



Significance of Artificial Intelligence

What is the issue?

\n\n

\n

- The countries with advantage in Artificial Intelligence (AI) could soon take form as concentrations of global power.
- It is high time that India use to its fullest advantage the IT and entrepreneurial competence, and a huge domestic market.

\n

\n\n

What is Artificial Intelligence (AI)?

\n\n

\n

- The human brain uses multiple techniques to both formulate and cross-check results.
- AI is the simulation of this human intelligence processes by machines, especially computer systems.
- These processes include learning, reasoning and self-correction.

\n

\n\n

Why is AI unique?

\n\n

\n

- Most industrial technologies develop in laboratories and then get applied by businesses.
- But, uniquely, AI develops within business processes as data are mined from

digital platforms.

\n

- These are then turned into intelligence and reprocessed to produce more data and intelligence.

\n

- So any country's AI largely exists within its huge, domestically owned commercial digital/data systems.

\n

- E.g. in the U.S. it is with Google, Amazon, Facebook, Apple and Microsoft.

\n

- In China it lies with Baidu, Alibaba and Tencent.

\n

\n\n

How is India in this regard?

\n\n

\n

- India is not making a rational use of its great advantages of high IT capabilities.

\n

- It also leaves unplanned, the big domestic market required for data harvesting.

\n

- India is thus far behind in this emerging Artificial Intelligence race.

\n

- It has no large domestically owned commercial data systems as that of US and China.

\n

- Bleak chance, if any, could be hampered by allowing takeovers like that of Flipkart by Walmart.

\n

\n\n

What is the threat?

\n\n

\n

- **Economic** - India's consumer-behavioural and other economic data may soon be owned by Walmart and Amazon.

\n

- This will offer them the scope to develop various kinds of Artificial Intelligence.

\n

- Eventually, such AI will allow them to control everything.
\n
- Every participant, along various economic value chains linked to consumer goods would be under their control.
\n
- **Power** - Intelligent systems typically tend to centralise and monopolise control.
\n
- Thus beyond economic dominance, AI influences cultural, political and military power.
\n
- Notably, Google and Microsoft are partnering with U.S. military on AI applications.
\n
- Likewise, China's AI platforms are working even more closely with its military.
\n
- Logically, in the coming time, whoever rules Artificial Intelligence will rule the world.
\n
- A non-AI military against an AI-powered one would be at a great disadvantage.
\n

\n\n

What are the concerns for India?

\n\n

- **Competition** - The digital/AI industry works in huge ecosystems with global digital corporations at the centre.
\n
- The US and Chinese firms are trying to ensure the largest number of clients and followers possible.
\n
- Given this, start-ups, including in India, are struggling to find a place in huge global ecosystems.
\n

\n\n

- **Understanding** - Indian IT industry leaders are conveying a wrong message that India is doing well with AI.
\n

- But these are only in reference to the fragment of IT/digital business.
\n
- The real need is creating the highest levels of new value chains that AI will create in every sector.
\n
- **Applications** - AI applications talked about in India are largely in reference to eased agriculture output, precision medicine or tailored learning.
\n
- But these are just a miniscule of global digital/AI corporations, giving one-off benefits here and there.
\n
- Evidently, the AI engine owned by Google or Microsoft is gathering further data from each new instance.
\n
- In the course of time, they become more intelligent about India's problems and solutions.
\n
- So a big nation like India cannot derive satisfaction from rapidly becoming a client country for AI.
\n
- Owning the centres of systemic AI from controlling huge commercial data ecosystems is the real power.
\n

\n\n

What is the way forward?

\n\n

- \n
- Policy makers should aim at building the systemic cores of AI where the real national advantage lies.
\n
- India must welcome global technology companies to help India's digital development.
\n
- But the challenge is, while technology is global, data are essentially local.
\n
- So India must start treating its collective social/economic data as a strategic national asset.
\n
- It thus has a right to provide domestic data protection through policy.
\n
- So data-based sectoral platforms, like in e-commerce, agriculture, health, education, should largely be domestic.

\n

- Such policy protection will encourage large-scale data-driven Indian companies to develop the highest AI in every sector.

\n

- After developing enough AI proficiency domestically, it should be used to go global.

\n

\n\n

\n\n

Source: The Hindu

\n



IAS PARLIAMENT
Information is Empowering
A Shankar IAS Academy Initiative