CIE ASSIGNMENT

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- **(Official / Govt of India) definition of a Tech Startup.**
    - "An entity working towards innovation, deployment, deployment, and commercialization of new products, processes or services driven by technology or intellectual property."

- **What is a DeepTech Startup and how is different *from a 'regular' Tech Startup?***
    - Deeptech are differentiated from other regular tech thanks to their use and deployment of advanced technology.
    - They are characteristically more complex and leverage more technology

- ***What are the characteristics* of *an "Inventive DeepTech" startup?***
    - *Inventive Deeptech are the deeptechs backed by fundamental research. They rely on research and intellectual property.*

- ***Read the section on "DeepTech Ecosystem Landscape" and answer the following:***

    Number of DeepTech startups and growth rate

    - *There are 3000+ startups with growth rate of 53%*

    Top 2 sectors for top adopters of DeepTech startups

    - *Enterprise tech and BFSI*

A set of 'inventive DeepTech startups are creating solutions and value based on Intellectual Property (IP). List any 5 IP focus areas.

- *Maritime, Edtech, Life Science, Agritech and HealthTech*

- ***Read the section on "Tech Stack Trends"; apart from Artificial Intelligence what are the 3 other tech focus areas?***

  Big Data Analytics, Internet of things, Blockchain.

- **What are the key characteristics of the Indian DeepTech startups (see Pg 17 in PDF)? Pick 2 characteristics and answer the following for each:**

  What is the significance of this being a key characteristic/enabler of the Indian DeepTech startup?

  - *Higher seed and Early stage funding*

  Your opinion – why do you think there are fewer unicorns in the DeepTech startup space?

  - *Untapped market and still growing market are the major reasons, I believe. There's still a lot of potential for Indian startups to reach unicorn status.*

- ***Pick any two of the 8 areas listed (Pg 12 in the PDF "There are 3000+ startups working across mature DeepTech Technologies).*** **Pick one startup in each area and research these 2 startups and answer the following questions for each of the startups:**

The math company (from Analytics area)

What is the key problem the startup is trying to solve?

Various data and analytical operation services

What is the differentiation, the startup is trying to provide through its solution?

Mathematical decision making and analytical services

If the startup is successful, what impact (financial, societal, etc) will it have in the marketplace &/or economy?

Improved expert decision making accessibility

Using mathematical prowess to lead the way for simplified adoption seeing widespread adaptation

Active.ai (From AI area)

- **What is the key problem the startup is trying to solve?**
  - *Currently working on multi language AI chatbots*
- **What is the differentiation, the startup is trying to provide through its solution?**
  - *Easier quick communication through various and simple language*
- **If the startup is successful, what impact (financial, societal, etc) will it have in the marketplace &/or economy?**
  - *Improved experiences and customer services across various domains*
  - *Easily accessible AI*

- **If you were an angel investor or VC, would you invest in these 2 startups? Why?**
  - YES! I believe these both startups have a huge potential and can shape future of Mankind!

- **Based on the 8 areas* (Pg #12) pick any 2 Techs and answer the below for each of the tech areas - * AI, Blockchain, IoT, Big Data & Analytics, AR/VR, Robotics, Drones, 3D Printing**

*Share **your** understanding (what/why/application/etc) of this deep-tech in*

- **AI :-** *Artificial intelligence (AI) is a term to describe a branch of computer science dealing in creating intelligent machines that would learn to work and react like humans. The field of Artificial Intelligence also includes other fields like machine learning. They heavily utilize large amount of data. AI has multiple varieties and characteristics. This branch exponentially increases human productivity through its lightning speed. A growing economy like India has lot of potential in this field.*
- **Big Data & Analytics** *:- Big Data analytics is a process used to extract meaningful insights, such as hidden patterns, unknown correlations, market trends, and customer preferences. Big Data analytics provides various advantages—it can be used for better decision making, preventing fraudulent activities, among other things. With terrabytes of data being produced every second, the analytics industry is currently most relevant now than ever before. All this data can be used to create a safer, better and more useful internet and help in advancement of humanity overall.*

Can you think of creative ways of deploying this technology locally (India) and/or globally to create impact (financial, societal, etc)?

- **AI** *- AI has vast applications. Its literally only bound by human imagination for even sky isnt its limit. AI can aid and help nearly every domain from manufacturing to Services. From handling huge amount of data in nanoseconds to doing laser precise tasks, AI can operate and be jack of all trades for many things. In india, where there are billions of people, AI can be a wonderful tool of service. For example, Our E learning can use AI to cater custom content to young minds for growth. Or, the AI can be used for doubt solving of students. These are just miniature examples of what AI can do. Another example would be AI in virtual assistants. It can make browsing internet much easier, aiding people navigate internet easily. The voice assistants help disabled or elderly people. With aid of AI, India can achieve greater heights.*
- **Big Data & Analytics** *:- If you are a Spotify user, then you must have come across the top recommendation section, which is based on your likes, past history, and other things. Utilizing a recommendation engine that leverages data filtering tools that collect data and then filter it using algorithms works. Thats an great example of how Big data analytics*

work. Massive countries like India will have too much data created every minute and its impossible to process it manually by humans. We can improve the overall nation through Risk management, Product developments and Innovation, which are few direct applications of analytics. Also, the analytics can help to speed up the overall bureaucracy and management. India has much to gain from big data analytics.