

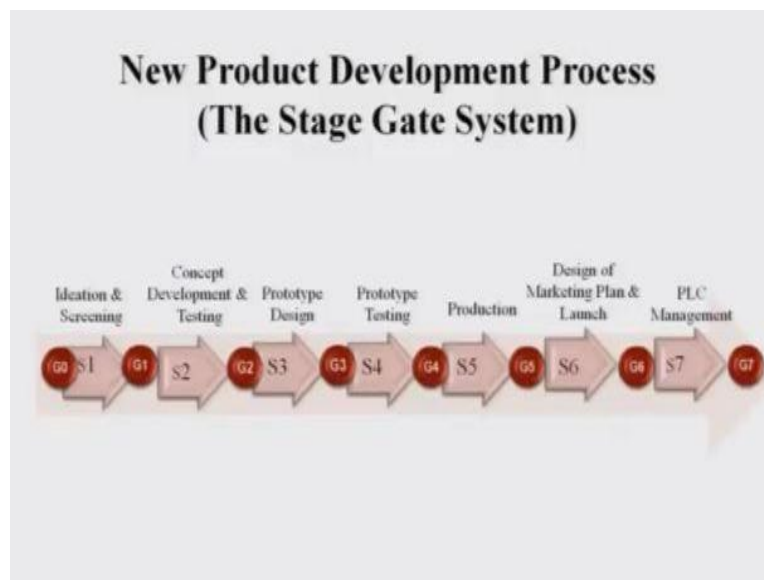
**Marketing Management II**  
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**Lecture No. W1-L5**  
**New Product Development -II**

Hello and welcome to our course marketing management part II. We are in week 1 and this is the session 5 I am Shashi Shekhar Mishra and I have with me senior colleague Mr. Jayanta Chatterjee. Hello. We are going to continue, what we have discussing in the previous session that we have started taking about the new product development process and at the beginning of the session. We have emphasis while new product are so important to our, the innovation in general is so important to any society and new products are important to the survival of any organizations.

So, in that context we have introduced this stage gate system of the new product development process and we have talked about the different stages and the gates at the end of each of these stages.

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What happens inside each of these stages and why organizations have predetermined criteria for evaluating each of the stages. Then we have also a very briefly talked about the limitations of stage gate system, that while implementing this state gate system what you should be knowing about this process that, any limitation of this process should not hurt your New Product Development process.

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So, continuing from there we have started taking about what contributes to success or failure of New Product Development Process. And in the literature, if you look at the success factor or the performance of new product development is set to be dependent on 2 broad type of factors, that is business unit level factors the driver at the business unit level and the critical success factor at the project level.

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Major Drivers of New Product Performance at the Business Unit Level	
High Quality New Product Process	<ul style="list-style-type: none"> <li>• Solid up-front homework</li> <li>• Sharp, early product definition</li> <li>• Strong market orientation (voice of customer)</li> <li>• Tough go/kill decision points</li> <li>• Quality of execution throughout</li> <li>• A complete, thorough NP process</li> <li>• A flexible process</li> </ul>
A Clear New Product Strategy	<ul style="list-style-type: none"> <li>• Goals defined for total new product effort</li> <li>• Role defined for new products</li> <li>• Business goals clearly defined areas (areas of focus)</li> <li>• A long-term thrust</li> </ul>
Adequate resource for new products	<ul style="list-style-type: none"> <li>• Resources in place to achieve NP objectives</li> <li>• R &amp; D budgets adequate</li> <li>• Necessary people in place, time freed up</li> </ul>
High quality project teams	<ul style="list-style-type: none"> <li>• Dedicated leader (to one project at a time)</li> <li>• Team interactions (good team communication)</li> <li>• Handle outside decisions well</li> </ul>
R&D spending on new products (% of sales)	

So, we discussed about the major drivers at the business unit level in the last class and we have talked about in detail, what are the drivers, that the first one was high quality new product development process. How you execute the different stages what important should be given to fuzzy front end it is the far-reaching effect on the success of the new product

development process and what are the different approaches to fuzzy front end, so we can choose to be a market driven and where the ideas come from the market.

And accordingly, the products are designed and offered in the market as per that, on the other side you can you could be market driving that that is technological development at the organization level which are basically transformed into the products those are basically pushed into the market. So that market driven market driving approach.

So, like this example is that suppose a company manufacturing potato chips and the market costumers are needing potato chips which are low on fat or not using any Tran's fat. So, that costumer new requirement when that comes back to the organization based on a new series of potato chips are released which have fat substitutes or very low oil or no Trans fat sort of thing that becomes a incremental new product which is coming out of market feedback. That is, I think market driven

On the other hand, like a famous example of 3m and the postage which was developed in laboratory almost through an accident and becoming a roaring successful product so both are valued approaches. So, the basically the trends in the market like increasing health awareness leads to different kind of new products like low fat products am not only limiting to chips I think the health drinks which are coming in to the market. they are low on the fat.

On the other side, the other example of market driving could be something like an ultra sound or echo cardiogram machine. The diagnostic centre might already be using an equipment which was previous generation, but which works pretty well and provides you the information about the patient in quite good way.

But because of the technological advancement the new series of the product comes into the market and you can bring the products, you can bring a new product which probably diagnostic centre may not exactly might have stated as their need, but then they will also release that it enhance their diagnostic or other requirements of the diagnosis of the patient.

They better help the doctors to understand the disease or the patients the status of the health. So, you can understand the costumers will not hesitate their needs but the technological advancement will help you in better serving those things. So, these are basically the market

the market driving things. With these we talked about a new clear new product starts strategy we talked about the organizational goals the role of products.

How each product, how each new product, has a role to basically in the overall portfolio of the product from the company. Then we talked about the resource location the quality of project teams. Now today we are going to discuss about, the project level factors that predict the success or they critically contribute to the success of the product.

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<b>Critical Success Factors at the Project Level</b>	
<b>Factor</b>	<b>Indicator</b>
Product superiority	- Differentiated product - Unique customer benefits - Superior value for the customer
Sharp, Early Product Definition	- Target market - Product concept and benefits - Requirements and specs
Solid, up-front homework	Before development begins
High quality marketing activities	- Assessment, research, testing with customers, and launch
High quality technological activities	- Assessment, development, testing, preproduction and production start-up
Cross-functional teams	- Cross-functional; dedicated; accountable; strong leader

So, the first thing that comes in to this discussion is the products superiority the product differential. So, the very first thing that comes in to the discussion is how differentiated a product is? A new product by terms it should be different there is a no significant difference

in the new product from the existing product, its relative value or the differential advantages gets reduced and accordingly the costumer it may not excite the costumer.

So, the unique costumer benefits create the basic ally an advantage for the form and the superior value basically provided by this new product contributes success of that new product. The next factor that come in to the which is the sharp early product definition how clear you are about the role of the product which costumer it will go; how will you take it to the market and the entire things which are related with the strategic marketing plan.

If you are clear about that I think you can go back to our discussion in the marketing management part I, we talked about what is target marketing. from their you can understand that, the clear the product definition like if there is a clear picture to the costumer what their requirements and what is the consumption environment of the costumer is? how they basically consume a product? They help you to basically built a product which caters to the need of a customer in a better way.

So that basically gives you the idea like, what should be the product concept, what should be its benefits and leads you to a specifying the requirement from the product and the product's specification. The next thing that comes in to the picture is solid up-front homework. So, this is about before development begins, this is precisely what we talked about in the fuzzy front end.

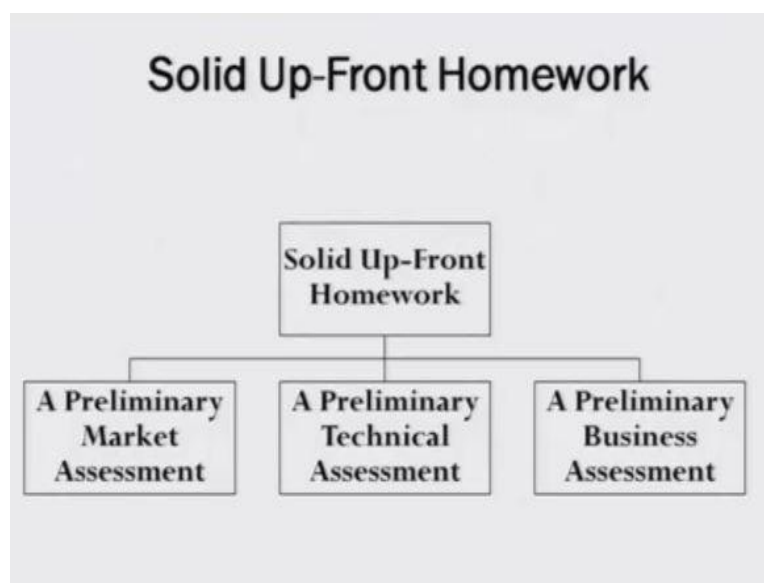
The maximum uncertainly the part of the product development process is where the things are not so clear and because things are not so clear and there is a informal way of managing the process and that is where the maximum problems happens. And also, as we have discussed, that this is the stage where your cost incurred or investment is low. But its impact on the future product architecture in the future cost structure is very high. So, this is where as you have rightly said that we need to do very solid upfront homework.

So, we will talk about solid upfront homework what comes inside it again then the next thing is that high quality marketing activities. So, the activities which undergoes in this product development process in every project is assessment, research testing with costumers and launch. So, how seriously and how meticulously you are doing these activities contribute to the success of the product. High quality technological activities, again that assessment

development testing or of preproduction and production related thing are also contribute to the success factor.

Then cross functional team, how the different organizational functions come together, how they gel well so that they can they were no interdepartmental gaps in new product development process. How the accountability set in the team and how basically the product lit up takes that drives the team these are another set of factors that contribute to the success of the product. So, these are the project level factors that contribute to the success of the new product, that we have discussed.

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And when we talk about solid upfront homework. It basically, it includes three dimensions, it includes the preliminary market assessment, it includes a preliminary technical assessments as well as it includes a preliminary business assessment. Very good. And this case you will see that this when we talk about the market assessment.

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## Detailed Market studies and Market Research

- User needs-and-wants studies
- Value-in-use studies
- Competitive Analysis
- Concept Test

It includes the detail market studies and market research, which will probably involve all the user needs and want studies you try to understand the consumers. When we say that we try to understand the consumer needs, will not only look in to the stated needs, will look into the latent needs of then costumers, will look in to their overall consumption environment, will look in to even cultural values.

Because these are the important things that first they come in the form of the product, they should set probably very well in the overall consumption environment of the costumer. So, value in use studies, competitive analysis, concept test. These are the important parts of the marketing research of the market studies. They help you to understanding the customer needs better.

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## Detailed Technical Assessment

- Assessing technical feasibility
- Identify the likely technical solution
- Deal with technical risks
- Assess manufacturability (route, costs, and probable capital requirements)
- Deal with safety, health, legal, and regulatory issues

And there is the technical assessment part, which includes, assessing the technical feasibility of the different concept, how feasible the concepts are. You can think of wonderful ideas. But they may not, correct, they may not appropriately convert into the product. So, technical feasibility is important with the available technological knowledge and the available production systems, you should be able to cater a product.

I think that is a very important point that, it can technical feasibility this should be assessed in terms of your own organizations competency framework. So, something may be technically feasible if it is that done in Germany or something may be technically feasible by even in an organization which is competing with you. But it may not be technically feasible inside your organization.

And therefore, that is this what customer desires that has to be balanced with these two other factors this technical feasibility. The organization capabilities have to be matched with the customer requirements that, yes, takes you to the feasible ideas in that technology, very well said.

In the next thing, is that that leads you to the identifying the technical likely solutions deal with the technical risk and managing technical risk is very important. As you talked about in the previous class, that when you talked about in terms of the financial feasibility in terms of managing your portfolio of risk.

So, risk of cash flows, at the same time you need basically take technology projects, you should have a portfolio of projects, in terms of the technological base cause also correct certain projects. They are certainly possible with the existing knowledge that organization persuade and also you can look in to the certain projects which are long term projects where you work on radical technology. But if feasible they will provide a certain differential advantage so there you have to acquire competency, I see you have to acquire competency you have to probably integrate the knowledge external to the organization. correct.

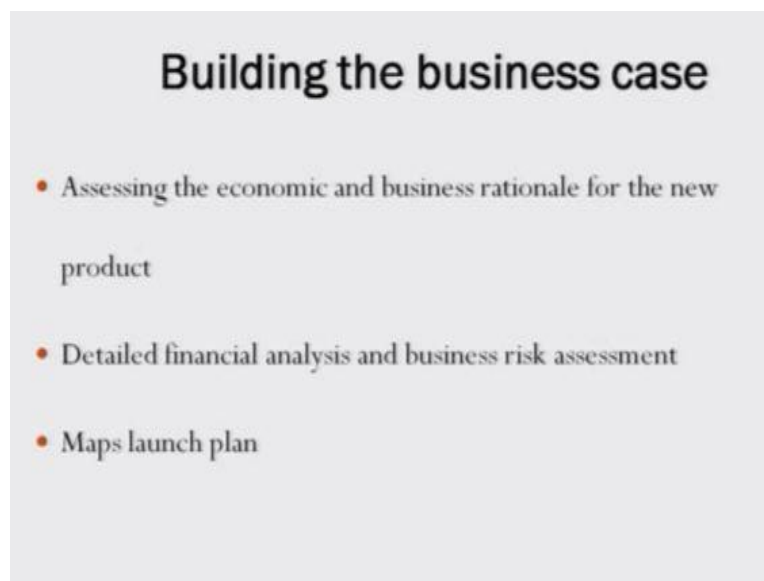
So, that you built the competency the over period of the time but once you build those competencies they will probably put you in a place in the competitive scenario. We are give differentiate from here right competitor sure. So, assess assessing manufacturability. So,



another important thing in this technical assessment is, you need to understand the how the new product is going to be produced in the your production facilities.

So, the root cause, probable capital requirements all these things are important. Then the last thing, though looks very peripheral in terms of like deal with the safety health legal and regulatory issues. But they are becoming extremely important, sure, how you manage? I mean you should able to bring new product within the regulatory environment you should not be hurting these days that the environment in wrong way. So, these are the critical issue when you have to think when you are planning for new products.

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The last thing that in the solid upfront work is the third dimension is building the business case. So, assessing the economic and business rationale for new product that you look you have to look to the detailed financial analysis of the product and the business risk involved it that and you have to map it with the launch plan. So, these are the three things. These three-dimensional which constitutes the solid upfront work which contributes very heavily to the success of the product.

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Now, I will take you back I will refer you back by story of this Honda Active. So, we discussed in marketing management one about this case study. This case study we have just taken to a illustrate that what we have discussed, this is not to be basically illustrate the good practices or a bad practices or anything in particular about the organization.

But when we have discussed the case study I talk to you about this that, this product was launch in 2001 in india and when it was launched in a very short time in about a decade it become one of the top selling two wheelers and sometimes it had been the most sold out two-wheeler in the country. So, why it crossed this one crore mark in the country we have discussed and what we have understood from this case study was the company has sense the market opportunity very well.

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They have born in to the user need so well and I will explain it to you they have understood the the Indian conditions and the Indian needs. So, they have understood that the transportation need of all family members. They have understood the Indian prefer manageable size of the scooter, traffic congestion in the cities is another thing. The trend, they have understood that is important for the design of the product limited parking is space and the Indian's prefer vehicle which have low maintenance and comparable fuel economy.

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So, understanding these things they came out with the product which was attractive to both male and female so that caters to overall family so anyone can ride the vehicle in family. Now another thing that comes in that Honda Activa is that something which is very easily what you say, it has very easy handling. So, you can go in to the congested area with very less effort you will not feel tired is and this is a basically automated scooter.

That is something another thing that is contributor and it comes out with new HET technology, that gives it a fuel economy. So, the smaller in size is another factor plenty of the space for storage, anti-theft locking, competitive pricing. Some of the things they are very specific to Indian market and that is why, understanding the opportunity designing the product in needs of the market has contributed to the success of the product. excellent.

I was saying that this is the important point that, sometimes a feature like here this, anti theft locking it appears that it is no big deal or incase of any foreign two-wheeler products this will be consider as a, unnecessary or low need item. But in Indian situation this can make a big difference. So, understanding your marketing its entirety, the consumers a logical needs as

well as consumer's emotional needs and then designing your product accordingly within the technical feasibility boundary to create a better commercial viability, I think.

So, this they do at IDO for new product for this test they call it as DVF model. That is desirability, viability and feasibility. Desirability from customer perspective, feasibility from your organization perspective and technology and competence perspective and viability from a commercial standard point from your own financial need, your business case. I think one of the areas of new product is also to look at a product or service, maybe after we have done module on service management you can come back to this new product new service and new business model management.

Sometimes, very successful product a new product can fail due a wrong business model. Some of these we can discuss at the later stage after the evaluate the foundation. So, I think today we can windup and as professor Chatterjee as talked about a couple of very important points and that might be making it very clear that managing a new product development process in the larger organization is different from the small-time startup or so firm in a SME sector.

So, tomorrow we are going to talk little about that issue that how the new product development process in larger form is different from smallest start up good and when you are in smallest startup what should you should differently from this large firms so from their we are going to start in tomorrow session for now we are saying Goodbye. Thank you