



## India: The Tech Garage of The World

This editorial analysis is based on the article [India can soon be the tech garage of the world](#) which was published in Live Mint on 9<sup>th</sup> of September 2020. It analyses the opportunities before India to become a technological superpower of the world.

The strong and sustained growth and innovation in the technology space presents a unique opportunity for India to position itself as the 'Tech Garage of the World' i.e, a technological powerhouse. Through the development of innovative digital and technology solutions, India can successfully find solutions to the massive and intractable challenges across several sectors.

### Opportunities

#### Unaffected By Covid-19 Pandemic

- Even as the world continues to grapple with the [Covid-19](#) pandemic, the remarkable resilience of India's tech industry has been on display, with investments soaring to a mammoth \$38 billion.
- A significant portion of these investments went to software based companies, which witnessed a major growth brought about by an increasing demand for digital tools and automation amid the current crisis.

#### Growing Market

- Eight of the world's 10 richest companies that grew and expanded lately were technology companies.
- The fastest growing jobs on LinkedIn's list of emerging jobs globally are [artificial intelligence](#) specialist and data scientist.
- During the covid period itself, Apple, Microsoft, Amazon, Facebook and Google enhanced their market capitalization by over \$1 trillion.

#### Vibrant Ecosystem

- India is the youngest country in the world with [demographic dividend](#) and a vibrant [startup](#) ecosystem.
- In 2019 alone, over 1,300 startups were added, thereby solidifying India's position as the third largest startup ecosystem in the world.
- Private equity investments hit a 10-year-high in 2019, attracting \$17.3 billion and registering a yearly growth of 60.5%

#### Initiatives In This Regard

- The Prime Minister recently entrusted [NITI Aayog](#) with the task of developing technological products in partnership with the private sector, which would enable India to leapfrog in the post-covid era which are currently in different stages of evolution.
- The products and solutions showcased by NITI Aayog include:

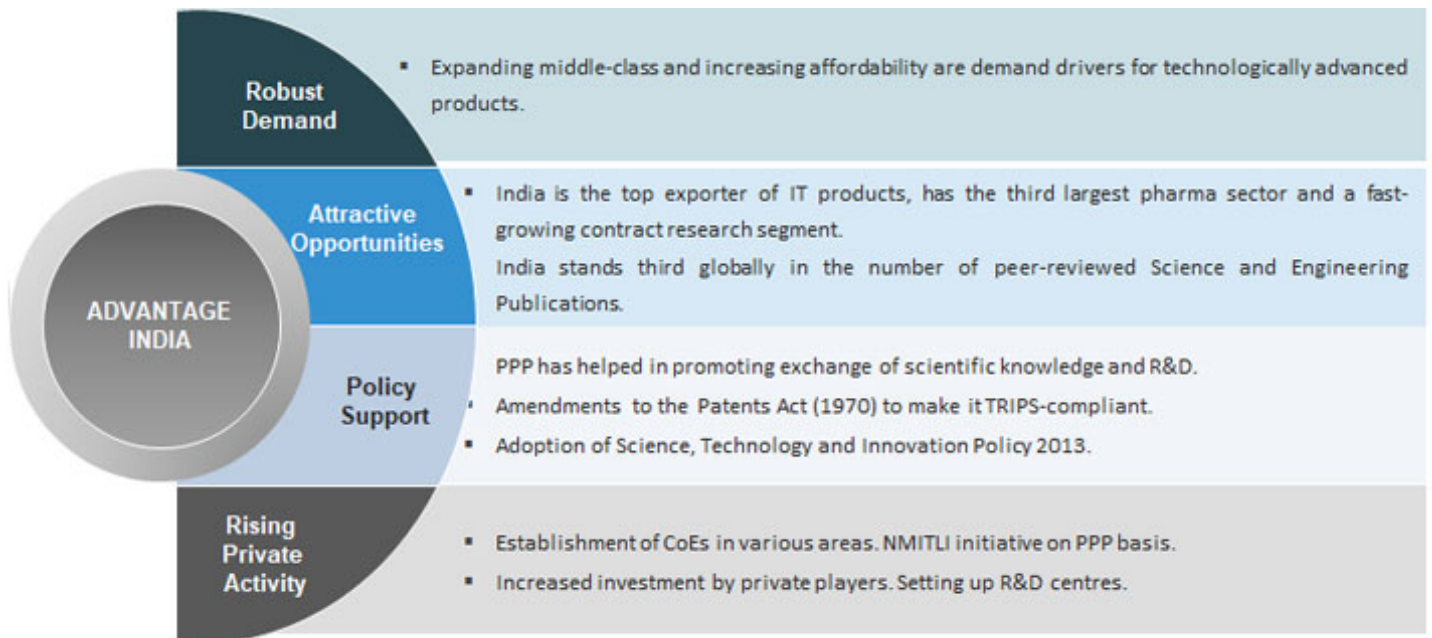
- **Unnati:** A technology platform upskilling blue and grey collar workers.
- **KrishiNeev:** Agriculture platform for price forecasting, productivity, quality certification and traceability. The platform claims to use blockchain technology as well as artificial intelligence and machine learning to arrive at outcomes
- **Unified Logistics Interface Platform (ULIP):** An integrated multi-modal platform for digitising supply chain issues to address the logistics sector.
- **SamShiksha:** The platform has been conceptualised as an online university of the future and one-stop platform for higher education.
- **KYC Setu:** An integrated platform for digitally sharing KYC-data by individuals with new service providers.
- **Kashi:** The cash over internet service will provide low cost digital lending solutions to farmers and labourers on their direct benefit transfer (DBT) accounts.
- **Swasth:** A telemedicine app with over 5000 registered doctors will focus on integrated services for health issues, including mental health and integration of hospitals and doctors.
- The Prime Minister also launched the [Atma Nirbhar Bharat App Innovation Challenge](#) to encourage the creation of world-class made in India Apps and the response was overwhelming.
- The [Atal Innovation Mission \(AIM\)](#) is driving [Atal Tinkering Labs](#) with Artificial Intelligence, and robotics and 3D printing are being taught from class VI onwards.
  - AIM also supports incubators and has catalysed a creative and innovative culture.
- [National Health Stack](#) and [Aarogya Setu](#) were developed envisioning a cohesive future for a healthtech ecosystem in India with public and private participation.
- One of the most powerful examples of the potential that India has is the success of the [UPI](#) platform in the digital financial inclusion space.
  - UPI, is just 4 years old but reports 10 times the number of transactions as compared to the other transactions e.g. that of through Decade-old American Express.

## Challenges

- The development of these world-class products requires skilful application of artificial intelligence.
  - This necessitates critical inputs like flow of data-hungry young entrepreneurs, AI algorithm engineers, computing powers, and AI-enabling policy environment.
  - While India has humongous data, thanks to mobiles and low data costs and top-class start-up entrepreneurs, it lacks in product managers, AI scientists, product designers and software engineers.
- Another challenge would be to make it inclusive so that it reaches most people and must also be safe so that any issue of privacy and data theft don't arise.

## Way Forward

- Our Engineering colleges must be reoriented to produce AI engineers who can partner tech entrepreneurs to launch cutting-edge global tech companies.
- The government has a crucial role to play in positioning India as the Tech Garage of the World. It should act as a catalyst, and bring together the synergies of the private sector with the aim of innovating for India and the world.
- It has the potential to provide an enabling environment and a favourable regulatory ecosystem for the development of technology products and provide the size and scale necessary for their rollout.
  - The product development should ideally be undertaken through private entrepreneurship, with the government acting as a facilitator.
- The key principles of product design should incorporate transparency, security and ease of access.
- The products must have open architecture, should be portable to any hosting environment and should be available in official and regional languages.



### ***Drishti Mains Question***

India is in a bright spot to harness the power of technology and become a technological powerhouse of the world. Discuss.

This editorial is based on **[“Grim Sovereign Tangle: On GST compensation standoff”](#)** which was published in The Hindu on September 3<sup>rd</sup> 2020. Now watch this on our Youtube channel.

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