

**Entrepreneurship**  
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**Lecture 44**  
**India as A Start-up Nation**  
**Part 2**

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**Slew of Initiatives by the Government of India for a Vibrant Start-up Ecosystem:**

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**Funding Support and Incentives**

- Fund of funds with a corpus of Rs 10,000 crore
- Credit guarantee fund
- Tax exemption on capital gains
- Tax exemption for 3 years
- Tax exemption on investments above fair market value

**A Vibrant Start-up Ecosystem**

**Simplification and Handholding**

- Self-certification for compliance
- Start-up India Hub
- Mobile App and Portal
- Legal support for patenting
- Procurement from Start-ups
- Ease of doing business
- Faster exit

**Industry-Academia Partnership and Incubation**

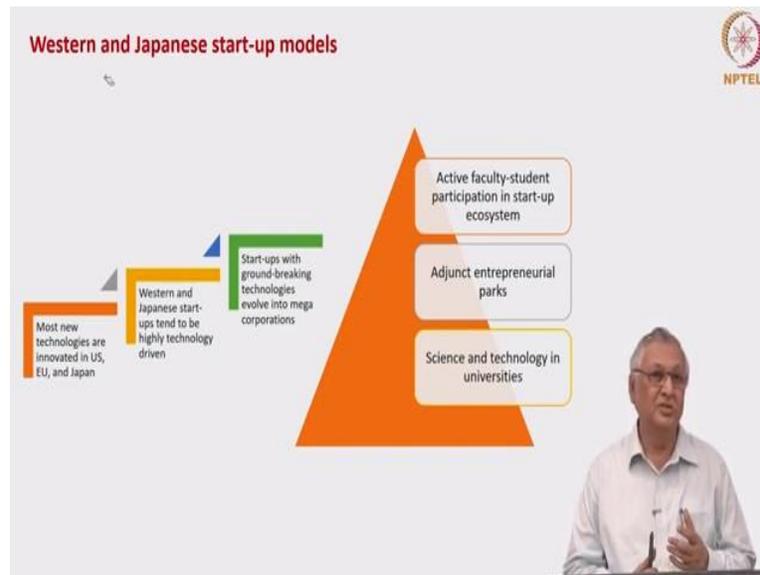
- Start-up Hubs to showcase
- Atal Innovation Mission
- Self-employment and Talent Utilization (SETU) Program
- Private Sector Expertise for Incubator setup
- Innovation Centres at National Institutes
- 7 New Research Parks installed at IIT Madras Research Park
- Start-up in the Biotechnology Sector
- Innovation Focussed Programmes for Students
- Annual Incubator Grand Challenge

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So, this is the further amplification of this flow of initiatives taken by the government of India in terms of funding support. We have a fund of funds of Rupees 10,000 crores with corpus of Rupees 10000 crore for supporting start-ups. We have credit guarantee fund, we have tax exemption on capital gains, we have got now angel tax being removed, we have tax exemption for a few years and if there are investments above fair market value, there are tax exemptions.

We also have self-certification, we have got registrations with the government portal to ease the business for start-ups, and then serve there are several industry academia partnership which we have considered in various phases of our discussion thus far.

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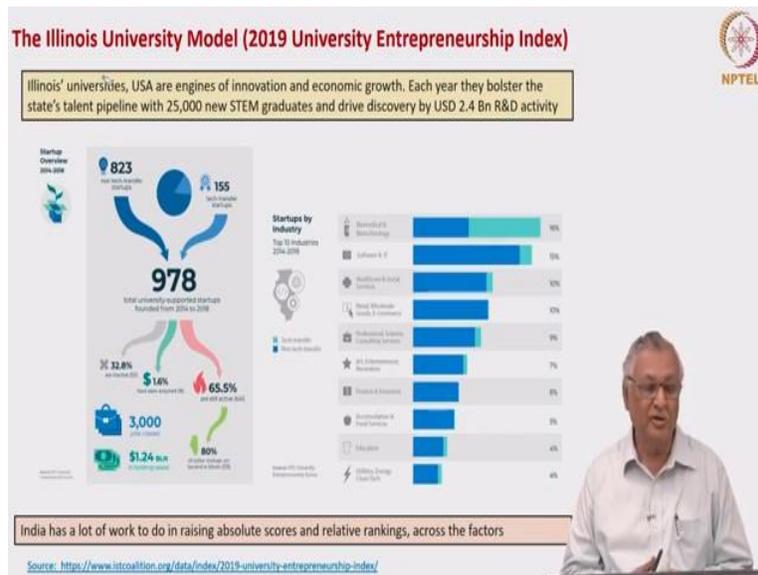


Now if you look at the western and Japanese start-up models, the western start-up model and even Japanese start-up model is highly technology oriented. Most of the technologies are still innovated in US, Europe and Japan. That is the foundation of the start-up model and the start-ups, therefore, are highly technology oriented.

And thirdly, start-ups with groundbreaking technologies are able to convert themselves into early efficient start-ups and evolving to mega corporations. But if you see the pyramid of growth for the start-up system in the west, we have got one science and technology in universities.

We also have adjunct entrepreneurial parks, which are next to the best of the universities. We also have active faculty student participation in start-up ecosystem. And there is also a kind of monitoring and self-evaluation system which is happening with these universities as to how their entrepreneurial systems are working.

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So, one presentation here is referring to the state of Illinois. Illinois has got several universities which are engaged in science and technology, and for the last 10 years they have been publishing how their university model of entrepreneurship is supporting economic growth.

So, they are the engines of innovation and economic growth as per their self-assessment. Each year they support state's talent pipeline by 25000 new STEM graduates that is graduates in Science and Technology, Engineering and Mathematics. And more importantly compared to our Indian situation, they drive discovery by investing as much as 2.4 billion dollars on R and D activity.

So, this is a snapshot from the report of the Illinois university program on how the start-up system is working. We will find that there have been 978 university supported start-ups that were founded between 2014 and 2018, which is a big number. Out of which 155 were based exclusively on technology transfers from the university and 823 had independent technologies.

It does not mean that they did not have technology transfers from other universities. Nevertheless, they were non-Illinois technology transfers or technology developments.

Out of this, 32.8 percent were inactive, which again points to the fact that not every start-up that has been put on development horizon would eventually succeed.

But that 67 percent are active and have been successful is a much-much better number than the number we generally have that one in 10 start-ups only will succeed. So, this figure is significantly better and one of the reasons why this figure is better probably is because of the technology backbone that is supporting the start-up development.

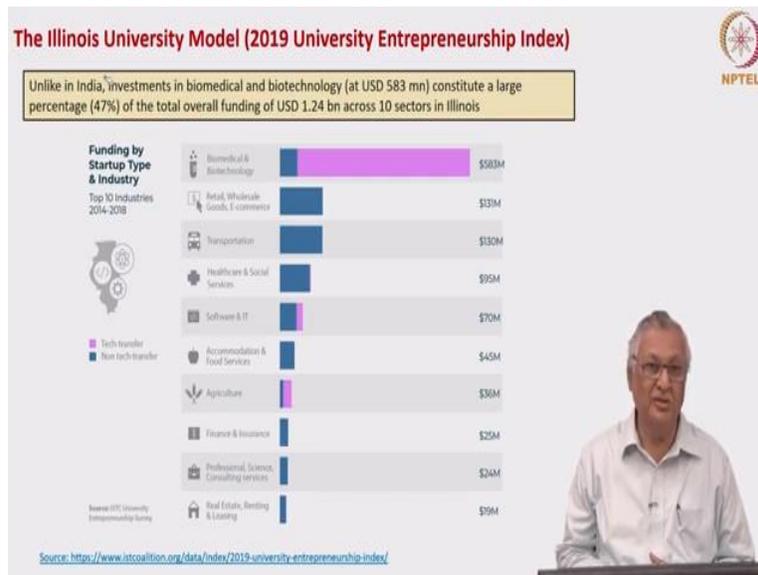
Out of that, 65 percent are still active and 1.6 percent have gone through acquisition. This is again a very important factor that if start-ups demonstrate their worthwhileness to big companies, they are likely to be acquired. And they have created 3000 jobs, they have been able to raise 1.24 billion dollars in funding.

And 80 percent of the start-ups are located in Illinois, which shows that the regional development of technology and regional development of start-up activity has got merit in any geography. But if you look at how the start-ups are getting invested, you will find a completely different profile.

In India, much of this investment in software takes place in the e-commerce and digitization areas, particularly in terms of the digitization of the process which are mechanical and which are physical. But if you look at the US situation or probably even a Japanese situation or the EU situation, you will find that in overwhelming percentage of investments is getting made in the biomedical and biotechnology field.

Which is the driver and one of the very important aspects of industry 4.0 which we discussed in one of the earlier sessions. Then of course software and IT follows, and fund followed again by healthcare and social services. Retail, wholesale goods, ecommerce which is the dominant case in our system ranks fourth.

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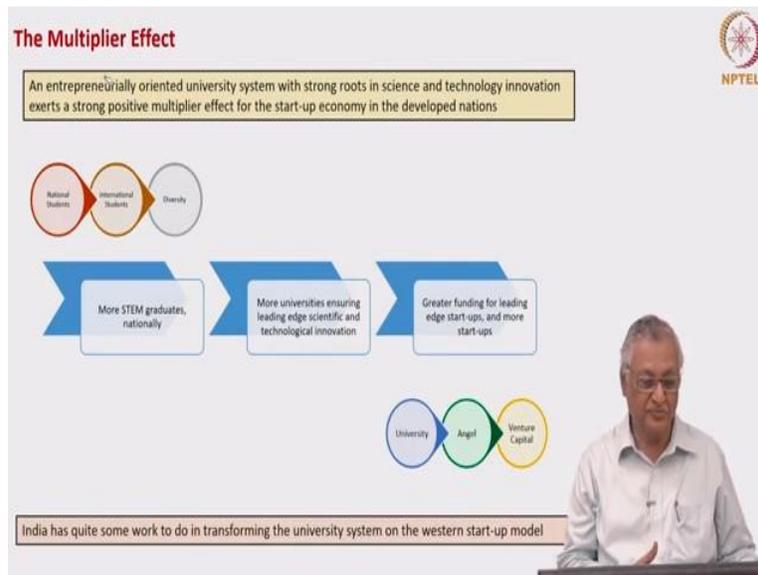


So, this is an expanded view of how the investments in the state of Illinois is working out. We will find that 583 million dollars out of the total 1.2 billion dollars of investment has been made into the biomedical and the biotechnology field which is 47 percent, which is a strong boost to how the industry would move in terms of start-up development.

And many of these industries which we have listed here, biomedical, biotechnology, retail, wholesale goods, ecommerce, transportation, healthcare and social services, software and IT, accommodation and food services, agriculture, these are all very important areas of investment.

So, it is important that India also has a start-up funding analysis which tracks the industries where the new funding is going and whether there needs to be a redistribution of funding interest across industries.

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So, we need to take a cue from what has been happening in the west and see how we can achieve a multiplier effect in start-up development in India. Fundamentally, at the base level we should have more STEM graduates nationally. STEM graduates were skill and technology oriented and not only merely employable, but people who have got the capabilities to transform their science and technological education into a product or service very effectively in a start-up situation.

Secondly, more universities should continue to emphasize leading edge scientific and technological innovation. While there is every need to enhance liberal arts education and provide more humanities and social science exposure to students of science and technology so that what we have would be a profile of very well-balanced individual.

The core of universities emphasizing, leading edge science and technology, that cannot be ignored. Third one is greater funding for leading edge start-ups and more start-ups in the overall. So, at one level we have national students, who would form the talent to the large extent, then we also should have international students and we should also have gender diversity in this student population which is entering this process pipeline.

Then we should have universities which are providing an anchor for the ideas to be converted into start-ups. We should have angel investors who are associated with the

universities and we could also have the venture capital firms having strong linkages with institutional incubator systems. Right now, angel and venture capital systems are linked more to start-ups directly rather than to universities.

Increasingly we are seeing initiatives like Deshpande, Kris Gopalakrishnan Institute for innovation. There are several other innovation-related activities that are happening in higher educational institutions which adds into the educational system so that start-ups could be supported better.

Again, we have got lot of work to do in transforming the education system which is oriented towards degrees and jobs and to some extent into academic research into practice oriented, start-up oriented, western start-up education system model.

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**Few Mega Growths and Multiple Acquisitions by Mega Firms**

Not all techno-entrepreneurs in the West were, or are, keen to build their start-up enterprises into mega enterprises. They see themselves as pioneers working to take their new technology concepts to commercial success as novel products or services at their hands.

Start-up

- Scale-up on own
- Get Acquired
- Monetise technology
- Become Inactive

Philosophically, ownership and management are treated as very important in the start-up phase but are considered expendable for leading their enterprises into the growth and maturity phases.

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The slide features a flowchart with 'Start-up' at the top, branching into 'Scale-up on own', 'Get Acquired', 'Monetise technology', and 'Become Inactive'. A speaker is visible in the bottom right corner of the slide frame.

Not all techno entrepreneurs in the west have been or are keen to develop their start-up enterprises into mega enterprises. We have got this flow chart which shows that when a start-up comes into being, there are a few options. One, scale up on own, which is a good thing to happen but, not in all cases that scale up on own happens.

The second one is the central one which we see here, monetization of technology. The other one is to get acquired as a whole, as a company, as a start-up. That is the other

option available. And the fourth option is to be inactive or above all the developments until the better day comes or until the technology itself is refurbished as rejuvenated.

So as a start-up, we have got different ways of looking at it. Philosophically in India, ownership and management have been treated very important and significantly together. As a result, there has always been an emphasis on entering the start-up by the promoter, managing the start-up by the promoter, and finally leading the start-up by the promoter to as long an extent as possible. But that does not workout at all phases.

Ownership and management could be very integral and together in the early phase and early growth phase, but not necessarily appropriate and could even be expendable when the start-ups become leading mainstream companies in the growth or maturity phases.

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The slide is titled "Japanese start-up models" and features the NPTEL logo in the top right corner. It contains several text boxes and a speaker in the bottom right corner. The text boxes describe the characteristics of Japanese start-up models, including their relationship with larger firms, their focus on innovation, and their growth patterns. The speaker is a man with glasses, wearing a light-colored shirt, who is presenting the slide.

**Japanese start-up models**

The techno-entrepreneurs in Japan are different. They tend to innovate for larger industrial firms or trading groups and, in the process, help create multi-level business arrangements.

- Larger firms in Japan respect the origins and independence of the smaller suppliers
- Desist from the Western temptation of acquiring promising technologies and firms
- The accent is on letting the smaller start-ups grow into mature, innovative enterprises

- Typically committed to their technologies and attached to their groups
- Evolve to higher levels due to a positive synergy from parent and supplier relationships

The Japanese start-ups typically grow with the larger firms and groups as well as with support from the giant trading groups, and become global enterprises in their own right

Structurally, the Japanese industrial ecosystem enables technological innovation across the value chain, and provides the motive force for start-ups to remain independent and yet collaborative

So that is the western model and when we look at the western model and when we absorb the best facets, we should also be open to absorbing the best facet which I mentioned of keeping ownership and management separate after the earlier targets on entrepreneur are achieved.

So, let us switch tracks to Japanese start-up models, how would they work? The techno-entrepreneurship in Japan are different. They typically tend to innovate for larger

industrial firms, trading groups or for large universities. And in this process, they create multi-level business arrangements.

As study of Japanese history of start-ups has revealed that the Japanese start-ups typically grow with the larger firms, or they grow with the larger trading houses like Sumitomo and Mitsui, and they also have got support from the governmental systems as we will consider later.

And as a result of this multifaceted support and also the emphasis on technology, these enterprises are able to become global enterprises in their own right. So, when we look at big companies which are in various fields in start-up area, you will realize how the so-called component manufacturers have become global component manufacturers in the Japanese system.

So, the Japanese start-ups are typically committed to their technologies, they are very focused and then they try to achieve perfection in their technologies and groups are evolved around the technological anchors. And the positive synergy that are accrues between these component maker or the ancillary supplier and the parent corporation with the linkage of technology helps them become bigger. There is a synergy.

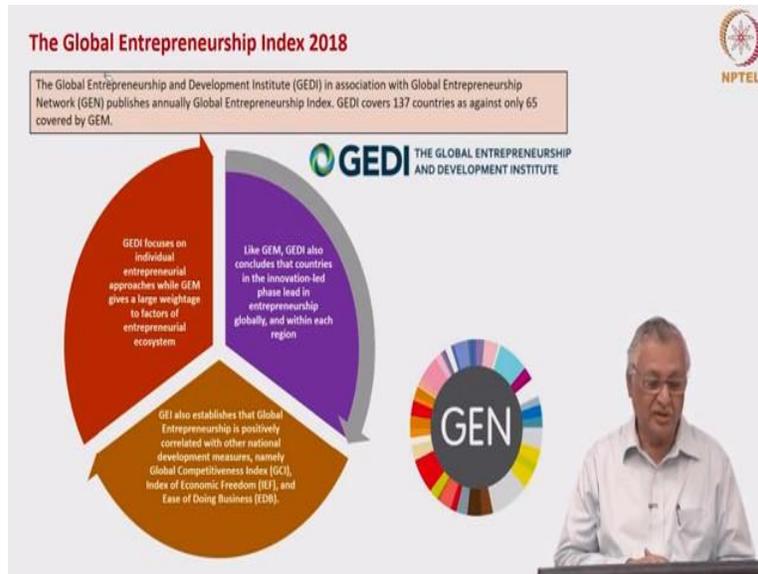
And as opposed to the western system, larger firms in Japan are respectful of the origins of the small firms and there is no intention or an aggression to acquire biotech companies or acquire component suppliers and become bigger in their own way.

So, large firms keep a safe and respectful distance from the smaller start-ups and allow them to be independent and allow them to grow, then the accent is also on, allowing development of those technologies within the start-up system making them more mature and more innovative rather than making them more attractive for acquisition.

So as a result, what you have is a more virtuous start-up growing into a bigger start-up, growing into a major conglomerate of start-up ecosystem rather than big companies taking smaller start-ups into their ecosystem, and then again new start-ups have to come up. So, there is a big difference in the way the Japanese ecosystem operates with reference to the start-ups.

But as a result of this respectful way of co-existence of small start-ups in a technologically innovative way along with the big companies also technologically innovative, we have got technology innovation across the value chain which is self-sustaining and it also is providing the motive force for the start-ups to remain independent yet be collaborative within the overall production and development network.

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We will also switch tracks to look at how the global entrepreneurship index 2018 ranks, our country along with other countries. GEDI covers more countries than what GEM covers. And this study is done by the global entrepreneurship and development institute along with global entrepreneurship network.

It also publishes annually the global entrepreneurship index. So GEDI focuses on individual entrepreneurial approaches, while GEM gives large weightage to factors of entrepreneurial ecosystem. So, whereas GEM is factor-driven, GEDI is individual entrepreneurial development. And in doing this analysis, like GEM, GEDI also concludes that countries in the innovation-led start-up phase lead entrepreneurship globally and within each region.

So, innovation is considered the main important factor in boosting start-up across nations. Global entrepreneurship index also establishes that global entrepreneurship is positively

co-related with other national development measures, namely global competitiveness index, index of economic freedom and ease of doing business. Again, these indexes have been mentioned in the earlier review as well.

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**Determinants of the Global Entrepreneurship Index**

Component of the Entrepreneurship Ecosystem	What does it measure?
<b>Pillar 1: Opportunity Perception</b>	Can the population identify opportunities to start a business and does the institutional environment make it possible to act on those opportunities?
<b>Pillar 2: Startup Skills</b>	Does the population have the skills necessary to start a business based on their own perceptions and the availability of tertiary education?
<b>Pillar 3: Risk Acceptance</b>	Are individuals willing to take the risk of starting a business? Is the environment relatively low risk or do unstable institutions add additional risk to starting a business?
<b>Pillar 4: Networking</b>	Do entrepreneurs know each other and how geographically concentrated are their networks?
<b>Pillar 5: Cultural Support</b>	How does the country view entrepreneurship? Is it easy to choose entrepreneurship or does corruption make entrepreneurship difficult relative to other career paths?
<b>Pillar 6: Opportunity Perception</b>	Are entrepreneurs motivated by opportunity rather than necessity and does governance make the choice to be an entrepreneur easy?
<b>Pillar 7: Technology Absorption</b>	Is the technology sector large and can businesses rapidly absorb new technology?
<b>Pillar 8: Human Capital</b>	Are entrepreneurs highly educated, well trained in business and able to move freely in the labor market?
<b>Pillar 9: Competition</b>	Are entrepreneurs creating unique products and services and able to enter the market with them?
<b>Pillar 10: Product Innovation</b>	Is the country able to develop new products and integrate new technology?
<b>Pillar 11: Process Innovation</b>	Do businesses use new technology and are they able access high quality human capital in STEM fields?
<b>Pillar 12: High Growth</b>	Do businesses intend to grow and have the strategic capacity to achieve this growth?
<b>Pillar 13: Internationalization</b>	Do entrepreneurs want to enter global markets and is the economy complex enough to produce ideas that are valuable globally?
<b>Pillar 14: Risk Capital</b>	Is capital available from both individual and institutional investors?

Source: Global Entrepreneurship Index 2018



So, there are 14 pillars based on which the global entrepreneurship index is ranked. One, how do people pursue the opportunity? What are the kinds of start-ups skills that are available in a nation? What is the level of risk acceptance in the nation, are individuals willing to take the risk of starting a business? Is the environment that is available relatively low risk environment or do unstable institutions add additional risk to starting a business?

Networking, do entrepreneurs have a network of their own, knowing each other? And how geographically located and concentrated are the networks? For example, in California, you have a network. Does India have a network like that? And we do have like Bangalore, we have Gurugram, we have Pune, we have Hyderabad. So networking is one area of enquiry by the GEI.

Then what kind of cultural support that is available in the country for entrepreneurship development? Then the sixth pillar is opportunity perception, are entrepreneurs fascinated by the opportunity or pushed into entrepreneurship by lack of opportunities? So, in the

session on entrepreneurship and employment, we consider how lack of formal job opportunities act as negative motivation for people to become entrepreneurs.

Therefore, true blood entrepreneurial system should require entrepreneurs who are engaged by the opportunity rather than motivated by lack of opportunity for employment. That is one important pillar. Technology absorption. Is the technology development sector large enough to fund technological impulses of various start-up companies? And also business, are they ready to absorb these new technologies.

Human capital, are entrepreneurs highly educated, well-trained in business and are able to move freely in the labor market? Competition. Are entrepreneurs able to create unique products and services and are able to enter the markets with them? Another question, product innovation. How is the country poised in terms of development of new products and how these new products are getting integrated in terms of technology into the actual deliverable products in the market place?

And what kind of process innovation supplements product innovation? Do businesses use new technology and are they able to access high-quality human capital in the STEM fields? High growth. What is the perspective of industry in terms of growth, they want to grow fast? Do they have this strategic capability to achieve this growth?

Then internationalization, do entrepreneurs want to remain cocoon in their domestic economies or they want enter global markets? And is the economy complex enough or developed enough to provide products and ideas which could find a place in the global value chain? The 14<sup>th</sup> pillar is risk capital. Is capital available from both individual and institutional investors?

So, from the first pillar of opportunity perception to the 14<sup>th</sup> pillar of risk capital, not necessarily in any order of importance, we have 14 aspects which we measure entrepreneurial capability of a nation.

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**The Global Entrepreneurship Index**  
 (Index Rank of Top 10 & Other Select Countries, including BRICS countries, amongst 138 Countries – 2018)



Global Rank	Country	Score (%)	Global Rank	Country	Score (%)
1	United States	84	18	Taiwan	59
2	Switzerland	80	24	Korea, S.	54
3	Canada	79	27	Singapore	53
4	United Kingdom	78	34	Spain	45
5	Australia	75	42	Italy	41
6	Denmark	74	43	China	41
7	Iceland	74	57	South Africa	33
8	Ireland	74	68	India	28
9	Sweden	73	78	Russia	25
10	France	69	87	Vietnam	23
16	Israel	65	98	Brazil	20

From an Indian perspective, being in the bottom half of the global entrepreneurship index is not a comfortable situation. Being a few scores and ranks lower than China is also not helpful. Compared to the developed world, the gap in terms of stand-alone score as well as relative rank is worrisome, and needs to be bridged even as India aspires to be (and will be) the third largest global economy by scale.

According to GEDI, improving the conditions for entrepreneurship in India by 20% could add USD 3.3 trillion to the economy.

Source: Global Entrepreneurship Index 2018



So, the global entrepreneurship index looks at the rank of 16 countries in this case out of the 138 countries which the survey has covered and you will find that India has a rank which is not as high as one would like to have. We have a score of 28 percent and we have a rank of 68. Again, it is coming midway in terms of the overall 138 ranks we have in this study.

United States ranked the highest with a global rank of 1 and score of 84 percent, Switzerland at 80 percent, Canada 79 percent, United Kingdom 78 percent. We have got amongst the BRIC countries, China at 43 ahead of us score of 41 percent; India 68 at 28 percent, South Africa ahead of us with a score of 33 percent and rank of 57, Russia behind us with a score of 25 percent and rank of 78; and Brazil probably the lowest with a score of 20 percent and global rank of 98.

So, from an Indian perspective, our being in the bottom half of global entrepreneurship index is not a comfortable situation. Being a few scores and ranks lower than China is also not helpful. Compared to the developed world, the big gap in terms of standalone score as well as in relative ranking is worrisome and needs to be bridged as India aspires to be and certainly will be the third largest global economy by scale in future.

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## Hybrid start-up models for India



Given the constraints the Indian start-ups face in accessing technology, finance and markets, and the attachment of the entrepreneurs to continued ownership of the firms they founded, a hybrid model is relevant for Indian start-ups, which typically fall into one or more of the following classes.



Start-ups which achieve a virtuous combination of technological innovation, operational efficiency, and market penetration would be in a position to drive into a growth phase on their own.



So, what is, again I would emphasize. For us to bridge this gap, we need a hybrid start-up model. And the start-up models are of three types, one, start-ups that make better use of available technology, so digital computerization is there. Start-ups are using better use of the available technology through apps and various digital parameters.

There are start-ups which make their operations more competitive, more efficient. And the third one is start-ups that access or create new market segments. Ideally, if your start-up works in the intersection of all these three circles that is a start-up which is technologically more efficient, operationally more competitive and also market creative rather than just market seeking.

That start-up would be really a hybrid start-up and the rest of the features of these three models.

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**Different Strategic Approaches for Start-ups**

Each class of firm could have its distinctive strategic orientation which would serve well



Innovative Technologists	<ul style="list-style-type: none"><li>• Early PoC of product/service</li><li>• Scale-up/ monetise</li></ul>
Creative Marketers	<ul style="list-style-type: none"><li>• In-license product/service</li><li>• Outsource manufacture</li></ul>
Operations Leaders	<ul style="list-style-type: none"><li>• Cost-competitiveness</li><li>• Market entry and growth</li></ul>

This could enable such firms build their valuation profiles in ways appropriate to their competencies

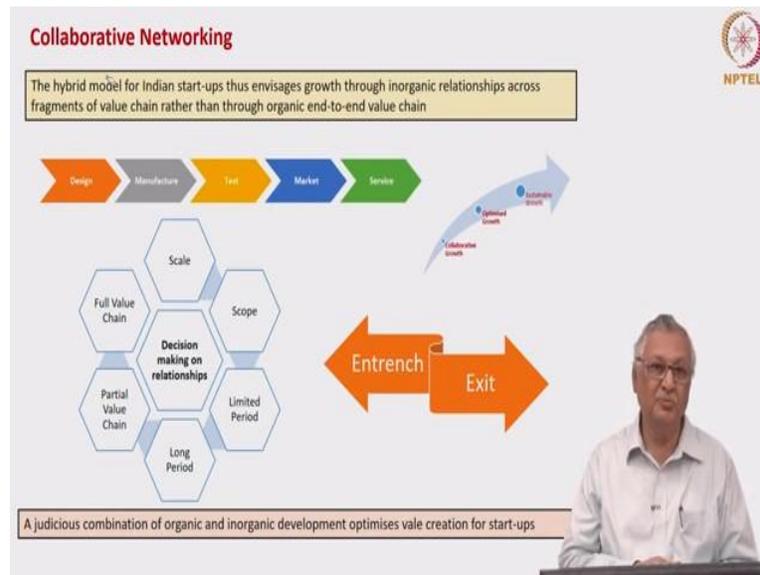


So how do we get to that? Each class of firms could have its own ideas. First, we should have innovative technologists who will be able to achieve early proof of concept for the minimum viable product. People who will be able to scale up the product from the idea stage to the prototype stage to the minimum viable product and finally to the ultimate desirable product, a concept which we considered earlier.

How do we then monetize through commercialization? The second group is creative marketers who can in-license products, services and components and who can outsource manufacturing so that they will be in a position to reach the market earlier. And the third group is the operations leaders who are very cost competitive in whatever they do.

And they know how to secure a foothold in the market and how to grow the market. If the companies have got these three groups of people, it would enable such start-up firms build their valuation profiles in ways appropriate to their competencies.

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So, what should be the hybrid model in terms of the collaborative networking? In organic relationships across the value chain that has been proved to be one of the very important ways in which the value chain can be strengthened with timeliness. From design and manufacture to test and market to service, there is a value chain.

And where do we need to collaborate with other companies? How can we achieve optimized growth and how can we reach a sustainable growth, depends on the kind of collaborative network we are able to forge across the value chain. So, the decision again is that we should entrench houses for perpetuity or should we exit at the earliest opportunity.

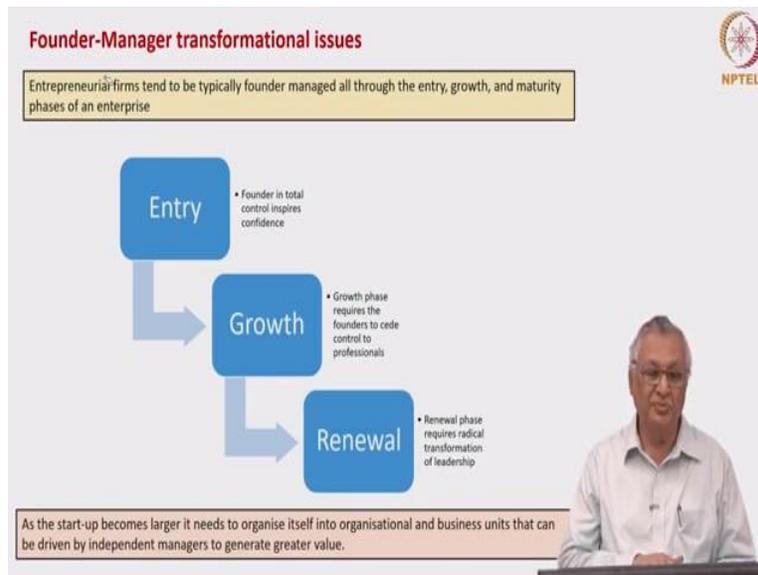
The answer could be somewhere in between on a contextual basis. If you are able to provide to a start-up or if the start-up is able to provide for itself, a judicious combination of organic and inorganic development, the value chain, value creation for the start-ups would be optimized. So, what are the factors which are there in terms of decision making? What kind of scale I should have in each of the value chain components?

Second, what kind of scope I should have in terms of different product market groupings we should have? Should we have a relationship in a limited period or for a longer period? What is the kind of value chain we should consider for collaborative networking? Should

it be partial value chain or full value chain? So, between scale and scope, between limited period and long period and between partial value chain and full value chain, there are certain decision-making ideas.

There are certain decision-making options which if judiciously exercised, they can provide value chain optimization for a start-up.

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So, when we say this, we also come to grips with the founder-manager transformational issues. As we said earlier, during the early phase of a start-up, it is very important that the ownership and management are kept together and there is complete commitment from both the sides of an individual persona that I am owning this and I should make it work. That helps very much in the entry phase.

But in the growth phase, there is a requirement for founders to start seeding control to the professionals. And finally, in the renewal phase, you may require radical transformation of leadership.

So as the start-up becomes larger, how would it retain its entrepreneurial capability as also grow professionally, that is where constitution as a business unit, constitution as a functional unit or as a business unit will become important.

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**Filling Passion Gap, if any**

While no professional manager can bring the same level and type of passion and the feel of a founder-leader to an enterprise, start-ups need to find ways and means of institutionalising the entrepreneurial passion and feel through diversified professionalization

Indian start-ups which moved into the big league have done so on the basis of 'technology-efficiency-market' model that is expressed and executed through a talented organisation; professional transition helps founders become free to engage in serial entrepreneurship, for profit or non-profit

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So as a hypothesis, we can always say that no professional would be able to bring to a start-up the same level of passion which the founder-promoter has been able to provide, that is because the entrepreneurs are of a different class as we have considered in the very first few sessions and that level of passion and energy cannot be substituted by professional.

But the professional brings a different set of competencies and different set of approaches to development of a firm. So, start-ups need to find ways and means of institutionalizing the entrepreneurial capability, institutionalizing the entrepreneurial passion and also the feel which the promoter has towards market development, towards product development through diversified professionalization.

It cannot be just one for one replacement of a founder by a professional. It should be a real search for an entrepreneurial oriented professional to fill the gap that would be created if an entrepreneur were to move out. So, leadership transitions are an extremely important point.

So, if we have professional passion and if we say that these three pillars which we have discussed earlier, which is the technology, the efficiency and market or very important for a start-up, how does the organization structure evolve? So, we have on the right side a

very classic organizational structure where we have a CEO, we have a Chief Technology Officer, we have a Chief Commercial Officer.

And Chief Technological Officer will have ops under him, quality R & D under him, whereas the Chief Commercial Officer will have marketing and service. We could also look at another box where we have Chief Corporate Officer who will look at various other supportive functions like business planning, business development, finance, corporate activities, corporate affairs, secretarial, legal, et cetera, et cetera.

So, you have a full -fledged organization. Many of these functions would be undertaken by promoters as part of a multitasking paradigm. But as professionalization happens, this organizational structuring becomes very important and it needs to be executed through a talented organization.

And once the professionals allow the promoters move out of their companies, the promoters become free to look at other entrepreneurial ventures or pursue social entrepreneurship or just be investors and then help other companies to go up the start-up value chain.

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**Leveraging Indian Professional Attributes**

The suggested organisational model is based on the unique Indian psyche that complies as much as it commands; that follows as much as it leads; and that is as much professional as it is entrepreneurial

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• For the start-up cause	Loyalty	Frugality	• Ensuring least-cost solutions
• Coming up with creative solutions	Innovation	Execution	• Agile multi-tasking

The success of large Indian private and public sector corporations is related to the diversified ownership model that is extended to individual organisational units of an enterprise. There is no reason why start-ups cannot benefit from professionalization of their organisations

So how does one leverage the professional attributes? Now the Indian psyche has got 4 quadrants. One is a strong ethic of loyalty. The loyalty ethic tends to be personal to the

leader at one level, it also tends to be personal to the company or the institution which one is serving.

There are many reasons why in spite of significant wage differences people do not move from one area to the other area while the family circumstances could be one reason, the other reason is that people tend to develop a strong institutional roots or linkages with the parent institution with whom they have been working.

Therefore, loyalty is one important part of the individual DNA in the Indian system. So that loyalty when it is coupled with the start-up cause will be a very significant professional attribute that could be leveraged.

Second, frugality, Indian system always looks at developing products with the least cost motive driving operations, which is one of the reasons why the generic pharmaceutical products have been very successful in the Indian market both as bulk drugs and formulations because the design of facility is frugal, the facilities, equipment is frugal and the methods of manufacture are frugal.

Frugality does not mean that the quality is comprised by any manner. Frugality means that what is required for the purpose is undertaken. So if you are looking at designing a clean room or designing a clean corridor in a pharmaceutical factory, there is no need to design a corridor which is, let us say, 10-meter wide, when you do not have products or equipment which have that level of movement requirement of that size.

So, the moment you design the corridors, the clean rooms, in proportion to the activity which you are undertaking, obviously then your HVAC requirements will be downsized and the whole design will become frugal.

Similarly, when you have many satellite units rather than one monolithic unit supplying various services to the facility, then you will be able to get greater economies and the fix costs of running a service system will be more optimized depending upon the demand requirement. So, there are several ways in which a designer can bring in least-cost solutions to facility design.

The third one is innovation which is coming up with creative solutions for solving a problem. And the fourth one is agile multitasking. So, the success of large public sector and private sector corporations in the past has been related to diversified ownership model that is extended to individual organizational units of an enterprise.

So similarly, start-ups can also use these four capabilities which a typical Indian professional has, which is the loyalty, second is frugality and third one is innovation and fourth one is execution to ensure that the start-ups are efficient and effective.

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**More start-ups fail than succeed – The Need for a Different Model**

The failure rate in start-ups is very high, even globally. India, as a capital-scarce economy, can ill-afford the duplication of aggressive loss-funding model of start-ups adopted in the West. A different model adaptive to the Indian psyche should be pursued to ensure capital optimisation

NPTEL

Indian Start-up Model must have...

- Survival of the fittest
- Markets will correct by themselves
- Capitalistic View
- Laissez faire
- Total freedom
- No policy prescription
- Resource profligacy
- Resource drought
- Economic Vicissitudes

Scalability Sustainability

India needs to be on a virtuous cycle of continued growth and employment, with minimal wastages in investment, in its quest to reach its full potential

The slide features a diagram with three main boxes: 'Capitalistic View' (left), 'Laissez faire' (center), and 'Economic Vicissitudes' (right). 'Capitalistic View' includes 'Survival of the fittest' and 'Markets will correct by themselves'. 'Laissez faire' includes 'Total freedom' and 'No policy prescription'. 'Economic Vicissitudes' includes 'Resource profligacy' and 'Resource drought'. A blue arrow points from 'Capitalistic View' to 'Laissez faire', and another from 'Laissez faire' to 'Economic Vicissitudes'. A box above 'Economic Vicissitudes' says 'Indian Start-up Model must have...'. Below it, two orange arrows labeled 'Scalability' and 'Sustainability' point left and right respectively. A speaker is visible in the bottom right corner.

We discussed earlier that more start-ups fail than succeed. There is this familiar number of 1 out of 10 start-ups becoming successful. We have the Illinois model where 67 percent of the start-ups have been either active or successful. So, what kind of model should we adopt? India is a capital-scarce economy.

Right now, start-ups are getting funded, both for the operations as well as for the losses. But how long this bubble will continue? That is our pre-question. Even a mega investment corporation like SoftBank had to realize that funding of models which are not self-sustaining would work in the long term through the WeWork model.

And there are expectations that these kind of investment bubble which funds losses and mindless expansion could be tested by the investor impatience as we go forward. India

must look at these kinds of trends and realize also in this process that we are a capital-scarce economy and we cannot ill-afford replication of the aggressive loss-funding model of start-ups that has been adopted in the west.

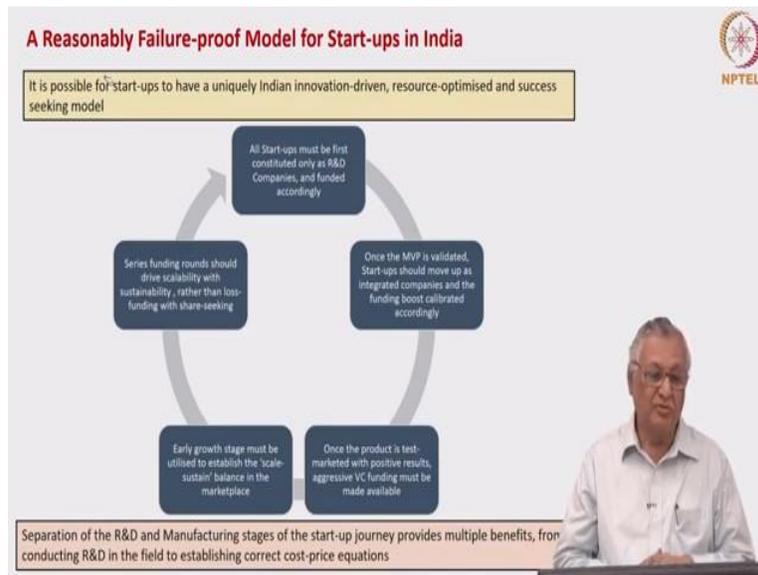
We need to have a different model which is adaptive to the Indian psyche and which measures every penny of capital we put in to ensure that we have got a good return on that pattern. So, the capitalistic view is of course the survival of the fittest and markets will eventually correct by themselves. So, the view here is that okay, we will fund losses.

There could be an investment bubble many start-ups would blow up. But eventually fair sense will return to the investors, the start-up founders as well as the overall industrial and business system and things will be better. That is the capitalistic view. It also supported Laissez faire assumption that we should give total freedom for industries and businessmen to operate and there should not be any policy prescription.

So as a result of that, when this capitalistic view supported by Laissez faire approach works, we have resource profligacy followed by resource drought. There would be economic vicissitudes. Whereas we cannot afford to have that kind of rollercoaster ride in our start-up system, we should have steadiness, we should have scalability, we should have sustainability.

So, we need to have a virtuous cycle of continuous growth and employment, we should have minimum wastage in the process and we should have optimized investments as we try to reach our full potential.

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So, I would propose a reasonably failure proof model for start-ups in India. What should it be? It should be typically Indian innovation driven, it should be resource optimized and success seeking rather than market share seeking. We should define what is success? Success is not merely having the highest number of clicks or highest number of footfalls, or having highest market share.

Success is also having the ability to fund your own operations of the initial gestation period. So, one of the ways in which we can do this is to look at this start-up activity in terms of two different streams. One is the R & D stream, second is the manufacturing and commercialization stream.

Typically, the way it happens in the current start-up situation is that the founder comes up with a very novel idea, very brilliant idea which excites the investors and the investors are willing to write checks. Not merely in terms of developing the product, also in terms of capturing a market. So as a result, even as the product is getting developed as an R&D product, there is an anxiety on the part of the founder to make the product reach to the market as early as possible.

In this process of trying to fly two tracks at the same time, two things happen. One, product development is compromised. Two, the total resource requirement which is

required for putting a start-up on to a commercialization stage is underestimated. Therefore, one of the ways in which you can handle this is to constitute all start-ups first only as R and D companies and fund accordingly.

So, constitution as an R and D company means what? It means that there should be a reasonable understanding of the development time cycle for a product including alpha testing and beta testing and ensuring that what comes out is a fully proven product. And that timeline could be one year for certain type of products and it could be 2 to 3 years for certain other types of product.

So, when the start-up is constituted as an R and D company and as also funded, then the entire investor founder dynamics will be different. Secondly, it should move to the regular start-up stage once the MVP is validated and then they should get the venture capital of much larger levels, so that it can move on the commercialization cycle as per a calibrated form. Once this product is test marketed, venture capital funding should be more aggressive and must be made available.

Then early growth stage must be utilized to establish the scale sustained balance in the marketplace. And finally, series funding rounds should drive scalability with sustainability and by that point of time the start-up would become a mainstream company.

The key difference in this model compared to the existing model which is operating in the country is that start-ups will be seen as R and D companies' prima facie before they move into a R and D cum manufacturing company as the minimum viable product is tested.

So, the separation of R and D and manufacturing stages of the start-up journey provides multiples benefits and it ensures that the R and D is never conducted in the field. R and D is conducted in the laboratory in the proper manner and the product is properly developed.