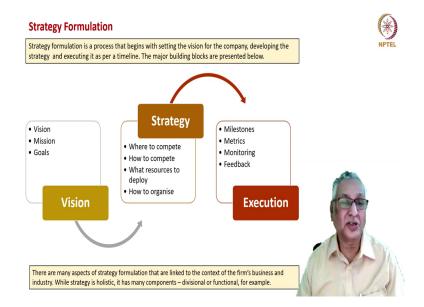
## Business Development From Start to Scale Prof. C Bhaktavatsala Rao Department of Management Studies Indian Institute of Technology, Madras

## Week - 01 Business Fundamentals Lecture - 04 Strategy Formulation

Hi friends, welcome to the NPTEL course Business Development from Start to Scale. We are in week 1 covering the topic of Business Fundamentals. It is actually the theme of the 5 lectures. In this lecture the 4th in the series, we are covering the topic of Strategy Formulation.

(Refer Slide Time: 00:28)



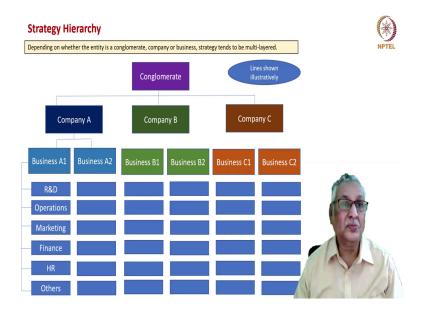
We have considered in earlier sessions that the strategy of a firm determines how business development can take place. It also determines how different functions of a company can be aligned to deliver the results. Strategy formulation is a process that begins with setting the vision for the company, developing the strategy and executing it as per a timeline.

The major building blocks of this process are presented below. Vision is nothing but expressing where the company would need to be and the broader purpose the company has in its growth journey. Vision itself is very broad vision needs to be supplemented with mission and goals. Goals will be most; more specific. Strategy is a set of plans or actions that tell us where to compete, how to compete, what resources to deploy and how to organise.

Execution is another name for implementation. Execution includes setting the milestones, developing the metrics, monitoring performance against milestones and metrics and providing feedback to the strategy planners and the chief executive officer. There are many aspects of strategy formulation that are linked to the context of the firm's business and also the industry.

The strategy for an automobile firm is different from the strategy for an oil and gas firm, it is also different from a company which is indulging in fast moving consumer goods business. So, things are different depending upon the nature of the industry. While strategy is holistic it also has many components divisional or functional for example.

(Refer Slide Time: 02:13)

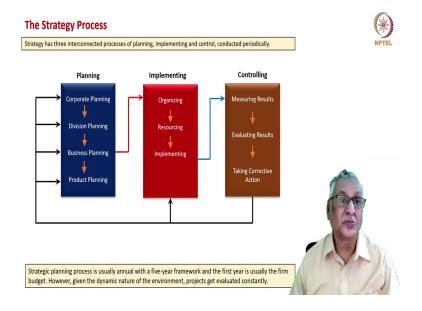


The nature of strategy varies, whether the strategy is one of conglomerate or of company or of a constituent business. A conglomerate is a group of companies with common ownership structure. A company may have single business or multiple businesses, so you can look at a horizontal spread from the Apex conglomerate through the companies, to the businesses. In each company there will be a corporate plan or a business plan for a particular business covering the various functional hierarchies.

And when these businesses are combined within a family of a company it becomes the corporate plan for the company and the corporate plans of the various companies becomes the overall strategic plan for the conglomerate. Now, these lines are shown illustrative typically a conglomerate would be group of several companies could be 10, 20, 30 depends upon the nature of the conglomerate.

Similarly a company could be a grouping of several businesses not just two businesses. The complexity of strategy formulation is therefore, evident and this is called strategy hierarchy. But at the same time there is also a horizontal spread of the strategy hierarchy as you move into a company situation and also into a conglomerate situation.

(Refer Slide Time: 03:41)



There are three interconnected processes of planning, implementing and control which are conducted periodically as per the long term planning, mechanism that used to be there a few decades ago. There would be planning, which comprises the corporate planning, which boils down to the strategic business unit and further cascades down to business planning and moves on to product planning.

Product is the basic atom of developing the strategy from product which serves a market you get into a business and that business forms the strategic business unit and then it leads to the

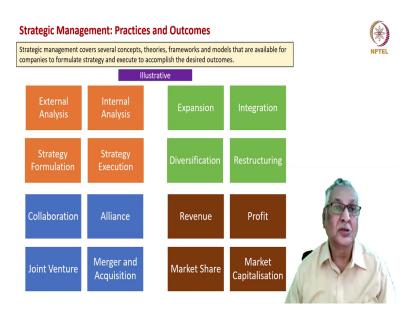
corporate plan. In terms of the implementing you need to organise the company in terms of the factor resources including people and begin implementing it.

And the controlling module looks at measuring the results, evaluating the results and taking corrective action. Usually strategic planning is undertaken with a five-year horizon, in the contemporary period of fast and dynamic changes in technology and market preferences even a three-year time frame is considered appropriate for strategic planning.

Typically the first year of a strategic plan tends to be the annual budget. Annual budget will be firm and fixed and calendarized in terms of months for execution. However, the strategic plan itself over the three-year, five-year horizon could undergo certain changes based on the environmental developments and also the varying internal strengths and weaknesses.

The Chief Executive Officer and the Chief Strategic Officer have the responsibility to establish a fine balance between focus of a reasonably fixed strategic plan and the adaptiveness and the flexibility of a plan which is dynamically responding to the ongoing developments, you cannot be too flexible; you cannot be also too rigid. This is the fine balance that is required.

(Refer Slide Time: 05:44)



There are many practices and outcomes of strategic management. In the theory of strategic management you would find several concepts theories, frameworks and models. And these help the company to formulate strategy it also helps the company to execute to achieve the desired outcomes. Although this is not a course for strategic management, I will try to provide you several nuggets of knowledge related to strategic management, so that you can look at this whole domain of business development in a more holistic way.

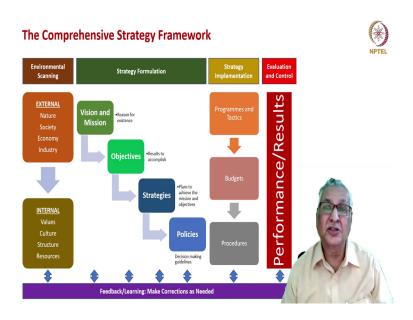
Illustratively strategic management requires external analysis of the environment, internal analysis of the firm and its ecosystem, the strategy formulation process itself and the strategy execution paradigm. And to be able to do that a company may look at expansion, diversification, integration and restructuring. Each of these activities will be required at different parts of the life of the company.

Expansion is indicated when there is adequate market demand and you could introduce more products and capture more market share. Integration will be required when cost competitiveness of the product is desired and there is sufficient demand to sell a cost competitive product. And this integration could be forward integration into the channels that is dealerships, customer connect or it could be backward in terms of the supply of components or vendor materials.

When there is saturation of the market or when there are better opportunities there could be diversification as a strategic plan component. When the going is tough and you need to reaching the enterprise you need to undergo restructuring these are the four ways in a company's thought process. And this can be again achieved through four tools collaboration, alliance, joint venture, merger and acquisition. In this course I will comprehensively deal with each of these things in later lectures.

And the ultimate objective of the strategic management process is to provide four financial parameters and market parameters. Market share and market capitalization, revenue and profit are the four markers viewed from a marketing as well as financial perspective to help the company achieve its dominance.

(Refer Slide Time: 08:17)



The comprehensive strategy framework that I have proposed here is very important for you to visualize the whole process of strategic development over a long term framework. It requires environmental scanning, strategy formulation, strategy implementation and evaluation and control to be viewed as four distinct modules, but each interconnected with the other. The starting part of a very comprehensive strategic framework is the environmental scanning module.

In this you require an analysis of the external environment, comprising, nature, society economy and industry. In the past strategic planning approaches nature was never a factor but today even the ESG considerations that is environmental, social and governance considerations. And also the need to protect the environment nature and society have emerged

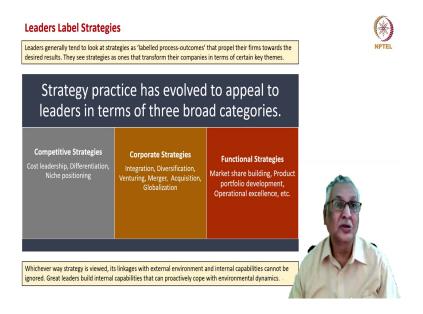
as the most important drivers of external analysis, internally we must look at the values, culture, structure and resources of the organization.

You cannot think of something which is grossly at variance with the internal system that we have, we need to change the internal system from time to time, but there cannot be an immediate gross deviation from whatever are available as internal strengths and internal attributes. The strategy formulation process itself comprises four important components.

Vision and mission, including goals as we have discussed earlier, the objectives that is the results that are expected the strategies that is the planning and plans to achieve the mission and objectives and the policies which are the guidelines for making the strategies.

And once you have the strategy stitched up you need to go into the strategy implementation phase which comprises programs and tactics, budgets and procedures. And the evaluation control would take place through performance and results. And every module is required to provide feedback and landing mechanisms and enable the company to take corrective or remediation actions as required.

(Refer Slide Time: 10:33)



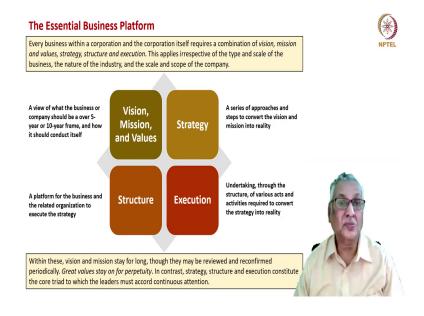
Leaders tend to label strategies; they look at the strategy process as a labelled process outcome paradigm. They look at this as a means to propel their firms towards the desired results. Therefore, they see strategies as ones that transform their companies in terms of certain key themes. Over a period of time there have been three broad categories that have been developed in terms of labelling strategies one set is the competitive strategy set cost leadership, differentiation and niche positioning.

These are the three generic competitive strategies that are available to develop a company on its growth path. We also have corporate strategies that have been there even earlier to the development of the competitive strategy theory. These are integration, diversification, venturing, merger, acquisition and globalization.

There have also been functional strategies even prior to the corporate strategy regime which included market share building, product portfolio development, financial analysis, operational excellence etcetera. Whichever way you view the strategy its linkages with external environment and its appropriateness to the internal capabilities cannot be easily dismissed.

Great leaders build internal capabilities that can proactively cope with environmental dynamics. Similarly, great leaders also consider strategy as a wholesome practice that comprises competitive strategies, corporate strategies and functional strategies. All of these together will be a very virtuous method of developing strategy for a company.

(Refer Slide Time: 12:23)



The business platform as we may look at for every company is a combination of vision, mission and values, strategy, structure and execution this is what I have told in the earlier sessions as well. But the time frame for this varies from time to time and values are the ones

which will provide a purpose for the company which will guide the formulation of the vision and mission.

Strategy is a series of approaches and steps which converts the vision and mission into reality. Here I introduce the third element which I have not covered earlier in such detail. The structure the structure whether you call it organizational structure or resource structure or people structure serves as the platform for the business and the related organization to execute this strategy.

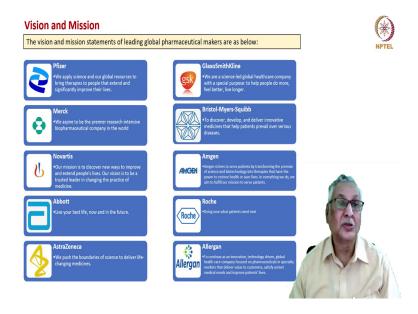
When you come through the organizational part of our course, wherein I will briefly touch upon the organizational structure you will see the linkages of the organization structure with the vision, mission strategy of the company the nature of the industry and also the scope for business development utilizing the organization structure.

Execution is the process of undertaking through the structure of various acts and activities that are required to convert the strategy into reality. One thing we need to remember vision and mission stay for long, they are not annual, iterative statements they are broad enough to help the company guide itself on its future journey.

They will get reviewed reconfirmed time to time, but not certainly annually. Great values on the other hand stay on for perpetuity values are so fundamental to a company's good behaviour and good living that these are to be chosen with great care and once chosen they must be embedded into the DNA of the company.

In contrast to vision mission and values strategy, structure and execution constitutes the core triad which requires contiguous attention by the top leaders of the company and strategy structure and execution can be altered from time to time within the overall framework of vision mission and values.

(Refer Slide Time: 14:47)



Let us look at what vision and mission constitute in terms of the vision and mission statements of leading global pharmaceutical companies. Most of the companies must be known to you. Pfizer we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. This is a vision statement of the Pfizer Corporation which is one of the top ranking pharmaceutical companies globally.

What do you see from this application of science? Utilization of global resources, development of therapies and extension and improvement of patient lives; these guidelines, these purposes will remain for long long time for any pharmaceutical company. Therefore, this is the way a company defines and embeds its vision into the company. Merck another pharmaceutical company says we aspire to be the premier research intensive biopharmaceutical company in the world.

Now, what is another pharmaceutical company says, our mission is to discover new ways to improve and extend people's lives. Our vision is to be a trusted leader in changing the practice of medicine. Abbott is also a great pharmaceutical company it says even more simply live your best life now and in the future. AstraZeneca talks about pushing the boundaries of science to deliver life changing medicines.

GSK is another leader with long heritage, we are a science led global healthcare company with a special purpose to help people do more which means be more active, achieve more, feel better live longer. Bristol Myers Squibb another Stalwart company it says discover develop and deliver innovative medicines that help patients prevail over serious diseases.

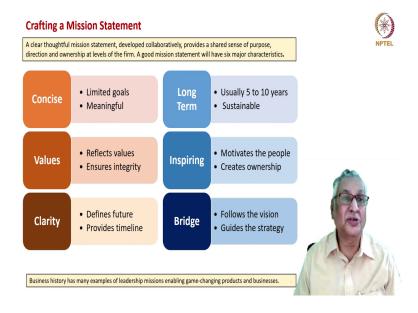
Now, the way you define the disease over serious diseases which means, that BMS will be more inclined towards developing challenging therapies rather than small over the counter medicines. So, this is an important visionary statement that tells the company where it should focus its energies on. Amgen it is a leading biotherapeutics company.

Amgen strives to serve patients by transforming the promise of science and biotechnology into therapies that have the power to restore health or save lives. In everything we do we aim to fulfill our mission to serve patients. Roche again another leading company it says doing now what patients need next.

Allergan is a company, it says I will continue as an innovative technology driven global healthcare company, focused on pharmaceuticals in specialty markets that deliver value to customers satisfy unmet medical needs and improve patient's lives. You can also see the kind of differences in how the vision statements are defined by different companies some are very simple as in the case of Abbott.

Live your best life now and in the future some are very elaborate as in the case of Allergan and Amgen and in most cases vision statements tend to be between the two.

(Refer Slide Time: 18:12)



How do you craft a mission statement? Once you have the vision you need to transform that into a mission statement. So, that people can perceive that in a tangible fashion, a good mission statement will have six major characteristics. One it will be concise, it will have limited goals and the goals will be very meaningful.

Second it will have values and those values will be very clearly seen in the mission statement. It also ensures that the company follows a policy of integrity in all its thoughts, expressions and deeds. It clearly defines the future provides the timeline. A mission is usually for long term for 5 to 10 years and it will be sustainable for an oil and gas company, the mission could be to maximize development of green energy.

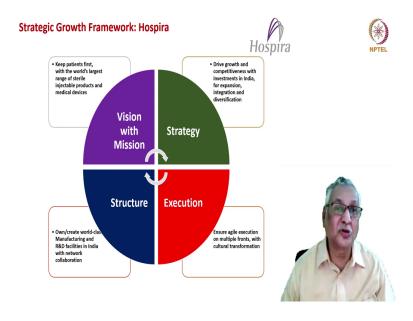
So, that the green energy produced by the company is at least 50 percentage of the total energy output of the company. It is a mission whereas; in terms of the vision, the vision could

have been to transform itself into a total clean energy company over a period of 10 years 15 years like that. So, the vision is given a more concrete space, more concrete direction in terms of the mission.

The mission will be inspiring to people it motivates the people, creates ownership when a mission of electrification of the automobile line up is given to the organization and that motivates the people because they are going to handle new technology, transform the markets change the customer mindsets, create a new infrastructure and also in the process become more competitive relative to the other competitors.

And another aspect of mission is that it will serve as the bridge between the vision and the strategy. Straight away from the vision it is challenging to translate into strategy because vision is so broad in terms of its purpose. Whereas if you have a mission which takes you through the missionary steps it will help in better guidance for the strategy. Business history has many examples of leadership missions enabling game-changing products and businesses.

(Refer Slide Time: 20:27)



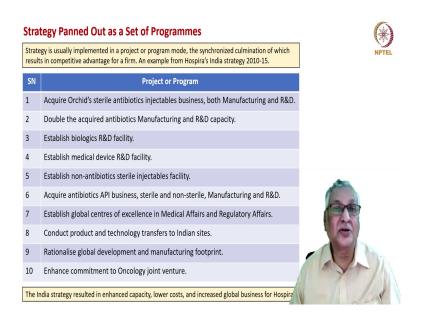
I have given here an example of Hospira it has vision with mission, it has strategy, it has structure and execution. I was part of the Hospira ecosystem between 2010 and 2015 and I was the managing director of Hospira in India as well. The vision with mission is that we should keep our patients first and we should do that with intensive care therapies.

So, that lifesaving is made possible and it has therefore, become the world's largest range of sterile injectable products and medical devices that are an offer. And in terms of strategy it said that we should drive growth and competitiveness with investments not only the United States, which is the parent country, but also in India for expansion, integration and diversification.

(Refer Time: 21:16) in order to do this it has developed a structure, world class manufacturing and R and D facilities in India again supported by the global R and D and

manufacturing facilities. In fact, it is a complementarity that has happened with network collaboration and execute in an agile and nimble fashion along with cultural transformation. This is the vision, mission strategy structure execution growth framework for Hospira.

(Refer Slide Time: 21:45)



But the strategy itself was panned out in terms of a set of programs. Usually strategy is implemented in a project or program mode, it is the synchronized culmination of these projects and programs that helps the firm, advance its growth path and also achieve sustainable competitive advantage.

An example from Hospiras India strategy in the period 2010 to 2015 is as below. It comprises of 10 distinct programs. 1 acquire orchid sterile antibiotics injectables business, both manufacturing and R and D. The idea was to start off in India with a readymade high quality

(Refer Time: 22:27) day compliant R and D and manufacturing base and also a injectables drug pipeline.

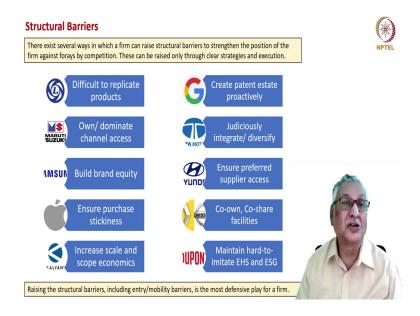
Once the acquisition is done, you must double the acquired antibiotics manufacturing R and D capacity because as a company Hospira had a global footprint and had better resources to produce more and also market more. And the 3rd program was to establish biologics R and D facility, because the future is bio stabilized. The 4th program was to establish a medical device R and D facility because the company is committed to total healthcare not only in terms of medicines, but also in terms of device care.

5th established non-antibiotic sterile injectables facility because some of the non-antibiotic sterile injectable be it the vitamins or be it antibiotics they are all important for a patients comprehensive health care. Then you needed to backward integrate to achieve greater competitiveness. Therefore, acquire the antibiotics API business, sterile and non-sterile manufacturing and R and D. The 7th item was to establish global centres of excellence in medical affairs and regulatory affairs.

The 8th item was to conduct product and technology transfers to Indian sites and the 9th project was to rationalize global development and manufacturing footprint. And 10 get into a space which is very vital for terminal stage developments of life, which is commitment; which is enhancement of the commitment to oncology joint ventures that develop anti oncology medicines.

This India strategy which comprised of the overall strategic direction of being in the life saving business for patients and having a mission of transforming the overall competitiveness with strong India presence resulted in enhanced capacity lower cost and increased global business for Hospira.

(Refer Slide Time: 24:29)



There will always be structural barriers to the implementation of strategy. Now, these structural barriers will be there, when other firms raise the structural barriers likewise, you as the company forming the strategy have to raise structural barriers. So, that others cannot simply copy your strategies you should raise structural barriers, which avoid forays by competition or negate them. And for that you need clear strategies and execution.

I have given you five examples here of companies which have created such structural barriers. Ashok Leyland the leading truck and bus manufacturer has created structural barriers by developing, manufacturing and marketing for decades difficult to replicate products. Maruti Suzuki has created a structural barrier by owning and dominating high class channel access right from the time it introduced its state of the art products in the Indian automobile product.

Samsung created a structural barrier by building brand equity. Apple has created a structural barrier by ensuring purchase stickiness that is the ecosystem developed by Apple was found so engrossing and so endearing for the Apple users that they remain with Apple and general saying is that if you are an Apple customer you would not try out anything else. And for Kalyani leading manufacturer of forgings the structural barrier was in terms of scale and scope economics.

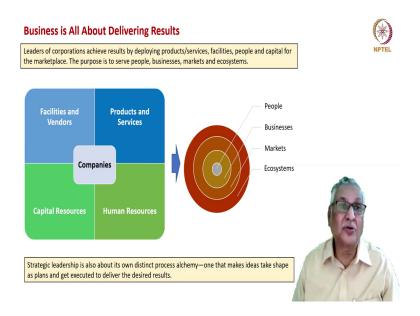
The core was creating the difficult to manufacture cracks shafts for big internal combustion engines and from there increased scale and scope was aimed at. For Google create patent estate proactively, for Tata Motors judiciously integrate diversify, it is the only automobile company in India which covers everything from the smallest passenger car to the biggest truck and bus. Hyundai ensures preferred supplier access.

And for Nissan which has teamed up with Reno co-own and co-share facilities. And for DuPont maintain hard-to-imitate EHS and ESG policies. Now, these structural barriers are based on certain core competency which is owned further. But it does not mean that the company would not have other capabilities.

In fact, each of these ten factors would be present in some measure or the other with the various manufacturers that are listed here. But they have used one of these things to be an rather insurmountable channel access or product capability structural barrier as in the case of Maruti Suzuki and Ashok Leyland that others find it difficult to overcome those barriers.

Raising the structural barriers including the entry and mobility barriers is the most defensive play for a firm even as you pursue an aggressive strategy of business development you need to have defensive structural barriers. So, that the business can be constructed and managed fruitfully and seamlessly in future.

(Refer Slide Time: 27:48)



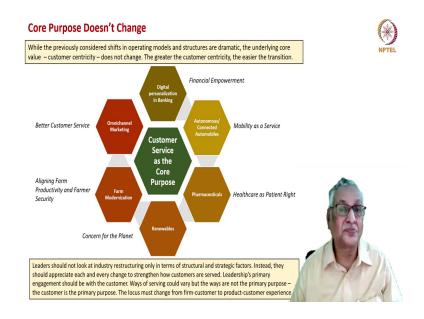
Business is all about delivering results. Leaders of corporations achieve results by deploying, products, services, facilities, people and capital for the marketplace. The purpose is to serve people businesses markets and ecosystem. People are the consumers and people are the employees, are at the core of any particular corporate setup. And then you have the businesses which deal with the markets and serve the markets and we have the entire ecosystem of the company.

Now, we have this ecosystem comprising facilities and vendors, products and services, capital resources, human resources every company will have this. However, strategic leadership is the art of creating a very special alchemy, a very distinct process alchemy that makes the ideas spring up in a very unique manner get strategized in a very unique manner and also get

executed in a very unique manner. And that strategic alchemy is something which is going to differentiate your company from other companies.

And you need to understand strategy in all its depth in all its breadth to be able to develop this strategic alchemy, as you proceed it is not just a set of plants that need to be written down and circulated to departments is much more that it is creating a DNA of strategic alchemy in the company.

(Refer Slide Time: 29:15)



But we also must remember that whatever structural changes you do, whatever strategic shifts you undertake the core purpose of a business does not change as we are aware the industries, businesses and companies have been changing over the last few decades. But if you really look at closely the core value or the core purpose of each business that is the customer centricity does not change.

And the greater the customer centricity of your company, the easier would be the transition in the transformation journey. Let us look at digital personalization in banking. When you look at digitization happening in banking you may think that oh my god banking is going to be completely different in future there may not be. So, many branches, there may not be people exchanging cheques and receiving cash all those kinds of thoughts may come.

But the core purpose which is financial empowerment of individuals is not going to change. In fact, it is going to be made much better with the digital personalization that is happening in banking. Let us look at the autonomous connected automobiles at one level we understand that this is going to completely transform the automobile industry the structure of vendors, the structure of products, the manufacturing processes, the overall designs are going to be completely different in future.

But does the basic purpose the basic customer centricity change no. Mobility as a service continues to be the main purpose of automobile industry whether it is powered by clean energy engines or in any other manner by any other way including autonomy. Let us look at pharmaceuticals. We have chemical molecules that have ruled the rules so far. And today 50 percent of the molecules which are used as medicines or biological molecules and in future it could be 75 percent biological molecules.

Other methods of pharmaceutical development such as regenerative medicine, customized medicine are all coming through. But what is the core purpose, what is the core connect with the customers, healthcare as the patient right, every individual who has come into this world has the right to have a healthy life and pharmaceutical industries main purpose remains the same.

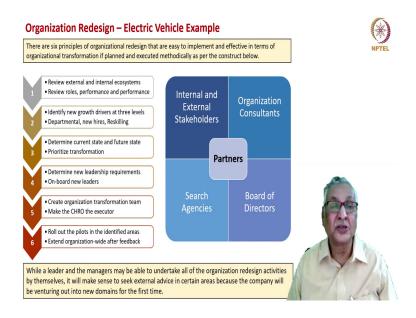
For renewable energy concern for the planet this is the customer centric, theme and purpose, for farm modernization, aligning form productivity and farmer security and for Omni channel marketing better customer service. So, you look at the industrial transformations not in terms of the nuts and bolts of the transformation or in terms of the clicks and sites of the industry it has to be viewed in terms of the basic customer connectivity that remains as it was, but and

gets enhanced in terms of the smoothness, cleanliness and prosperity of the process that is taking place.

So, leaders should not look at industry restructuring only in terms of structural and strategic factors instead they should appreciate each and every change to see how the customer interests can be better served. Leader's primary engagement should be with the customer not with just the technologies of changing the industry structure or changing the products. Ways of serving could be many, but waste are not the primary purpose. In normal life we say that destination is not important, journey is important.

But in this case we say that the destination which is serving the customer is the most important, we may take different journeys, we may take different ways to serve the customer. The customer is the primary purpose something which Mahatma Gandhi said long long ago. The locus must change from firm customer interface to product customer experience and this is the core purpose that must drive strategy formulation in companies.

(Refer Slide Time: 33:29)



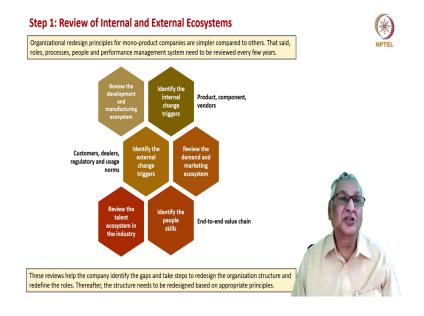
Let us take one example of how an organization gets redesigned. I take the example of electric vehicles; there are 6 principles of organizational redesign. That are very easy to implement and very effective in terms of organization transformation. But these need to be planned and executed methodically as per the construct below there are 6 steps as I said. The first step is to review the external and internal ecosystems, review roles, performance and performance.

Second identify new growth drivers at three levels, departmental, new hires, Reskilling. Determine current state and future state, prioritized transformation. Determine new leadership requirements, on-board new leaders. Create organization transformation; create a team for that make the CHRO or the Chief Human Resource Officer the executor. Roll out the pilots in the identified areas, extend organization-wide after feedback.

Now, to be able to do that you need partners, the partners are internal and external stakeholders that is the ecosystem residents and the external input givers, the organization consultants, the search agencies, the board of directors. These are the partners in the organizational redesign journey. A leader and his managers or her managers may be able to undertake all of the organization redesign activities by themselves.

However, it will make sense to seek external advice in certain areas because technologies are changing, customer preference are changing you require an independent third party view on the latest trends and the futuristic trends. So, that any entry into a new domain is seamless and also very effective. Now, let us roll out the electric vehicle example in terms of these six steps.

(Refer Slide Time: 35:27)



The first step is the review of internal and external ecosystems. The redesigned principles for mono product companies are simpler compared to others. However, the roles, processes, people and performance management system need to be reviewed every few years. Now, how do you do that you develop the manufacturing and ecosystem related paradigm over several years.

Before it gets ossified you need to review that, you should identify the change triggers at product component and vendor level. Identify also the external change triggers, customers, dealers, regulatory and usage terms. Review the demand and marketing system, review the talent ecosystem in the industry and finally, identify the people skills.

In the context of the sugar industry, the external inputs that have come in terms of ethanol blending it has been a great input how the sugar industry restructures itself and also serves the oil industry and therefore, the automobile and transportation sectors. The government has mandated that there should be a blending of 20 percentage of ethanol by 20 23 it has accelerated its mission by few years and that has radically changed the way sugar by products that molasses are used.

Similarly, there is a mandate that there should be a blending of 5 percent of biodiesel in diesel. We consume several million tons of petrol and diesel with huge importation cost and that importation cost is ballooning in the context of rupee depreciation. But this governmental input in terms of the mandate or guidance whatever you may call is nudging the industries to take fundamental transformations in how they conduct their manufacturing processes and develop their products and by-products.

And that leads to creation of new facilities, reviewing of the talent ecosystem, identifying new people skills and various other parameters. So, the study of internal and external ecosystems is very important to ensure that there is an industrial transformation in the appropriate time and it also helps you identify the gaps and take steps to redesign the organization structure and redefine the roles in good time.

(Refer Slide Time: 37:52)



The second is to identify new growth drivers, alright. You want to go to electric vehicle manufacturing. But what are the new departments that you require? You had an engine development department earlier in your R and D you may not require it to that extent. However, you require a battery development department, a thermal management system department idea.

You had redesigners in terms of the overall industrial design of the passenger car. But today you have batteries put underneath on to the chassis and both the front bonnet and the dicky are available for loading of goods. Now, whether you would like to load the goods or reconfigure the entire car to be a more compact vehicle.

These are all the challenges you have therefore; you require new departments expanded departments. So, in respect of the electric vehicle development, it is not that ice engine

vehicles will disappear overnight they would continue for a long time maybe another 10 years, 20 years and also improvement of the vehicles on road.

Therefore, you require along with the established skills though they are calibrated down in a phased manner you require new R and D skills, hybrid and electric development units, vendor development for new electric and electronic components, technology sourcing, vendor investment, testing and homologation etcetera. Similarly, you require new ecosystem coordinators.

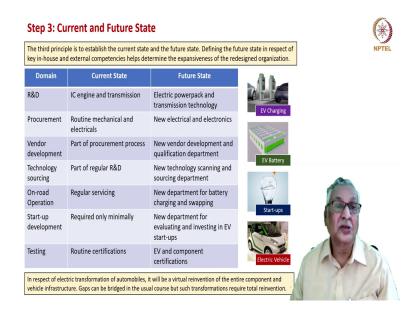
The ecosystem as defined earlier will get supplemented with charging stations, battery swapping, arrangements, government incentives, vehicle financing, dealer development etcetera. So, as a result you get a new hybrid organization, which is capable of managing the established ice engine based vehicle line up. But also introduce and eventually take over the ice engine based vehicle over a period of 10 to 15 years.

So, there will be three types of gaps that are identified in this process need for entirely new departments, batteries would not have been a departmental concern at all. Now, a news department or sub-department has to be created for development of batteries and also the thermal management systems and the motors etcetera.

You also require a new department for developing connected vehicles or autonomous vehicles. Secondly, you need to develop new skills in the people who are already in the company because you cannot (Refer Time: 40:52) the existing organization and the talent will not be available of the new skills to the extent you require.

Therefore, you need to skill the existing people. The third is the need for reskilling the existing employees. So, you have skilling the departments with the new capabilities and reskilling the existing employees with training, coaching and development and identifying of new departments that need to be in instituted all the three have to happen together.

(Refer Slide Time: 40:53)



And the step 3 is to establish the current state of the company and the future state. And defining the future state is extremely important to ensure that the key in-house and external competencies are shaped up in the way that will support the future state and that is the redefinition of the organization. So, in terms of R and D from the current state of IC engine and transmission you go to electric power pack and transmission technology.

Procurement from routine mechanical and electrical items you go into new electrical and electronics items. Vendor development, which is a normal process of procurement will move into a new vendor development and qualification process almost on a green field basis. You need to have technology sourcing moved away from part of regular R and D to a new technology scanning and sourcing department.

On road operation will be handled by regular street mechanics, service centres and various other network opportunities that the companies have built up over years in the current state. However in the future state you need to have new departments for battery charging and swapping and also remotely managing the connected vehicles in case of any anomaly.

Start-up development was required only minimally even over the last few years in the conventional automobile industry. But in the future state you require certainly new department for evaluating the EV start-ups that are sprouting up and that are showing promise. And in terms of testing all the certification and homologation requirements in the current state are standardized and it is repetitive.

But when it go comes to the future state, you need to have new certifications for electric vehicles and components. By not having those certifications we have also seen that the evolution of the future state will have a setback be it in terms of the range problems or in terms of the quality problems or unfortunately in terms of fires which engulf the electric vehicles. Therefore, you need to have all of these things happening with an eye on the future state.

It is a virtual reinvention of the entire component and vehicle infrastructure as far as the electric vehicles are concerned. These gaps can of course, be bridged in the usual course, but transformations of this nature suddenly require total reinvention that is why you should look at step 3 in a great detail.

(Refer Slide Time: 43:26)



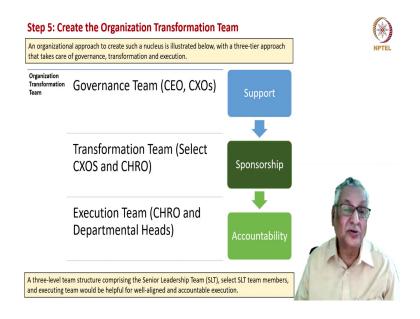
The step 4 is to create a new leadership nucleus. An organization under transformation to new technologies as well as new business models will require a new place of new leaders or even transformed leaders who can guide and execute the redesign and transformation process. Because leaders are the ones who are going to set the vision, define the mission and tell the organization how to move forward.

So, you have the Apex leader under the Apex leader will have CXOs there will be a current R and D head, but he would have team leads who are newly skilled and reskilled of the current capabilities. Second there will be a new development head for electric vehicles who will have new departments. The current operations head will be reskilled to handle the electric vehicles as well as the established vehicles simultaneously.

There would be a new EV operations head will be responsible for end to end development of new technology components operationalizing them and putting them into the marketplace. So, that will be the new thing. So, up skilling, new skilling, whole new departments and new leaders would be the entire gamut of creating the new leadership nucleus.

So, we have to strengthen the organization substantially through the above construct and also at times you may have to take selective one time consultancy support. So, that there is less of fixed cost and more of sustainable cost as you try to do an industry transformation.

(Refer Slide Time: 45:07)



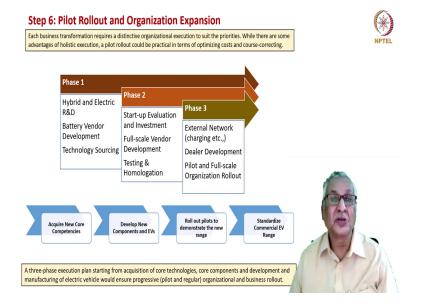
Step 5 when you look at an organization transformation it has to be companywide. But the tone at the top is very important, the top leadership needs to set the guidance, but also see

how the guidance is actually getting executed in practice. So, we need an organization transformation team which will have three layers.

The top layer is the governance team comprising the CEO and the CXOs; the middle layer will be the transformation team that is the team full of the new skills and the ability to upskill the existing organization the CXOs and the CHRO. And third the operating team for the execution team which will comprise the Chief Human Resource Officer and various departmental heads.

When they put their heads together in these three layers they will be able to provide the required support to the transformation task, serve as sponsors to the transformation and they themselves will take accountability and ensure accountability. And this is the way in which organizations can transform, when a magnitude of the electrification scale is envisaged.

(Refer Slide Time: 46:16)



And the step 6 is the pilot rollout and organization expansion. Each business transformation will require a distinctive organizational execution to suit the priorities. There are some advantages of a nationwide execution or pan product execution, but a pilot rollout could be very practical in terms of optimizing cost and course correcting.

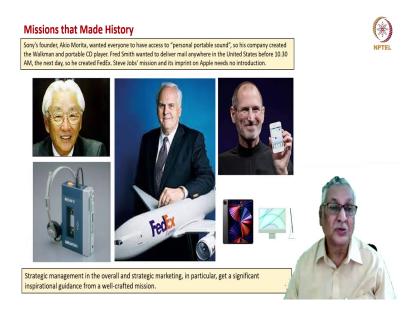
So, phase 1 in the electrification endeavour could be first hybrid and electric R and D followed by battery vendor development in parallel or sequential and then technology sourcing. Phase 2 could be start-up evaluation and investment, full scale vendor development, testing and homologation. General motors' has been in electric vehicle development for several years.

But it has been evaluating start-ups to understand whether decarbonization could be a technology that could be integrated after 3 4 years of evaluation it has taken a new start-up under its belt for decarbonising. Therefore, in phase two you start degrading new technologies from the external ecosystem you also undertake full scale vendor development, testing and homologation.

And in the phase 3 you look at the ecosystem dealer development pilot and full scale organization rollout. So, acquiring new core competencies, developing new components and electric vehicles, rolling out of the pilots to demonstrate the new range and finally, standardizing the commercial new electric vehicle range is a sequence that needs to be followed. And some of them obviously, will overlap into the previous stages as well as into the future stages.

This execution plan phase 1, phase 2, phase 3 which will focus on core technologies core components and new way of development and manufacture will be the right answer to rapid and successful electrification of the automobile industry.

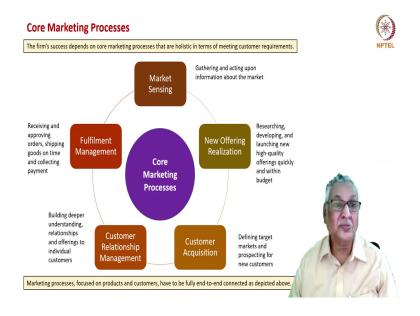
(Refer Slide Time: 48:12)



To be able to do that you require leaders who can make history. Sony's founder, Akio Morita, wanted everyone to have access to "personal portable sound", so his company created the Walkman and portable CD play decades ago. Fred Smith wanted to deliver mail anywhere in the United States before 10.30 AM, the next day, so he created FedEx. Steve Jobs' mission and its imprint on Apple needs no introduction.

Strategic management in the overall and strategic marketing, in particular, get a significant inspirational guidance from a well-crafted mission and leadership that supports this mission. Leaders have been instrumental, pivotal and highly valued in transforming their companies from what they have been to what nobody imagined them to be that is why missions are important and for missions to make history you need visionary leaders, who can make missions that can be future history.

(Refer Slide Time: 49:18)



In this we need to have a marketing support or a business development setup, there are some co marketing processes that help. So, from this supply of the strategic marketing process which is aligned to the corporate strategy and business development processes you also have to be very focused on market.

And you have to sense the market it is simply not enough for a company to say that I will go into at quickly development you have to sense the market, what is the nature if people are charging their vehicles in the homes inside the rooms, how do I ensure that these are error proof, how these are going to be fire proof and what other kind of charging technology can offer.

People should not you know repeat the same kind of mistake which Tata Nano did it developed a beautiful product, but did not understand how it could be parked by the people

who are in the past owners of motorcycles with minimal parking space. Therefore, parking space alone in my opinion derail the Tata Nano strategy. Similarly, if the electric vehicle manufacturers have no understanding of how vehicles are going to be charged at home or elsewhere the electric vehicle endeavour could fail.

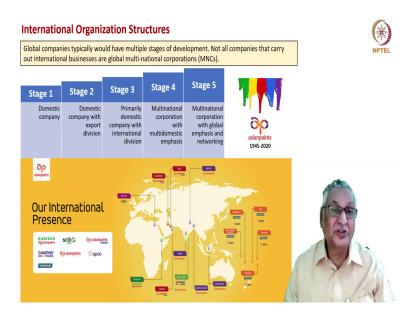
Therefore, sensing of the market gathering and acting upon information about the market is extremely important. We also need to have realization about the new offering. So, you have to research, develop and launch new high quality offerings quickly and within budget it took 8 or 4 years to launch the next generation of electric vehicles is that acceptable is it helpful.

The third one is customer acquisition. The core customers for any new vehicle development or any new industrial product or consumed product development are extremely important they provide the word of mouth based on the performance of the product and experience of the users. Therefore, we need to define the target markets and prospect for the new customers in a very targeted manner.

Then customer relationship management also becomes very important we have to build deeper understanding relationships and offerings to individual customers. Because you got to go the extra mile to make sure that they offer a totally new product receiving and approving orders, shipping goods on time and collecting payment is part of the fulfil manage; fulfilment management which needs to be done even more rigorously.

In any industrial transformation, marketing processes which are focused on products and customers have to be transformed into fully end-to-end connected as depicted above.

(Refer Slide Time: 52:06)



We also have as part of strategy, as part of business development, organization structures, playing very useful and very important role international organization structure is one such primary. Example typically in any development of industry there will be 5 stages. In stage 1 the industry would comprise domestic companies. Stage 2 domestic companies with export divisions. Stage 3 primarily domestic companies with international divisions.

Stage 4 multinational corporations with multidomestic emphasis. And in stage 5 multinational corporations with global emphasis on networking. Most developed countries and the leading companies of the world are in stage 5. Be it the Unilever, be it the General Electric, be it the Apple or any other such companies.

In India companies have started from stage 1 post independence, they moved on to stage 2 very quickly, they got stuck in stage 3 for quite some time and now they are looking at

globalizing themselves look at the example of Tata Motors, Tata Steel and various other companies.

Companies are also becoming global by inviting multinational companies to take stakes in their corporations and in this process becoming more global. Example of ancient paints between 1945 and 2020 is a classic example how an India based operation has become a globalized operation through acquisition of multiple manufacturing facilities some R and D facilities in various regions of the world, including Middle East, Africa, Europe and several other geographies which the company has not thought about when it started its journey 1945.

So, development of organization structures which we will consider in greater detail later, is an important aspect of business development and global strategization. With this we come to the end of this lecture.

Thank you for your kind attention, we will meet again, in the next lecture.