Leading the Innovation and Entrepreneurial & Incubation/Pre-Incubation Activities

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Faculty Development Program (FDP) on Innovation & Entrepreneurship, organized by C-i2RE, KITS Warangal





KITSW













NSTITUTE OF TECHNOLOGY & SCIENCE

Opp: Yerragattu Gutta, Hasanparthy(Mandal), Warangal - 506 015, Telangana, INDIA

CENTRE FOR INNOVATION, INCUBATION, RESEARCH & ENTREPRENEURSHIP (C-i2RE)

MIC's Faculty Development Program | Program Schedule

In collaboration with Ministry of Education, AICTE, MoE's Innovation Cell

Session 1	Session 2	Session 3	Session 4
Theme: Evangelising Entrepreneurship among Students (90 Mins)	Theme: Falling in Love with Problems / Problem Identification (90 Mins)	Theme: Creativity and Idea Generation	Theme: Interactive Workshop
Theme: Target Customer Analysis and Discovery (90 Mins)	Theme: Value Proposition in Startups (90 Mins)	Theme: Understanding Lean Startup (120 Mins)	Visit to Incubation Centre & Networking on Problem Solution Journey (120 Mins)
Theme: Finance for Startups (90 Mins)	Theme: Business Model Canvas (90 Mins)	BMC with Activities (Group Activities)	
Theme: How to Pitch to Investors (90 mins)	Theme: Go to Market Strategy (90 Mins)	Theme: Leading the Innovation and Entrepreneurial & Incubation/Pre-Incubation Activities	Theme: Group Discussion on Best Practices in Incubation & Acceleration
Theme: Intellectual Property for Startups (90 Mins)	Theme: Action Plan Development (120 Mins)	Implementing Action Plan and Feedback Sharing (120 Mins)	Closing Remarks & Certificate Distribution (90 Mins)
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Some people want it to happen.

Some wish it would happen.

Others make it happen.

@successpictures

WHAT IS START-UP?

START-UP

A **startup company** (**startup** or **start-up**) is an entrepreneurial venture which is typically a newly emerged, fast-growing business that aims to meet a marketplace need by developing a viable business model around an innovative product, service, process or a platform. A startup is usually a company designed to effectively develop and validate a scalable business model.

SOME START-UPS THAT TURNED UP BIG













START-UP & INDIA

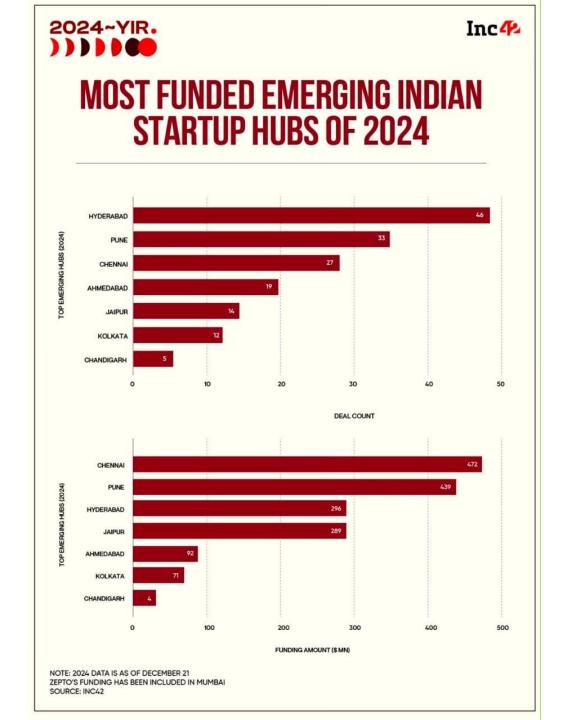
- Demographic Dividend: by <u>2030</u> India will be a home to <u>150</u> million working populations
- Generating Jobs: India needs 10 million jobs per year. It is startups, not large enterprises that create net new jobs in any country.
- Initiating Start-ups: India is a home for almost 3100 startups starting per year standing just behind US, UK and Israel according to the NASSCOM report.
- Startup India campaign: Great initiative to boost entrepreneurship in India.
 Facilitating startups and providing a new dimension to entrepreneurship in the country.
- Government Agencies: DST, DIPP, NRDC & AICTE

START-UP & ENGINEERS

Who Engineers really are?

Engineers are people who invent, design, analyze, build and test machines, systems, structures and materials to fulfill objectives and requirements while considering the limitations imposed by practicality, regulation, safety, and cost. (Do you agree?)

- Correlation factor between successful start-up and engineering mentality is very high
- Grooming of this mentality through support and motivation
- Eco-system for start-up: Need of developing eco-system for start-up at institute level
- Start-up cell, Innovation and entrepreneurial cells, industrial cells at institutes can collectively co-operate to build this eco-system j



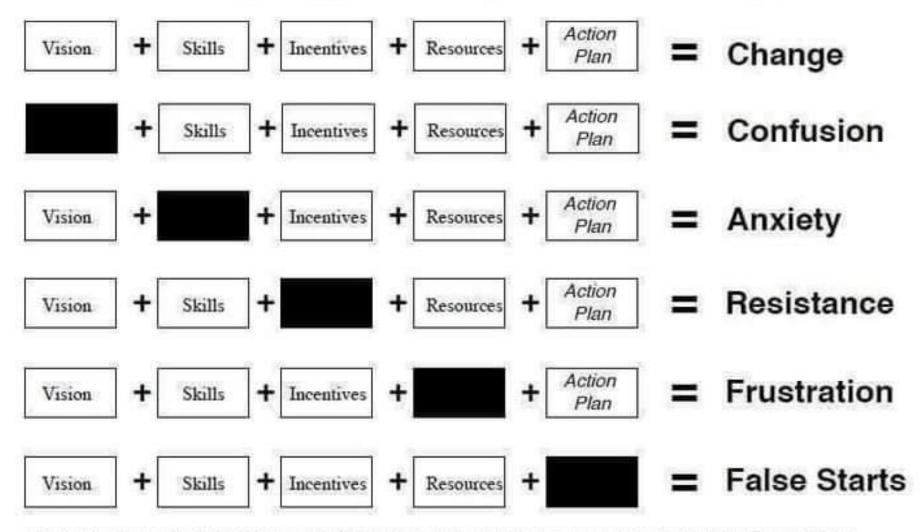
Infomance

NUMBER OF US UNICORN FOUNDERS FROM

INDIAN UNIVERSITIES:



Managing Complex Change



Adapted from Knoster, T., Villa R., & Thousand, J. (2000). A framework for thinking about systems change. In R. villa & J. Thousand (Eds.), Restructuring for caring and effective education: Piecing the puzzle together (pp. 93-128). Baltimore: Paul H. Brookes Publishing Co.

No Idea is a bad Idea!

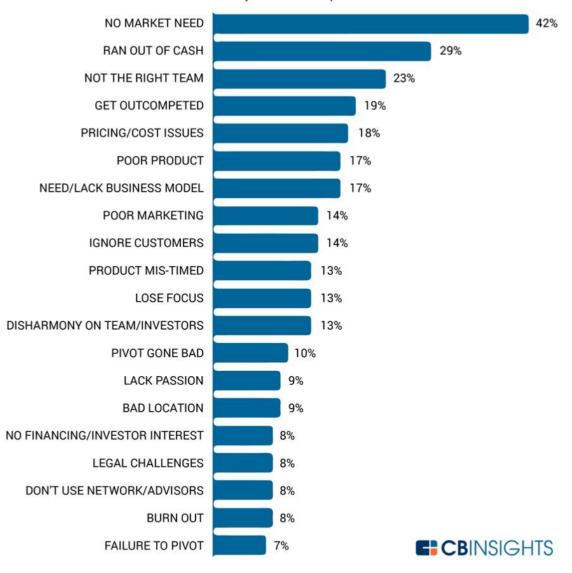




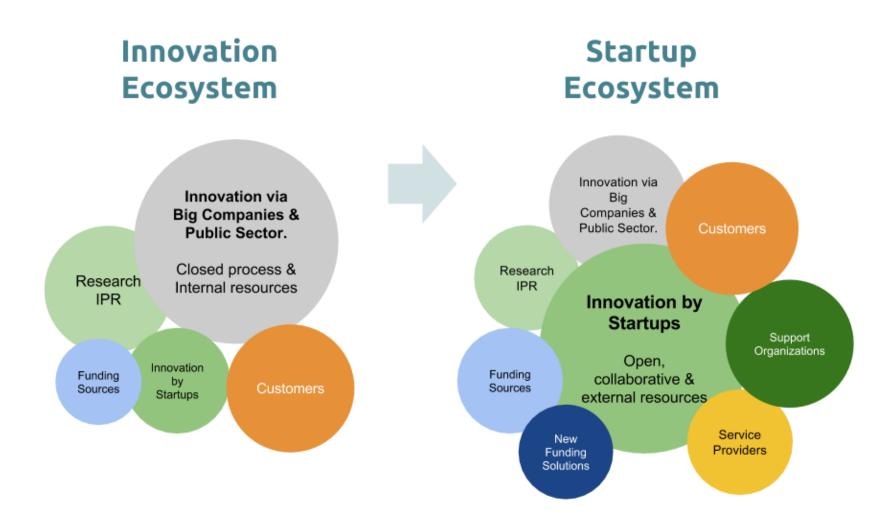
One should be prepared to grow even in most unfavorable conditions

THE TOP 20 REASONS STARTUPS FAIL

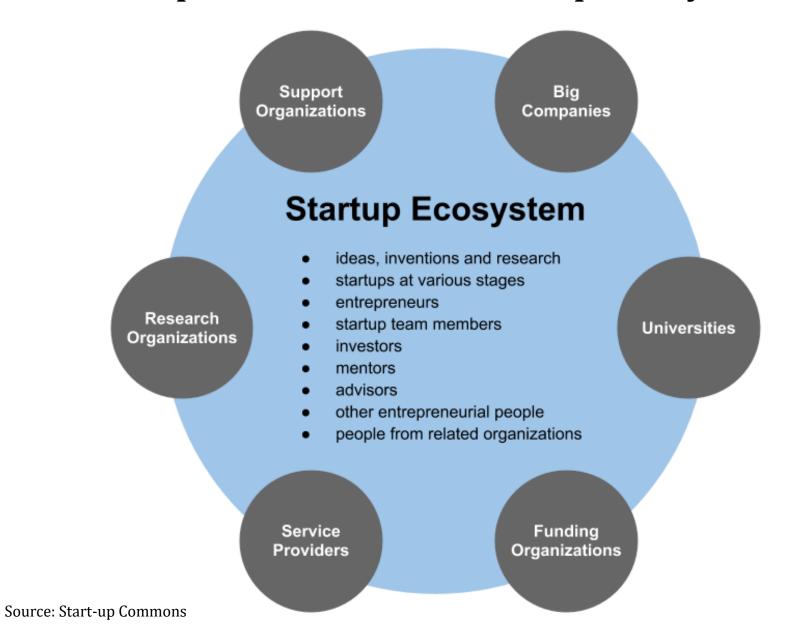
Based on an Analysis of 101 Startup Post-Mortems



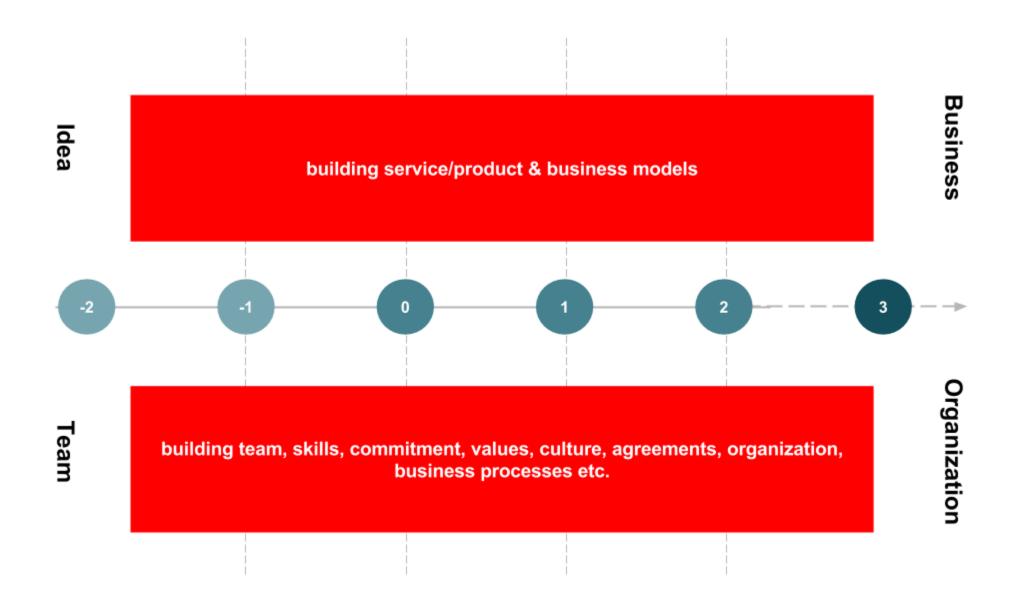
Transition of Ecosystem



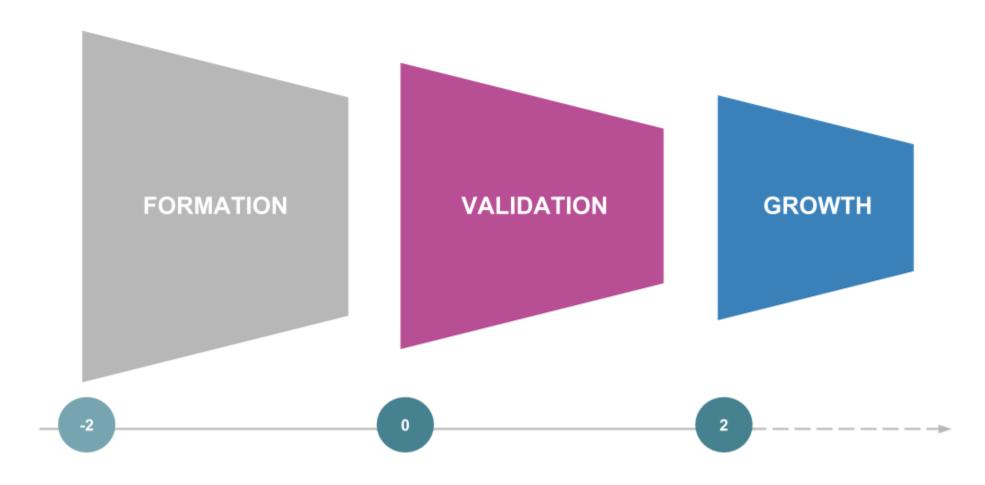
Composition of the Start-up ecosystem



Key Start-up Development Phases



Key Start-up Support Phases



Key Support Phases

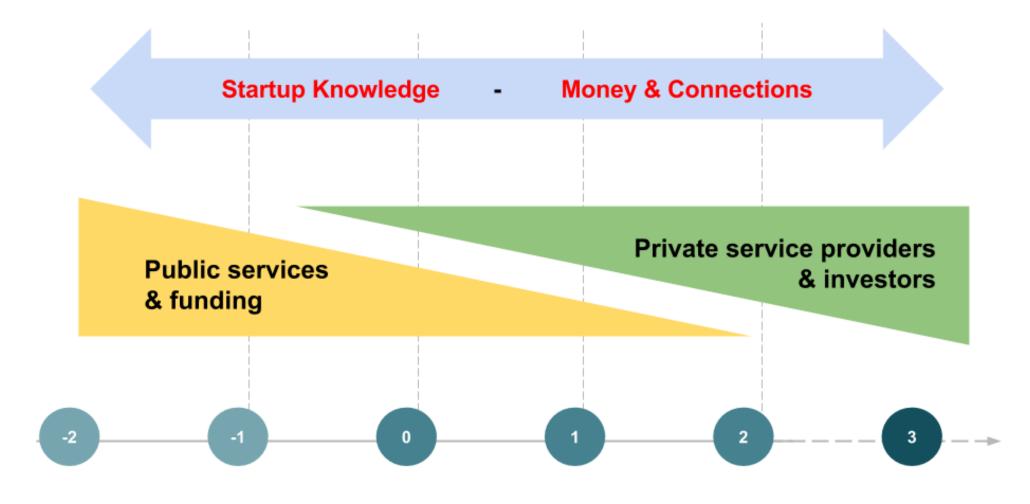
• From both overall Startup journey perspective, key steps the support focus are :

Formation stage is about inspiring and access to key knowledge, to build the right mindset, understanding and abilities for the journey ahead, typical issues to avoid or solve, what steps to take in what order and about available support along the way.

Validation, is where the support focus shift to initial product development, strengthening core team via mentoring, supporting model business validation and customer development.

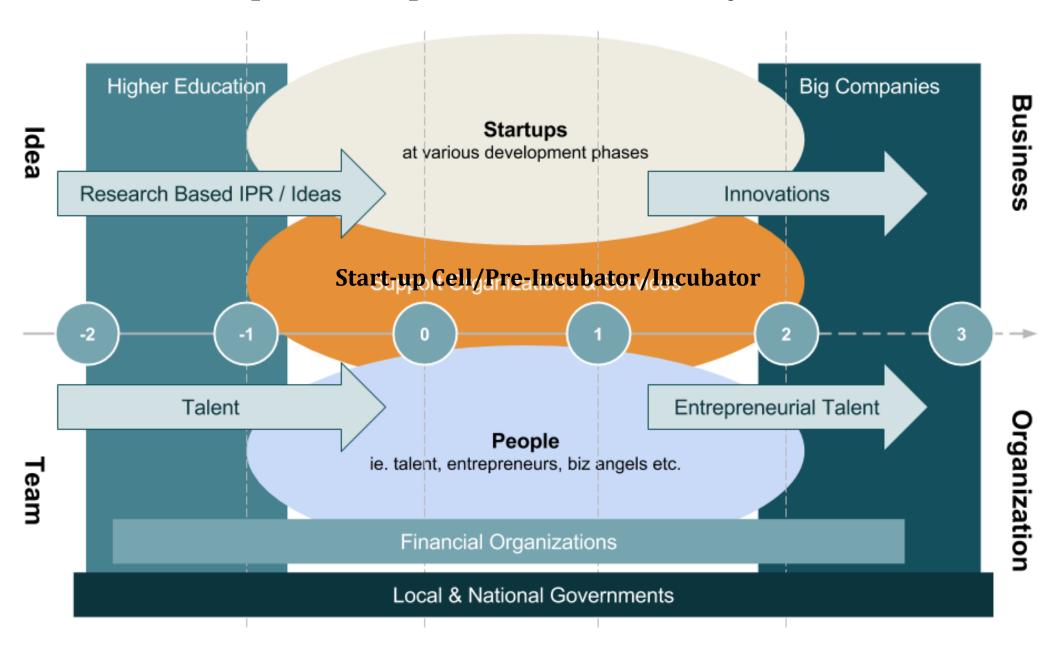
Growth, at this phase the support focus is mostly about resourcing and scaling various business operations internationally.

Start-up Development Phases: Key Requirement

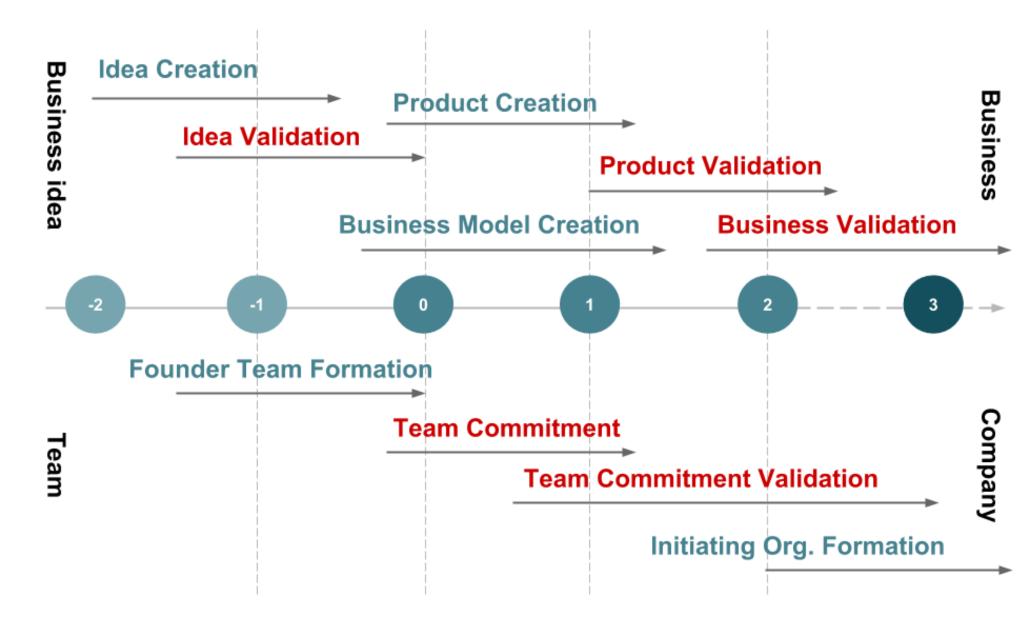


The balance between public services or publicly funded support services tend to be focused in the earlier phases, while private and for profit type of services are focusing on later phases of the journey, where the startup company is starting to have more clarity and shape.

Start-up Development Phases: Key Stakeholders



Start-up Development Phases: Key Services



Item categories are (vertical)

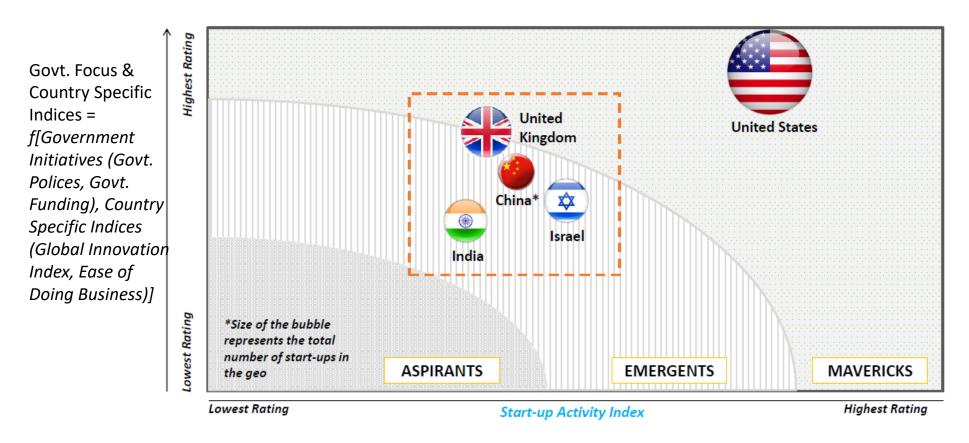
- Innovation: problems, research, ideas, concept, products etc.
- **Talent:** entrepreneurial people, attitude, skills, passion etc.
- Entrepreneurship: mission, vision, culture, values, etc.
- **Support :** knowledge, services, education, workforce etc.
- Money: funding/revenue; grants, investments, sales etc.
- **Growth**: growth in "everything", in volumes, quality and velocity, in companies, in go to market, channels, international networks, jobs, etc.

Values to improve are (horizontal)

- **Volume**: methods to improve: culture building, communications & marketing, etc.
- Quality: methods to improve: knowledge, guidance & feedback loops, etc.
- **Velocity**: methods to improve: tools & processes, matching etc.
- ROI (budget/resources vs output): methods to improve: measuring, analysing, strategy & orchestrating

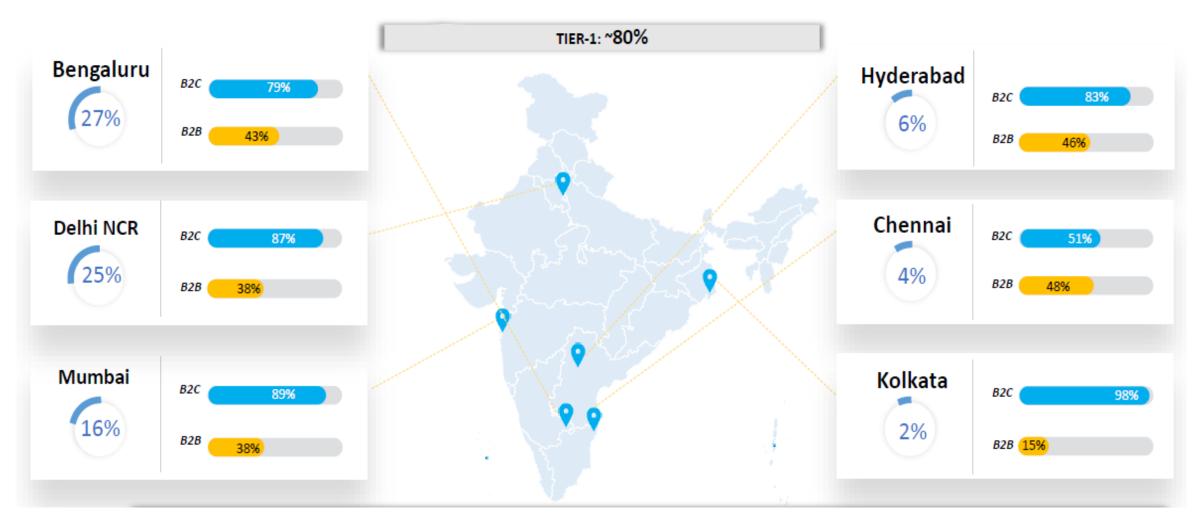
Global Start-up Landscape

India positioned 3rd and competing with Israel



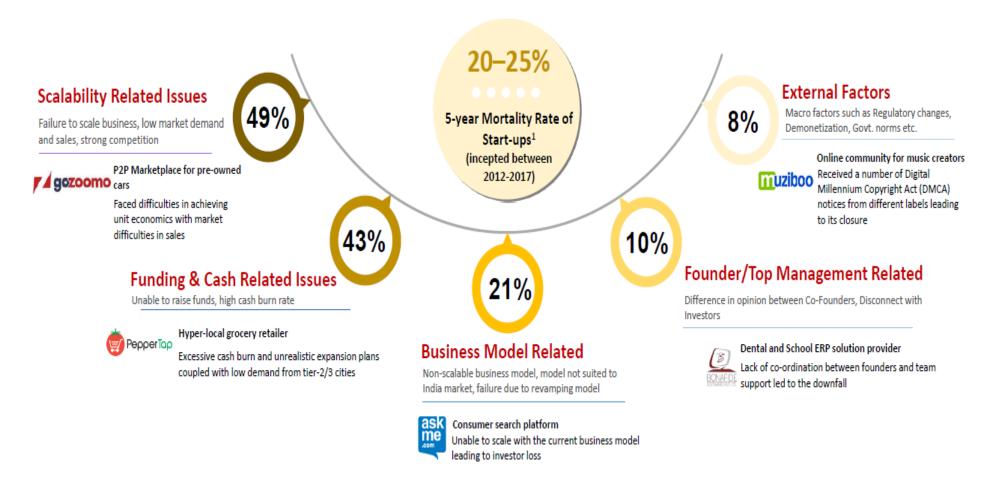
Start-up Activity Index = f[Landscape (Total Start-ups, Start-ups Per Capita, Acquisitions), Unicorns Analysis, Investors Ecosystem & Funding, Advance d Tech Focus]

National Start-up Landscape



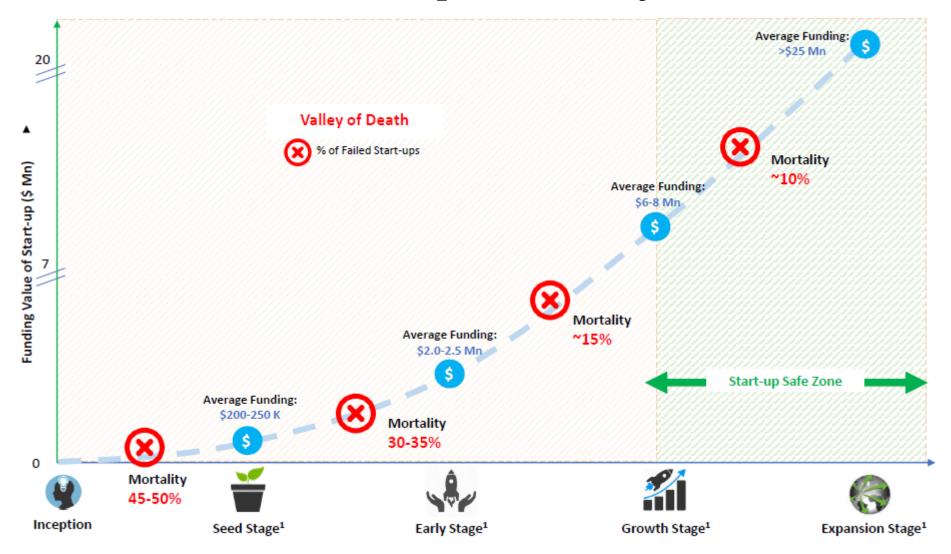
- 80% Start-ups are concentrate in tier 1 cities
- Chennai and Hyderabad with maximum proportion of B2B start-ups, led by the presence of Tech Institutions and R&D centres

Start-up Mortality



- Majority of Start-ups dying within 1.6-1.9 years of Inceptions
- 55% of failed start-ups have received funding
- 20% failed start-ups graduated from Incubators/Accelerators

Start-up Mortality



• Funding Amount - Seed Stage < Rs. 5 crore; Early Stage = Rs. 5 to 25 Crore; Growth Stage = Rs. 25 to 100 crore; Expansion Stage > 100 crore

Creating Start-up Ecosystem in Technical Institutions in India



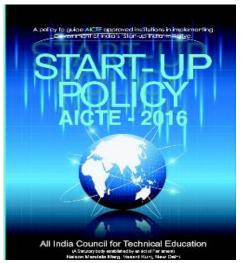
AICTE Start-up Policy

AICTE, New Delhi

AICTE has Launched the Start-up Policy on 16th Nov 2016







The Policy aims to streamline and strengthen the innovation & Startup ecosystem in Technical Institutions:

Identify the innovation and entrepreneurial potential of students, nurture innovations and transform them into startup entrepreneurs by developing an ideal entrepreneurial ecosystem in technical institutions and engagement with diversified enablers at national and international level

Policy Program Interventions

Focus Area	Components			
	* Designing "AICTE Innovation Index"			
Coherent Policy Development &	*IPR Policy Guideline and Knowledge tools for Tech Institutions			
	*Standard Guidelines; Institutions participation, 100 point Score			
Research Studies	*Coherent Policy Development in States & Universities			
Innovation Drive	*Orientation, Identification, Scout, Support Innovations & Startups			
	*e- Acknowledgement for Innovations			
	*Facilitating IPR filing for Student Innovations			
	*In-house mentor capacity development: e-Learning programs &			
	modules; Innovation & Pre-incubation through SWAYAM Platform			
Pre-Incubation/ Start-up Drive	*Designing "Startup & Innovation Fellowships"; Micro grants			
	*Designing New Academic Program: Minor & Master in Start-up			
	*Tech compendium of "Ready to Startup" IPR enabled Public funded			
	technologies & Expired IPR Imported Engineering Tools.			
	*Setting up Idea Labs/Innovation/Start-up Centre through			
	convergence initiatives with lead ecosystem enablers and agencies.			
Referral Support	*Referral for acceleration, incubation, investment at national			
	*Linkage with International acceleration & Exchange programs			

Several Major Initiatives

• Start-up Policy Awareness events are conducting in various states and universities across the country.

AICTE Signed MoUs with national and International Ecosystem Enablers

- NITI Aayog: To strengthening the linkage between technical institutions, students' engagement and mentorship opportunity with **100** *Atal incubation centers and 900 Atal Tinkering labs* to be established across the country.
- Ministry of SDE: Towards mass creation of entrepreneurial oriented, practicing and skilled students in 3050 technical and management institutions in next five years.
- Ministry of Small and Medium Enterprises: towards Imparting Skill and increase the employability of students completing their education and internship.
- Daegu Centre for Creative Economy and Innovation (CCEI) a non-profit organization under the ministry of SMEs and Start-up, Govt. of South Korea for International Start-up Exchange and Innovation ecosystem strengthening.
- CARLETON University, Canada in the area of international collaboration in **Start-up Exchange** and Innovation ecosystem strengthening.

NEED OF HOUR & INTERVENTION

- Start-up Eco-system: Vibrant and ideal entrepreneurial ecosystem in every technical institute
- Inter-institutional Partnerships: Among technical institutions and other ecosystem enablers to build entrepreneurial culture, to support student innovations, to identify entrepreneurial potential of students and transform them into start-up entrepreneurs.

INTERVENTION

AICTE has come up with implementation of mandating Start-up program in institutions through:

- Establishment of Start-up Cells and in-house expertise and capacity building.
- Start-up Cells are envisioned to play the role of Pre-incubator as well as Policy advocacy centre at regional level.

OBJECTIVES

- 1. Policy Making: To achieve the desired outcome and impact, it is believed that, Startup cell coordinators not only have to act entrepreneurially to implement the program but also play in policy making.
- 2. Building Up eco-system: Orientation programs to be conducted to aware and orient Start-up Co-ordinators on start-up ecosystem development concepts, theories, practices, support structure.
- 3. Vision Building: Orientation workshops aiming at vision building for start up cell and development of draft micro action plan for the start-up cell to implement.

START-UP ACTIVITIES

- Appoint faculty coordinator/advisor
- Establishing Start-up cell/club with students
- Identify location for Innovation and Start-up cell/club for students (Including equipment and furniture like computer, Wi-Fi, table, chair, printer, stationary)
- Innovation & Start-Up workshops/awareness drives for students
- Competitions: Idea stage, prototype stage, business plan, etc)
- Providing seed money to students for their projects. (Incentivisation through prizes, academic credits, appreciation, attendance relaxation etc.)
- Expert Lectures (TA/DA and other logistics)
- Motivation through local entrepreneurs
- E-summits, conferences, seminars and other Entrepreneurship fests (organising as well as attending)
- Exposure visits to start-ups, incubation centres, venture capitals, incubation/research parks

START-UP CELL COMPOSITION

- 1. Head of Institution or his/her Nominee as Chairman
- 2. One faculty as Start-up Cell Coordinator
- 3. Three to five faculty facilitators representing various disciplines and dept. of Institute
- 4. Student Coordinators pooled from Innovation Club, Start-up club, E-cell for program coordination and management
- 5. Experts from the areas of Start-up and innovation may be included

IMPLEMENTATION OF AICTE MANDATE

- Mandatory internship (4 to 8) weeks in industry for each UG students
- Industry Readiness: To impart technical and soft skills required for industry; (managerial, entrepreneurial, leadership, communication, team work etc)
- Promoting Innovation/Start-up: Formation of club, participation in Hackathon

Student Participations and Activities-Pre-incubation/ Ideation

Activities-I

- Skill certification program on Ideation, Entrepreneurship, IIPR, Innovation etc.
- Workshops, awareness, market out reach events, orientation, advocacy meetings on Business Plan
- Networking events: Intra and Inter-institutional, enablers, stakeholders
- Skill and competency development training programs/FDPs/EDPs organised
- Research studies related to Entrepreneurship, Pre-incubation and Innovations

Activities-II

- Convergence and leverage with schemes/programs offered by major enablers
- National and regional award and campus Hackathon like events would be organised
- Incentivising Entrepreneurship and Innovation; services and facilities; Start-up Manual, policies, tool kits etc.

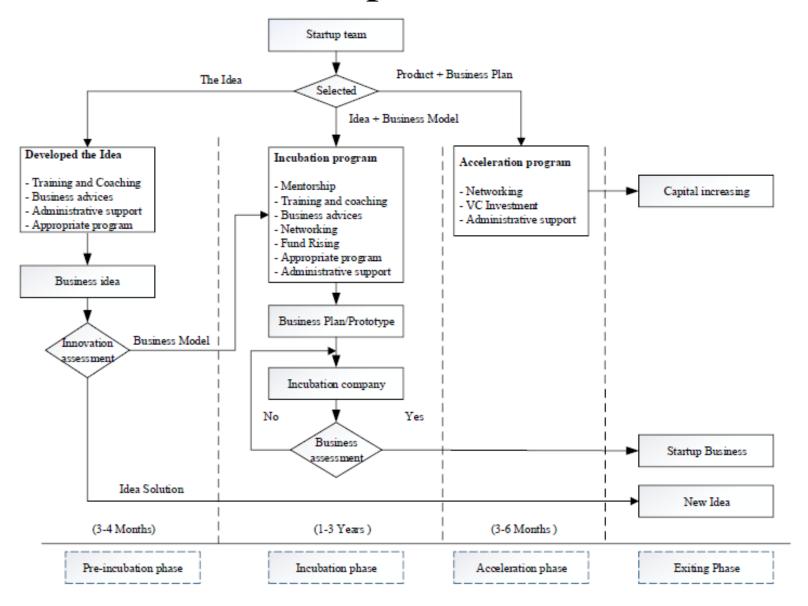
Key Performance Indicators

- No of IP filings
- Number of technologies licensed or transferred
- Number of corporates incubated by faculty, students, researchers or entrepreneurs
- Number of training programs or conferences conducted
- Number of collaborative projects developed
- Total capital raised by start-ups
- Total capital raised for various programs from Industry

The incubation process

- The incubator activity consists of pre-incubated process, incubated process, and accelerator process.
- Factors such as startup team capability, networks, quality of the mentors, and market efficiency play an equally important success in the incubation process.
- Incubation activity has been addressed as a mechanism to support start-up through education, resource sharing, co-working space, and collaborative network.
- The incubation concept try to link the technology, knowledge and capital in order to increase the new start-up competency and support to develop the new start-up companies

Incubation Conceptual Framework



Impact of Pre-incubators on Entrepreneurial Activities

- Entrepreneurship can be considered a driving force for economic growth, employment creation, and competitiveness in societies.
- However, a crucial issue is the ability to produce knowledge and train a skilled workforce that has a proper entrepreneurial mindset.
- In this regard, there are three main actors: public governance, universities, and the private sector.
- Universities should take more role as both producers and disseminators of knowledge in entrepreneurial activities.
- The concept of pre-incubation centers, is one outcome of such activities.

- By providing targeted resources and services, incubation serves as a business-support process that accelerates the successful development of start-ups and companies.
- Incubation ideas focus on already established firms—either start-up or senior firms; however, pre-incubation centers focus on the early-stage ideas of students and entrepreneurs.
- The educational system should produce individuals with requisite skills: at that point, they can become active in furthering government policies to promote entrepreneurship (Ex: CBDE of MoE)

 In this context, entrepreneurial universities play an important role as both producers and disseminators of knowledge.

 University-based incubation centers will become key actors for promoting entrepreneurial culture in societies.

• Studies show that, overall, a positive contribution by the preincubators was found, in terms of turnover generated and jobs created in an area of economic development.

Startup Incubators

 A facility that supports early-stage startups by providing mentorship, resources, workspace, and networking opportunities focusing on long term growth and business development without a fixed time frame or direct investment.

Create a robust pre-incubation / early incubation set up

• With a strong ecosystem of domain partners and academia, the setup has to nurture the startups.

 Startup and its co-founders have their best chance to succeed when they are able to get timely access to the following three enablement

systems:



- Deep mentorship Most early-stage startups fail because they struggle to get the right set of mentors who are aligned and invested in the success of the startup and their innovation.
- This means that while they do get many connects during their journey, they are unable to get dedicated mentors who can hand hold them for long periods of time.
- Startups also need different kinds of mentorship at different points of time in their journey.

- Ecosystem Access Another reason for most early-stage startups to fail is their inability to identify the right problem to solve.
- Even when they do figure it out, they find it extremely difficult to get a "safe" ecosystem of user communities where they can quickly experiment, co create and fail fast and learn from it.
- Talent / Skills This is a significant hurdle for startups that aspire to move from early stage towards the GROW phase and eventually the SCALE phase.
- Their ability to spot, on board and leverage the right skills is often their biggest point of failure even after getting everything right.

Incubation Centre - Functions

- To provide infrastructure, prototype development support, research assistance, help in getting funding, business consulting assistance, mentoring and guidance to make their idea into a successful venture
- To create awareness about the importance of entrepreneurship among the students and local community
- To promote new technology/ knowledge/ innovationbased startups.

Incubation Centre - Functions

- To promote design thinking process among the incubates and provide the platform for speedy commercialization of technology.
- To enhance the domain knowledge / skills to develop the innovative products / services.
- To build a vibrant startup ecosystem, by establishing a network between academia, financial institutions, industries, and other institutes.

- Business incubation is a public or private development process that nurtures firms from idea creation to start-ups, providing complete assistance to help them grow and succeed.
- An incubator offers resources including, physical space, capital guidance, shared services, and networking opportunities.
- Incubators provide mentoring, business aid, and monitoring services. New enterprises are facilitated by raising awareness of risks and reducing the cost of failure.

 With over 100,000 incubators globally, the business incubation process has grown more important for start-ups, and extensive research is being conducted on the process, encompassing studies on its interventions and consequences.

• We need to understand many kinds of business incubators, benefits, and drawbacks and also how policymakers and incubation managers might design interventions according to the particular incubator type and the process setting.

Critical success factor (CSFs) of incubation

- 1. Startup Team capacity
- 2. Market need
- 3. Incubation Management
- 4. Coaching and Training support
- 5. Networking
- 6. Mentorship and Business advices
- 7. Admin support
- 8. Fund

- <u>Business incubators</u> are specialized initiatives tailored to support early-stage startups in developing their ideas into profitable products and services.
- Companies at the idea stage usually find business incubators more suitable than accelerators.
- Incubator programs generally come in the form of venture capital firms and non-profit development companies, and although they are mostly self-sufficient, most receive funding from government organizations and angel investors.

- When it comes to the application process, business incubators tend to prioritize applicants with prior affiliations with them or those who possess objectives that align with the institution's mission.
- For example, educational establishments prioritize students, nonprofit organizations prioritize startups that support community goals, and commercially driven incubators concentrate on fostering partnerships within their field.
- Business incubators can help startups access loans with higher limits,
 often requiring recommendations from credible organizations.
- Incubators offer business advice and aid such as legal advice, accounting support, marketing advice, and access to professional networks to assist startups in carrying out necessary operations and tasks.

How to determine if an incubator is suitable for your startup?

- First, evaluate your business stage and determine if your startup would benefit from the support and resources provided by an incubator.
- Scrutinize their incubator process, mentorship structure, networking opportunities, and access to funding, as these are vital aspects that can significantly impact your startup's growth.
- Next, research incubators that align with your specific industry and seek out those that offer tailored support and expertise relevant to your business ideas.

- Finally, consider the networking opportunities associated with the incubator, as networking opportunities provided by incubators can vary depending on the location.
- Ex: Incubator program located in a metropolitan area: Allows your startup to gain exposure and build meaningful connections in a vibrant and diversified environment, with various industry events, coworking spaces, conferences, startup communities, and workshops, where you have more chances of connecting with the potential investors.
- Incubator program is located in a smaller city: In that case, it will strengthen ties with business associations, chambers of commerce, local startups, and economic development entities to generate networking prospects in a more close-knit environment.

Startup Accelerators

• A facility / program that supports early-stage startups by providing mentorship, funding, resources, and networking opportunities focusing in a structure, time limited environment to help them scale rapidly and refine their business models.

- Startup accelerators are designed to offer early-stage companies support in their growth and development.
 Through mentorship, resources, and networking, these programs typically span a three to six-month period and can aid startups in scaling rapidly.
- Being part of an accelerator can provide startups substantial benefits, such as access to knowledge and mentorship of successful entrepreneurs and industry experts.
- Mentors in the program offer insight and support to those in the early stages of launching their business, assisting with overcoming the obstacles existing companies usually face when trying to expand.

- Secondly, accelerators offer networking opportunities, allowing startups to connect with other entrepreneurs, industry experts, and potential investors.
- Most startups in the development stage seek to increase their awareness of the marketplace and build valuable connections.
- Accelerators allow us to achieve these objectives by providing access to office space, tutorials, knowledge materials, and seminars and linking startup founders with companies that offer branding services for startups.
- Overall, accelerators suit startups with an established user base, paying customers, and some evidence of product market fit.

Which accelerator is a good fit for your startup?

Consider the following factors:

- Stage of Development
- Assess whether your startup has achieved proof-of-concept and is ready to scale. Accelerators are ideal for early-stage existing companies that already have a minimum viable product.
- Revenue and Funding Needs
- Before joining gain insight into your funding needs and income streams; evaluate your financial documents, such as income statements, balance sheets, and cash flow statements.
- Remember, most accelerators work with companies that have met a specific income requirement and attained steady sales within a certain timeframe.

Expansion Goals

- Identify your expansion goals and whether a short-term collaboration to accelerate growth aligns with your objectives.
- Accelerators focus on rapid expansion, so if you are interested in slow but steady development and are not ready to keep the fast pace, joining an incubator may be a better idea.
- Also, remember that accelerator programs often have a highly competitive application process due to the large number of applicants and limited available resources.
- Therefore, before joining an accelerator program, you should be prepared to provide proof of your growth potential and explain why collaboration with your business will benefit the accelerator.

Incubator vs. Accelerator

Incubators

Accelerators

Stage of Entry

Seed-stage startups





Established startups with MVP

Funding Sources

Academic/ government-funded; no equity taken





VC-funded; equity stake required

Duration

Unlimited





3-6 months

Program Costs

Free or minimal fees for services





Equity in exchange for funding/support

Location

Require local presence





Work with alreadyestablished locations

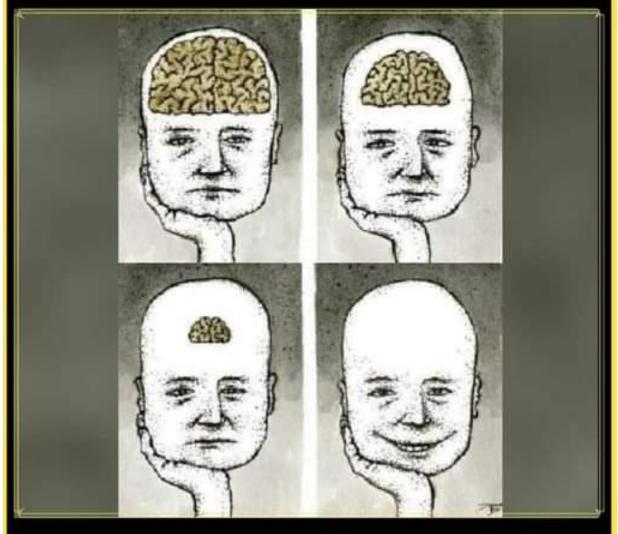
Acceptance Criteria

Lenient, diverse startups





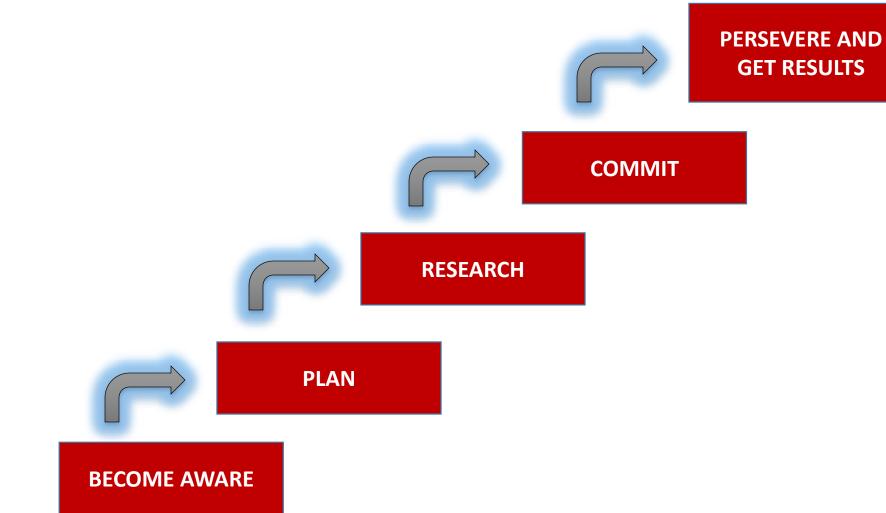
Highly selective, proven business models



According to Charles Bukowski "Sadness is caused by intelligence, the more you understand certain things, the more you wish you didn't understand them."

There is no END to INNOVATIONS and IDEAS. It's a NEVER ending Endeavour

Conclusion!



13-Mar-25

THAN SOU



Questions 2 / Comments!

