

# Entrepreneurship

Ash Ravikumar  
Entrepreneurship Development Officer



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# 1. Starters



“People crazy enough to think they can change  
the world, end up changing the world”

- Apple commercial “think different”



*The Birth of **NETFLIX** and  
the Amazing Life of an Idea*

# That Will **NEVER** Work

*'Engaging  
and insightful'*  
NEED HASTINGS

**MARC RANDOLPH**  
CO-FOUNDER AND FIRST CEO OF NETFLIX

*'Marc Randolph will demystify the world of Silicon Valley  
start-ups and make you laugh a lot along the way'*  
DECCA AITKENHEAD, *THE SUNDAY TIMES*



# Electrifying regional air travel

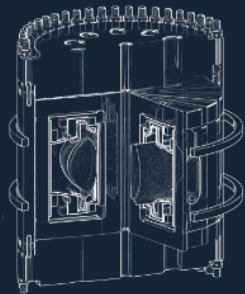




Technology

# Designing and building fusion energy systems to power the world

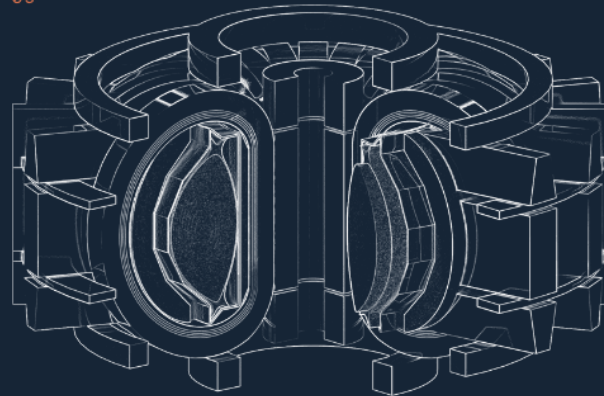
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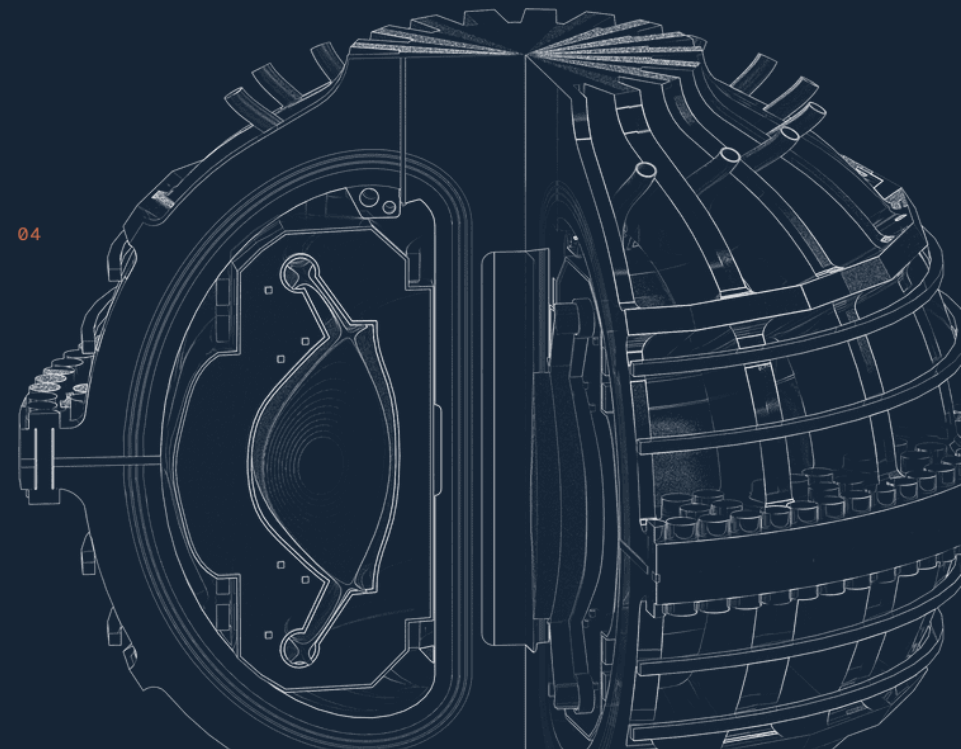
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03



04



# Jargons and TLA



# What is a "deep tech" startup?

Why this label? What other types exist?





# Startup Jargons and History

Evolution



## Startups

All startups were tech based

High growth

Scalable

(High risk)



Ever wondered why it's called Silicon Valley ?

## Tech Startups

Post Google, Facebook, iPhone

Non tech-based companies

High growth & Scaled

Lot of de-risking

**Takeaway : Jargons matter**

## Deep Tech Startups

Present day

Wide mix of startups

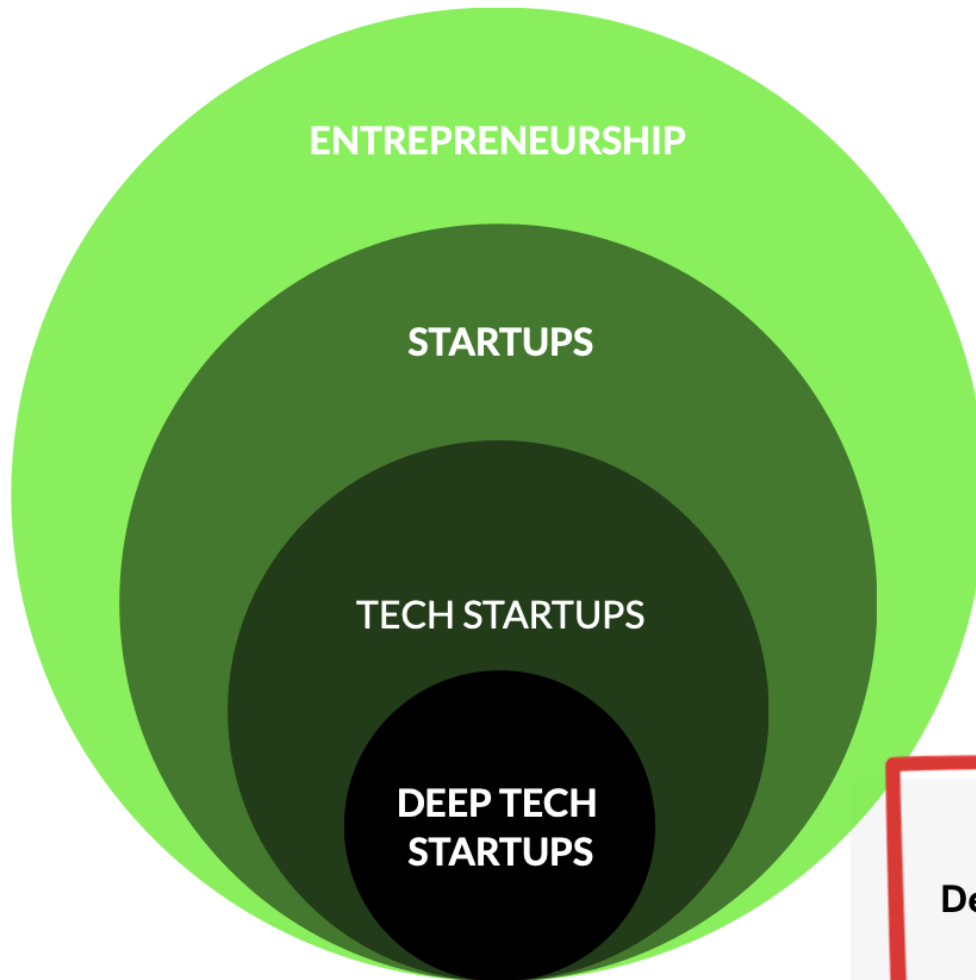
Fintech, proptech, trusttech, ....

## Small Business

Companies that may grow and are risky but cannot scale



# Another way to visualize



## Entrepreneurship

All new businesses are created by entrepreneurs

## Startups

High growth and highly scalable companies

## Tech Startups

Technology (including software/app) based startup companies

## Deep Tech Startups

- Biotechnology, Medical devices, medical imaging
- Advanced materials
- Advanced manufacturing
- Robotics - hardware, software...
- Electronics, Photonics, Quantum...
- AI/ML, VR/AR...

# Characteristics of Deep Tech Startups

## **Built around novel IP**

Underlying IP is unique and hard to recreate; Significant competitive advantage

## **Technology-first approach**

"Solution in search of a problem"

## **Capital intensive**

Infrastructure and human capital

## **Developed in a lab**

Early results in a controlled environment

Technical risk will be visible later in the product development



# Example : LASER

LASER is 61 years old

## History

A bit of controversy on who invented LASER.

1951 - Charles Townes proposes MASER

1957 - Gordon Gould coins the term LASER. Sets his company TRG (technical research group)

1960 - First patent granted for Bell Labs. Gould loses patent and fights for 30 years

1963 - Annual sales for commercial sales for LASER- \$ 1 million

1964 - Townes, Basov, Pharkhov receive Nobel Prize in physics.

**Charles Townes called it "Solution looking for a problem"**

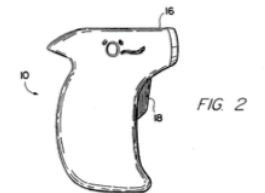
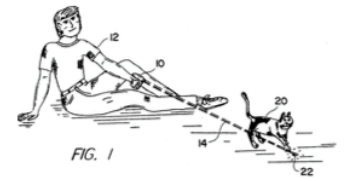
First applications:

1962 - welding of watch springs

1964 - Nd:YAG - cosmetic surgery (Lasik)

Source: Photonics.com

Unintended consequences

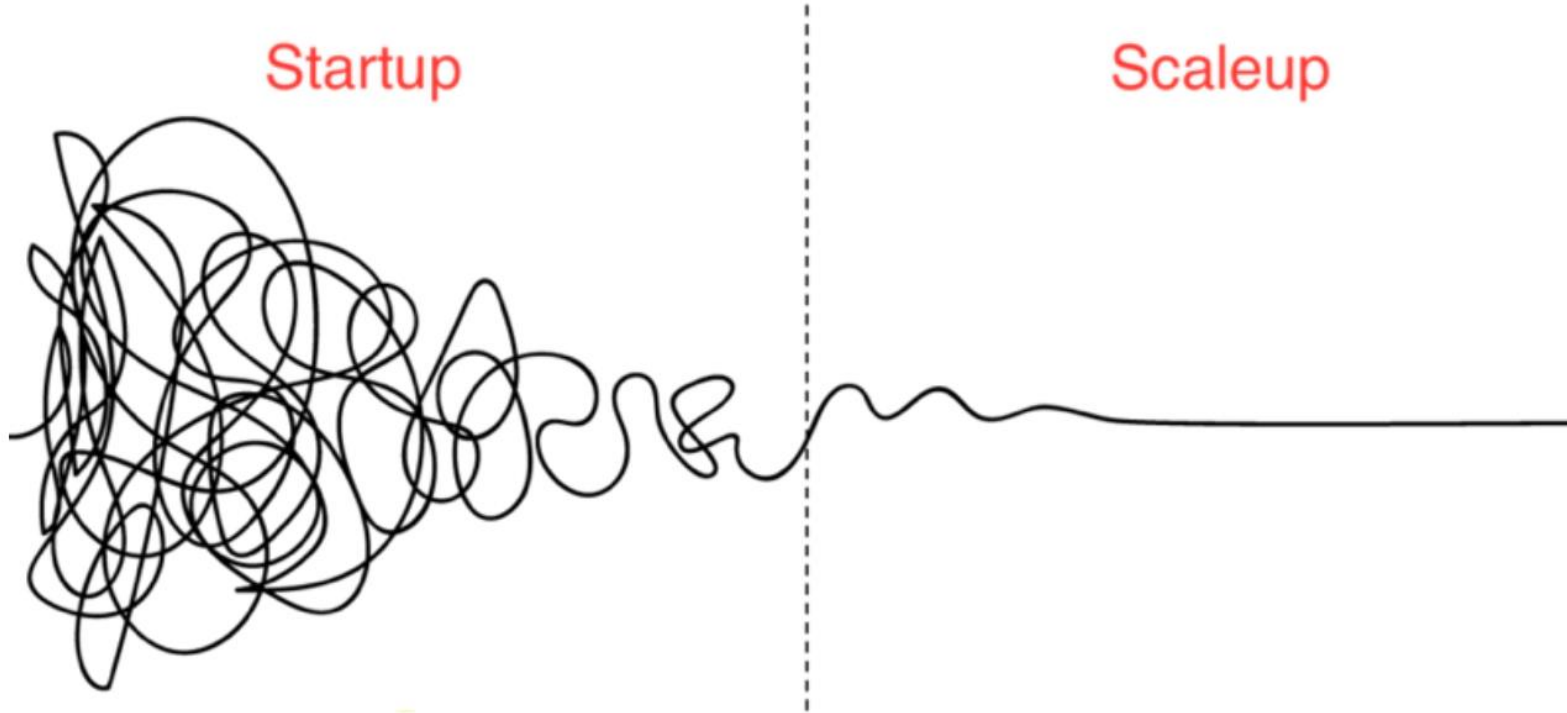


Method of exercising a cat

US Patent: 5,443,036

Startup

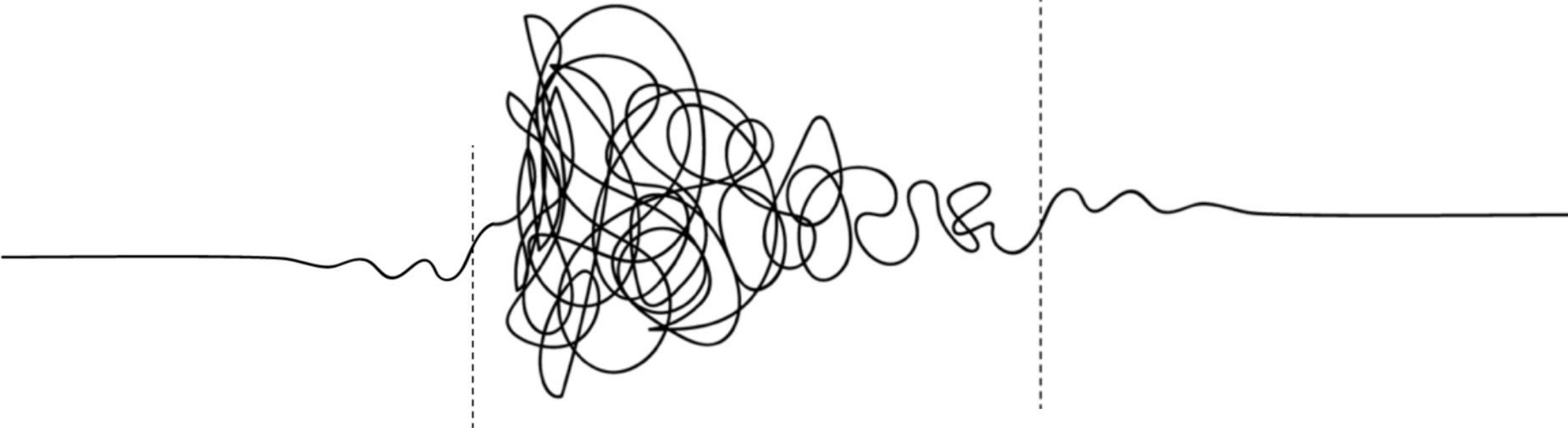
Scaleup



**Lab**

**Startup**

**Scaleup**



## Lab

## Startup

## Scaleup

Searching for a problem fit  
for technology solution

Searching for Validation towards  
Product Market Fit (PMF)

Optimizing for growth  
Channel Product Fit (CPF)

Minimum Viable Product  
(MVP); Prototype

MVP

PMF

CPF



# Problem worth solving

(source: <https://www.k9ventures.com/blog/2015/02/10/finding-problem-worth-solving/> )





Frequency:  
Does this problem occur often?



Density:

Do a lot of **them** have this problem?



Pain:  
Do **they** care?



Friction:

How hard is for **them** to access,  
understand, or use the solution ?



## **Them** and **They**:

Good Product X Nobody knows = Failure

Bad Product X Nobody tells you = Failure



## 2. Joiners



All startups need talent.

Single biggest challenge :

Attract the best talent

(competing with established company)



# Where to find startup jobs





# Startups

Many will not have an exact match to  
your profile/expertise/...

But, reach out to the founders to tell  
them why you want to work with them

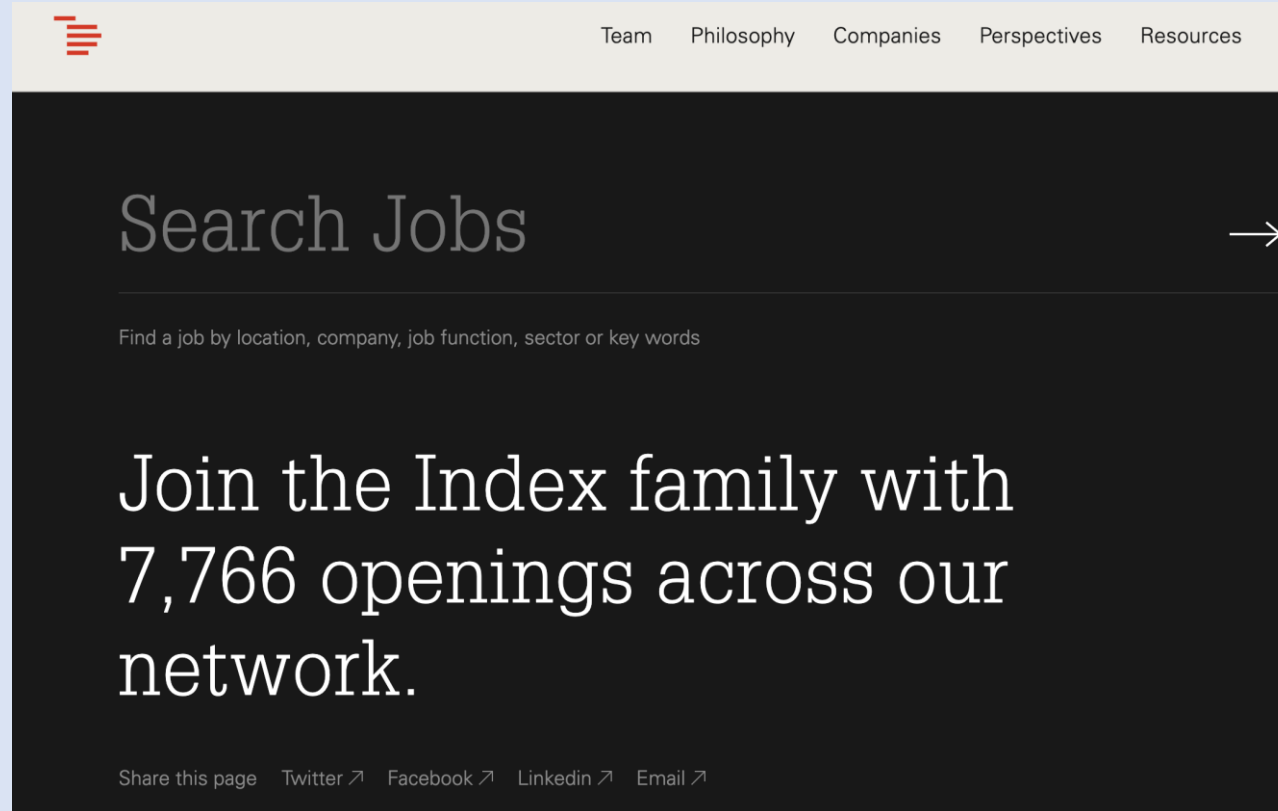


# Angel list



<https://angel.co/jobs>

# Venture Capital firms



The screenshot shows the top navigation bar of the Index Ventures website with a red logo on the left and links for Team, Philosophy, Companies, Perspectives, and Resources on the right. Below the navigation is a dark grey section with the text "Search Jobs" and a right-pointing arrow. Underneath is a search prompt: "Find a job by location, company, job function, sector or key words". The main content area features the text "Join the Index family with 7,766 openings across our network." At the bottom of this section are social sharing links for Twitter, Facebook, LinkedIn, and Email.

Team Philosophy Companies Perspectives Resources

## Search Jobs →

Find a job by location, company, job function, sector or key words

Join the Index family with  
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<https://www.indexventures.com/startup-jobs>



# Thanks!

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