

INDIA AND THE ARTIFICIAL INTELLIGENCE REVOLUTION

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Recent advances in artificial intelligence (AI) are a wake-up call to policymakers in India, with every one of Prime Minister Narendra Modi's flagship programs likely to be directly affected within the next few years. With China making rapid progress in AI-based research, it is imperative that India view AI as a critical element of national security strategy. Spurring AI-based innovation and establishing AI-ready infrastructure are thus necessary to prepare India's jobs and skills markets for an AI-based future and to secure its strategic interests.

The Challenges Facing India's AI Development

- AI-based applications to date have been driven largely by the private sector and have been focused primarily in consumer goods. The emergent scale and implications of the technology make it imperative for policymakers in government to take notice.
- Early lessons of AI success in the United States, China, South Korea, and elsewhere offer public and private funding models for AI research that India should consider.
- The sequential system of education and work is outdated in today's economic environment as the nature of jobs shifts rapidly and skills become valuable and obsolete in a matter of years.

Recommendations

- For India to maximally benefit from the AI revolution, it must adopt a deliberate policy to drive AI innovation, adaptation, and proliferation in sectors beyond consumer goods and information technology services.
- Policymakers should make AI a critical component of the prime minister's flagship Make in India, Skill India, and Digital India programs by offering incentives for manufacturers, creating regional innovation clusters for manufacturing automation and robotics in partnership with universities and start-ups, incorporating market-based mechanisms for identifying the kind of skills that employers will value in the future, and promoting cloud infrastructure capacity building inside India.
- The National Education Policy must make radical recommendations on alternative models of education that would be better suited to an AI-powered economy of the future.
- The government should identify public sector applications like detecting tax fraud, preventing subsidy leakage, and targeting beneficiaries, where current advances in AI could make a significant impact.
- India must view machine intelligence as a critical element of its national security strategy and evaluate models of defense research in collaboration with the private sector and universities.

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