

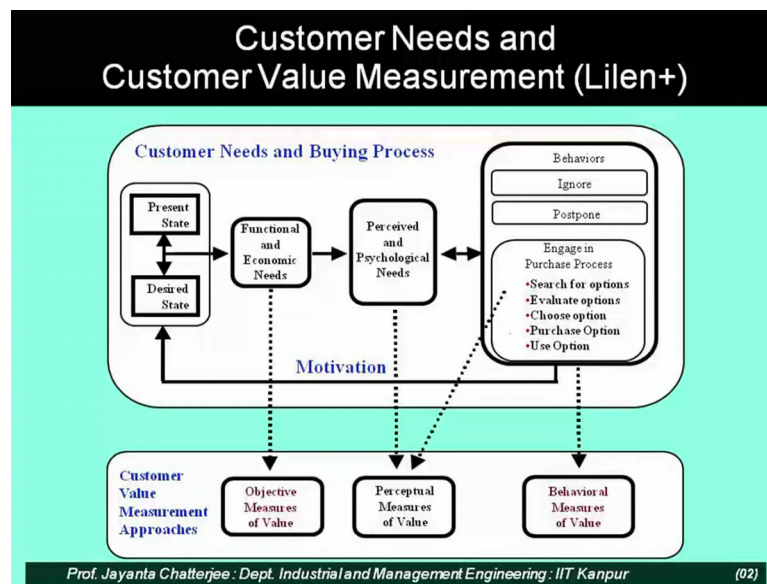
**Management of Field Sales**  
**Prof. Jayanta Chatterjee**  
**Department of Industrial & Management Engineering**  
**Indian Institute of Technology, Kanpur**

**Lecture – 14**  
**Evaluation – Long Term Value Approach**

Hello, I am Jayanta Chatterjee. We are discussing Management of Field Sales. This is the fourth lecture of our third week set of sessions. In this session and in the next session, I am going to discuss the considerations that you should have to prepare yourself for getting into a sales negotiation.

Negotiation is a very important part of a sales person's life and the whether a whatever level you are in the sales hierarchy, whether you are just a field sales person, or you are actually a vice president of sales, you will have to get into negotiation, situation with the customers.

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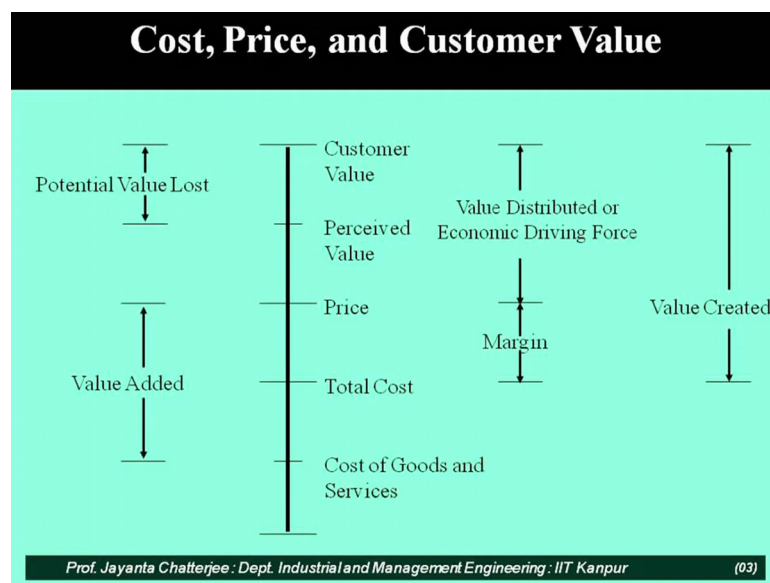


So, let us try to understand first of all this whole concept of value and a value based pricing and at the range determination of the range over which this negotiation can take place particularly with respect to price. So, this particular diagram that you see on your screen.

On the upper block shows the sales process and the buying process etcetera, which we have already discussed. But the more important point here, I want to draw your attention to the block which is given below the top block, which is the customer value measurement approaches. This is actually how at different stages, the customer perceives different set of values.

And therefore, your negotiation has to tune towards these different aspects of value assessment by the customer for better or more efficient negotiation.

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This diagram very nicely represents, the various elements that we are going to discuss just now. Incidentally a good part of this presentation is inspired by this particular book, this is called a principles of marketing engineering and it is written by professor Lillian and professor Arvind Rangaswamy and Arnav Doubloon.

Now, even if this book you cannot find very easily in your library, then I would say that you go to the internet lot of their lectures of a Professor Lillian and professor Rangaswamy are available as a power points, as well as audio visual presentation on through generals search as well as on YouTube.

And so besides this power point that you can access, you can see the details as provided by them if you want to dig deeper into some of these concepts ok. Let us look at this chart first of all, this side of the chart.

So, you see anything that is produced and shipped out of a factory or for a establishment, selling establishment at the base will have this cost of goods and services. Sometimes in short in a profit and loss statement etcetera, in financial statements this will be written as C O G S – Cost Of Goods and Services. This normally will include the material cost, the labor, cost the overhead cost, you know including electricity and other stuff that will go into as inputs into the final output.

Then there are various other elements that may come into picture like the sales and marketing cost and relevant costs which happen outside the factory. If you add all of those, then you come to something which is called total cost right. And suppose, this is the level of price that is charged or that is it could be obtained from the marketplace.

This is often incidentally, picked at a level lower than what could be obtained and this is the purpose of today's discussion. So, first of all this difference between the price that is finally obtained versus the cost of goods and services with which you start out of the factory, this difference is what we call value added ok.

Now, if this is the level of the price, and actually logically this is the value that could be charged logically. I will just now show you with some calculations how that will happen, then that minus the perceived value by the customer that means, the logical value could be here, but the customers perceived value could be somewhat lower; and between these two what we have what is called the potential value lost.

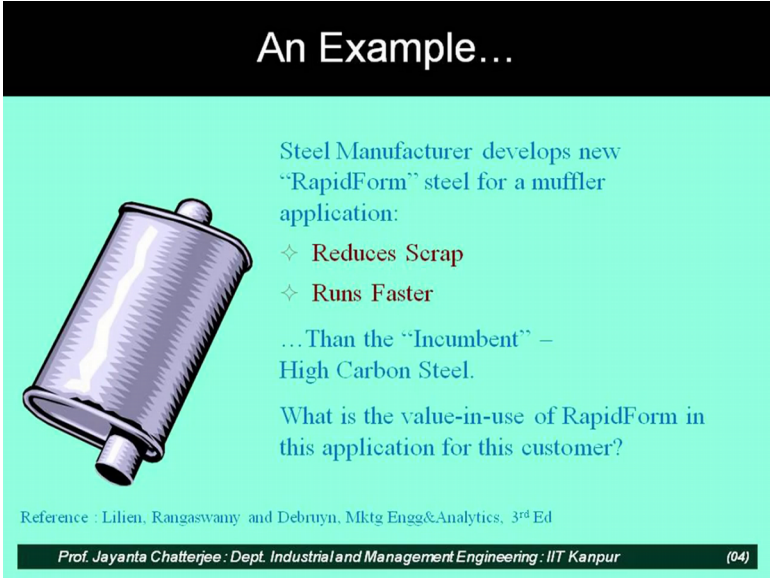
So, as you can see here easily that often products are sold at something called price, because a many sellers have this cost plus pricing approach. So, if this is the total cost, then you take some kind of percentage on top of that and you set the price. But what this presentation is showing you is that if you dig deeper do some more research and understand that what is actually the logically chargeable value or at least you determine that what customer will perceive as a value. Then you can see that this is a difference is price to perceived value is an improvement that could be done.

Now, obviously if your product is not that good or if you actually have not position did that well or if you are targeting is not good. So, you see here there is a close relationship between a segmentation and targeting, positioning and the pricing if it is well positioned, then perceived value should be higher than the price; but if it is not, then actually the

perceived value could be lower than the price. And then obviously your sale will decline at that stage.

Now, this difference between this what we call the value created versus where you could go, this is something that we can call it as the value creation opportunity.

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**An Example...**

Steel Manufacturer develops new “RapidForm” steel for a muffler application:

- ◆ Reduces Scrap
- ◆ Runs Faster

...Than the “Incumbent” – High Carbon Steel.

What is the value-in-use of RapidForm in this application for this customer?

Reference : Lilien, Rangaswamy and Debruyn, Mktg Engg.&Analytics, 3<sup>rd</sup> Ed

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Let us take an example instead of this model; we can come back to this model. The let us take an example, this example I have taken from professor Lillian and Rangaswamy’s book marketing engineering and analytics, this is the third edition.

So, suppose a steel manufacturer has developed a new type of steel, let us call it RapidForm RF which is actually the terminology used. And it is being used for mufflers, you know the sound the mufflers used in automotives automobiles, cars, trucks and so on.

And this material is being used to create a part like this, and the two things the new material will be offering; one you will be reduced scrap, because the manufacturing process matches the material in such a way that scrap is reduced. And it runs faster the whole thing with respect to currently being used high carbon steel in short will call it RF and HC. So, RF steel thus much better than HC steel with respect to these two factors.



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**VIU Example: "RapidForm" Steel vs. High Carbon (HC) Steel in stamped automotive part...**

- Long Coil • "Riverside" plant • "Partsco" Application • Etc...

<b>HC Steel</b>	- 2 lbs/part @ 60¢ lb. - 25% scrap rate - 80¢ Machine time
<b>Rapid Form</b>	- 2lbs @ ??¢ lb - 5% scrap rate - 70¢ Machine time

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And what happens therefore, therefore in high carbon steel suppose two pounds upper part at 60 cents per pound. I have taken the example as, given in their books that we are using this American, you know they use pounds for a weight measurement there as still not kilograms. And this is the price level 60 cents 0.6 of a dollar.

And suppose 25 percent is the scrap rate, if you are using high carbon steel and 30 cents is the machine time. See we are determining the COGS – Cost Of Goods Sold. And with rapid form 2 pounds per part the part remains the same, and we are trying to determine that what should be the logical price level ok and because as we discussed earlier that RF steel reduces scrap.

So, the scrap has come down from 25 percent, it can be brought down to 5 percent. And it is a faster processing with RF steel. So, instead of 80 cents machine time, here we will need 70 cents for machine time.

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## Example Calculations

“The hypothetical price of an offering for a particular customer in a particular application, that leaves the customer at overall economic breakeven with respect to the next best alternative...”

$$\frac{\text{HC:}}{(2 \times .60) + .80}{(1 - .25)} = \frac{\text{RF:}}{(2 \times V_{\text{RF}}) + .70}{(1 - .05)}$$

**.92¢/lb = V<sub>RF</sub>**

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Then you see we can easily set up this particular equation, which is 2 pounds into 60 cents plus 80 which is the machine time 80 cents divided by 1.25, this gives you the 1.25 comes from the 25 percent scrap rate right, so this is a situation.

On the other hand, 2 pounds into the price that we are trying to determine plus 0.7 divided by 1 minus 0.05, because the scrap rate has now become 5 percent as suppose to 25 percent. Then you see we can easily calculate that the with the RF type of steel the value that means, the logically or mathematically chargeable price should be 92 cents per pound.

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As suppose to 60 cents per pound right

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**Costs, Prices and Values**

Customer Value \$0.92

Perceived Value \$0.68 (Probably could have priced higher)

Total Cost

External Purchases

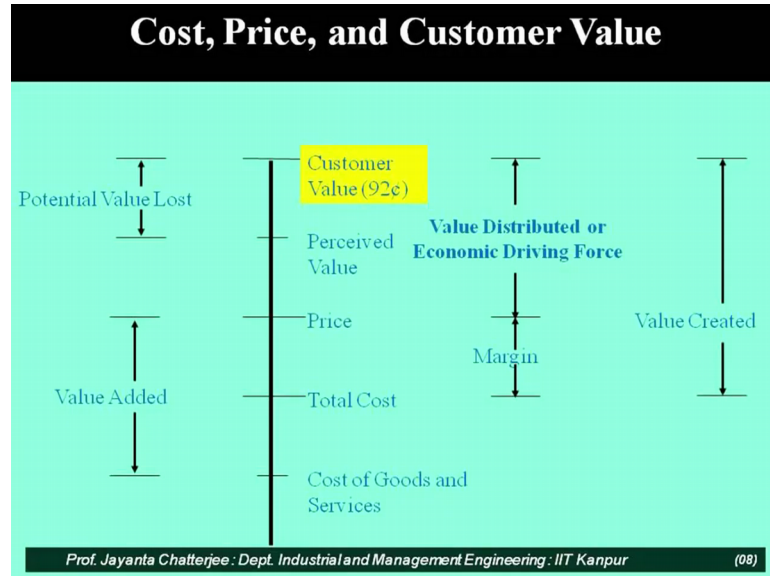
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What is the situation here that actually currently suppose the price level is here, 0.68 that means, 0.6 some margin added to that leads to 0.68. Obviously, this is the range between 0.68 dollars and 0.92 dollars, which is a sales persons negotiation target.

If the sales person is going to the market with RF steel product, rather than the current high carbon steel. So, if you are selling something, new, innovative, something better

something which is clearly differentiable, then this is the discussion with respect to pricing and negotiation.

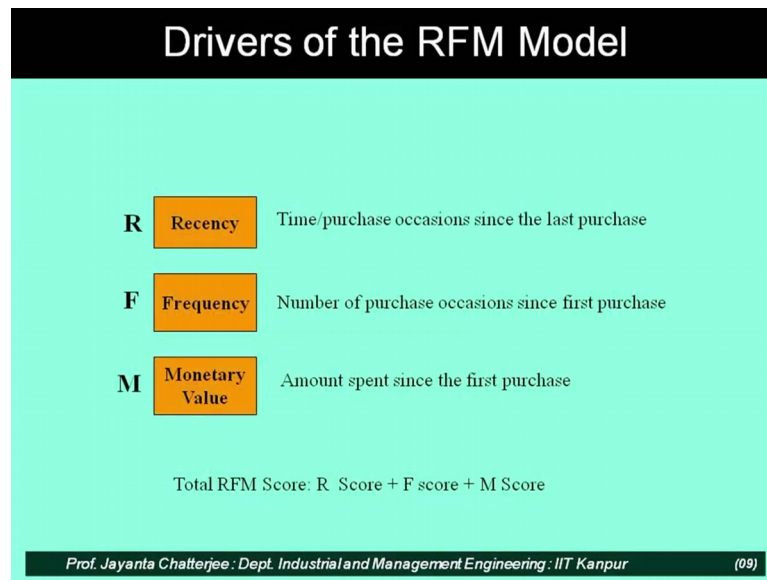
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So, 0.68 to 0.92 this is the range, but in a reality what can happen is that you may not be able to go to 92 cents, which is actually the logically calculated customer value, but the customers perceived value could be somewhere lower than that, because when you describe that what are the advantages you are giving; then the customer will be willing to you pay you something higher.

And the customer may not actually be prepared to pay up to 92 cents, and you may be able to negotiate somewhere here, this difference is sometimes called the potential value lost. But at least it is very important as you see here that with proper sales technique, which we have discussed based on focusing on benefits and advantages before you come to features, the FAB type of selling that we discussed. One should be able to take this, price to this type of level.

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And let us see what are the different ways we do that in between I want to insert this concept that this RFM model, which gives you some kind of privatization process that which are the customers where you should focus first, when you are trying to establish a new version of a product, improved version of a product.

In this case that RF steel as suppose to high carbon steel, you actually take recency that means, the time since the last purchase. So, the more recent the case has been and the more recent is a last opportunity, you are in a better position or it is more important in your targeting profile to focus on that.

Similarly, frequency the number of purchase locations since first purchase that means, how many times a customer is purchasing, how regularly the customer is purchasing, obviously that has a higher weightage. And the monetary value the amount spent since the first purchase. So, this R F F M score is obtained by R score, F score at M score.

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### Example RFM Model Scoring Criteria

R	Months from last purchase	13-max	10-12	7-9	3-6	0-2
	Score	5pts	10	15	20	25
F	Frequency	> 30	21-30	16-20	11-15	0-10
	Score	5pts	10	15	20	25
M	Amount purchased	> 400	301-400	201-300	101-200	≤ 100
	Score	50	45	30	15	10

Implement using Nested If statements in Excel

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So, and then you can assign some points and then based on that, you can evaluate different types of opportunities and accordingly assign your priority, where you need to establish the new pricing level.

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### Example: Choosing Among Three Alternative Products

Brand	Performance	Quality	Variety	Value
A	0.7	0.5	0.7	0.7
B	0.3	0.4	0.2	0.
C	0.6	0.8	0.7	0.4
D (new)	0.6	0.4	0.8	0.5
Estimated Importance Weight	2.0	1.7	1.3	2.2

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This kind of gives you that calculation process that at the different elements and the oh no. So, this one is actually a little different, this chart this chart actually shows that three brands brand A, B, C and D suppose this is the new brand that you are trying to bring in.

And based on those factors that we discussed about you know you it takes at less scrap, and but at throughput and so on.

So, what you can do is therefore compared to that other three brands. Suppose, your performance is at 0.6 double the quality, variety and value, these are the different values and accordingly you can actually find out the this is the important.

So, if you multiply this an add, then it can give you some idea about where your D product can be positioned. What kind of a perceived value you can guess, incidentally do not take these values as derived from that high carbon steel versus RF steel, it is case.

It is just a general a mathematical expression that if there are three brands and you are coming in with new brand, and that new brand with respect to the other brands has this kind of aspect with respect to performance, quality, variety, then and value. Then this is the importance of this, this importance will come from customer survey.

Now, talking to the direct customers and finding out that which element has what kind of weight and based on that or importance based on that you can then find out that what could be the logically or rather logically and perceptually targetable value.

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**Score Customers for their Potential Profitability (Example)**

Customer	A Score (Purchase Probability)	B Average Purchase Volume	C Margin	D Customer Expected \$ = A * B * C
1	30%	\$31.00	0.70	6.51
2	2%	\$143.00	0.60	1.72
3	10%	\$54.00	0.67	3.62
4	5%	\$88.00	0.62	2.73
5	60%	\$20.00	0.58	6.96
6	22%	\$60.00	0.47	6.20
7	11%	\$77.00	0.38	3.22
8	13%	\$39.00	0.66	3.35
9	1%	\$184.00	0.56	1.03
10	4%	\$72.00	0.65	1.87

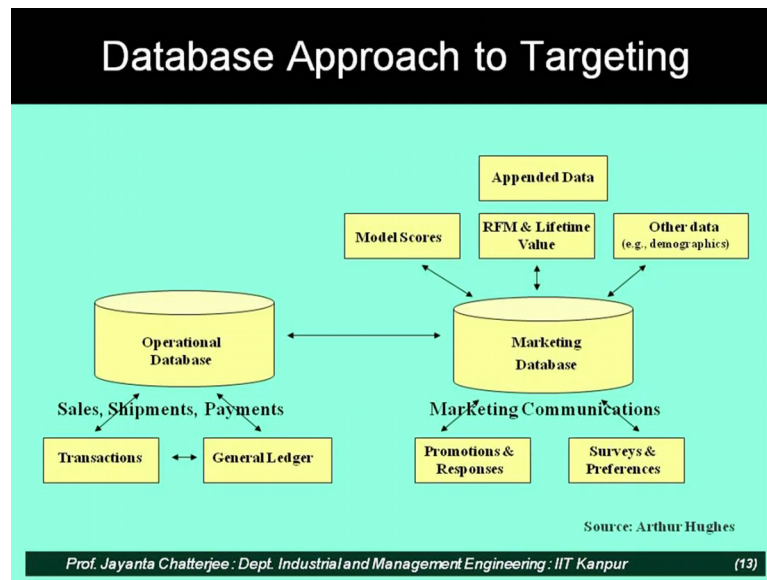
Average expected purchase per customer = \$3.72

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So, these are the different ways you can actually approach and of course, here we will also include the probability of purchase and the volume, and that will give us some kind of a customer's expected dollar idea.



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What we are just now discussing, allow that depending on an improved or distinguishable product attributes. How you can actually calculate the new targetable price, and so that you know that this is what I want I am aiming at through my negotiation.

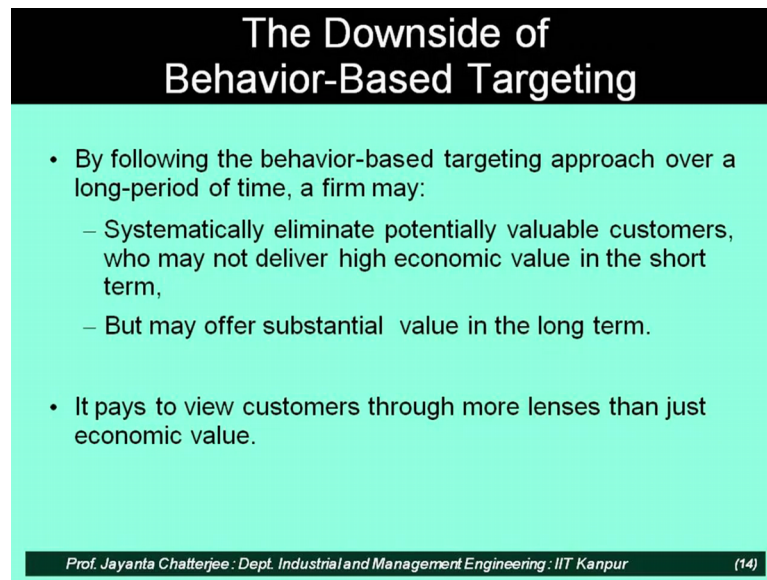
And now I am going to present some of the other information technology related aspects, which is also important when you are going for a negotiation. And the is that background creation of this marketing database. This marketing database is a created on the basis of the various inputs that are coming from the field sales activity that we discussed about prospecting you know hot prospects, warm prospects and so on.

So, from the promotion and response you are getting different inputs and there are surveys and preferences examined, this surveys and preferences are important for this particular model that we discussed just now. About that what is more important to the customer and to what extent more important, then based on that you can therefore have this model score, the recency frequency and the monetary value calculation.

So, based on that therefore you can have a whole list of customers privatized according the importance coming up from this and that actually then gives you, where you want to go to, which customer you are going to call on today, tomorrow, day after, etcetera.



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### The Downside of Behavior-Based Targeting

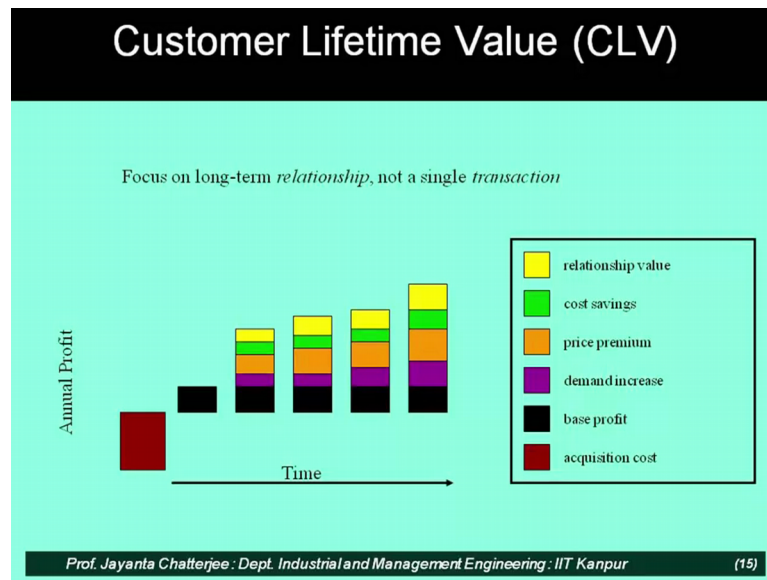
- By following the behavior-based targeting approach over a long-period of time, a firm may:
  - Systematically eliminate potentially valuable customers, who may not deliver high economic value in the short term,
  - But may offer substantial value in the long term.
- It pays to view customers through more lenses than just economic value.

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This particular approach is good and often used, but there are some drawbacks which you should know that it actually, because we are looking at recency frequency, etcetera This that RFM module model, that has a disadvantage that sometimes, it can ignore potentially.

Suppose, the customer is now buying in small quantity buying infrequently, but that customer's business has a potential of high growth over the next 5 years. And therefore, when you are actually doing this calculation based on the immediate history, you might ignore the potential growth.

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So, this is a drawback of this particular model. We can improve in the model, then we can actually introduce in that the possibility of future growth. And therefore, we can actually create a graph, where actually we take today's RFM valuation and with some probability added to it we can go to that what could value over the next year, year after and so on.

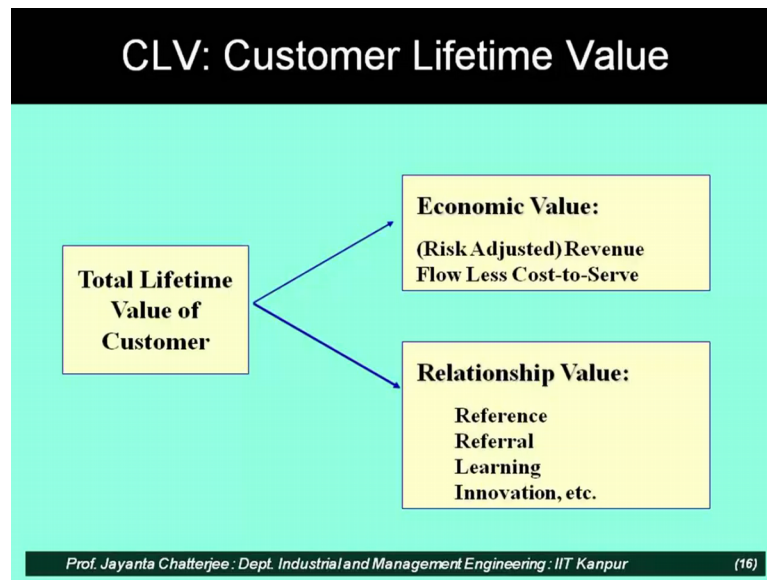
In all these cases, it is very important to understand a topic that we have discussed right from the beginning that in today's sales world, loyalty is very very customers delight based, trust based, relationship based, loyalty orientation is very important, because longer you have a customer with you better will be your gain monetary gain.

So, as you can see here we are showing that we have annual profit, base profit and then the increase in demand, price premium that can be charged by better positioning, and cost saving and relationship value.

So, you see overtime this builds the column goes up and up, and also it actually shows that the performance over a long term becomes much better if you have relationship, because many of your costs actually cost of sales and marketing, it goes down and that is quite a significant cost.

And therefore, the buildup of this column becomes faster, so that is why today's sales focus is on long term relationship and not a single transaction as it is shown on top.

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And you can actually calculate this total lifetime value of the customer. One is you take the economic value, which is the risk adjusted revenue flow less cost-to-serve that means, you take revenue every year that, that you are able to get minus the sales and marketing and service and other costs.

And then you can actually assign some probability of maybe next year, you are definite that this kind of result can be obtained, but the year after you will say ok, there is a 80 percent probability of getting that result, because it is kind of distant in the future, so nothing future cannot be predicted accurately. So, you can therefore, adjust with respect to risk by multiplying by the probability factor.

And therefore, you can actually come up with a kind of revenue flow, risk adjusted. And you can also adjust it with respect to time value of money. So, if you are calculating today what you are going to earn yeah three years later, you discounted by the usual cost of money percentage.

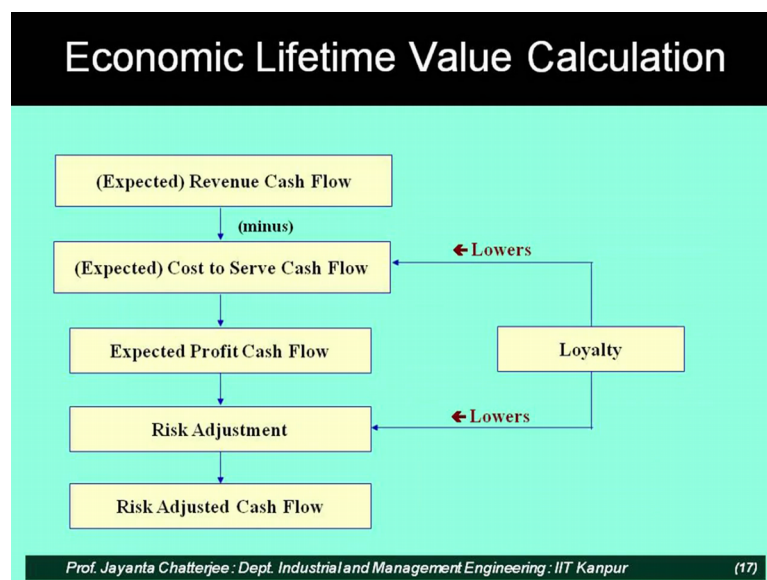
And come up to the present value, net present value calculation. So, one is the net present value calculation that is a direct reflection of the economic value of a customer, but there are other understandings that you can get from this previous chart that there is something called relationship value.

The relationship value you see in the earlier chart is right on top, and as you see as the time goes the relationship value block becomes bigger and bigger, and the cost saving block becomes smaller and smaller. This is the whole issue the basis of the rational of the relationship based trust based sales superiority.

So, the relationship value comes by different ways reference to other customers, which has a very powerful force as we discussed earlier. And learning from the customer, and also innovation that can happen because of customers input.

If a customer has good relation with you, the customer will come up with ideas how the product or service combination, good service combination can be improved and that is an excellent source for product enhancement.

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So, this is kind of a simple projection that shows that expected revenue cash flow minus the cost to serve cash flow. And expected profit cash flow with risk adjustment that means probability factor introduced and this gives you the risk adjusted cash flow.

So, obviously our idea will be so the loyalty does two things, one is that it reduces the cost to serve right. The better is the relationship better is the understanding between the two organizations, and a lower will be your cost to serve. Straight away of course, something goes down is the marketing cost, but otherwise also the service provision costs will be lower.

And the risk adjustment also will be lower, because if you have better relationship, then you will know in better depth at what is the likelihood of the customer giving you that level of business, 3 years from now.

Whatever are their internal estimates with respect to their own sales projection, they will share with you and that will give you a better understanding. And this obviously, our aim is to maximize this that improves us, takes us to a finally much better situation with respect to this which is the lifeblood of the business, risk adjusted cash flow.

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**Customer Relationship Value**

- Reference Accounts (Give us prestige, high credibility)
- Referral Accounts (Give us high-quality leads)
- Learning Accounts (Help us refine our offerings/beta testers)
- Innovation Accounts (Help us to develop new offerings)

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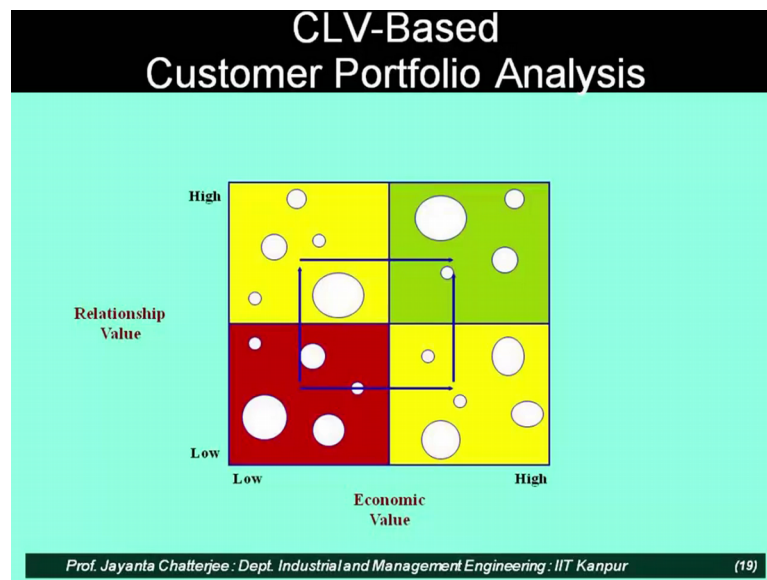
And to conclude let me just put forward this simple classification of the different types of accounts, which is a kind of you can say it will give you the negotiation profile what kind of. So, one is the reference account these are the accounts, which are providing us referrals to other serving as an example to a new intending customer, it establishes our credibility, enhances our reputation all of that, so that those are called reference accounts, always the most important of the accounts.

In today's world, where retention is more important than acquisition. And besides reference accounts are accounts which you can refer to, but referral accounts slight variation are accounts where the customers actively will give you lead to other opportunities. So, this high quality lead provision is another fantastic advantage we get from those customers with whom we have good relationship.

And then there are learning accounts, these are accounts where we are able to try new products without in confidence, so that if there are some bucks or there are some deficiencies in the product, the customer is not going to bad mouth you in the market place. And we rather give you inputs how to take care of those at which are the bucks, which are the problems. So, the we also sometimes called them as a better customers. This better customers are important, because these are accounts with which help us to augment enhance the product.

And then innovation account, these are the accounts were like the early adapters. So, they are the people who will possibly be good recipient for your new offerings.

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And so accordingly we can create this chart, which is how we will a customer portfolio we will analyze and negotiation targets we will analyze.

So, one hand we have high relationship value and high economic values. So, obviously this green quadrant, which are customers who provide high economic value as well as high relationship value will be our first priority.

Our second priority maybe here, and we will try to improve the economic value of this quadrant and move the more towards this, as well as we will try to take this quadrant, where the economic value is high, but our current relationship value maybe low how to

take them towards this. So, moving this quadrant towards this quadrant and this quadrant towards this quadrant will be our sales strategy inputs.

So, in short in today's session we briefly discussed about the idea of cost of good sold and total cost versus what is the perceived price, considered fair by the customer. And the logical price, which one can calculate by way of the advantages and performance improvements offered by a new product.

And as we discussed that usually the perceived price for a better product will be higher than the current ruling price, because the customer has a better perception for that new product, but usually it will be lower than what is the logically calculated chargeable price.

And as a salesperson our aim should be to push that middle line, if you remember let me show you that chart again here. So, here this is our second third slide that our aim as a sales negotiator will be to push this line as high as possible, definitely we should actually try to take it to this level which is the perceived value.

In rare cases, we may be able to take it to this level, usually it will not be possible. And so to reduce this gap, and to increase this gap to reduce this gap between the customer value and the perceived value; and to increase the gap between the current price level and the perceived value level is are the sales negotiation objectives.

We discussed then how we calculate the kind of this logically chargeable price, so that we know the, what is the you know up side that one can go for. So, again that same thing we try to take this upwards, and take this line as close as possible to the slide that is our whole negotiation objective, and that will improve our margin with respect to the value creation.

So, the maximum value one can expect by increase of margin for a new improve product is this the value created line. So, push this as much as possible and make it equal to this, this is our objective ok.

And we categorize the targets by this R, F, M – Recency, Frequency and Monetary value model. And then of course, we also look at that what percentage the total customer base we can logically aim by using this kind of a matrix that we discussed. Where, however

new product B can be position with respect to the existing brands A, B, C. And by looking at these factors, we can calculate that what could be our imputed share or logically achievable market share that kind of concludes our first introductory discussion on the quant quantitative aspects of negotiation.

Tomorrow, we will discuss the negotiation techniques, and mechanisms in the sales arena.

Thank you.