

Convenor: Naganand Doraswamy, Founder & MD, IdeaSpring Capital

Nitin Pai, Co-Founder & Director, The Takshashila Institution

Saurabh Chandra, Co-Founder & Director, Ati Motors

Sriram Rajamani, Managing Director, Microsoft Research India

Satish Sangameswaran, Principal Program Manager, Microsoft Research India

Rahul Matthan, Partner, Trilegal

Chiranjib Bhattacharyya, Professor, IISc

Bharadwaj Amrutur, Chairman, Robert Bosch Center for Cyber-Physical Systems

Sanjay Anandaram, Charter Member & Mentor, TiE Bangalore

Tridib Roy Chowdhury, Adjunct Faculty, IIITB

Vivek Raghavan, Chief Product Manager and Biometric Architect, UIDAI

Nikhil Velpanur, Senior Director, Partnerships, Fundraising, and Communications, Wadhwani AI

Ajay Sethi, Venture Partner, Accel

Pranay Kotasthane, Head of Research, The Takshashila Institution

Shambhavi Naik, Research Fellow, The Takshashila Institution

Rohan Seth, Policy Analyst, The Takshashila Institution

Goals: AI for *yogakshema*

#1: Make India an AI superpower

AI contributes 5% of GDP by 2030, servicing both export and domestic sector.

#2: Use AI as an opportunity for national development

Achieve New India 2022 goals, reduce poverty, achieve sustainability, increase wellness, quality of life, raise rural incomes, enhance national security, propel innovation, and economic prosperity.

#3: AI transforms governance

Highly efficient and equitable public service delivery, tax administration, judicial system, law enforcement, public procurement, project management, transparency, and integrity.

How to become an AI superpower

#1: Attract world-class faculty

Target 500 leading researchers to work in India over the next 3 years. Each one trains 5-10 PhDs/Master's graduates over 20 years. Indian research should be among the top 10 most cited.

#2: Attract the top AI companies

India should be the preferred location for both homegrown and foreign companies to carry out research, development and, commercialisation of AI products and services. Target the Global AI 100.

#3: Create new Centres of Excellence

20 Centres of Excellence across Indian cities in partnership with industry and academia. These will carry out advanced R&D, each excelling in a particular domain.

How to become an AI superpower

#4: Set up a national authority for data governance

A new body tasked with oversight of rules governing data ownership, privacy, commerce, standards, and algorithms.

#5: Set up an AI promotion board

Tasked with the creation and management of the Centres of Excellence, set up data repositories, common platforms, and administer challenge grants and provide funding to entrepreneurs. Funding can come from a collaboration between the Government, CSR, and private money. The governing council of the board to be represented by Industry, Academia and Government with minimal bureaucracy.

Projects and Initiatives

We propose 6 major initiative areas at a total budget of ₹15,200 crores over three years.

#1: Simultaneous real-time translation of the Prime Minister's 75th Independence Day Speech into 30 Indian languages

Estimated cost: ₹1000 crores over 3 years

To create a "moonshot" to develop and demonstrate India's capabilities in AI and inspire investments, research, and education in the field.

Break the language barrier

Indians should be able to speak and understand each other in their native languages. AI can be used to provide instant real-time translation among all Indian languages. This has great potential for national integration and economic efficiency.

Projects and Initiatives

We propose 6 major initiative areas at a total budget of ₹15,200 crores over three years

#2: Set up 20 Centres of Excellence

Estimated cost: ₹700 crores (Infrastructure cost) languages
Annual operating cost: ₹2600 crores (₹130 crores x 20)

#3: AI for Health

Estimated cost: ₹1900 crores over 3 years
Set up a federated data platform for health (₹1500 crores)
Support the technology development for assistive primary healthcare (₹400 crores).

Accelerate universal healthcare coverage

Use AI for medical screening, improving diagnosis, medical decision support, and data-based recommendations for public health policy making and interventions.

Projects and Initiatives

We propose 6 major initiative areas at a total budget of ₹15,200 crores over three years

#4: Challenge Grants

Estimated cost: ₹1800 crores over 3 years.
A challenge grant is awarded as a reward to teams to achieve an extraordinary breakthrough in solving an identified problem.

#5: Atal Tinkering Labs v2

Estimated cost: ₹1000 crores over 3 years
To set up equipment, training, and sandbox facilities across schools in India.

#6: AI for Expedited Justice

Estimated cost: ₹1000 crores over 3 years
To eliminate backlogs of certain types of legal cases in 3 years.