

## **BUSINESS MARKETING - TECHNOLOGY FOCUS**

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### **Lecture 17: Pricing Summary**

Hello, I am Jayanta Chatterjee from IIT Kanpur. As you know, we are discussing B2B marketing with technology focus and we are right now concluding today the session on pricing in the B2B context. We have already discussed several aspects of pricing in this domain. In this session, we will repeat some of those points for accentuation and we will supplement some new points which are particularly interesting for the B2B domain. So, pricing fundamentally is an indicator of the worth of a product or service.

**Pricing Summary**

- Fundamentally, price is an indicator of the worth of a product.
  - Price needs to be set at a level that

indicates that the benefits are worth the price,

indicates that the customer can afford the price,

the customer cannot obtain more value from some other supplier's offerings.

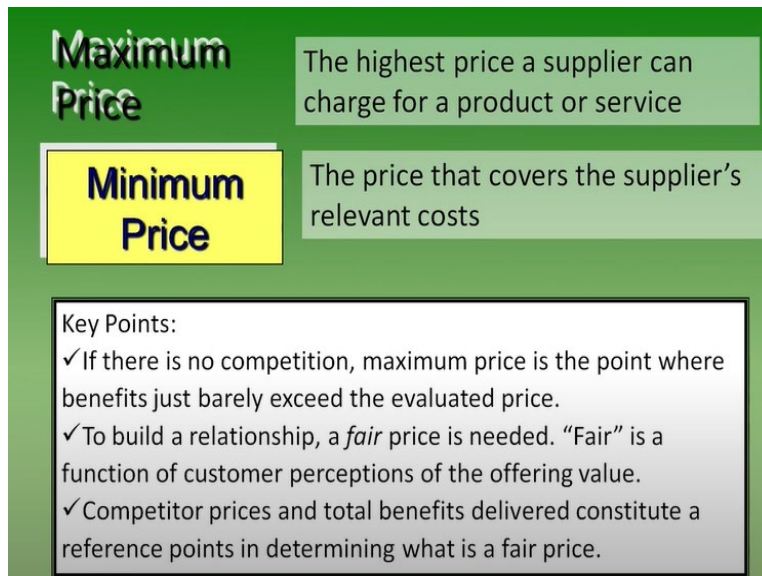
Price needs to be set at a level that indicates that the benefits are worth the price. This is the most important point we have again and again saying that price is of lesser importance than the value that is perceived by the customer, and the value that is perceived by the customer must exceed the cost that is borne by the customer and that is the whole strategic core of pricing in the B2B context. Pricing also indicates that the customers can afford the price, we have to set it at that kind of level and another important point about pricing level is that the customers should be sure that they cannot obtain a better value from some other suppliers offerings.

These are the three criteria that constitute about your price level setting.

<b>Cost-Based Pricing</b> Price is set by calculating the cost of an offering, then adding a standard percentage profit.	<b>Value-Based Pricing</b> Price is set based on perceived customer value.
<b>Cost-Based Price Issues</b> <ul style="list-style-type: none"><li>•Costs depend on volume.</li><li>•Costs assigned by standard rates may have no relationship to actual costs.</li><li>•Price has no relationship to customers' perceptions of the offering's worth.</li></ul>	<b>Value-Based Price Issues</b> <ul style="list-style-type: none"><li>•More difficult to implement than cost-based pricing.</li><li>•Need to establish the <u>evaluated price</u> (the price of the offering from the customer's perspective after all costs associated with the offering are evaluated).</li></ul>

Now, we have been discussing also about cost based pricing versus value based pricing and I am going to summarize what we have already discussed with some new points here. So, cost based pricing issues, costs depend on volume because as the volumes go up, some of the items like the fixed cost etc., get attributed to the per unit at a lower level and so costs depend on volume. Costs assigned by standard rates may have no relationship to the actual cost because there are several aspects about costs which are not captured by the standard costing method.

So, some of these we have discussed in the past but we are again emphasizing it here and the most important part is that the price that you charge is of lesser importance compared to the sense of value that is price has no relationship to customer's perceptions of the offering's worth. So, the value in the customer's mind, the worth that the customer feels he or she has received is of much higher importance than the issue about upfront price. So value based pricing is a little bit more difficult to implement but that is what we will have to always attempt because we have to establish in the customer's mind that the evaluated price that means the explicit price plus all the implicit prices etc., all put together is less than the sense of worth the customer feels after acquiring the product or service that B2B seller is offering.



So, we know that the maximum price is the highest price a supplier can charge for a product or service that is quite obvious. And the minimum price is the price that covers the suppliers relevant costs. So, this all costs put together is the lower strata and the upper strata is the highest price that the customer can charge. In between is our pricing domain, is our area where we will actually have the flexibility to set the prices. Key points that we have to emphasize here are that if there is no competition, then the maximum price is the point where the benefits just barely exceeds the evaluated price.

To build the relationship which is at the core of B2B marketing, we have to always charge the fair price. Fair as in customer's mind. So, fair is a function of customer's perceptions of the value received which must always be higher than the upfront price that he or she would have paid. And competitor prices and total benefits delivered constitute a reference points in this respect in determining what is fair price.

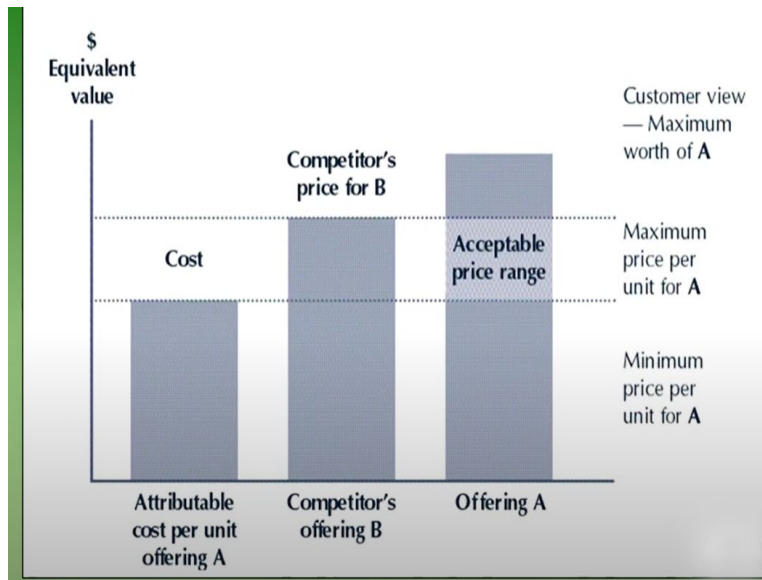
## Value-Cost Model of Pricing

- We need to analyze how important a product is to the *customer's creation of value*.
- This indicates what each buyer can afford and how sensitive the customer is likely to be to price changes.

So, if we actually we will clarify this a little bit more in a diagram little later. So, value cost model of pricing is we need to analyze how important a product is to customers creation of value. For example, there may be certain products like say cutting fluid or cooling coolant in a manufacturing company, in an engineering company, metal cutting company where lot of these fluids are necessary in various machines.

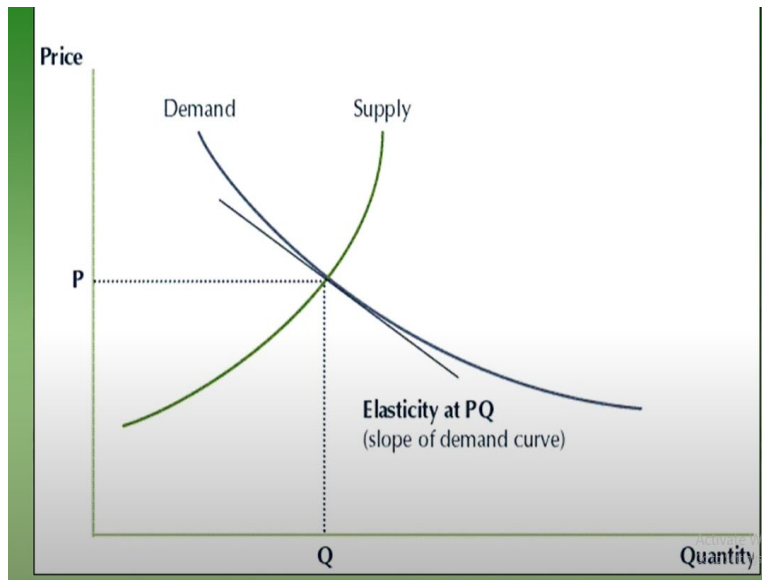
Now, this may be a very innocuous item, this may be a very low cost item per unit. But it is a very crucial item and therefore the customer will always be very sensitive to pricing of these products even though they are low value items. So, the importance of the item in the customer's operation often will ascribe a higher sensitivity to the value that the customer feels he or she has received.

That means this indicates that to what extent the buyer can afford and how sensitive the customer is likely to be to the price changes in this kind of. So, something that is crucial at certain stage for capital expenditure, something that is going to bring a lot of productive value to the customer's operation. The customer may be not so sensitive to price, but for consumables which are again very crucial for customers operation and customer is very sensitive to its availability and the price that he pays even though it is a low value item there it is important that one when we deal with the pricing for such items.



Now this diagram is what I was talking about. You see on the left-hand side, the column that you see is the column of cost attributable to cost per unit of a particular offering which is A, say. Now, there may be a comparable or competitive offering which is B and that has a certain price level. Now, the offering A, as it is in customer's mind, the worth of the item is the top of the column which is the right most column, but the lower range that one has to look at is the cost line which is the lowest line and in between is the line of the competitors price the B column price. And therefore, even though theoretically speaking, one could charge it to the top of the column, which is on the extreme right hand side.

But in reality, it will be playing between the cost line and the competitors pricing line, assuming that they are like equivalent and comparable. So, in reality, therefore, even though the price in certain aspect in the customer's mind could go to the top of the right hand column. But it will be actually pegged somewhere in between because of the competitive pressure. So if you remember the pyramid that we had seen in an earlier session, the competitive pressure, the cost are continuous two factors which are actually playing upon the final price that is set.



Now this is another diagram that is very well known from microeconomics. The supply line is rising from the left to the right and the demand line is sliding from the left to the right which means that if price goes up then the demand comes down. Contrarily when the price comes down then the demand goes up whereas in case of supply when the price goes up then there may be more product flow into the marketplace.

So, that is why the two slopes are in opposite directions and where they meet that line between that the PQ line PQ point as you see is the point where we can actually draw a tangent and that gives us the elasticity at that particular point. Now if this line slopes change then accordingly that point will also change.

## Lessons to be learned on the economic fundamentals of price

**Lesson 1: Demand levels differ at different price levels.** Each segment will have a different degree of price sensitivity.

**Lesson 2: Price changes trigger customer reactions.** In the short-term, these reactions may be constrained by customers' situations.

**Lesson 3. Price changes trigger reactions from competitors.**

So, the lessons that can be learned from the economic fundamentals of price that lesson 1 is that demand levels differ at different price. Each segment will have a different degree of price sensitivity. Some items as we said are more elastic and some segments may be less elastic and in the same way the demand will determine also the degree of price sensitivity. So the degree, the demand and the price are interactive, the supply and the price are interactive and that is depicted by the graph that we just now saw. Price changes trigger customer reactions.

Price changes also trigger competitive reactions that we will just now discuss. In the short term, these reactions may be constrained by customer situation. Sometimes the customer may have already too much money invested in a particular supplier's equipment. So, therefore customer will not be that sensitive to the pricing for the additional equipment or pricing of spares etc., because of the huge investments that are already there in that particular supplier's previous installations.

So, depending on the situation, the price changes will trigger certain kind of reaction from the customer. But on the whole, of course, always price increase will have a negative reaction. Sometimes the customer may just tolerate it. But in many cases, that will be something that the customer will have dissonance with. And price changes also trigger reactions from competitors as we just now mentioned.

## Several Marketing Objectives Addressed by Pricing

### • Strategic Purposes

- Achieve a target level of profitability
- Build goodwill in a market
- Penetrating a new market or segment
- Maximize profit for a new product
- Keep competitors out of an existing customer base

### • Tactical Purposes

- Win new and important customer business
- Penetrate a new account
- Reduce inventory levels
- Keep business of disgruntled customers
- Encourage product trial
- Encourage sales of complementary products

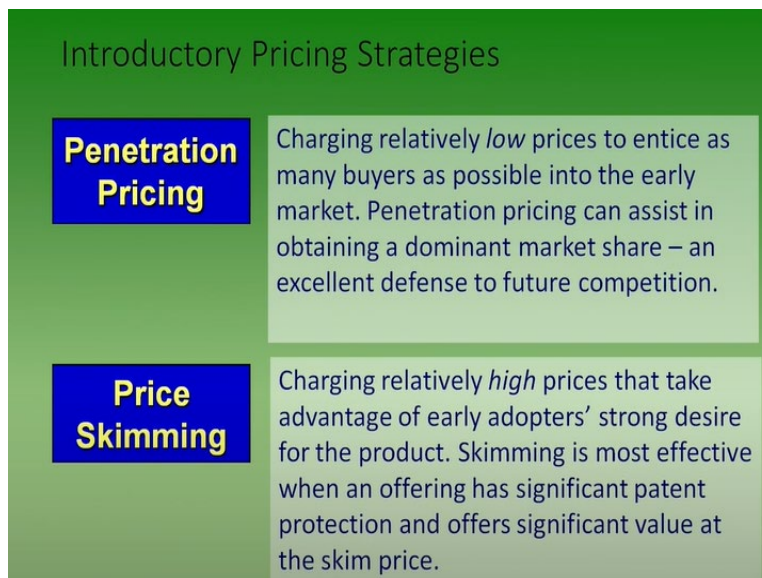
And these two sets of reactions are to be always remembered when we are dealing with the price changes. This is a particular diagram which this slide summarizes the tactical issues related to tactical purposes of pricing and strategic purposes of pricing. The tactical purposes pricing actually helps us to win new business so that may be the first step and the most usually used step to penetrate a new account. It may sometimes be used to reduce inventory level by giving some additional discount for clearing of stock which is more that happens in case of B2C. In B2B that is the stock clearance sale happens for certain consumable or for some staple items, but not usually for you know the products which are like large machines or complex services.

And price can also be used as an incentive to disgruntle customers just to make them give them a stroke of happiness. It also is very important in the B2B context to encourage product trial. So, our initial price setting for new products where we are encouraging for more and more people to try out to accept the product, the pricing may initially be at a low level which we call the penetrative pricing as we have discussed and we will again repeat it in the subsequent slide. And tactically price is also that encourages sales of complementary products because often actually this happens with for almost all B2B and professional products where we try to do cross-selling of associated products and services as well as up-selling of associated products and services by offering various kinds of price incentives.

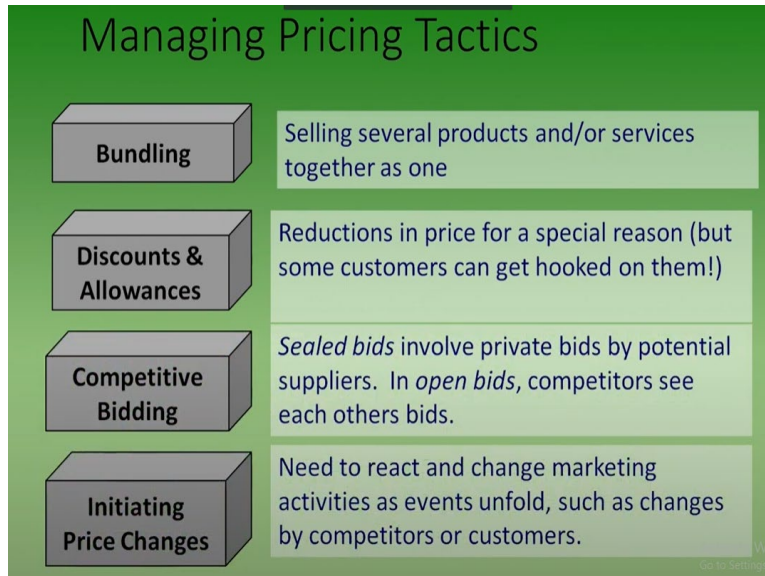


Strategically price achieve a target level of profitability and that is why we have to we discuss this in when we talked about the profit setting approach to pricing. It helps us to build goodwill in the market. When we were known as a fair price company or when we are known as a competitive price company, it builds a certain kind of automatic attractor and it becomes an ingredient of the industrial brand. It also helps us to penetrate new market segments strategically and It obviously helps us to maximize the profit for a new product, particularly if you can do price skimming, as we discussed earlier.

And it also strategically helps us to keep competitors, even future competitors, out of the market. Because if your price is at a very competitive level and you have, therefore, good control on your cost, Then you will be able to set a price level that will dissuade competitors to come into the market because to them as a new entrant they may find the margins to be not attractive at all. So, these are summarizing the tactical purposes of pricing strategy and strategic purposes of pricing.



Let us look at some of the points that we have already highlighted earlier in the earlier session about penetration pricing and price skimming. We have discussed that when we can do penetration pricing or when we normally that is the most often used strategy for new product introduction. But in certain cases when we have good intellectual property protection, patent protection, etc. or design related high degree of preference as we discussed in a previous session, then we can do price skimming.



Let us look at some of the pricing tactics like bundling, discounts and allowances, competitive bidding and initiating price changes. The top two bundling and discounts and allowances are more often used in B2C, but it is also used in some of the professional services and in B2B services, particularly bundling is often used.

For example, in the fiber optic service for internet, they may actually come in hand in hand with certain other bundled packages for other entertainment and or if you buy the internet package, then you may get voice over internet free and such bundling may happen in the pricing strategy. We are going to spend a little bit of time on the third block. from top which is competitive bidding which is that it is one of the key part of pricing in the B2B context and this particular the two slides that I am going to show you shows us how we decide on quantitative issues related to bidding.

## Determining a Bid Price

Expected profit at a given price is calculated as

$$\text{➤ } E(PF) = PW(Pr) \times PF(Pr)$$

Where:

➤  $E(PF)$  = Expected profit

➤  $PW(Pr)$  = Probability of winning the bid at price  $Pr$

➤  $PF(Pr)$  = Profit at price  $Pr$

So, this formula that you have in front of you which is EPF is expected profit. Expected profit is PWPR which is the probability of winning at that particular price PR and the next is the profit at the price PR. So, if we have actually we are setting a price PR then the probability of winning the bid at that price is the first factor and the profit that we are going to make at that price is what is the second factor.

### Hypothetical Example of Profit Expectations in a Competitive Bidding Situation

Cost	Bid	Profit	Prob. of Winning Bid	Expected Profit
\$20,000	\$20,000	\$0	.2	\$0
\$20,000	\$22,000	\$2,000	.5	\$1,000
\$20,000	\$24,000	\$4,000	.7	\$2,800
\$20,000	\$26,000	\$6,000	.5	\$3,000
<b>\$20,000</b>	<b>\$28,000</b>	<b>\$8,000</b>	<b>.4</b>	<b>\$3,200</b>
\$20,000	\$30,000	\$10,000	.3	\$3,000
\$20,000	\$32,000	\$12,000	.2	\$2,400

So, with this formula we can actually build a chart like this by observing the various kinds of bids that have been submitted for similar product or similar service earlier because in many many of these cases the bids are open. So, the competitors can see each

other's bids when the on the appointed day the bids are opened. So, you see, at \$20,000, all the cost is the same on the extreme left-hand column, \$20,000. If the bid is \$20,000, then there is no profit, zero profit.

Probability of winning may be some number. It could be 20, 40, whatever. It does not matter because the two factors, when multiplied, then it gives expected profit is zero. Now, at 22,000 dollars, whether profit is 2,000 and suppose the probability of winning is 0.5, 50 percent, then the expected profit is 1,000. Like that, if we go to 26,000, then the profit is 6,000, the probability of winning may again be 50% and these percentages are to be computed by observing previous buying records by observing previous tender results of the similar product or similar service. Or it can also be done by way of estimation by experts, particularly involving the field sales personnel. And it can be therefore an educated estimate by the executives. So at \$26,000, 6,000 profit probability is 0.5, then the expected profit is 3,000. At the next level, which is 28,000, the profit is 8,000.

The winning bid may go, probability of winning may go down little bit, which is 0.4 or 40%. But we get the highest level of expected profit, which is \$3,200. So, normally with this kind of a computation, we will not set the price at 10,000, we will not set the price at 12,000 because the probability of winning will be very low at that level and we will not set at 4,000 because though the probability of winning will be more, but the profit level will be too low, so the net result will be lower. So, we will bid perhaps 8000 dollars, but if we expect to be the competitive pressure to be very high just to be to play safe in such situation and remember I am mentioning these numbers. These are typical or illustrative numbers because in reality you will have to take your equipment, your price level, your cost level and so on and set price with this but this is just showing that how you can use past data and your educated estimate to set the bidding price.

So, here if the competitive pressure is estimated going to be too high then you may decide to use \$6,000 as the \$26,000 as the price instead of \$28,000. So even though your profit will be a little lower. but the probability of winning will be slightly better. On the whole, therefore, you will be at 3000 as opposed to 3200. So, this kind of fine tuning may be done.

But this is a very simple presentation of an approach which can be made more sophisticated depending on the product, service, complexity, etc. But this is normally the way we do by combining our data available from the previous bids and previous buying records of similar product or service and our educated experience based estimate and by combining the two we can decide on what price we are going to bid in a competitive bidding situation.

Two Types of Negotiating Situations in B2B Sales

	Situation	
	Stand-alone Transaction	Balanced between Transaction and Relationship
Effective bargaining styles	Competitive; Problem solving	Problem solving; Compromising
Effective approach	Use of leverage	Seek common interests

That kind of brings us to the level where we are going to enter into our next session, which is industrial sales or sales in the context of B2B marketing. And at this stage, I will end this session here. Thank you.