



## Deep Tech startups

### Description

#### What is a Deep Tech startup:

- Deep Tech or Hard Tech startups are companies that develop engineering and scientific innovations to solve complex real-world problems. Developing an affordable solution for treating life-threatening diseases, creating IoT-based accident prevention systems for vehicles etc. are good examples of what deep tech startups can do.

#### Deep Tech startups in India:

- There are more than 100 unicorns (startups valued at over US\$1 billion) in India as of June 2022, but there is not even one deep tech startup among them.
- India has more than 65,000 registered startups as of June 2022. India is the third-largest startup ecosystem in the world after China and US. But only less than 1% of them are deep tech startups.
- India needs its own deep tech startup ecosystem because India has unique challenges such as the need to provide basic sanitation facilities for all, to improve literacy rates, to make buildings more differently-abled friendly etc. Deep tech goods and services that we import from developed countries may not be suitable for solving the problems in India.
- NASSCOM's (The National Association of Software and Service Companies) DeepTech Club program is mentoring deep tech startups in India. It is aiming to nurture and build 1000+ world-class deep tech product startups in India by 2025.
- IIT Madras is also mentoring science-based deep tech startups through the I-NCUBATE program.
- In general, deep tech startups require more time to fetch revenues. On average, deep tech startups need 5 to 8 years to reach that stage, whereas other startups take 1 to 3 years. Deep tech startups require more talent, more capital and more time but when they succeed, they can fetch huge amounts of revenue. At present, India has a few deep-tech startups and big companies are increasingly showing interest to acquire them.



- At India's top STEM (Science, technology, engineering, and mathematics) colleges, a good amount of high-quality research is taking place. A collaboration of research students from STEM colleges and students with entrepreneurial skills from other colleges can greatly help in taking the research projects to the commercial market and analyzing customer discovery (understanding the needs of the customer) etc. By this, the tech experts can tweak their innovations to meet the customers' needs.

### **Conclusion:**

Deep Tech or Hard Tech startups are companies that develop engineering and scientific innovations to solve complex real-world problems. There is a need to create more deep tech startups in India to develop solutions to the unique challenges in the country.

*Photo by [ThisIsEngineering](#)*

### **Your Turn!**

What are your thoughts on Deep tech startups? Express your opinions through the comment section below. And subscribe to our blog to read answers to the trending GD topics.

### **References:**

- "Deep-Tech Startup Ecosystem" article by R Raghuttama Rao in Yojana magazine (June 2022 issue)
  - [Top 8 Deep-Tech Startups in India](#)
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