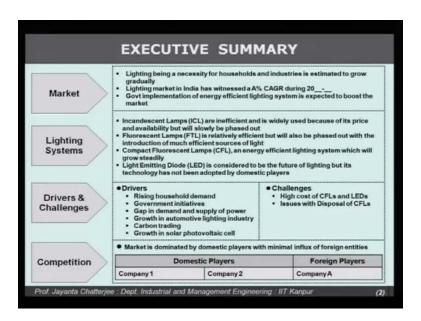
## Strategic Marketing - Contemporary Issues Prof. Jayanta Chatterjee Department of Industrial and Management Engineering Indian Institute of Technology, Kanpur

## Lecture – 15

In the last session, I explained to you or other presented to you a certain scenario with respect to the Indian paint industry, and requested you to develop a strategic marketing plan for a new player or on behalf of a challenger like Shalimar paints with a very small share of the market at the moment with respect to the market leader like Asian paints. I am now going to present to you, a part of a strategic marketing plan for another industry the lighting industry in India.

Now, there is an interesting difference in this industry compared to the paint industry that we discussed in the last session. In the paint industry the market is dominated by the players who have remained dominant over the last 10, 15 years. The innovation, the new variants product market development are led by the major players in that market. But the lighting industry at this moment in India has a different dynamics, and let us look at what is that dynamics?

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The market is again quite significant I have removed some of the figures, because you are supposed to investigate and find out that what is the size of this market today? Say in 2012, where is this market supposed to go 5 years from now. I will present to you some

of the trends and graphs. But you have to do some investigation and fill some of the numbers. For example, here right on top it says that what was the cumulative average, annual average growth rate? So, that you are suppose to fill that number after some investigation. So, this first set represents the environmental issues, and it gives you the reason why the dynamics of the market is changing, which is the national need for energy efficiency, because lighting consumes a significant part of the electricity produced and distributed.

See, if you can develop better efficiency, lower energy consumption in lighting, the overall demand for power electrical power where we have huge shortage like all other emerging countries. The overall power demand comes down. There is some interesting technological dynamics that is explained here, that the CFL or compact fluorescent lights new technology relatively against the incandescent bulb which has been the mainstay of lighting for lasts almost 100 years or more. So, compare to a 100 watt incandescent bulb you can get the same sort of illumination with a 28 watt compact fluorescent light. In fact, even a 14 watt compact fluorescent light is quite easily compatible in terms of its illumination capacity with a 60 watt or even a 100 watt depending on some other environmental things that you can take care of...

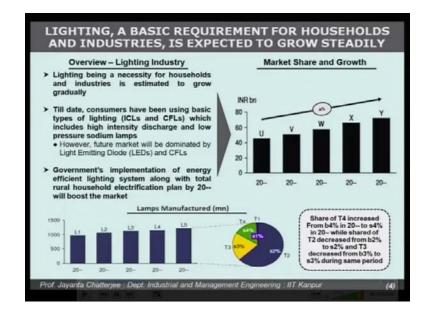
So, there are some drivers valid drivers for the growth of the CFL and the decline of the incandescent bulbs, trends also accentuated by regulations, government initiative, social initiative. But of course, there are some challenges with respect to the higher price of the CFL. So, the initial investment it is higher. Incandescent bulbs are made by many companies, whereas CFL needs more sophisticated plant and machinery. So, there are fewer players, and also there are issues relating to CFL disposal as suppose to the incandescent bulb whether the CFL has some environmental issues with respect to disposal. So, this diagram looks at company 1, company 2, a company A which is a foreign player coming into the market, company 1 and 2 representing the two dominant domestic players. Again these are at the moment you are suppose to fill in when you develop your strategic plan that which is what is company 1? What is company 2? For some reasons we are at the moment not naming the companies here, but in your plan; obviously, will be naming this companies, because these are the targets for your strategic trust.

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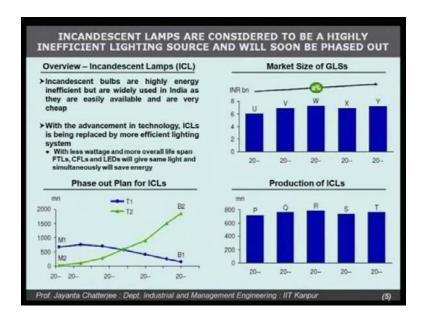
So, obviously, like any plan you will use the chart that we saw in the earlier one to right few paragraphs on the market overview. How the dynamics is changing? I have not provided any data as yet with respect to market segments. You can take a cue from the earlier discussion on paints. So, you can divide the market by domestic usage B to C and B to B industrial usage. Some divergent challenges we discussed in the previous slight some more you will have to uncover clear investigation and then competition.

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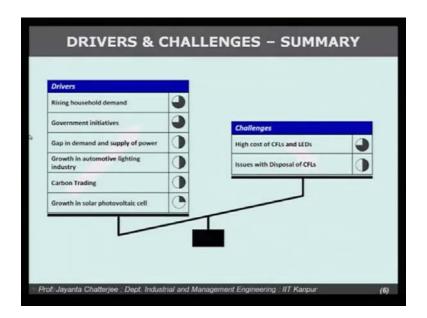


See if you look at the overview I am again providing some trends, but I have not provided all the data, because it is for you to fill up. So, you can see these numbers are this growth rates are derived out of real scenarios, the lamps manufactured incandescent, lamps manufactured these numbers are real.

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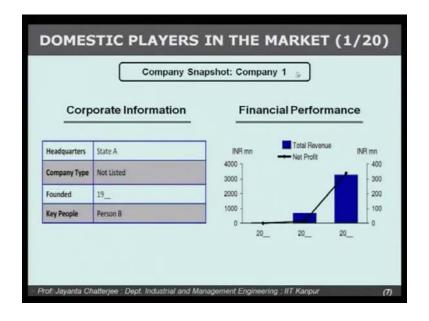
But you will have to determine like for example, here we do have the right numbers, but I have just removed the years for you to find these with respect to the number of incandescent lamps that were produced. The overview part the energy efficiency that we discussed that effectiveness of the CFL as suppose to the ICL and even LED's, which are even newer technology.



Those comparative issues are explained here. So, to summarize we have the market is growing we will just now present some data that in India. And most of you know that we are yet to light up all the homes in India. In fact, as of this year electricity distribution has reached every village we have nearly 675000 villages in India.

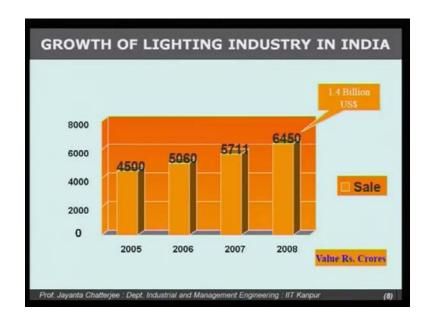
Today, we can say that we have the electricity connection in every village. It does not mean that power is available all through the day and that is why, because we still have a huge shortage. So, we have the pipe, we have the connection, but we do not have the power to flow and to meet that gap between the demand that is there a huge unfilled demand, we need to that drives actually the demand for more efficient devices like the CFL or the LED. And then you have this we have discussed the challenges. So, the gap in the demand and supply of power, the growth, and some of the issues like carbon trading environmental issues which also puts regulatory restrictions on inefficient energy consuming devices, electricity consuming devices like incandescent like ICL and then the problems relating to disposal up CFL and the high cost of CFL.

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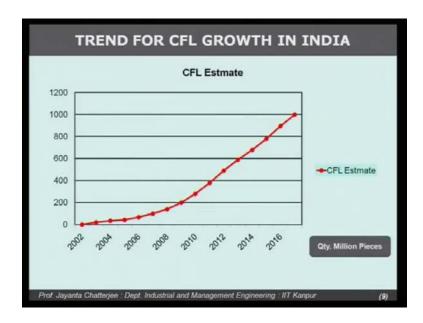
So, we are looking at a company 1 again I have not named the company, but this is a company. Let us say a company which is primarily interested in CFL it has decided, it is a new entrant, it has no legacy, no plant and machinery to produce incandescent bulbs. So, it does not therefore, have any historical baggage with respect to sunk investment which it has to amortize new company focused entirely on CFL. And you are looking at the marketing strategy development for such a company, how will the price? How will the package? And most importantly this is the key task in your, this session that how will you promote? Given the fact that the CFL initial cost is significantly higher it is something like 1 is to 10 ratio or 1 is to 8 ratio. So, with 15 rupees for an ICL you have to invest 120 or 150 or sometimes 200 rupees depending on where you are? What kind of other taxes and duties you are subjected to seem even have to pay 200 rupees. So, given such a huge initial price differential, what is the promotion strategy to persuade the customer to go for CFL, instead of ICL? This is the key part of this marketing strategy exercise.

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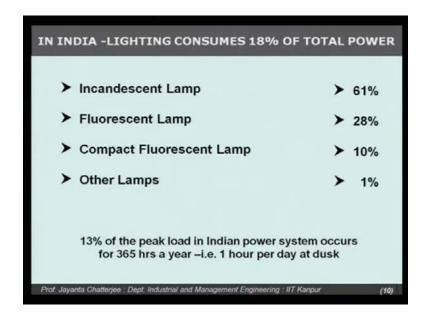
Now, we will give you some background facts the growth of the lighting industry in India is shown on your screen, you have data till about 2008.

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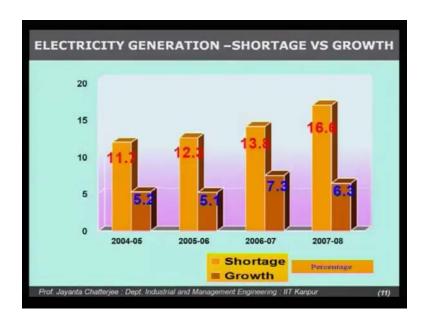
We have also the trend for CFL growth in India as you can see it is rising rapidly in 2012. We are looking at about 400 million pieces, and in 2016, because of the regulatory incentives, because of all the marketing strategies that brilliant people like you would be developing, we expect that the 400 will grow to 1000, that means say 100 million billion pieces by 2016 over the next 4 years.

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Today in India ICL incandescent lamp constitutes 61 percent of the market. 28 percent is fluorescent lamp like the old tube light, CFL is only 10 percent. And LED's still another types of lamps are even 1 percent on the other hand the data is provided to you that lighting consumes 18 percent of the total power.

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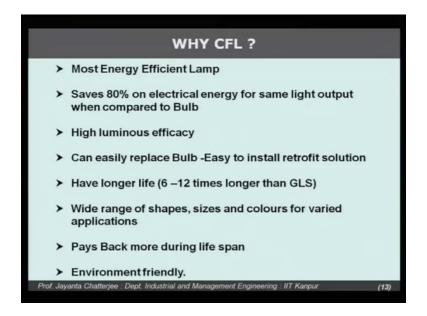
Therefore, if we can make some significant saving in that 18 percent then this huge gap that we have in India between the electricity generations versus the demand can be.

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ly p	ry changing a lamp with a Compact ay back the cost within one years, in Cost Benefit Analysis for using Re	but also save	e energy up	to 80%
1	Retrofit CFL over a lifetime Electronic Retrofit CFL	20W	15W	11W
2	Replaces GLS	100W	75W	60W
3	Savings in Electricity Consumption over 6000 hour  (2-1)x 6000  1000	480KWH	360KWH	294KWH
4	Savings in electricity bills per lamp @ ₹ 3.50 per KWH	₹1680	₹1260	₹1029
5	Cost of Electronic Retrofit CFL	₹150	₹100	₹100
6	Cost of 6 GLS lamps	₹66	₹66	₹66
7	Net Savings per GLS point (4-5+6)	₹1596	₹1226	₹995

This is an interesting chart; this is the kind of information that you will have to use for developing your marketing promotion plan. Now, you can see here that your marketing promotion for CFL will be different from the marketing promotion for paint. So, in paint you are looking at addressing aspiration you are looking at addressing emotion, your celebrity endorsement from top film starts. But in case of lighting industry, promoting CFL just appealing to a motion is not enough; you have to use these facts and figures. The question is, how do we bring in this kind of hard technical issues that how actually saving between a 20 watt CFL retrofit for a 100 watt. What kind of savings you can expect? These are absolutely scientific database calculations, but this, but the challenge is how to put that in your marketing strategy?

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We can develop descriptive issues. So, your marketing promotion plan, the key task in this session, will have to use numerical data as you have here qualitative analysis are more descriptive analysis that you will develop with respect to these questions.

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Your promotion plan will have to address these issues, not all of them are part of your promotion plan. But these are issues which you will have to take. Some of these will be also part of marketing like lobbying, creating awareness, exhibitions and workshops using the platform like alcoma the electronic at the electrical lighting and component

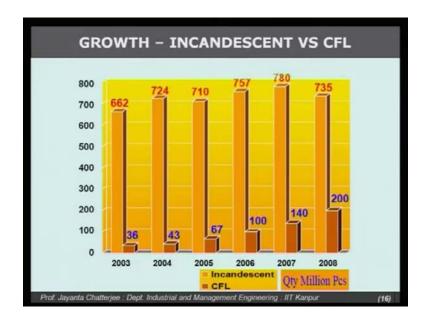
manufacturers association. In fact, some of these data derived from their publications and workshops conducted by them. Those workshops become important part of marketing in this kind of a scenario.

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USA	Announced in Dec 2007 – Phase out in 12 years 100W by January 2012 40W by January 2014 Rest by 2019		
CUBA	Exchanged all Bulbs with CFL in 2005		
BRAZIL & VENZUELA	Phase out began in 2005 -to be forbidden by Dec 2010		
CANADA	Govt. intention to ban sale of bulb by 2012		
PHILIPPINES	In Feb 2008 Govt. announced to ban the Bulb by 2010		
AUSTRALIA NEW ZEALAND	Nov. 2008 –Import stopped –No sale after Nov. 2009  Same as above, but import for personal use will be allowed		
EUROPE	2009-2001 - 100W, 2011-2013 - 75W, 2013-2015 - 60W, 2015-2017 - 25W		

I have it some clue here for you that how countries across the world have developed phase out plans for ICL. So, there is a legal mandate that by 2012, all 100 watt bulbs will be banned in US 40 watts by 2014 and rest by 2019. And similar regulations in Canada they are far more drastic, they want to impose a complete ban on sale of incandescent lamps by 2012. So, as you can see here your marketing promotion strategy is not only convincing the consumer with quantitative persuasion, technical persuasion. Some persuasion raising social awareness make the take help of the regulatory aspects to enhance your marketing strategy to enhance your market penetration for this new technology CFL.

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Use all that to fight against this continuing dominance in India for the incandescent lamp and still very slow growth rate of CFL compared to that.

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So, you want to achieve something like this a phase out plan versus a phase in our growth plan. So, this is roughly the task in front of you. And this exercise will be therefore, focused on developing a promotion strategy and communication strategy for marketing thrust for a new technology, using the domain of lighting industry in India.

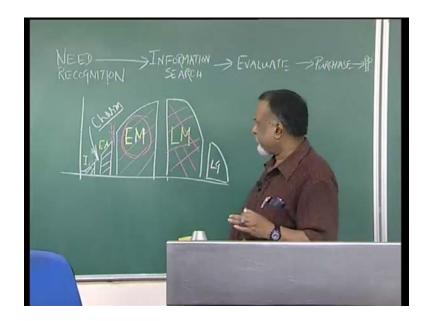
We will discuss some issues in this respect in the further sessions, but that the moment I will expect you to develop this plan and send it to us.

Now, this diagram which we looked at a little while back, which shows the gradual growth of CFL energy efficient lighting option with obvious advantages that have already been tabulated available to you from the previous slides. And this diagram also shows the decline of the current usage of incandescent lamps, so the traditional electric bulbs as knew them. Now as you can see here this is fairly showing; this is fairly showing our well known concept of product life cycle. So, this is the line for CFL adoption and this is the line for incandescent lamp decline.

So, the growth that has been tabulated here in millions of pieces, this data up to 2011 is real data. So, this is the expected trajectory 36 to 43 to 67 to 100 to 140 to 200, if it follows this then we really have no problem. The CFL will become the dominant usage and the ICL will wither away, people will adopt this initially costlier, but over a long run more economic solution. But in reality it is often observed that for technologically advanced products which challenge and existing option do not always follow discontinuous product life cycle graph as we have depicted here great research was done by Jeffrey Moore. And he wrote several papers as well as a very good readable book call crossing the Chasm. Some of you were interested I would highly recommend that you as you can see this is a low cost paperback edition already available.

And you should really for marketing strategy besides what I am going to discuss just now with respect to this particular case that is CFL versus ICL in the Indian lighting industry today and the marketing strategy development issues. Besides all that, this book also will give you some excellent insight into strategic marketing at the various stages of the life cycle of a product or a service, very good reading. And important reading also for entrepreneurial marketers people who are trying to establish a new business. But coming back to this discussion I have to first point out to you the way this is something that we have already discussed before.

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That this is the usual buying sequence customer have recognizes a need, there is a need to buy a new electric lighting device and electric bulb. The customer is exposed to information; otherwise the customer may be actually seeking new information that what is this CFL that has come about should I buy that CFL, even though it is 10 times costlier at this moment why should I buy it? What is in it for me? Besides what is there for environment or for the economy and so on. The customer would also like to understand that what is in it for me? And then of course, after evaluating the various alternatives that come to the customer from this information search, he or she makes the final purchase decision.

Jeffrey Moore research shows that the so called product life cycle graph or business growth for a new product is not exactly a continuous graph; he found that after initial adoption. So, this is the I represents initial adopters or we can even divide this initial part into segments; one we can call innovators, they are characterized as people who would like to try any new technology. They are the first buyers for the latest gadgets, and then there followed by early adopters. One can also sometimes for certain types of products; these two segments maybe merged and called initial adopters or innovative adopters. But mostly one sees this gap, and this is what Jeffrey Moore called Chasm. But more than this what is very significant, is this particular chasm which arises between the early adopters and the early majority.

As you know from our previous discussion that up to this point our marketing effort actually may not be delivering any real profit, because we are still amortising our investment, initial investments in technology development, initial investments in market promotion and so on. Really the money comes all marketers look for a dominant position in this segment of the market. The early majority and Jeffrey Moore found, and it is important for our situation here, that this growth that we are now looking for between 2010 and 2012 number, where we are looking for almost two and a half times of growth here. We were at about 200 level 200 million pieces, and here we are looking at, but 500 million pieces.

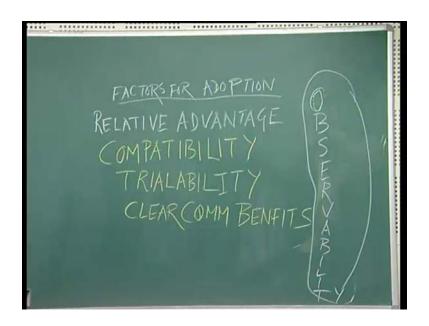
So, this 200 million to 500 million is a big jump, and this is when actually profits will flow in. And this is what will create the virtuous cycle, because there is more money coming in there is better amortization of your fixed investment. And as a result the economy of scale is developing, and also as we have discussed before the economy of scale leads to better learning and continuous improvement in productivity which further brings down the price and makes it more affordable and this early majority cycle continues and equally interesting for us is this late majority. This is where actually the cash cow model that we discussed before might be merging, because by this time there will be fewer players in the market place.

Now, the question is this chasm exists we know about it, and this is what we want. So, the question is how do we go? Therefore, from this innovator early adopter market to this early majority market, what factors will influence that transition. That understanding is very important, because that will give us some important clues to the marketing strategy that you need to develop on behalf of a new entrant that we talked about or on behalf of an market player whose sole product is going to be CFL. And that entire investment as we discussed that there is significant investment in plant, and the ship machinery needed to be a CFL player. And therefore, this transition is extremely important for them, because that will make or break their business.

What factors will influence this transition from innovator early adopter to early majority? For this, we can also refer to another very interesting set of research that was done by Rogers regarding adoption of new products, new processes, and new services in the marketplace. There are several factors relating to this that are too interesting models; one is this Rogers model as well as the baths model which you can look at through your

internet search, but at this moment referring to this particular marketing case that you need to develop for a CFL marketing company at this stage. In beginning of the second decade of the 21st century in India we will focus on Rogers factors that are listed here, factors for adoption by the early majority of a new product. So, as you see there he identified 5 factors relative advantage, compatibility. Relative advantage in case of CFL its energy efficiency 18 watts giving the same sort of luminosity or illumination as a 100 watt incandescent bulb.

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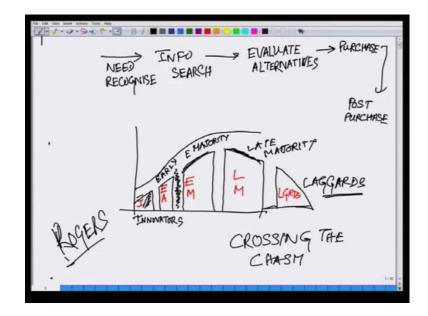


Compatibility, this is something you will observe when you now go to buy a CFL, that the back end of the CFL is the same 2 pin structure as you see in an incandescent bulb. Initially when CFL's were introduced, they were actually having a different kind of fixture which was a little bit more efficient, it is a screw on structure which is used in some developed countries it gives a much better contact and so on and so forth. But because in India or in many others such markets, the dominant usage is of the incandescent bulb, so the fixtures or the sockets for fixing a bulb they are all suitable for that 2 pin structure. So, the CFL manufacturers immediately understood that this compatibility backward, compatibility as we call it with the current fixing arrangement, current installation arrangement was extremely critical. And therefore, almost every CLF that you can now go and buy in the Indian market will that fixture that the 2 pin fixture that is usual for an incandescent lamp.

So, that is about this is true for almost every product. Like for example, when mobile phones were introduced the keyboard or the number pad resembled the ordinary desktop or landline phone. Today of course, over as that market has matured users have become more use to the mobile phone and more features are being demanded today's keyboard is quite different. But even in that market a company like Nokia which is heavily challenged in the smart phone market by new challengers like apple or Samsung, still a significant market exists for Nokia loyalty exists for Nokia, because of this user interface a very significant asset for Nokia. And this is because of this compatibility factor. Users are usually reluctant to make a radical shift see if you want to buy sell a CFL, and you want to persuade the customer that you have to tell change your fixture changes your socket then it is a back marketing strategy. So, one has to try as much as possible to create this compatibility.

Now, these last two at you as you see a vertically have written that observability, because all of these must be continuously observable, dustable by the consumer just giving a media information will not be enough until and unless there is a possibility to trial, try it out and clear communication on the benefits. So, as you do the secondary research for your case development on CFL marketing strategy in the Indian market of today. You will find that in other countries at an earlier phase, and in some countries like India where CFL introduction is still at an early stage. Because of this understanding of trial ability and clear communication benefits, there are various schemes supported by the government and by the regulator and by the electricity supply companies for subsidizing for giving free trial packs or for providing CFL's to very observable installations like a university, like a school or like a library in many public places as well as to consumers. This trial packs are made available of CFL's and that become an important part of your marketing strategy.

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So, to conclude therefore, this additional input to you with respect to so it is also available to you as that the key points that we discussed just now. That the product life cycle graph is not actually a continuous graph, but it actually has clear segments like the innovators, early adopters, early majority, late majority and laggards. These are people who will be the last stage adopters? So, it is very important to be able to manage this transition are crossing the chasm for a new high tech product, which you need to incorporate in the plan that you are going to develop on behalf of this new entrant offering CFL to the Indian market in 2012 for the period say 2012 to 2016. Where there are understanding of the work of Jeffrey Moore as well as Rogers need to be integrated issues like relative advantage, compatibility, observability of trials and clear communication of benefits. And as I mentioned that this book is also interesting for some of the discussions that we will be taking up in the next section which relates to entrepreneurial marketing.

But before that I will also look at issues relating to segmentation targeting and positioning in the business to business or industrial market, because in most of the earlier sessions the examples that we chose and the discussions were more focused on the business to consumer segment. But as in the previous session's the last two sessions when we were discussing about these two case development one on paint and one on these lighting particularly in the paint we discussed about the 70 percent market consisting of decorative paints for domestic use for buildings and homes. But we also

talked about the 30 percent market above of the industrial paint, paint for professional use by automotive manufacturers consumer durable manufactures, but in applications and so on.

So, this STP segmentation targeting and positioning and the buyer behaviour, and the buying process have some special features in the B to B market, that will be our next session which would be followed by our discussion on entrepreneurial marketing or new product marketing or marketing for a start up company where of course, we will again reuse the concepts that we have discussed today. But let me conclude therefore, your two sets of inputs; one regarding the case on paint industry that you are supposed to develop ,and the other regarding the Indian lighting industry that you are suppose to develop with this input.

Thank you.