Entrepreneurship
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Lecture 43
India as A Start-up Nation
Part 1

Hi, friends. Welcome to the course on Entrepreneurship. In this session, we will do a kind of wrap up of whatever we have seen and we will discuss how India can shape up as a start-up nation.

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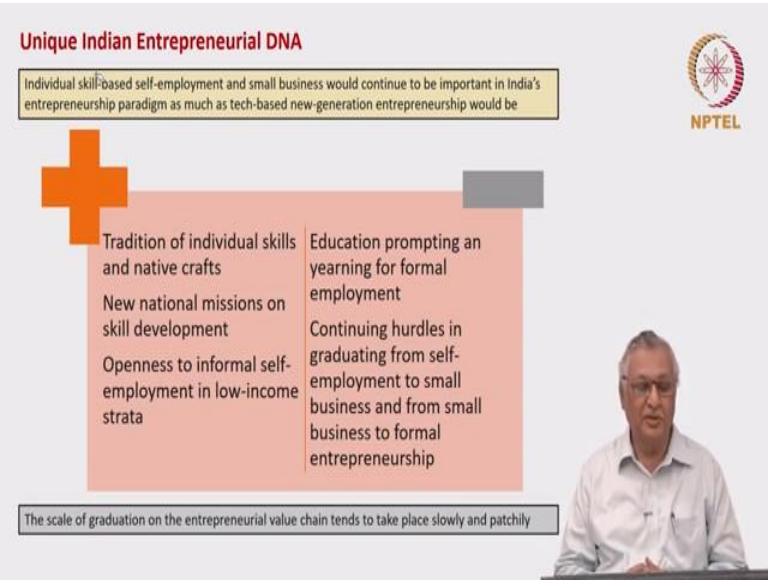

As I covered in certain earlier sessions, we have a very typical and unique Indian entrepreneurial DNA. On one hand we have had self-employment as one of the most important pillars of economic development, small business got added on to that. And these two, self-employment as well as small business, would continue to be very important in India's entrepreneurship development.

However, over the last few years we have also seen lot of tech-based start-up development, entrepreneurial development, which has taken place in the country and we have referred to that in terms of several case studies and examples in our previous sessions.

So, if you look at the Indian entrepreneurial DNA, on the positive side, we have a strong tradition of individual skills and native crafts. It could be ability to craft something, artistry, paint, music, ability to undertake buildings at low cost, whatever it is. There are several individual skills and native crafts that are engrained in the Indian personality system.

We also have the new national missions on skill development. And they look at upgrading these native skills and individual crafts to higher level based on the improved technological canvases which are now available. There is also an openness to informal self-employment in the lower income strata.

On the negative side, we also have our educational system which prompts us to go for employment rather than for entrepreneurship, preferences for secured jobs than for formal entrepreneurship. And also, there are continuing hurdles when we want to graduate from normal education to self-employment and from self-employment to small business and from small business to formal entrepreneurship.

So, the switchover across the three phases of entrepreneurship is not easy. Therefore, what we find is that in spite of the Indian entrepreneurial DNA having significant imprints of entrepreneurship, the graduation or the evolution on the entrepreneur scale is rather slow and also tends to be patchy.

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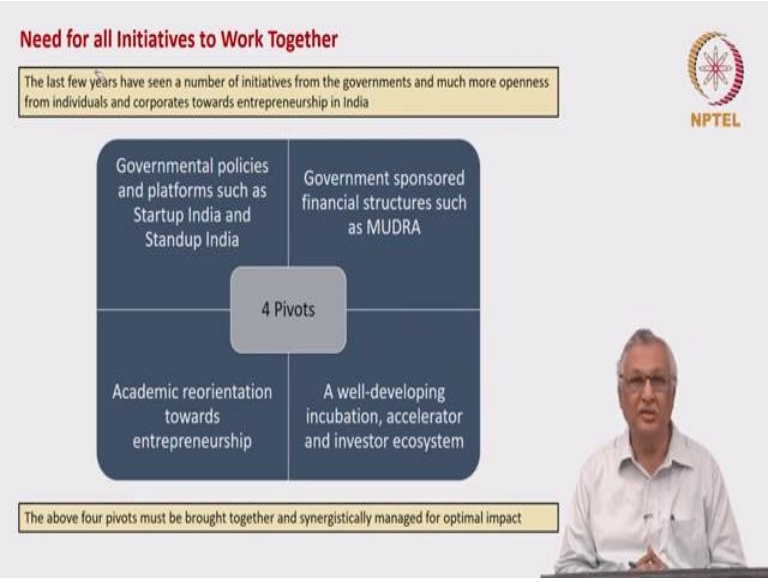

We have had several initiatives over the last few years and we have discussed those initiatives in terms of several topics in the previous sessions. But to summarize some of these things, we have got four pivots. One pivot is governmental policies and platforms which are exclusively designed for entrepreneurship and start-up movement.

These are start-up India and stand-up India. We also have financing arrangements specially sponsored by the government of India like Mudra. This kind of financial inclusion supplements whatever has been there through SIDBI and other banking system channels earlier.

We also have academic reorientation towards entrepreneurship. We have discussed this extensively in our sessions on education and entrepreneurship. And edging to this new reoriented academic infrastructure we also have a well developing incubation, accelerator and investor ecosystem that is developing.

For example, even today, which is November 19, 2019, we have got Atal Innovation Mission sanctioning an incubator at Great Lakes Institute of management. So, these are the kinds of initiatives which are happening all the while. So, what we need to do as a nation is to bring all these four pivots together and provide a holistic space for start-up development in the country.

And that would also help derive synergy from each of the four pillars and then have more holistic and more impactful entrepreneurship.

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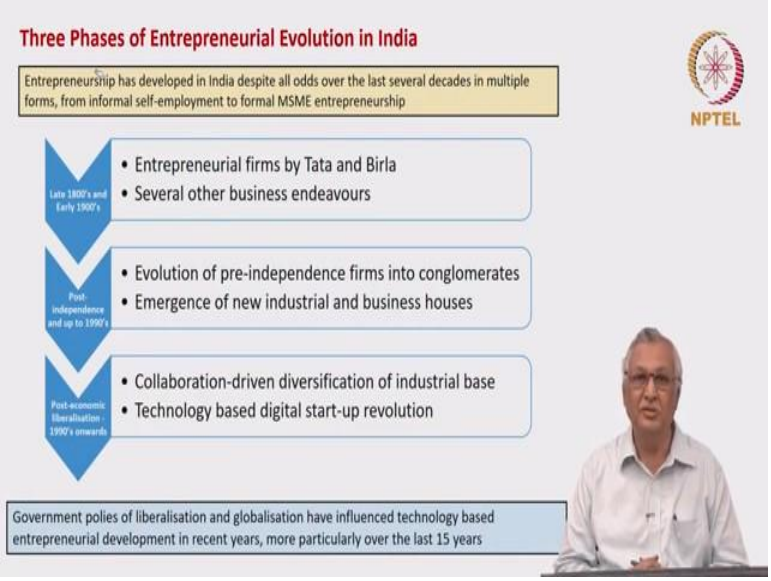

Now when we see the three phases of entrepreneurial evolution which have been occurring from the pre-independence days, let us say you look at 1900s we have had British rule at that point of time, but there was an entrepreneurship then as well. We had business stalwarts like Tata and Birla going against all odds and establishing indigenous enterprises at that point of time.

Subsequently, there have been several entrepreneurial and business endeavors in the 1900s. After independence in 1947, several of those pre-independence firms have evolved themselves into conglomerates. That is because the Indian government became more helpful in establishment of enterprises both in public sector and private sector.

This period also saw emergence of new industrial and business houses in India. But the watershed year was in 1992 when Indian economy was liberalized and there were very significant steps taken for globalization of Indian economy. At that time a new wave of collaboration based diversification of industrial based started occurring and technology based digital start-up revolution started occurring.

Therefore, the government policies of liberalization and globalization have influenced development of technology-based entrepreneurs in recent years and more particularly over the last 15 years.

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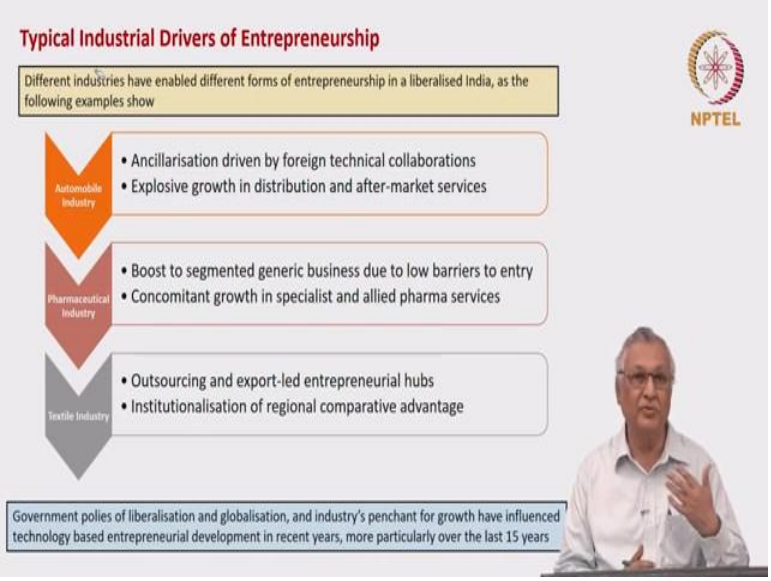

So, when you look at the typical drivers of entrepreneurship, whatever we have seen, this kind of evolution, how has it laid out? We take three examples. When we look at automobile industry, in the 1940s and 1950s as well as in the subsequent automobile revolution of 1980s and 1990s, we have had Ancillarisation driven by foreign technical collaboration.

Several companies were set up as ancillary units to the main original equipment manufacturers and they grew. There was also an explosive growth in distribution in aftermarket services. If you see the 1950s, I do not think we have had more than three major dealerships in the country but today we may account as many as 300 dealerships across various product groups.

Therefore, there has been an explosive growth in distribution and aftermarket activities related to the automobile industry. So, if you see the pharmaceutical industry after India's independence, bulk drug industry took strong routes. Thereafter, the growth has been in

terms of value adding in terms of formulations. This has also resulted to a big boost to provision of generic bulk drugs as well as generic formulations to the global markets.

And that has in turn resulted in a number of supportive units such as capsule makers, machine tool makers for pharmaceuticals, the tablet and capsulation machines and a whole lot of equipment makers like water, purified water systems, pumps, heat pumps, chillers, coolers, you name it several infrastructural facilities were Made in India as a result of this explosion in the pharmaceutical industry.

We also have had clean rooms being developed in India exclusively. They were being imported earlier. Therefore, there was a strong segmented generic business that has arisen in the pharmaceutical industry as a result of liberalization.

Similarly, when the pharmaceutical industry decided to further forward integrate in terms of new drug discovery or power drug delivery systems, we have had several ancillary services coming up, like bio-analytical laboratories, biotechnology laboratories, clinical trial organizations, then data analytics organizations. So there has been whole series of facilities set up in the support area.

So, if you look at the textile industry, there has been one great outsourcing export oriented activity and the growth has been triggered by exclusive export hubs dedicated to textiles and apparels for example, Tirupur. So, we can again say that government policies of liberalization, globalization coupled with industry's penchant for growth they have influenced together a significant entrepreneurial development in recent years, more particularly as I said over the last 15 years.

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So, when we see this change, how has this change expressed itself? There is a new found entrepreneurial confidence in the highly skilled. When I say highly skilled, I also mean highly educated and those who are capable of doing sophisticated science and technology.

So, individuals with the expertise and experience in specific domains began moving into the entrepreneurial domain and setting up entrepreneurial firms and this has two distinct streams of activity. One focused on individual as the customer. So, you look at medical diagnostics we discussed thyro care, we discussed Dr. Lal PathLabs, we discussed Metropolis, we discussed Lister.

So, there are number of medical diagnostics centres that have been established as entrepreneurial firms and they went on to become listed companies as well. Similarly, we have in home foods and groceries, the Zomato's or Swiggy's of this world. We have hospitality services broadly including MakeMyTrip.com and Ola and various other start-ups in that area.

We have real estate services, fitness and wellness like Talwalkar, Fitness Fun and various other things. And in fashion and accessories, we have got Limeroad and various other fashion ecommerce companies including Myntra and Jabong. So individual as the

customer has prompted several digitized start-up ventures based on the expertise and experience of participants in that domain.

But when you look at business as the customer, a completely different type of entrepreneurial development has taken place. We have digital app development that is a major activity that has taken place. Logistics has come up as a new area of B2B activity. Business analytics is one of the more profound areas of entrepreneurial development.

Software as a service, SaaS, business trading portals and customer relationship management, CRM as we call it, these have become very important aspects of B2B businesses. So, a large number of start-ups that are technology based have succeeded in both the spheres, individual as well as in business, creating scale and also in some cases, sustainability as well.

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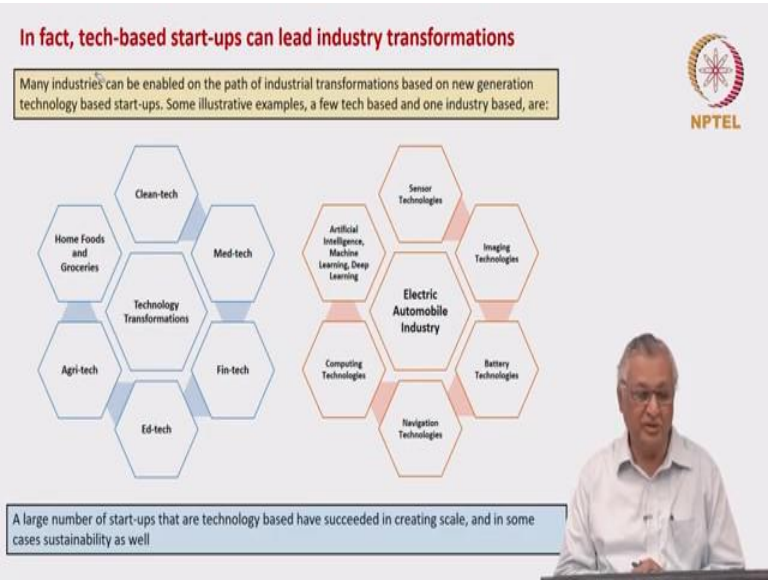

I would say that tech-based start-ups which we have seen over the last few years can indeed transform industries. In this slide we will see illustrative examples, how industrial transformation can occur both thematically as well as with industry specificity.

So, when we look at technology transformations, virtually every field of the industry is likely to be transformed when we have digital technologies and other different kinds of domain-based scientific and technological activities powering new start-ups. For

example, we have clean-tech, it is about having zero waste technologies transforming the way we produce and then recycle products.

We have med tech from, let us say, a simple doctor appointment portal through a comprehensive medical diagnostic capability. We have med tech transforming the healthcare, including also remote tele-medicine. We can also look at the hardware portion of it which is robotic surgery which we have again considered in one of the previous sessions.

Then we have fin-tech, where ability to pay over digital means, be it Paytm kind of payment wallets or in terms of other financial lending, microfinance institutions. We have got a whole new set of fin-tech companies which are not only a kind of shadow banking service but they are emerging to be their own enterprises in their own right.

Then we have Ed-tech which is really online education of courses but also creation of a personalized content and sort of pick and choose curriculum development for both adults as well as students of different age groups. Then we have Agri-tech which could include soil moisture measurement, weather forecasting, we can have drone supplying pesticides and seeds.

So, the possibilities in agriculture management including waste reduction, they are immense. Then we have in terms of home foods and groceries, better balancing of nutrition within the foods which are being made and more sophisticated analytical equipment to ensure that the food processing is at highest level. These are the technology transformations that are likely to happen that have already been happening as well.

So, we will take also one specific industry case here. If you look at electric automobile industry, whole set of new startups are emerging. One obviously is based on sensor technologies. If you want electric automobiles which are also semi-autonomous, we need the ability to sense how the traffic is happening, how the vehicle itself is moving and control the movement of the vehicle.

Then we also need along with that imaging technologies, ability to picture what is happening and then feedback to the onboard computer which is running the vehicle.

Then most importantly, obviously we have battery technologies which will provide the electric vehicles, then navigational technologies also become very important. Computing technologies, the onboard computer and also the ability for the automobile to learn by itself as to what the traffic patterns are, what the driver intentions are and what should be the best way to reach.

You need artificial intelligence machine learning and deep learning powering the whole autonomous vehicle system. So, a large number of technology start-ups would again clear scale and in some cases sustainability as well.

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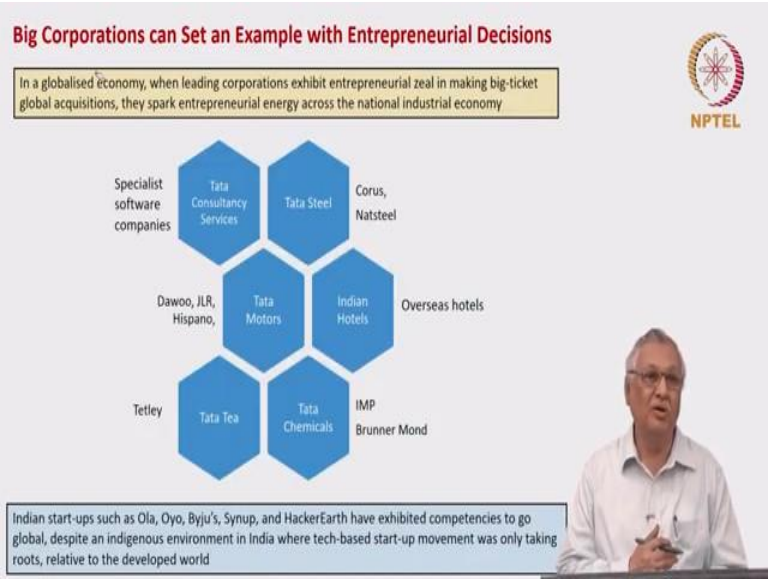

So how does this happen? How does this change from quite self-employment small business based entrepreneurial scene to a very vibrant tech-based entrepreneurial scene happen, though not seeming to be directly connected when large Indian companies make big ticket acquisitions globally.

And they reflect the growth aspirations of a new industrial Inc then there is a spark of entrepreneur energy that happens. Many of the acquisitions tend to be entrepreneurial in nature. When Tata Motors took over JLR, which even big companies such as Ford could not make sustainable and profitable and they felt that it is a kind of very niche area where they cannot operate.

When Tata Motors decided to take over JLR it is definitely an entrepreneurial decision. Similarly, Tata Steel trying to scale up on the global steel capacity paradigm by acquiring Corus or Tata Tea becoming a global beverages company with the acquisition of Tetley and Tata Motors taking over other bus manufacturing and heavy vehicle manufacturing companies from Spain, Korea and other areas.

And Indian Hotels which is the operator and owner of Taj Group of Hotels, when it takes over several overseas hotels. And Tata Chemicals when it does IMP and Brunner Mond acquisitions in the chemical space, you will find that there is a huge entrepreneurial energy that is displayed in the industrial system.

And this in turn prompts several companies to say, hey, why cannot I look outward? Why cannot it be equally global? So as a result, even when tech-based Indian start-up situation is no more than, let us say, a few years old, 5 to 10 years old. We have also companies such as Ola, Oyo, Byju's, Synup, and HackerEarth becoming global start-ups.

We also have a situation where Indian start-up companies are serving as satellite companies to Silicon Valley companies. Therefore, there is a globalization even in the start-up system it is no longer start-ups being set up only for the huge Indian population.

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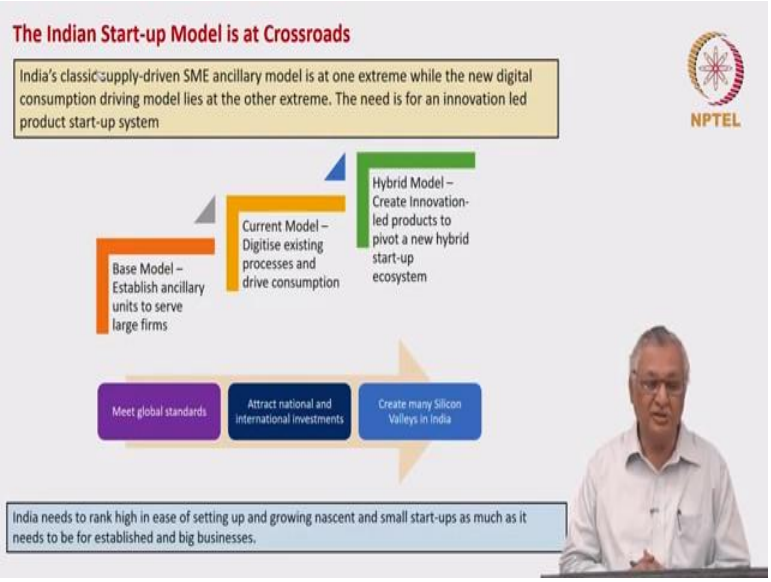

But that said, I can propose that the Indian start-up modeling is at cross roads. The classic SME-based, there is small and medium enterprise based ancillary model is at one extreme. That has been, the creative of the Indian entrepreneurship model from the 1940s and that remains and that is the classic model where there is an assurance of demand from the original equipment manufacturer.

There is probably a supportive technological environment from the collaborators of ancillaries for the original equipment manufacturer and it ensures that a stable demand-supply equation is established in the industry that is at one extreme. And the other extreme or the new digital consumption driving models which we have discussed B2C models and B2B models, that is the other extreme.

So, one is highly manufacturing oriented tied into very strong assured demand-supply equation and the other is exploring and creating new markets and trying to promote consumption, trying to digitize processes. That is the other extreme, but the need is for an innovation led product start-up system, because we find that most of the products are still being discovered and developed, whether it is in the start-up situation or in the big company situation in the west.

So, if we have the base model which is establishing ancillary units to serve large firms, that is stable, that is the great part of it that would continue to power our growth. The current model which is digitizing the existing process and drive consumption, that is also important, because the consumption process itself has to be streamlined the consumer choices have to be improved.

There should be better match between the producers and suppliers and there would be lot more productivity enhancement and efficiency enhancement that would happen by digitization of the existing process. That would also continue. But what we need is a hybrid model which requires innovation-led products to be introduced and which would serve as new pivots for hybrid start-up ecosystem. That is also very important.

So, if this has to happen, we also need to perform three types of input changes. One, whatever we do in the start-up and entrepreneurial area should beat global standards. We should be able to attract national and international standards while seed funding and then angel funding based on the Indian institutional resources or high net worth individuals is appropriate, we should also be able to attract national and international investments for this.

And thirdly, we need to create as many Silicon Valleys as possible in India. So, India needs to rank high in the ease of setting up start-ups as much as we wanted to or we want to rank high in the ease of doing big business. So, we are very focused on doing improvements in ease of doing business for big firms but we also need to step up our efforts in terms of making ease of business a reality for start-ups.

And government is taking very encouraging moves in this, the latest vision statement for 2024 prepared by the department of the industrial promotion and internal trade. Has said that there should be not more than 1 hour which is required to be spent by a start-up on ease of business related matters. So, these are the areas where the government could work on and government would work on.

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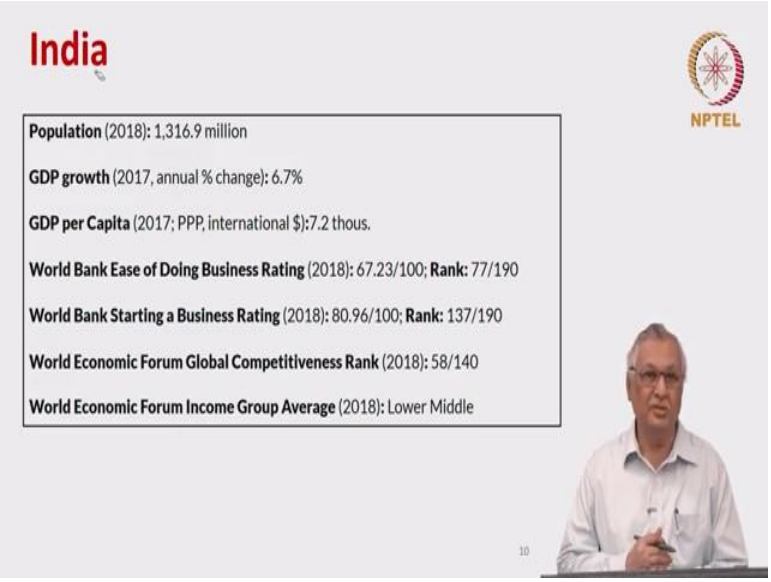

In the next session, we will talk about three different viewpoints that come internationally on the Indian entrepreneurial system. One, we have got an organization which is focusing on India as well as other economies in terms of entrepreneurship banking. And then we have another global entrepreneurship network which looks at the same issue from different angle and we also have the world economic forum which looks at entrepreneurship-related issues.

So, when we look at India overall, we have a population of 1.3 billion and in 2017 we had a GDP growth rate of 6.7 percent which is one of the highest in the world, but today it has decelerated to 6 percent. The hope is still there of course that we would evoke and reach up to higher levels of growth.

GDP per capita we have 7.2 thousand dollars, international dollars. World Bank ease of doing business rating has been consistently moving up. We are at 67 score out of 100 and the rank is 77 out of 190. In terms of World Bank starting a business rating, we have got a score of 81 and rank of 137 which obviously needs to get improved. World economic forum global competitiveness rank is at 58 by 140, and we also have world economic forum income group average to lower middle.

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So, the first study of Indian entrepreneurship which we could cover is the global entrepreneurship monitor which has submitted its 2018-19 report on India's entrepreneurship development. It is positive on India. It says that the government initiatives to strengthen entrepreneurship in India which includes initiatives such as the start-up India and Digital India, they are speaking very highly of India's entrepreneurship development.

Additionally, the Micro Units Development and Refinancing Agency, Mudra Bank, it has given a boost to young people to create businesses out of their ideas and their avocations. Another important significant improvement is the implementation of an online single window system that speeds business approvals and reduces the cost for obtaining permits.

Here again I said that there is a vision document 2024 under discussion for improving this to even as low as 1 hour per month and for reducing insolvency India has introduced a new IBC, Insolvency and Bankruptcy Code which has helped a few companies to restructure themselves or go in to different ownership patterns to be able to service the debts.

Although one may not see how this maybe of immediate use to start-ups, we can also consider that with India becoming home to many unicorns and unicorns themselves

becoming more aggressive in terms of scalability rather that sustainability. There is always the likelihood that at least a few start-ups may knock at the doors of IBC. So, the exit provisions for large structure units would be equally relevant for start-ups.

We also have gone into tax reform. We have had this one nation one tax GST reform which is major mammoth reform that has been undertaken and although there have been some complexities and hurdles in the smooth implementation of this nationwide project, progressively this tax has been simplified and progressively the administration is also getting simplified.

So, one may expect that start-ups, when they start commercialization and get into the GST ambit, the days would be much smoother than they were earlier.

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As I said, global entrepreneurship monitor conducts annually a survey of entrepreneurial activity across multiple phases of business process. In 2018, the 20th year of the survey, several economies participated in this study.

The GEM methodology classifies the economies in terms of three classes: one, factor-driven economy; second, efficiency-driven economy; and third is innovation-driven economy. When we talk about factor-driven economy, that is the easy availability of land, easy availability of human capital, cheap availability of electricity and various other

supportive requirements, including natural resources that factor set is driving the competitive efficiency and entrepreneurial capability of the firm.

The second is the efficiency-driven economy. The way the nation is able to convert those inputs with the help of science and technology that makes a country efficiency-driven economy. And typically, an efficiency-driven economy would also tend to be a factor-driven economy, but there are countries such as Japan which may not have all the factors that are required for very efficient industrial system, nevertheless they have become highly efficient and innovation driven economic system.

The third horizon is the innovation-driven economy where it is the level of innovation that drives the development of the nation. So, India is classified as a factor-driven economy and China is an efficiency-driven economy while certain developed countries are classified as innovation-driven economy.

I would submit that the goal of Indian entrepreneurial system or in broader sense the industrial system should be, to be classified as an innovation-driven economy which also has got the advantages of factor-driven economy and efficiency-driven economy.

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So, these are some of the rankings as per the Global Entrepreneurship Monitor Report 2019, which essentially pertains to the date of 2018. So, there are 9 factors which are

relevant here in terms of their assessment methodology. When you look at those factors which are entrepreneurial finance, cultural and social norms, physical infrastructure, internal market burdens or entry regulation, internal market dynamics, commercial and legal infrastructure and various government policies to support taxes, bureaucracy entrepreneurship programs.

The education level at school stage in terms of entrepreneurship and at post-school stage again in terms of entrepreneurship and the R and D transfers. We will find based on the ranking that we are neither inadequate nor adequate. We are somewhere in middle. So, are getting ranked at around mid-level between the inadequacy and adequacy spectrum does indicate that we got lot of work to do to move out to the high point.

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Self-Perceptions About Entrepreneurship		
	Value	Rank
Perceived opportunities	49.8	20/49
Perceived capabilities	52.2	20/49
Fear of failure	50.1	5/49
Entrepreneurial intentions	20.6	23/48
Activity		
	Value	Rank
Total early-stage Entrepreneurial Activity (TEA)		
TEA 2018	11.4	22/48
TEA 2017	9.3	31/54
TEA 2016	10.6	31/65
Established business ownership rate	7.0	24/48
Entrepreneurial Employee Activity- EEA	0.8	44/49
Motivational Index		
	Value	Rank/48
Improvement-Driven Opportunity/Necessity Motive	0.5	47T

There are also various perceptions within the entrepreneurs and the business system in India about entrepreneurship. So where does India rank? In terms of pursued opportunities, again midway 20 out of 49; in terms of perceived capabilities, again midway, but when you look up at the fear of failure, one would say that it is really high.

Entrepreneurial intensions are also pretty high. So, when we look at the early stage entrepreneurial activity, again we are pointing to the mid-range of this score.

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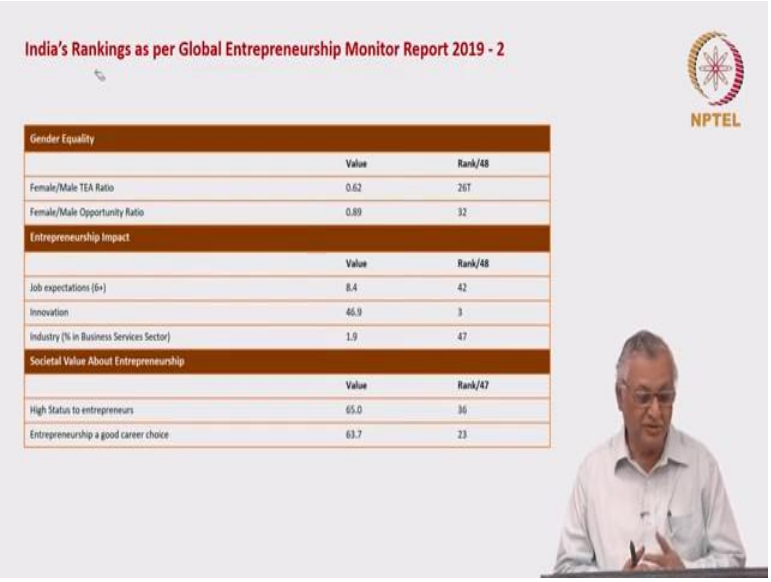

Gender Equality		
	Value	Rank/48
Female/Male TEA Ratio	0.62	26T
Female/Male Opportunity Ratio	0.89	32
Entrepreneurship Impact		
	Value	Rank/48
Job expectations (6+)	8.4	42
Innovation	46.9	3
Industry (% in Business Services Sector)	1.9	47
Societal Value About Entrepreneurship		
	Value	Rank/47
High Status to entrepreneurs	65.0	36
Entrepreneurship a good career choice	63.7	23

In terms of gender equality, there are certain ranks, job expectations, there are certain ranks, societal value about entrepreneurship, the rank is pretty good and entrepreneurship as a career choice, the ranking is a bit lower.

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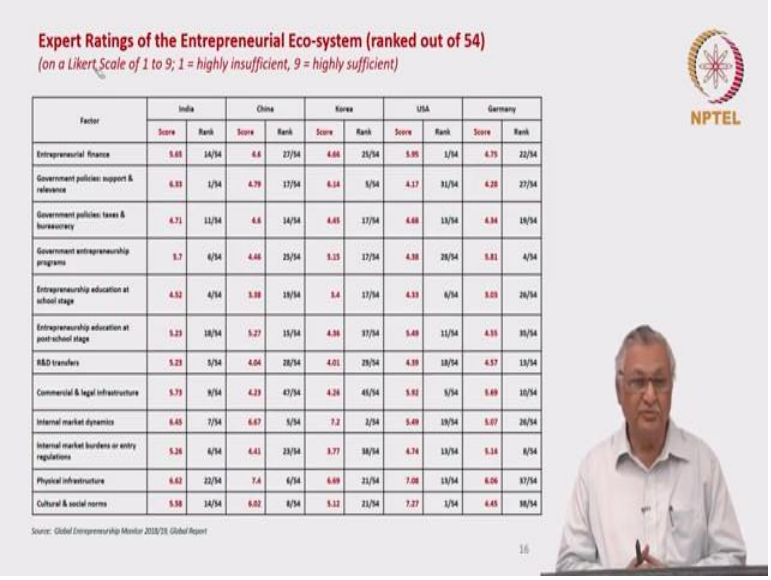

Factor	India		China		Korea		USA		Germany	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Entrepreneurial finance	5.65	14/54	4.6	27/54	4.66	25/54	5.95	1/54	4.75	22/54
Government policies: support & relevance	6.33	1/54	4.79	17/54	6.14	5/54	4.17	31/54	4.28	27/54
Government policies: taxes & bureaucracy	4.71	11/54	4.6	14/54	4.45	17/54	4.68	13/54	4.34	19/54
Government entrepreneurship programs	5.7	6/54	4.46	25/54	5.15	17/54	4.38	28/54	5.81	4/54
Entrepreneurship education at school stage	4.52	4/54	3.38	19/54	3.4	17/54	4.33	6/54	3.03	26/54
Entrepreneurship education at post-school stage	5.23	18/54	5.27	15/54	4.36	37/54	5.49	11/54	4.55	35/54
R&D transfers	5.23	5/54	4.04	28/54	4.01	29/54	4.39	18/54	4.57	13/54
Commercial & legal infrastructure	5.73	9/54	4.23	47/54	4.26	45/54	5.92	5/54	5.69	10/54
Internal market dynamics	6.45	7/54	6.67	5/54	7.2	2/54	5.49	19/54	5.07	26/54
Internal market burdens or entry regulations	5.26	6/54	4.41	23/54	3.77	38/54	4.74	13/54	5.14	8/54
Physical infrastructure	6.62	22/54	7.4	6/54	6.69	21/54	7.08	13/54	6.06	37/54
Cultural & social norms	5.38	14/54	6.02	8/54	5.12	21/54	7.27	1/54	4.45	38/54

Source: Global Entrepreneurship Monitor 2018/19 Global Report

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So, when we look at the entrepreneurial ecosystem when it is ranked out of 54 countries on these 9 parameters, we will see here the rankings as well as the scores which move from 4 to 6 in a manner of speaking. And it is not that many other countries which are

well developed like China, Korea, USA, Germany it is not that they are at the highest points of score.

But then there are countries where scoring is very high. For example, if you look at internal market dynamics, China is at the same level as India is. And in terms of physical infrastructure, again China is at the same level as India in terms of the scoring. But the score levels are so narrow that you will find that the rank of China in terms of physical infrastructure is 6 out of 54, whereas India is only 22 out of 54.

So, what we need to see is not merely this score, but where we rank in terms of the ranking. What is very heartening is that in terms of government policies and their support and relevance, India is ranking number 1 compared to various other countries which are not close, except probably Korea which is ranking number 5.

But in terms of certain other areas such as entrepreneurship education at post-school stage, probably we need to do something more and we also need to do something more in terms of physical infrastructure. So, the study of these parameters overtime will give us how India has been moving, what we have presented here is the 2018 situation as represented in the 2019 report.

But more longitudinal analysis of how India is moving. We will throw some light on where we need to work further and where we are probably on an autopilot in terms of further development.

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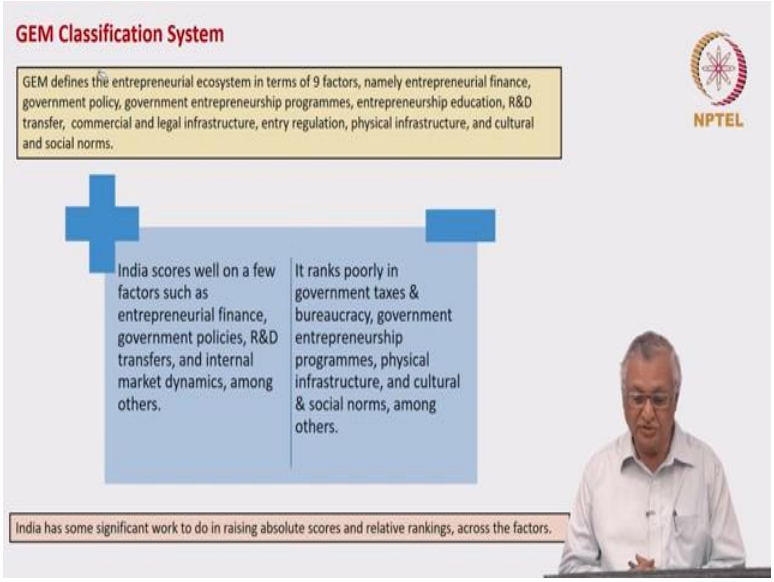

So, to summarize the India scores very well, on a few factors such as entrepreneurial finance, normal policies, R and D transfers and internal market dynamics among others, however we are pouring poorly in terms of taxes and bureaucracy, government entrepreneurship program, physical infrastructure, cultural and social norms among others.

And as I said, the government is committing itself to upgrade some of these features. So, in the future ranking certainly India will figure better than what it has figured in this report.

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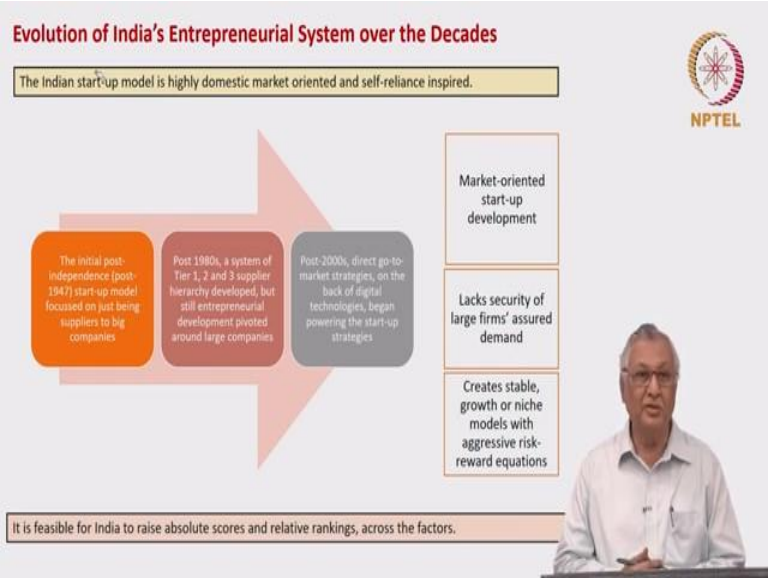

Now why is that we have some kind of lack? Because the Indian start-up system has been highly domestic market oriented and it is inspired by self-reliance. Initial ventures have been set up to launch products with foreign collaborations and over a period of time, those collaborations have given way to independent self-reliance oriented expansion and diversification activities.

So the model which started in the 1940s and in 50s as supplier to large companies evolved into a much larger and a more scientific structural system of tier 1, tier 2, tier 3 suppliers which ensure that the companies which started just as component suppliers in the past, progressed as tier 1 suppliers and they in turn provided capability for tier 2 and tier 3 suppliers to come.

Therefore, there was a diffusion of ancillary development that was pivoted, not only on marginal component companies but essentially on the larger OEM manufacturers. Then post 2000s, we had direct go-to-market strategies on the back of digital technologies and that began powering the start-up strategies.

So today if you really look at the new start-up wave, we have got lot of market-oriented start-up development. Unfortunately, it lacks security of large firms assured demand. So if you, let us say, if you look at Medtech and then we see lots of initiatives to do

digitization of healthcare systems, I do not think that they have the same assurance as let us say spring supplier had from automobile manufacturer.

They do not have the same supplier for, same assurance from either the public hospital system or from the private hospital system saying that look in start-up you are doing great things, in healthcare, digitization I am going to support you.

Therefore, what you see here is market oriented digital action by start-ups but it is lacking the security of large firms assured demand. And if only it were there, I would say that the start-up demand will grow, start-up movement will grow by leaps and bonds. But this kind of self-reliant and self-inspired system also creates certain stable growth or niche models with aggressive risk reward systems which are able to write out the initial shocks.

So, given this kind of evolution that is taking place, over the years we can assume that the country will be able to raise the absolute scores as well as the relative rankings across the factors.

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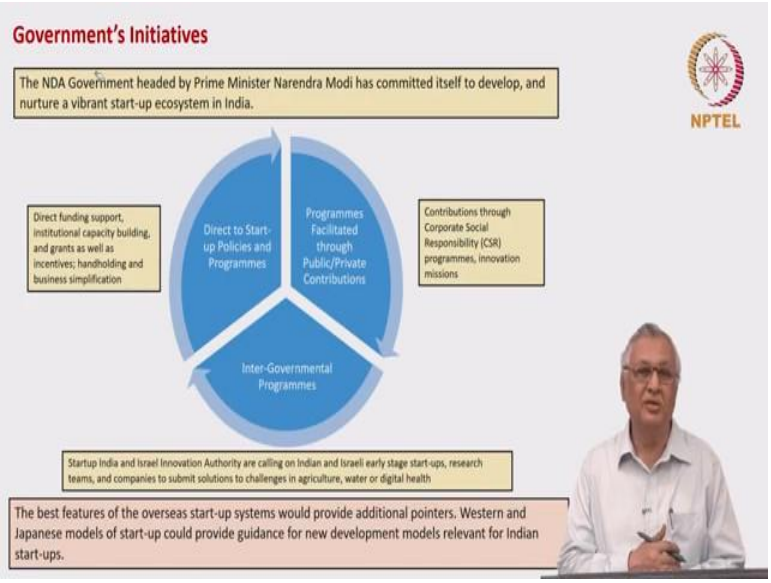

What are the government initiatives which we have considered in several sessions earlier and also in this session to some extent? We can classify these things in three buckets. The NDA government headed by Prime Minister Narendra Modi has committed itself to develop and nurture a vibrant start-up ecosystem in India.

That is also because experts see entrepreneurship as an important trigger for employment. With digitization that is happening in the big industries, the number of employment opportunities could also be reducing in future. And the only way in which we can increase employment is through entrepreneurship.

Typically, you consider a situation where we have a one-to-one correspondence when a graduate moves into an employment situation. But if the same graduate moves into an entrepreneurial system, he will be having a certain co-founders, he will be having a team of employers so the employment multiplicity of entrepreneurial system is much higher than the employment multiplicity of a formal employment system.

So, there is a matter for the discussion related to employment and entrepreneurship. So, coming back to what the NDA government is doing, we have three major aspects of the development. One, direct funding support, institutional capacity building and grants as well as incentives. So, when we talk about direct funding support, we have Mudra type of programs.

When we say institutional capacity building, we have Atal innovation type of programs, grants as well as incentives, and more importantly handholding and business simplification. When we have T-hub in Telangana to help entrepreneurial movement, it is handholding and business simplification.

We have also looked at in one of the earlier sessions how several leading banks have setup forums or entities to help start-up founders take their companies to commercialization. So, the one bucket is direct to start-up policies and programs. The other is programs facilitated through public-private contributions.

We are encouraging big companies to contribute through corporate social responsibility, not only for social entrepreneurship increasingly now for incubator accelerator and other direct formal entrepreneurship development programs. CSR programs and innovation missions are very important aspects of the second bucket which are programs facilitated through public-private participations.

And the third one is inter-governmental coordination. Every government across the world is committed to developing the international linkages in entrepreneurship. So, universities are willing to collaborate with each other on entrepreneurship development. Similarly, governments are willing to collaborate.

The government of Israel and the government of India are collaborating to have early-stage start-ups, research teams and companies to work in the areas of agriculture, water and digital health areas which are very important for both Israel as well as for India. And in some of these areas, Israel has obviously taken several leaps in terms of technology and practice.

The best features of the overseas start-up systems would certainly provide good pointers, additional pointers for the Indian development. Western and Japanese models of start-up would provide guidance, although they are of two different types. Each of them has got very good points for modeling our Indian entrepreneurial system and they would be relevant for Indian start-ups.