Leadership for India Inc: Practical Concepts and Constructs
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Week - 06
Leadership Structures
Lecture – 28
Organization Structures

Hi Friends, welcome to the NPTEL course on Leadership for India Inc, Practical Concepts and Constructs. We are in week 6, discussing Leadership Structures. In this lecture, we will focus on Organization Structures. While we touched upon organization structure as an important aspect of overall leadership related also to strategy, we will focus much more in a greater detail in today's lecture.

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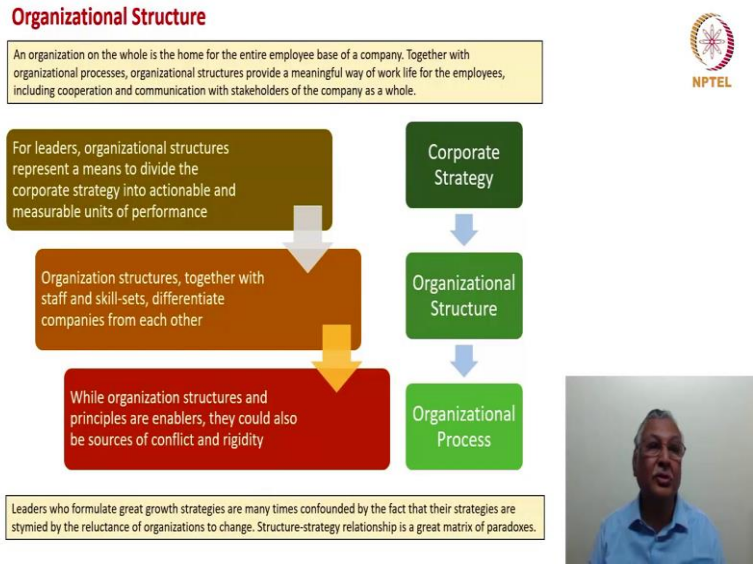

Organization is like a home for the employee base of the company. Together with organizational processes, organizational structures provide a meaningful way of work life for the employees and that includes cooperation and communication with stakeholders of the company as a whole.

For leaders, organizational structures represent a means to divide the whole canvas of strategy into actionable and measurable units of performance. Organization structures work together with the processes and also with the staff and skill sets to differentiate

companies from each other. While organization structures and principles are enablers, they could also be sources of conflict and rigidity.

So, the way typically it works is that, the company would draw up a corporate strategy, evaluate the adequacy of the organizational structure, then would get into organizational process in terms of the adequacy, then would also go into staffing and skilling. Leaders who formulate great growth strategies are many times confounded by the fact that their strategies are stymied by the reluctance of organizations to change. The relationship between strategy and structure is a great matrix of paradoxes.

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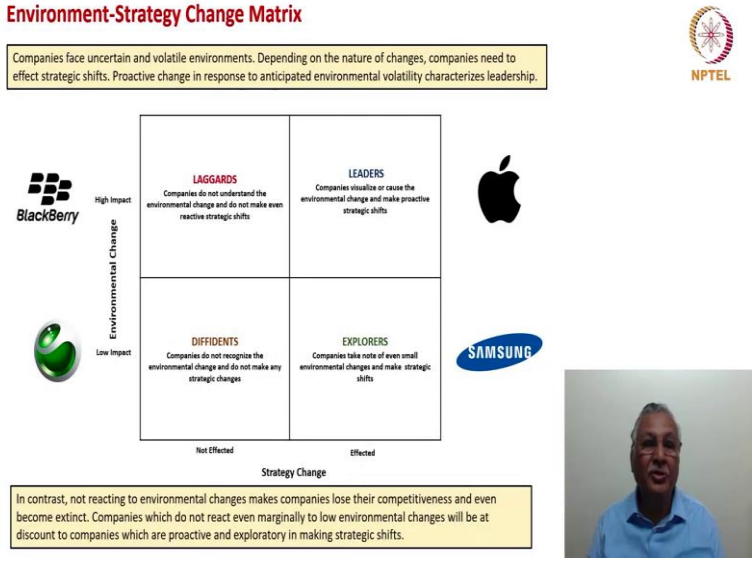

One paradox we can see in terms of environment and strategy change matrix. Companies do face uncertain and volatile environments. Depending upon the nature of changes, company need to effect strategic shifts. Proactive change in response to anticipated environmental volatility characterizes leadership.

Let us look at the environmental change dimension in terms of two extremes; very low impact and very high impact. Then let us also look at the strategy that has been modified by the company, which could be seen as having been done; that is a new strategy has been developed or not done, which is no strategy has been changed.

When you have this 2 by 2 metrics of strategy change and environmental change, you can classify several companies into one or the other of the four quadrants. If the

companies do not recognize the environmental change and do not make any strategic changes, they could be seen as diffidents.

In respect of mobile telephony, Sony Ericsson could be seen to be a diffident company. Let us assume that the environmental change is of low impact, yet a company has made this strategic change; then such companies could be seen as explorers. Such companies take note of even small environmental changes and make strategic shifts.

Let us assume that the environmental change is one of high impact. However, the company chose not to make any strategy change, such companies are laggards; because companies do not understand the environmental change and do not make even reactive strategic shifts.

Let us assume another quadrant, where the environmental change is of high impact and the strategy change also has been conducted; such companies are usually leaders, these companies visualize or cause the environmental change and make proactive strategic shifts.

We have companies such as Apple in the leadership category. Responding to environmental changes of high impact and in some cases they themselves make the environmental change happen and they lead through their strategy those kinds of changes.

Companies such as Samsung as I said are explorer type of companies; Blackberry is a striking example of the categorization of laggards. The company did not undertake a survey of the environmental changes that could happen and be of impact to the company. It did not regard touch screen telephony as of importance; it did not regard cameras; it did not regard communication; it did not regard social media as of being importance.

All Reliance was based on dated encryption technology and they corporate tie ups which the company had. However, when Apple came up with several features, which were consumer centric; immediately Blackberry saw the decline start. That is an example of strategy change not being effected in the face of high impact environmental change and causing the exit of companies in course of time.

It is important to note that not reacting to environmental changes make companies lose their competitiveness and even become extinct. And companies which do not react even marginally to low environmental changes will be at discount to companies which are proactive and exploratory in making strategic shifts. Sony is a great company, Ericsson is a great company; but together they could not match up to Samsung, because they were not proactive.

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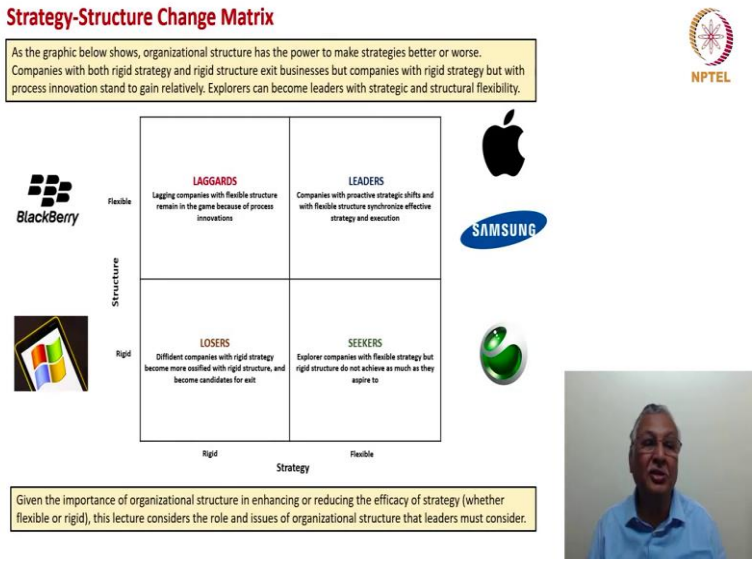

Let us look at another matrix, which is the strategy structure change matrix. As the graphic below shows, organizational structure has the power to make strategies better or worse. Companies with both rigid strategy and rigid structure exit businesses; but companies with rigid strategy, but with process innovation stand to gain relatively.

Explorers can become leaders with strategic and structural flexibility. How do we draw this strategy-structure map? Let us say strategy is flexible and strategy is rigid; that is, the company is following an adaptive strategy based on the environmental trends or company stays to the strategy, it has developed over the past several years.

The structure itself is kept in rigid fashion, departmentation does not change, the skill levels does not change. On the other hand, we can also assume that the structure is very flexible and very adaptive. If this is the 2 by 2 matrix, those companies which have got rigid strategy and also rigid structure will end up being losers. These are diffident

companies, who are ossified with rigid structure and rigid strategy and therefore, they become candidate for exit.

On the other hand, let us say, you have a strategy that is flexible and you are always seeking opportunities; but unfortunately the structure itself remains rigid. These companies are seekers; that is explorer companies with flexible strategy, but rigid structure, they do not achieve as much as they aspire to.

So, if you take Sony at a broader level than just mobile telephony, you will find that Sony is always exploring newer opportunities with newer strategies; but the ways and methodologies to execute those strategies remain somewhat bureaucratized and rigid, that is why it is not making as much impact as it could make given the technological strengths the company has.

Let us look at a company which is very strong in rigidity that is the strategy does not change at all and the structure is flexible, such companies are lagging companies no doubt; but they do have some flexible structure and they remain in the game, because of process innovations.

That happened with Blackberry for quite some time, until Apple completely moved it away. But even today, Blackberry under a new leadership is continuing to be a forced to reckon with; because it has understood how its coursed competencies and coursed strengths should be re-strategized for different kind of developments.

Then we could have companies which are very flexible in their strategy and very flexible in their structure, such companies are leaders; because they have proactive strategic shifts on one hand and flexible structures on the other hand. They are able to synchronize effective strategy and effective execution together.

If you see this matrix, it is very clear to you that, whether this strategy is rigid or flexible; by having a structure which could adapt to the strategic needs, provides better assurance for the company. Given the importance of organizational structure in enhancing or reducing the efficacy of strategy whether flexible or rigid; this lecture further considers the role and issues of organizational structure that leaders must consider.

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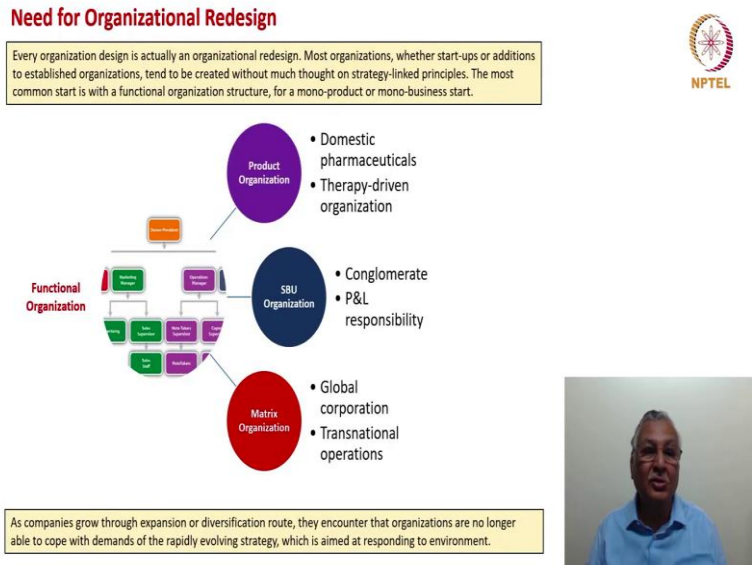

What is the need for organizational design or redesign? I would say that every organizational design is actually redesigned; because you start an enterprise with some organization at the foundation. And the moment you start redefining the organization based on the strategy, you can say that you are into organizational redesign.

Typically, most organizations start off as functional organizations, that is a CEO and CXOs representing several departments and these CXOs reporting to the CEO and several general managers reporting to the CXOs. So, we have product organization, which we have considered earlier; we, let us take the example of domestic pharmaceuticals, within that generally the trend is to have therapy driven organization.

So, a cardiac therapy, a neuropsychiatrist therapy, a gastrointestinal therapy, a vitamins and nutraceuticals therapy and so on; that is the typical product organization in a pharmaceutical company. If you go for a conglomerate structure, you will have an SBU organization; if not the companies themselves and each with a P&L responsibility.

If you look at a global corporation, the typical trend is to have a matrix organization because the operations are transnational. As companies grow through expansion or diversification route; they encounter that organizations are no longer able to cope with the demands of rapidly evolving strategy, which is aimed at responding to the environment. As I said, sometimes companies also proactive, that their strategies themselves lead to environmental changes.

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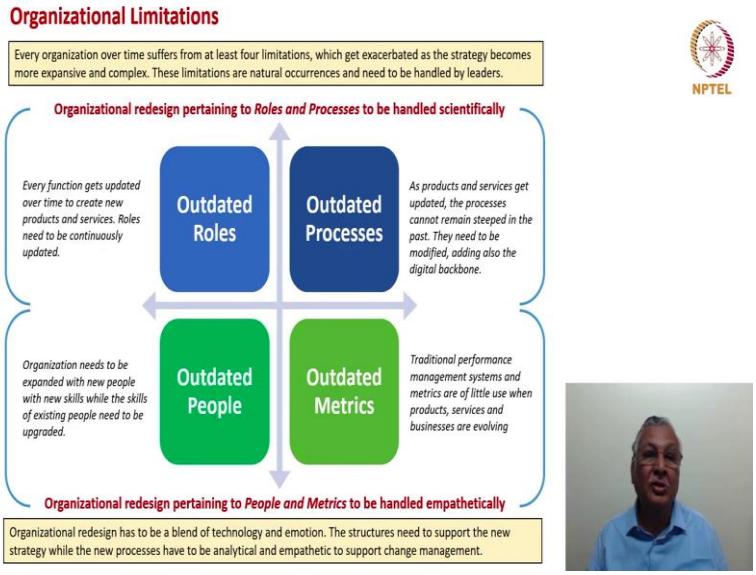

There are certain organizational limitations which pop up from time to time, even in organizations having great leaders and even organizations which are coach to be adaptive. Every organization over time suffers from at least four limitations and they get increased as the strategy becomes more expansive and more complex.

These limitations are natural occurrences in any organizational design and management and need to be handled by leaders. That is because strategy may be changed quite frequently, execution may occur every day; but you cannot keep on altering the organization on a daily basis or even in a quarterly basis.

Therefore, the way organization is defined, the way an organizational structure is established; there are certain limitations in the adaptability of an organization to changing trends. So, given that, there would be certain limitations; what leaders would need to do is to ensure that these limitations do not become ossified constraints on the company.

So, one limitation is outdated roles; every function gets updated over time to create new products and services, generally in the industry. Therefore, every firm has to update the roles that are defined in the company on a continuous basis. Secondly, outdated processes, as products and services get updated; the processes cannot remain steeped in the past, they need to be modified adding also the digital backbone.

Let us understand that any improvement in the product technology will also call for a corresponding improvement in the process technology. If you want to have the highest level of machining tolerance in a cylinder block, so that the fuel economy could be higher; obviously the machining processes have to be a step higher.

So, you should have outdated processes on a modernized product and the result would be quite sub-optical. And when we talk about processes, we could also include business process in that. We could have outdated people; that is people themselves are good, but their skill levels are no longer good to the new situation, organization needs to be expanded with new people and with new skills. And these skills of the existing people have to be updated continuously.

Then we have outdated matrix; earlier we were happy with revenue growth, profit growth and a few ratios, but today it is not sufficient, you need to understand the performance of the company unitized as well as in a gross manner. You have to understand the performance of the company in terms of very innovative indexes, very innovative benchmarks.

So, traditional performance management systems and matrix are of little use, when products, services and businesses are evolving. One way is the matrix need to improve is in terms of measuring the lead lag affect in understanding the performance. While handling outdated roles and outdated process, the leaders have to be scientific in addressing these issues and eliminating them.

However, when addressing outdated people, that is skill levels and outdated matrix that is the performance management systems; organizational redesign has to be empathetic, it is not just a mechanical or quantitative way to look at these aspects that would help the company. So, organizational redesign has to be a blend of technology and emotion. The structures need to support the new strategy, while the new processes have to be analytical and empathetic to support change management.

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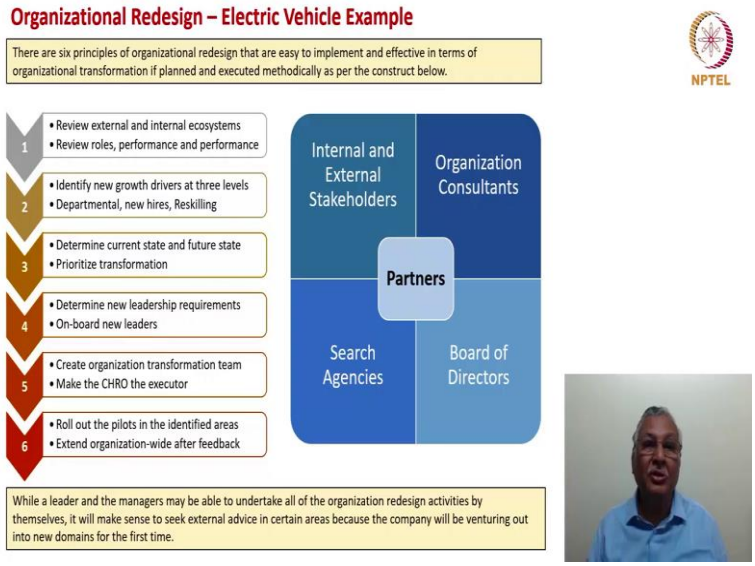

How do we do organizational redesign? I take two example here; one a hypothetical electric vehicle example, and another a known pharmaceutical example. There are six principles of organizational redesign that are easy to implement and effective; because when implemented together, they can result in organizational transformation.

And to be able to do that, we have to realize that every organization has got partners; internal and external stakeholders, organizational consultants, search agencies, board of directors; these are all partners in the organizational transformation process. The first step is to review external and internal ecosystems; because the ecosystems could differ from firm to firm and from industry to industry.

Review the roles, performance that are required under the new ecosystem. Point number 2, identify new growth drivers at three levels; departmental, new hires, and re-skilling. Determine current state and future state and prioritize transformation as principle number 3.

As principle number 4, determine the new leadership requirements and on board new leaders. And as principle number 5, create an organizational transformation team with the Chief Human Resource Officer as the executing authority for that. And as principle 6, roll out the pilots in the identified areas for organizational transformation and extend organization wide the change after feedback.

While a leader and managers may be able to undertake all of the organizational redesign activities by themselves, it will make sense to seek external advice in certain areas; because the company will be venturing out into the new domains for the first time.

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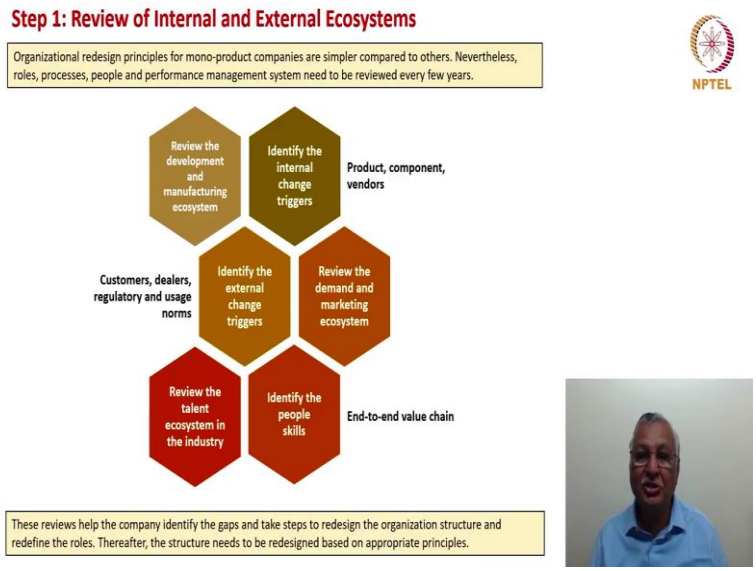

Let us look at in respect of the electric vehicle development. Step 1, review of internal and external ecosystems. For a mono product companies, the organizational principles are simple compared to multi-product companies and multi-business companies. Nevertheless, roles, processes, people and performance management system need to be reviewed every few years.

And that includes reviewing the development and manufacturing ecosystem, identifying the internal change triggers be their product, component or vendors related changes. Identify the external change triggers be it customers, dealers, regulatory and usage norms. Review the demand and marketing ecosystem; identify the people skills that are required on an end to end basis; and review the talent ecosystem in the industry.

These reviews help the company identify the gaps and take steps to redesign the organization structure and redefine the roles. Thereafter, the structure needs to be redesigned based on appropriate principles; because we may identify the people skills; but if the industry itself does not have any of those people's skills, the whole idea of doing the organizational redesign has to take a different route.

Instead of trying to bring in the nucleus leaders or nucleus managers from outside the system, we should be able to develop them internally. Therefore, there is a strategy shift with reference to the talent management paradox.

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In step 2, we identify new growth drivers. There are six principles of organizational redesign. As I said, out of this identifying new growth drivers is an extremely important aspect; if you want to look at the electric vehicle example, we do require several new departments and expanded departments. We have to have new R&D skills in developing native electric vehicles; we should understand how hybrid and electric development units can function.

Vendor development has to be brand new for new electric and electronic components; technology sourcing has to be global; vendor investment, testing and homologation have to be in completely different methodologies. And when you assemble these new departments, expanded departments together in an integrated seamless way; you will get a new hybrid organization of the existing organization as well as the new organization.

And that new hybrid organization has to talk to the external stakeholders as well; because the new ecosystem coordinators are required for charging stations, battery swapping, government incentives, vehicle financing, dealer development etcetera. Therefore, the change required in terms of establishment of new departments, new

networking arrangements is very high and that needs to be recognized early on in step 1 and step 2 itself and the new growth drivers should be identified.

Review of the external and internal ecosystems leads to identification of three types of gaps; one need for entirely new departments as I have outlined here; need for new skilled hires in existing department, potentially in departments such as vendor development and quality management; and three the need for reskilling existing employees, which could be universal across the entire organizational space.

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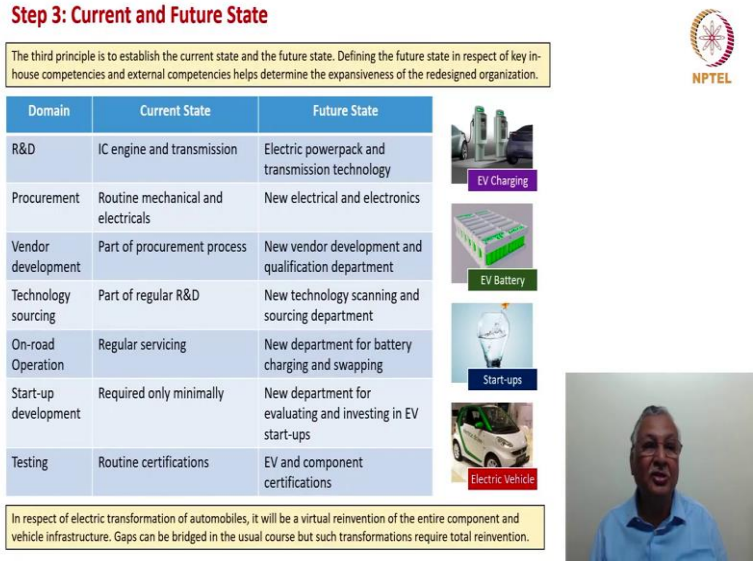

Step 3, current and future state. The third principle is to establish the current state and the future state. Defining the future state in respect of key in house competencies and external competencies helps determine the expansiveness of the redesigned organization. Let us take the domain of R&D; the current state is that we have an IC engine led power pack system, that is the engine and transmission.

And the future state is that we need to have an electric power pack and transmission technology. While some of the aspects of R&D, such as simulation, such as vehicle exterior design, crash test, sound proofing, all of those things could be valid. However, the core of the vehicle in terms of the power pack is going to be fundamentally different.

So, there is a new future state that is required in R&D. If you look at procurement, it is a kind of standardized ongoing process based on routine mechanical and electrical items.

And the future state requires a switch to new electrical and electronics, such as condenses, starters, motors etcetera.

Vendor development itself, earlier would have been part of procurement process; but in the new electric vehicle system, vendor development could be a very important goal. And vendor development could come up with a new qualification department also until the new components are established in the marketplace.

Technology sourcing used to be done by the R&D department; but for electric vehicles, you may have a strategic sourcing department centrally and that department will be doing continuously scanning of technologies to get the best possible parts as well as technologies.

The on road operation of the vehicle would nothing, but regular servicing in respect of established IC engine based products. However, you require a new department for battery charging and swapping in respect of electric vehicles. Startup development which is required only minimally will move to a new department for evaluating and investing in EV startups; many startups may have to be established to get the new vehicle technologies into play.

Testing used to be on routine certifications. We need to cooperate with the testing agencies, develop a new testing standards and you need to have certifications not only for the overall electric vehicle, we also need to have component level certifications. So, it is an entire reinvention of the component and vehicle infrastructure in respect of electric vehicle development.

Gaps can be bridged in usual course, but transformation such as these require total reinvention of an organizational structure and approach.

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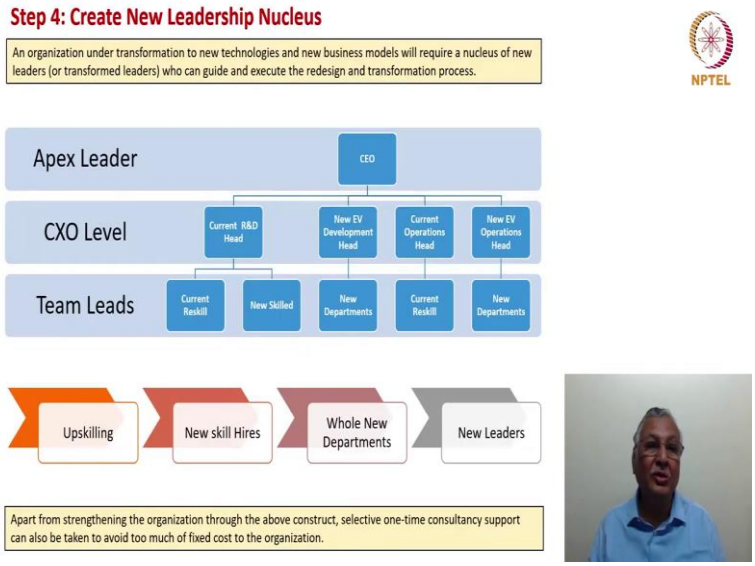

To be able to do that, you need to have new leadership new leadership nucleus. The current CEO as an apex leader who would continue let us say and the current R&D head would also continue; but you need a new electric vehicle development head, whether as part of the R&D or as a direct report to the CEO.

You need the continuous operation of the current operations head, but you also need a new electric vehicle operations head. And then you will have team leads, who will for re-skilling and new skilling. You would need new departments and also re skilling of the current departments and in certain cases, you may need completely new departments. Up skilling, new skill hires, whole new departments and new leaders are a part of the creation of a new organization structure for taking care of electric vehicles.

Apart from strengthening and organizing the new ways of doing things through the above construct; we need to have selective one-time consultancy support to avoid too much of fixed cost to the organization, because these kinds of transformations are one time transformations.

It may take one or two years to roll out, but then later on the entire new technology will be assimilated by the existing people and the need for dedicated new departments may reduce. It is therefore, advisable for companies to have external consultants to chip in whenever possible, so that there are fixed cost only in an optimal manner.

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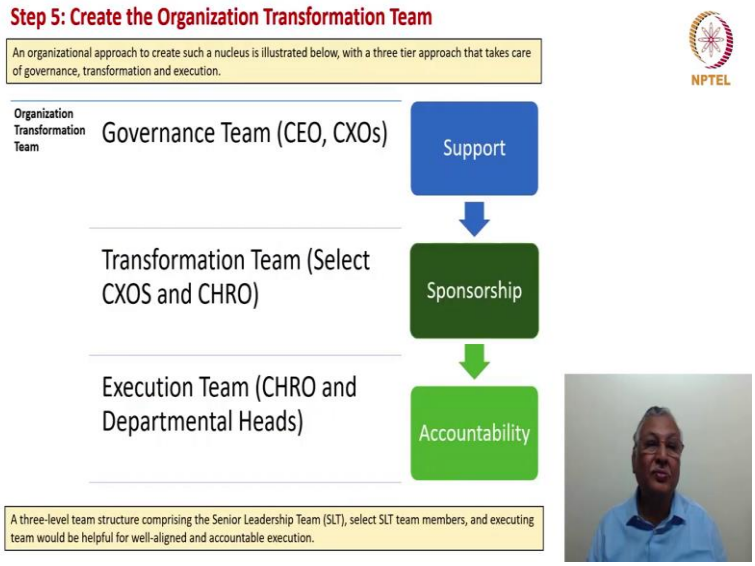

We also need to create an organization transformation team, because this is a companywide initiative also touching the overall ecosystem. So, you should have a governance structure. You should have a governance team which comprises the CEO and CXOs; if there is an expert person assisting this whole process, he or she also should be part of the governance team.

You should have a select CXO and CHRO grouping as the transformation team. And finally, the execution team which includes the CHRO and the department heads. So, support at the very high governance level; sponsorship at the transformation team level; and accountability at the executing level are important to make this organization transformation work.

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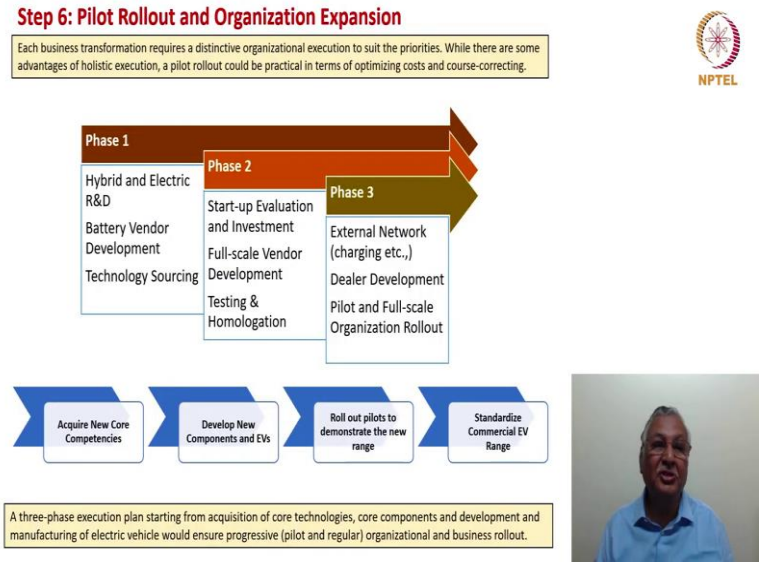

Step 6, is the pilot rollout and organization expansion. In phase 1, you focus on hybrid and electric R&D; you focus on battery vendor development and technology sourcing in this example. In phase 2, we start looking at the startups and see whether their components would be helpful for the new electric vehicle developments.

Once you establish the capability, you go on a full scale vendor development and you ensure that the components and vehicles have their standards and specifications set up. In phase 3, we look at the supportive infrastructure, that is the charging infrastructure, battery swapping infrastructure, power availability, go in for dealer development and you roll out on a pilot basis first and then do the full scale organization roll out.

So, from a point of view of how the talent matrix moves, we acquire new core competencies along with the existing core competencies and re skilling of those existing competencies. Then you develop new components and EVs. You roll out pilots to demonstrate the new range internally as well as externally.

And once the feedback is positive, you standardize the commercial electric vehicle range. And there could be some iteration between pilot roll out and developing of components. A three-phase execution plan as above starting from acquisition of core technologies, core components and development and manufacturing and of electric vehicle would ensure progressive roll out, which will be failure proof relatively.

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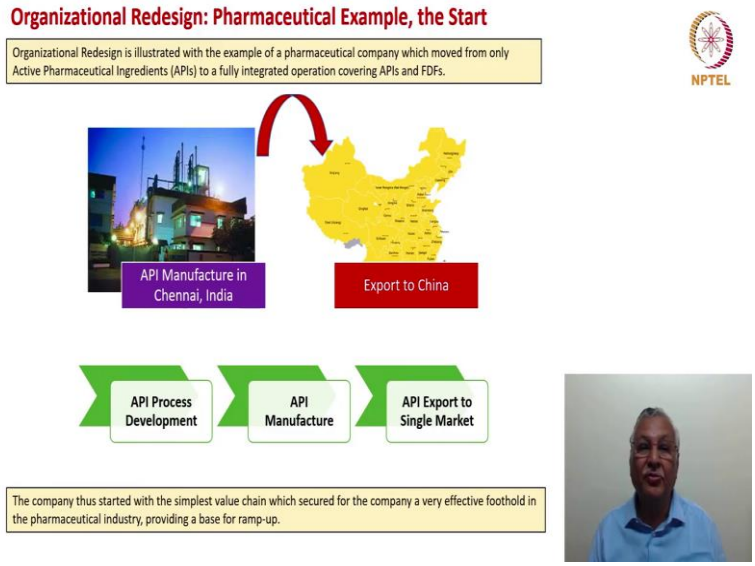

Let us go to the example of pharmaceutical industry. In the previous lecture, I talked about a particular pharmaceutical company which has changed its strategy substantially from bulk drugs manufacturing and China marketing approach to end to end connected full scale value added pharmaceutical company dealing in a number of domains.

Let us take that example. How does this strategy change lead to a structural change in the organization? This pharmaceutical company had API manufacturing in Chennai India and its only business when it started its operations in 1994 was exporting to China. API process development, API manufacture, and API export to single market are the only three major activities which the company did.

The company therefore, started with the simplest possible value chain and it secured for the company a very effective foothold in the pharmaceutical industry at an optimal cost providing a base for ramp up.

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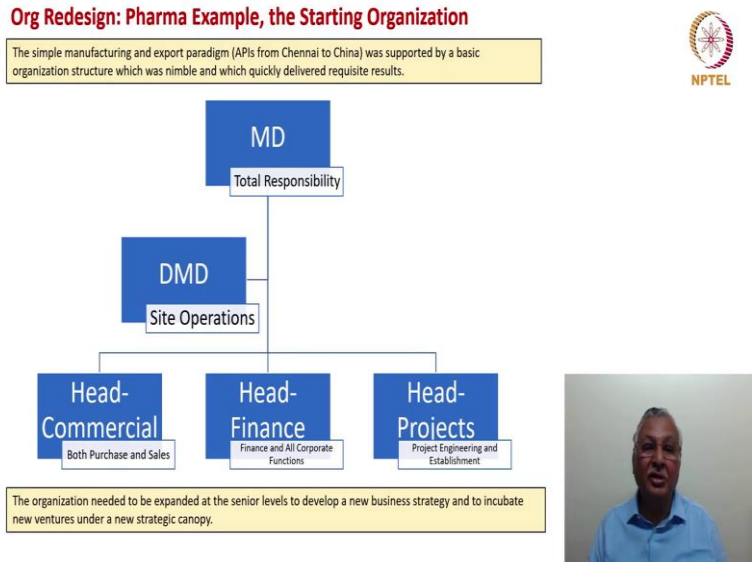

The organization at the time of start was as follows; the managing director who also happens to the founder entrepreneur had the total responsibility. He was supported by deputy managing director, who was in charge of the site operations, that is manufacturing of APIs.

Then there were only three heads; one head was looking after commercial both purchase and sales; one head was looking after finance, not merely finance, but all corporate functions including secretarial, legal, planning and so on; and there was one head projects, who was doing project engineering and establishment.

The organization needed to be expanded at senior levels, before a new business strategy could be thought about. That was a time as I said, I was on the board of this company and I notice the need for dramatically changing the cores of this company into a fully integrated pharmaceutical company.

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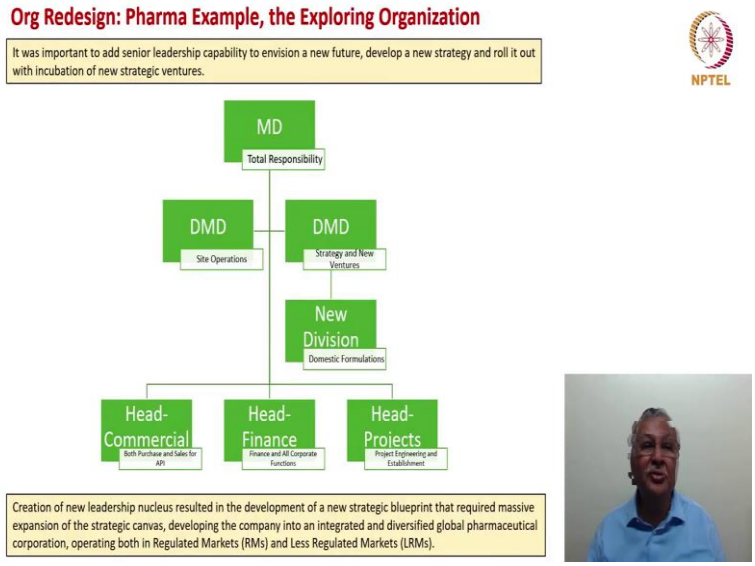

And the first step taken by the board was to get me into the company on a full time basis. So, the organization structure changed, while MD continued to have the total responsibility I came in as a person in charge of strategy and new ventures. I also started piloting the formulations venture with domestic formulations as the starting initiative.

The other three head certain operation level, continued to be the same head commercial, both purchase and sales for API, head finance for finance as well as all corporate functions, and head projects for all the engineering and establishment activities. However, this creation of this new division comprising myself and my team to start the planning work, resulted in development of a new strategic blueprint.

It also led to a need to divide the company in terms of a company which would take care of the very advanced regulated markets, such as the US and European Union and continue with the existing process and existing markets, that is the less regulated markets company. So, conceptually the company got divided into two parts; one very advanced company and another very established company.

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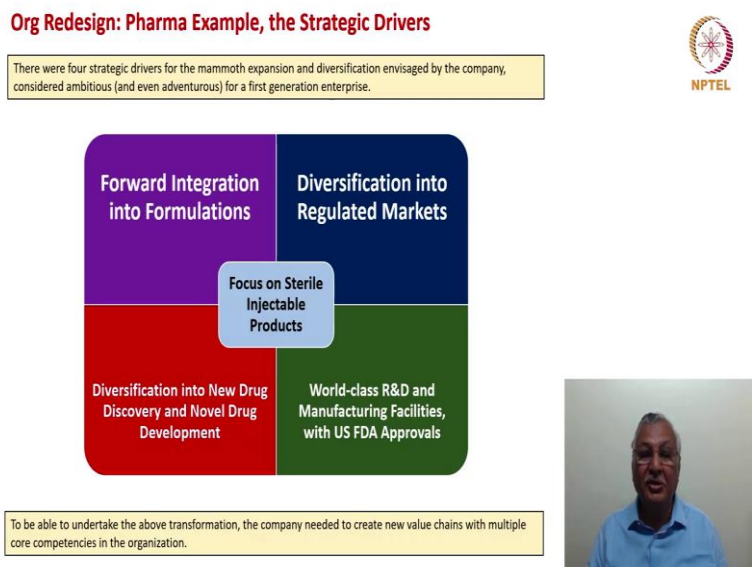

So, the organization redesign had four strategic drivers; one forward integration into formulations from doing only bulk drugs getting into formulations, diversification into regulated markets, third diversification also into new drug discovery and novel drug development, which is an entirely different ball game.

And creation of facilities for these kinds of three drivers, you needed to create world class R&D and manufacturing facilities with the US FDA approvals. All that was done with a focus on sterile injectable products, although the drug discovery had an even broader mission beyond sterile injectables.

These four strategic drivers ensured that the company was ready to take up a mammoth expansion and diversification. It was considered ambitious and even adventurous for a first generation enterprise at that point of time. To be able to undertake this transformation systematically, the company needed to create new value chains, new divisional structures with multiple core competences in the organization.

This is an excellent example of how strategy changes to meet proactively the environmental requirements, and how the structure has to be changed proactively to meet the new strategic requirements.

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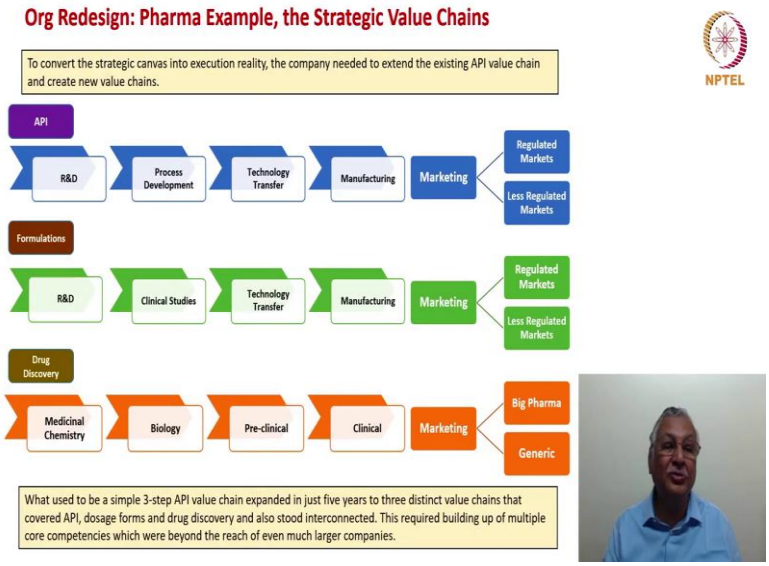

So, we created a several new value chains; API that is the bulk drugs continued to have R&D, process development, technology transform, manufacturing and marketing. However, marketing was divided into regulated markets and less regulated markets. The new division technology transfer that was introduced in the traditional API was to ensure that technology was upscale with much greater precision to meet the requirements of the regulated markets.

And also to enable appropriate transfer for the new value chain of formulations. An entirely new formulation value chain was created, starting again from R&D through clinical studies, which could be bio equivalence studies in most cases, have a technology transfer, have a manufacturing facility and undertake marketing.

Marketing again was divided into two facets; regulated markets and less regulated markets. As far as drug discovery is concerned, a totally different infrastructure was established; it starts with medicinal chemistry, which is quite different from organic chemistry.

In organic chemistry, you develop a compound based on the known knowledge; that this compound will have this therapeutic effect. On the other hand, in medicinal chemistry, you are trying to find an entirely new compound for a disease pathway. So, you have to guess scientifically as to which kind of molecular structure will have the greatest binding

capability to certain sites in the body and which will be acting in an appropriate manner on different therapeutic requirements.

Then the compound developed under medicinal chemistry has to be evaluated in respect of biological parameters; for that you require in vitro studies that is in the lab petri dish and you require in vivo studies that is in the animal models or in human clinicals. So, these studies are called pre-clinical studies, to conduct them need an infrastructure of your own.

Then you have to have clinical studies which are usually outsourced; and at the end of it, even the discovered molecules need to be out licensed and that requires also marketing. And the marketing could be for big pharmaceutical companies or could be for generic pharmaceutical companies which have got a vision beyond normal generics.

What used to be a simple 3 step API value chain thus got expanded to three distinct value chains, at least two of the value chains are closely interlinked. This required building up of multiple of core competencies, which were beyond the reach of even much larger computations. And we saw that the organizational structure that was available was a very simple organization structure.

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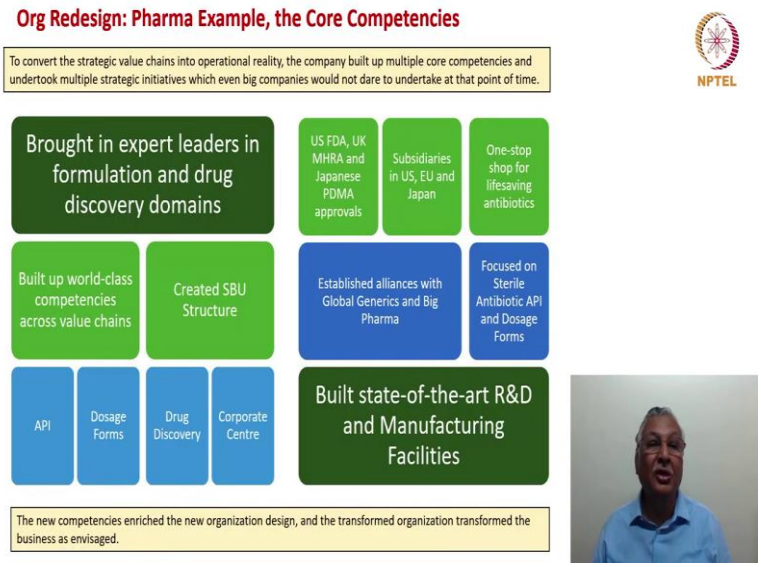

So, the first question before you did an organizational redesign; how do we convert this strategic value chains into operational reality? How do we build the multiple core

competence? It is easy to drop an organization chart, but the boxes could be empty, until you understand the core competencies and understand the talent that needs to be brought in to match these core competencies.

So, we brought in expert leaders in formulation and drug discovery domains; because entirely new value chains had to be created. We built up world class competencies across value chains, created an SBU structure. Typically, when a massive transformation is taking place based on an established organization, which incidentally also provides the funding for the new ventures.

There will be organizational dynamics which do not allow the development of the new organizational limbs and the new organizational initiatives, which is natural human dynamics. So, we need to incubate those ventures through an SBU structure that is what we did.

While the API as an established organization continued relentlessly in its focus for increasing the scale and also increasing revenues and profitability; we created new business verticals for dosage forms, drug discovery, and established a larger corporate center, which had the capability to tie in all these new divisions and functions.

We also said that the value systems from a science and technology point of view have to be substantially elevated. We decided that every facility we undertake to create must have US FDA, UK MHRA and Japanese PDMA approvals. We should also create subsidiaries in US, EU and Japan we hypothesized; although we may eventually market through the generic distribution alliances.

We need to have our own subsidiaries to understand the local market conditions and ensure that the alliances are working in an appropriate manner. And to do so, we did establish alliance at the global generics and big pharma, such as Apotex, AL pharma, Hospira, Mayne, McKesson and many others.

We also said that there must be a value proposition coming out of this diversification of the value chain. There is no point in having multiple value chains with multiple products dealing with multiple customer requirements; it is always better to have multiple value chains, which are integrated to serving the customers in a concentrated way.

So, for that we evolved houses as a one stop shop for life saving antibiotics, which nevertheless call for different types of R&D and different types of manufacturing facilities. And also the focus was on establishing barriers for competition in terms of investment intensity as well as technological intensity. So, we focused on sterile antibiotic API and dosage forms.

And to be able to meet all of these things, the company built state of the art R&D and manufacturing facilities. These new competencies enrich the new organization design and transform the organization into a transformed business as envisaged. You have a transform strategy; the transform strategy, transform the structure of the organization and this transformed organization structure transforms the business, that is the linkage.

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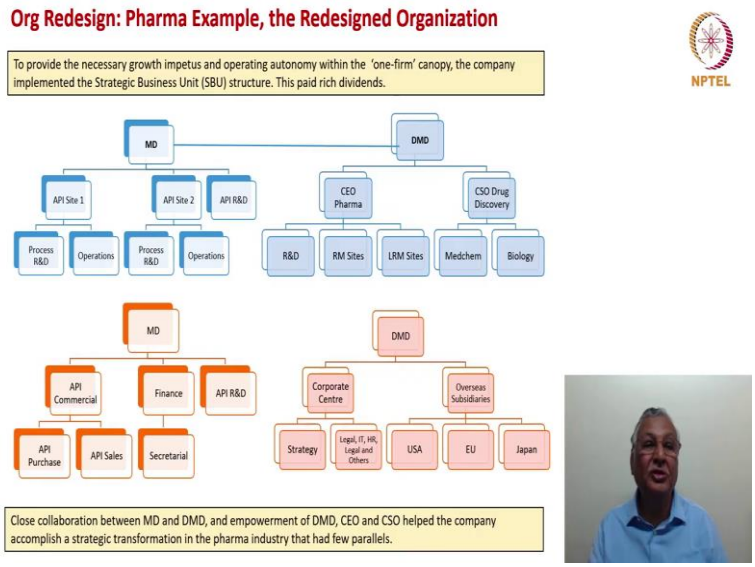

So, if you see the organization structure, now, you have the managing director looking after API site 1, API site 2, API R&D and with the leaders having other competencies within. But an entirely new organization structure was created under the new deputy manager director that is me, who comprised CEO for pharmaceuticals and a CSO for drug discovery.

And a value chain was replicated in terms of functional reporting to the CEO pharma. And some of the corporate central activities were distributed between the managing director and myself, while the managing director looked after API commercial finance, API R&D, API purchase, API sales and secretarial.

I looked after certain new emerging corporate functions, which are essential for diversification of this nature and for monitoring of the ongoing diversification, which is a new corporate center, overseas subsidiaries in USA, EU, japan. And a whole bunch of activities which are very necessary for undertaking this level of diversification and forward integration as well as alliances mergers and acquisitions.

Which is this the strategy department and a cluster of legal, IT, HR, and other departments. Close collaboration between MD and DMD and empowerment of DMD, CEO and CSO under me help the company accomplish a strategic transformation in the pharma industry that had few parallels. The kind of growth that was achieved between 2002 and 2007 in just 5 years was phenomenal.

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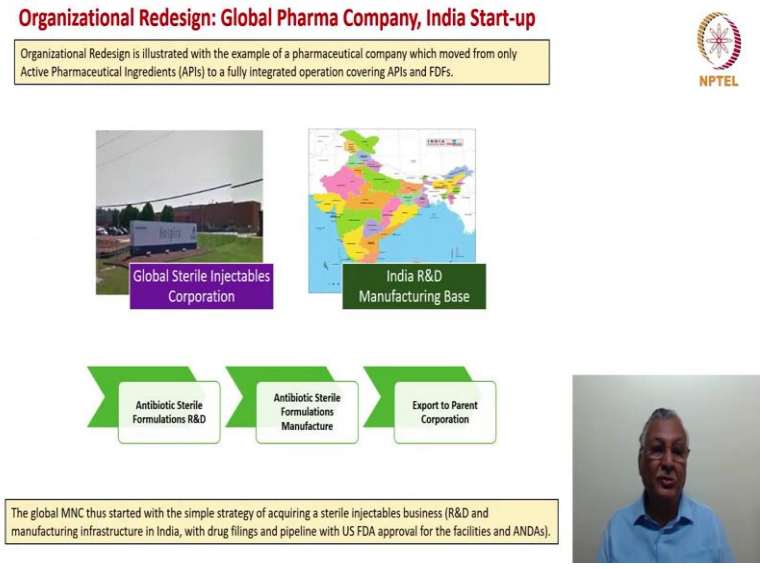

So, at that point of time, the organization started attracting outside interest. It had a complete value chain counting across R&D and manufacturing and marketing, including API and dosage forms; therefore, a global sterile injectables corporation became interested and given the debt level, even the company was interested in making a deal.

So, antibiotic sterile formulations R&D, antibiotic sterile formulation manufacture, which were being exported to the parent corporation were carved out as a new facility or new business and provided to the global MNC. The global MNC then started with the simple strategy of having a workshop and a laboratory and using its own global marketing power, particularly focused on US and European Union to sell those products.

And the drug filings of the acquired small business that is the sterile injectable business of the company was available in any way to develop new products, that was the simple strategy with which the company started.

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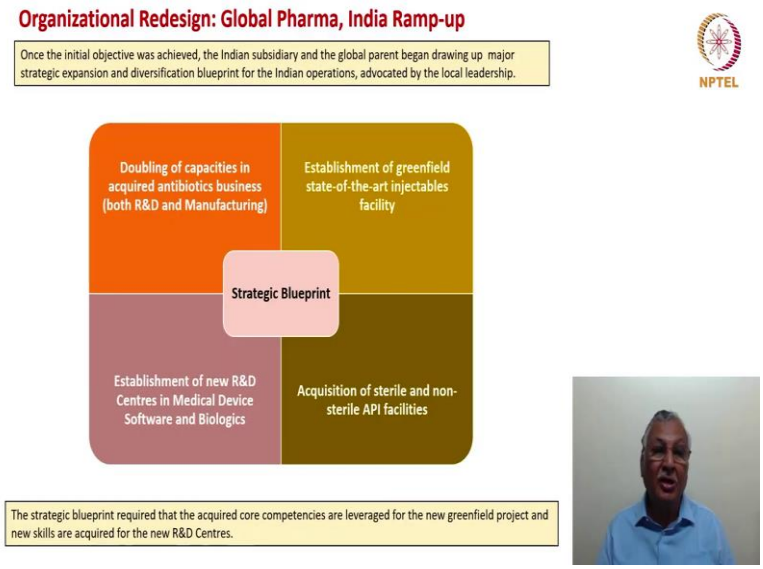

However, even the company started thinking of a new strategy. I moved as I said as the managing director of the new entity as a wholly owned subsidiary head in India for the global multinational corporation. Once the acquisition was done, we started examining; what could we do further to make India the center of gravity for the global multinational corporation and add more weight to the value driving activities of the company globally.

So, the first thing we did was doubling of capacities in the acquired antibiotics business both R&D and manufacturing; we established a new greenfield state of the art injectables facility to diversify the injectables range beyond anti-infectives. We developed a new R&D centers in medical device software and biologics, completely unthought of at that point of time.

There were not many experts doing embedded software development for medical devices at that point of time and we created a 200 strong center in India. Similarly, we created another 200 strong center for biologics research in TICEL Bio Park in Chennai. And this was also coupled with acquisition of sterile and nonsterile API facilities.

Again this strategic blueprint, which was fundamentally of a higher level and scope required that the acquired core competencies are leverage for new greenfield project and new skills are added for the new R&D centers and manufacturing operations.

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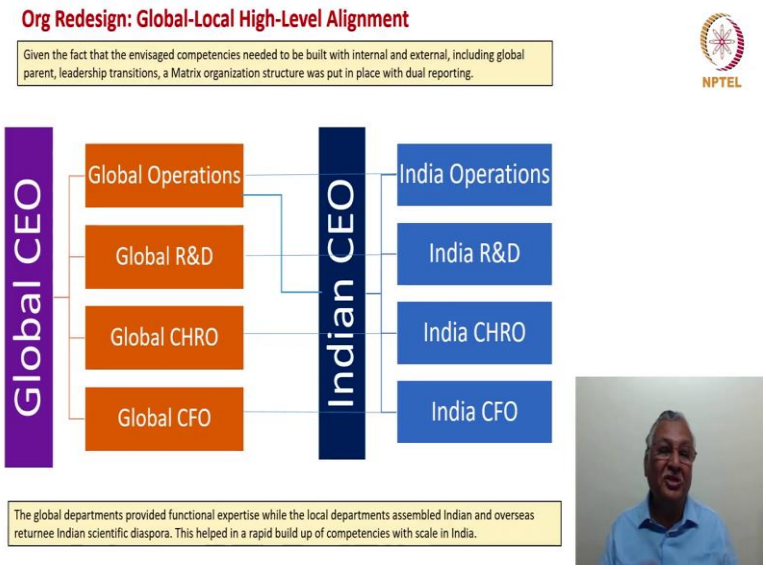

So, to be able to do that, first we established a high level coordination mechanism; global local high level alignment was the first target, for that matrix organization structure was put in place with dual reporting. The global CEO sitting in Chicago had global operations, global R&D, global CHRO, global CFO and of course, various global functions within him.

I as the Indian CEO reported to global operations and also to global CEO as part of the senior leadership team of the global corporation. And I had under me Indians operations, India R&D, India CHRO, and India CFO. These global departments provided the functional expertise, while the local departments assemble Indians and overseas returnee Indian scientific diaspora.

This helped in a rapid buildup of competencies with scale in India. And as a result the organization become even more intense and even more complex.

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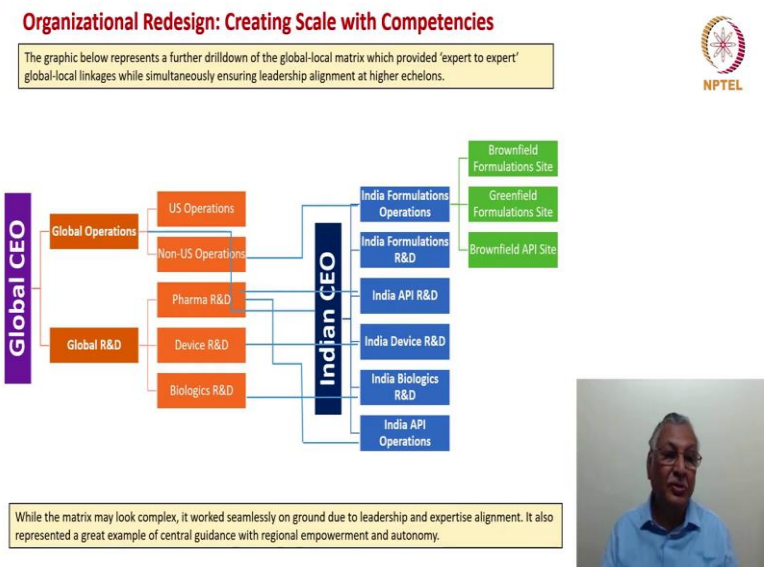

Looking at the detail, you can see the drill down of how the global local matrix provided expert to expert global local linkages, while simultaneously ensuring leadership alignment to higher echelons. So, the global CEO as I said, had global operations and global R&D and these global operations was for US operations as well as for non-US operations.

Global R&D itself was trifurcated into pharma R&D, device R&D and biologics R&D. Each of these expert global centers provided support to the expert Indians centers, such as India Formulations Operations, India Formulations R&D, India API R&D, India Device R&D, Biologics R&D, and API Operations.

And India Formulations Operations itself looked at the brown field formulations, that is the acquired site being doubled in capacity, the green field formulation site at Vizag and a new brown field API sites to support the formulations business. While the metrics may look complex, it worked seamlessly on ground due to leadership and expertise alignment; it also represented a great example of central guidance on regional empowerment and autonomy.

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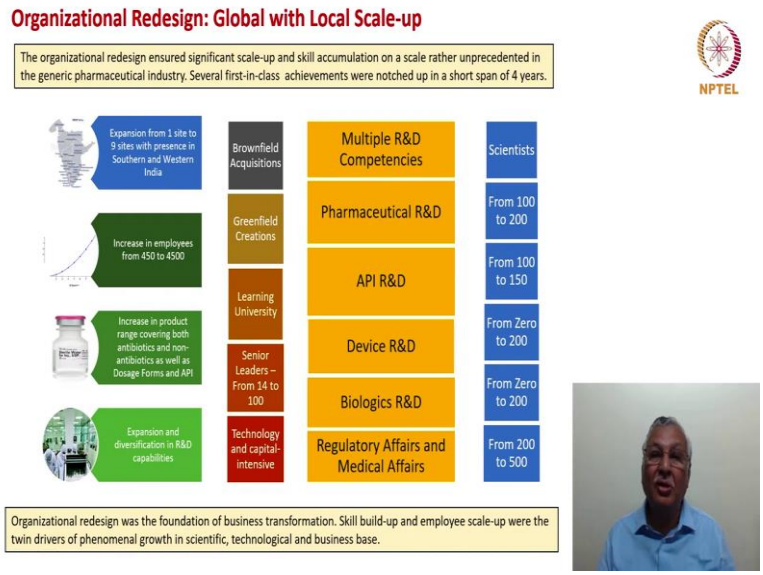

So, as a result of this global local combination, the scale up of the organization and the business happened in an accelerated fashion and with seamless connectivity and with impeccable results. In respect of the brown field acquisitions, we could expand from 1 site to 9 sites with presence in Southern and Western India.

The green field creations happened in Chennai in terms of R&D and other capabilities and also in Vizag. The employee count increased dramatically from 450 to 4500 in a matter of just 5 years. The product range increased covering both antibiotics and non antibiotics as well as dosage forms and API.

The expansion and diversification R&D capabilities in terms of additional floors as well as additional people was remarkable. So, as a result, you could see newer capabilities and competencies getting inducted into the organization and the organization structure as I said in the beginning, became a home to a whole lot of diversified talents which could take the corporation on its new strategic path.

We had established a learning university to help green field creations, have the appropriate quality and operational skills from the beginning. The number of senior leaders increased from the 14, who are brought in as part of the acquisition in 2010 to over 100 senior leaders. So, 86 senior leaders came in from other organizations as well as from abroad.

And the whole capital intensity and technology intensity of the operation multiplied many times over. So, Multiple R&D Competencies, deepened Pharmaceutical R&D, acquired API R&D, a brand new Device R&D, and a Biologics R&D and vastly expanded Regulatory Affairs and Medical Affairs teams were the reflections of the new strategy and the new structure.

And within these again, many of the functions became resource centers for global operations and their objective was far beyond what India needed them for and they became the global resources as well. The scientist counts in pharmaceutical R&D, jumped up from 100 to 200.

In API R&D from 100 to 150; in device R&D it was zero to 200 progression rapidly in just 2 years. And again in biologics R&D, the growth was from zero to 200. And the regulated affairs and medical affairs personnel moved from 200 to 500, this is the kind of transformation that occurred in the organization.

So, from this we can appreciate that organizational redesign based on the strategy that is newly crafted is the foundation of business transformation. Skill build up and employee scale up were the twin drivers of phenomenal growth in scientific and technological as well as business base.

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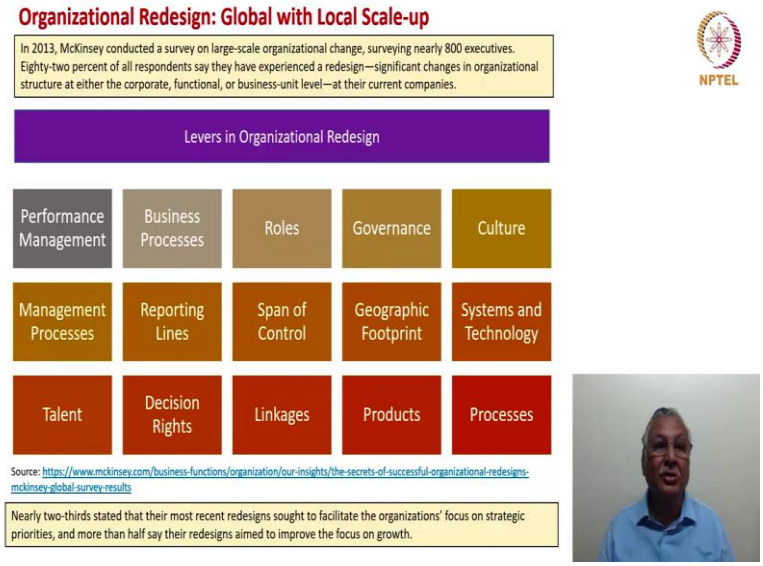

So, to be able to do these kinds of activities, that is global with local scale up; we need to pursue operation of certain levers in organizational redesign. In 2013, McKinsey conducted a survey on large scale global organizational change, surveying nearly 800 executives.

Eighty-two percent of the respondents said that they experienced a redesign, that is significant changes in organization structure at either the corporate, functional or business unit level at their current companies during the survey period. But they also said that these were the levers that were available for making those changes happen.

One different method of performance management, re-engineering of business process, redefinition of business roles, governance mechanisms, the cultural anchors, the management processes, the reporting relationships, the span of control, geographic footprint, systems and technology that could be deployed to do handle new products and new services.

The talent base including new skills, decision rights for the new leaders as well as the existing leaders, and also across different businesses and also different staff and line responsibilities, the linkages between various parts of the business and various people, and finally, of course the products and process.

Nearly two third stated that their most recent redesign sought to facilitate the organizations focus on strategic priorities and more than half said that their redesigns aimed to improve the focus on growth. What this means is that, growth orientation is one of the fundamental drivers of organizational change and that is prompted by the strategy change that is required to meet the growth aspirations.

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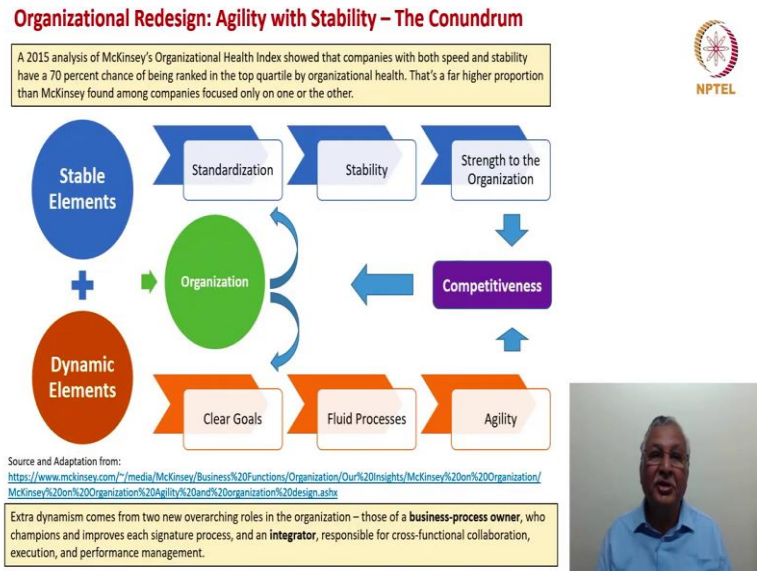

For successful organizational redesign, we need agility with stability and that there lies a conundrum. McKinsey conducted a survey of organizational health in companies in 2015. And the survey results said that the companies with both speed and stability within their system had a 70 percent chance of being ranked in the top quartile by organizational health.

That is a far higher proportion than found among companies focused only on either speed or stability. So, what are the stable elements? Standardization, stability these are the standard stable elements. What are the dynamic elements in an organization? Clear goals, fluid processes.

If you pursue your stable elements to its logical conclusion, you get strength to the organization. And if you pursue the dynamic elements, you will get agility. And when you combine strength and agility, you get competitiveness for the organization; that competitiveness for the organization has to be reflected in terms of the organization.

So, this is a kind of closed loop system, which has competitiveness as its result. Extra dynamism comes from two new overarching roles in the organization; those of a business process owner, who champions and improves each signature process, and an integrator, responsible for cross functional collaboration, execution and performance management. In actual practice, the CXOs and the CEO must act as combinations of business process ownership and integration responsibility.

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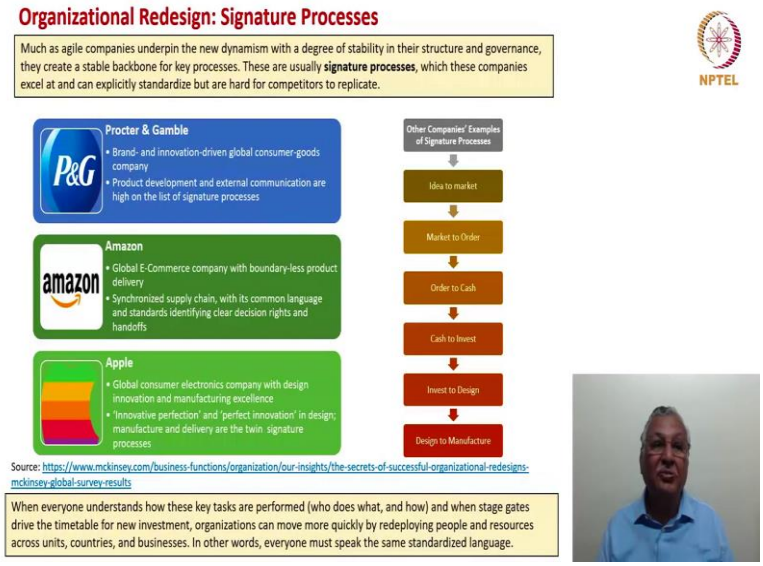

There have been many signature processes that have been adopted by agile companies to underpin new dynamism of with a degree of stability in their structure and governance. Such companies create a stable backbone for key processes, we call them this signature processes and these companies excel at and can explicitly standardize and such processes are hard for competitors to replicate.

For Procter & Gamble, which is a brand and innovation driven global consumer goods company; product development and external communication are high on the list of signature processes. Amazon is a global e-commerce company with boundary less product delivery. For Amazon this signature process is this synchronized supply chain.

It has to have common language and standards, also identify clear decision rights and handoffs for various people in the supply chain to be effective as the most universal market place in the world. We have Apple, global consumer electronics company with design innovation and manufacturing excellence.

Innovative perfection and perfect innovation, they are the signature processes for this company, where manufacturing, product design and customer delivery happen to satisfy the customer to the greatest extent possible. Other examples of signature processes are as follows; one the time for idea to market, market to order, order to cash, cash to invest, invest to design, design to manufacture.

That is any part of the value chain, including the company value change as well as the customer value chain can be optimized, made a core competence, which is non-replicable for other companies and that becomes the signature process for the company. While everyone understands how these key tasks are performed, that is who does what, how.

And when stage gates drive the timetable for new investment; organizations can move more quickly by redeploying people and resources across units, countries and businesses. In other words, everyone must speak the same standardized language as far as the signature process are concerned, so that these companies would be far ahead of others in respect of such process and have core competence as well as the core market loyalty because of such process.

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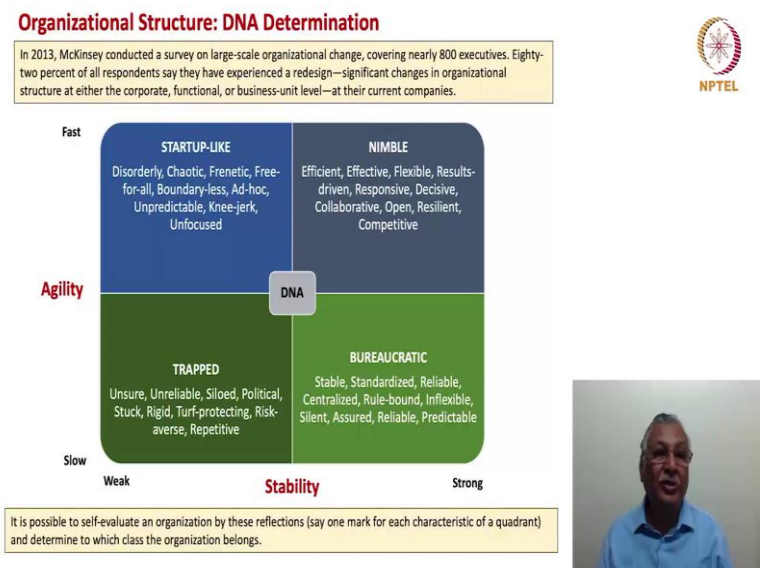

So, how do we define this organizational structure, which has these features of stability and agility? How do you make this the DNA of the organization? So, let us plot the stability factor as an x-axis dimension; weak stability or strong stability. Agility, let us look at whether the company is slow or fast.

So, if a company is unstable and if it is not fast in terms of adaptation and is not agile at all; then the company becomes trapped in the narrowed product market scope, that company is unsure, unreliable, siloed, political, stuck, rigid, turf protecting, risk averse,

repetitive and anything else, depending upon the nature of the company, nature of the industry and the nature of the product market combination.

I am not saying that a trapped company will have all of these negative features; I am only saying that several companies could be ranked or could be labelled in terms of these factors differently. Companies which are very strong in terms of the stability of the organizational structure, but they are not agile; they could be seen as bureaucratic companies.

They are stable, standardized, their services are reliable, their outputs are reliable, they have a centralized way of working, they are rule bound very inflexible, silent, assured, reliable and predictable. Again I am not saying that, A company which is typed as bureaucratic company will have all these features; some will have shades of some of these futures more than the others.

Then we could have a company which is not very stable, but is very agile very flexible; it is like a startup like company, it could be disorderly, it could be chaotic, frenetic in its space, a free for all kind of approach, a boundary less organization, ad hoc, unpredictable, knee jerk, and unfocused.

It would remind you of the hare characteristics we discussed; very random, very speedy, very agile and probably, because these are startups, they will also have some entrepreneurial skills and ideation that will help them become better as time progresses.

Then there could be companies which are having very strong structure and at the same time they are also very agile in their execution. Those companies are nimble, efficient, effective, flexible, results driven, responsive, decisive, collaborative, open, resilient, competitive.

Such companies are very helpful for leaders to develop and such companies are really required for leaders to achieve their goals. It is possible to self-evaluate an organization by these reflections say, one mark for each characteristic of a quadrant and determine to which class the organization belongs. It is a self-administrable questionnaire that we can use for determining the DNA with reference to stability and agility of an organization.

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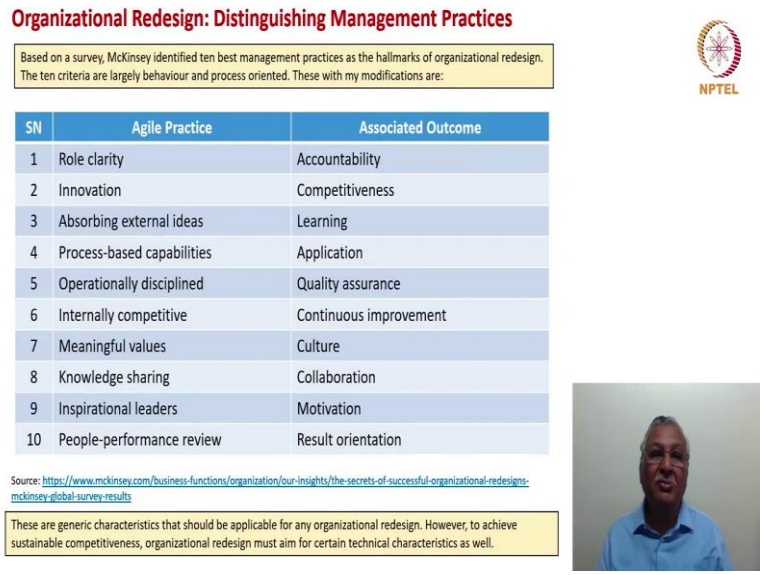

So, what as the distinguishing management practices? If you want role clarity, there is an associated outcome or rather if you want accountability, there is an agile practice which you must have. So, if you want accountability, role clarity; similarly, if you want competitiveness, you need to have innovation.

If your agile practice is absorbing external ideas, you will be a learning organization; if you have process based capabilities, you will be able to apply those capabilities very strongly in the market place. An operationally disciplined agile practice will ensure quality; an internally competitive agile practice will provide continuous improvement.

Meaningful values as anchors for the agile practice will provide cultural stability. Knowledge sharing as a practice leads to collaboration; inspiration leaders provide motivation; people performance review leads to result orientation. So, these are the practices that could be utilized by the leaders to enable that positive outcomes are ingrained in the organizational process.

And these generic characteristics are applicable for any organizational redesign. However, to achieve sustainable competitiveness, organizational redesign must aim for certain technical characteristics as well.

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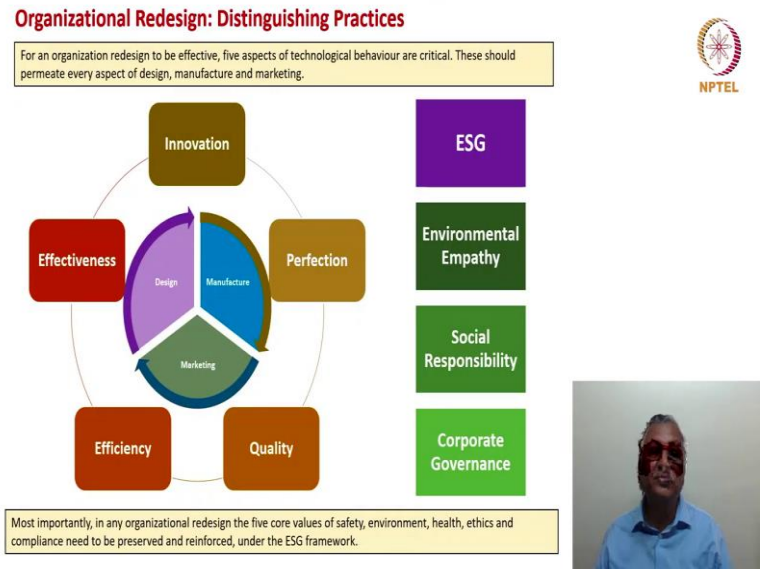

When we say technical characteristics, they are related to innovation as also inventiveness. These distinguishing practices are the follows; innovation, perfection, quality, efficiency, and effectiveness. You can see that three are very much related to the science and technology aspects and two are very much related to the business process.

Design, manufacturing and marketing; if they are characterized by these five features, then the organization redesign will be very effective. And the drivers of these design, manufacturing, marketing aspects of the organization will provide competitive advantage for the company.

However, we have to also bear in mind, all this could come to not, if the ESG practice of the company are sub-par. If the ESG practices are higher than the industry standard; by a corollary, the company would be doing all that what we discussed earlier, that is innovation, perfection, quality, efficiency and effectiveness. And what is ESG we discussed earlier as well; environmental empathy, social responsibility, and corporate governance.

ESG investments is an extremely powerful methodology for directing corporate behavior towards these three factors. And these three factors when supplemented with innovation, perfection, quality, efficiency, and effectiveness in operations; the result would be a highly competitive, highly sustainable corporation, which supports the socio-economic

development. That is the summation of organizational redesign in terms of the distinguishing practices that are required.

Thank you, we will meet in the next lecture.