

ISB- Product Management

Week 9: Willingness to Pay and Price Setting

Video 1: Module Overview

Welcome friends to the module on pricing of the course on product management. Let me start this module by letting you know the fundamental axiom of economics. One of the fundamental axiom of economics is that the firm's goal is to maximise on profit, and what is a profit? Profit is simply the revenue firms generate minus the total cost incurs, and the revenue consists of two parts, price times the total demand, the total sales. And the cost can be divided simply into two parts, the variable cost and the fixed cost.

Now, firms want to improve profit, and then they can work on multiple things, right? They can work on increasing the sales volume by doing advertising, by customer acquisition, going to new markets, launching new products, improving the quality of the products, or they can also improve the profit by reducing the cost. It could be employing the new technology to reduce the fixed cost or managing their workforce and the material better and reduce the variable cost. But here is the thing, in one of the most widely cited study by McKinsey, they looked at the income statement of global 1,200 firms, and what they found is the pricing is the most powerful lever.

So, let me tell you what I mean by the most powerful lever. If firm actually have some resources and they, using those resources can reduce the fixed cost by 1%, what is the impact on the profitability? versus, if they employ those resources and are able to increase the sales volume by 1%, what is the impact on the profit? or, they can actually work on reducing the variable cost, and what is the impact of that on the profitability? and what they found is that the price is the most important lever.

The impact of 1% change in prices could lead to roughly 9% increase in the profitability. And in this module, we will talk about how should firm think about the pricing issues? And in the same article, McKinsey talks about, that the firms actually, and particularly in the North American firms, they spend quite a lot of efforts in terms of strategising, but relatively little in terms of doing the systematic research around the pricing.

And in this module, we will talk about, what do I mean by systematic research? What are the important pieces of information one need to have before they think about pricing issues? So, in this module, we're going to talk about the common pricing approaches. We'll touch upon the role of cost in the profitability and the pricing decisions. We'll look at some of the methods, how can you estimate consumer willingness to pay? And then we'll talk about, how using all these pieces of information, one can think about setting the profitable prices.

Video 2: Pricing in Practice

Before we move on to understanding the finer nuances of pricing, let's talk about and let's just look at the common approaches managers employ when think about setting the prices. Now, in this model, we're going to focus on the product and market level prices. But the pricing can be thought of at three different levels. At the highest level, think about the industry-level prices, and these are important for the policy making decisions, right? For example, what are the prices of grains and things like that.

So, macroeconomic factors are far more important when we think about the pricing at the industrial level. And at the bottom of it, you can think about pricing at the transaction-level, what kind of discount and payment terms you are giving to your customers. But the most important thing from the product-market perspective, is the pricing at the product and market level. So, what are the common approaches currently used by the firms? So, here I'm going to point to one of the studies by Professor Vithala R. Rao and Benjamin Kartono. They did survey 150 firms across US, Singapore and India, and particularly they were interested in understanding how do these firms actually set the prices? And while talking to these managers who were in charge of setting the prices, they got to know that they were using different kinds of pricing strategies.

They talked about price skimming, they talked about leader pricing, parity pricing, price bundling, costless pricing, breakeven pricing, geographical pricing, Internet pricing, all different kinds of pricing strategies. So, when they looked at these pricing strategies and they asked these managers, "Can you really explain what do you mean by low price supplier pricing, or leader pricing, or the geographical pricing?" So, when they describe these pricing strategies, they were able to understand, what are the anchoring points and how they think about the pricing? And not surprisingly, what they found that actually, there are only three kinds of anchors when firms think about the pricing.

They anchor themselves when in the cost or they anchor themselves in the competition or sometimes these firms anchor themselves into the customers, or their value they're providing to these customers, right? So, let me explain to you what we mean by these three different anchors. So, cost plus pricing is the most commonly and widely used approach for the pricing, and all of you probably already have the idea of that is, here idea is, first, figure out what is the cost of manufacturing this product or offering this product, right? and then use some markups. Now, these markups could be industry practices, for example, in the hotel industry, whatever the cost of producing that particular dish, you mark it up by four times or something like that, right? and different industries use a different kind of markup and firms often use that to anchor themselves to come up with the pricing for their products.

Now, of course, why this is very widely used? Because cost is something seems like firms know quite a bit, right? So, they can look at their accounting with some difficulty but still, they can figure out what is the cost of producing the product, or the cost of delivering the services. So, accounting data is readily available to them to estimate the cost, they have some understanding of what kind of markups they need, what kind of markups others are using, or they might use something like internal rate of return, that to have these products, we need to produce this kind of at least, these kinds of returns

are required. Now, why this pricing is very popular? Because it's relatively easy, barring that as long as you have some good estimate of the cost, it seems prudent, it seems fair that the firm basically is able to cover their costs and have some profits already built in there, right?

But one of the biggest challenges with this approach is that it doesn't take into account the customer value, how customers actually derive the value from your product. Now, the second very commonly used approach you might have seen by the firms is, by looking the competitive offerings. Who are my competitors? What kind of products they are selling? And what kind of pricing they are charging? and based on that, you come up with some pricing. Again, as you can imagine, this seems like a good approach because, at the end, you want to sell the products and the services in the competitive market, and then you need to be competitively priced so that the consumers buy your products and services.

But still, the completely anchoring yourself in the competition is not the right approach, because it might lead to some price wars and it's destructive to the entire market, that everyone if is looking at each other's prices in setting their own prices, then you know where things can go at the end. And the third very common approach is again in the B2B setting is, that you talk to your customers because a lot of time these products are customised, and these services are customised quantities and things like that. And then you try to get the feel of how much consumers will be willing to pay, get some sense of it, and then set the price right? And it's very often used by the salespeople. Well, all these three anchors actually are important anchors, but what I'm going to talk about here in this module is, how to account for the cost, how to account for the competition, how to account for the customer willingness to pay.

Video 3: Price Setting Example

To understand the issues which are relevant for the pricing, let's look at this example. In this example, there is a president of one of the SBUs, which is selling one kind of product. Think about some kind of industrial products. And what he's struggling with is that in the last year, his target was one million units he wanted to sell. But he was able to sell on his 750K units, and what he found that he has 13% of the market share. His prices were \$9 but there is a competitor who is selling at \$11 and his market share is roughly around 17%. And there are a lot of other competitors who are selling, ranging from \$6 to \$13. And the bottom line here is that the directive given to him from the head office was that this particular unit should generate roughly 1.5 million profits or, in revenue terms, maybe roughly around nine million revenue.

So, he is thinking about what can we do? how should actually achieve that goal of 1.5 million profit? So, he looked at the accounting data, right? So, remember the price is last year was \$9 and he sold 750,000 units, so the total revenue he generated is around \$6.75 million. And if you look at variable costs, the variable cost is \$3 per unit. And then there is fixed costs and the marketing and the other overheads, which are three million and 1.5 million, respectively. And if you add up all the costs, it turns out the total cost was \$6.75 million and the revenue was \$6.75 million.

So, basically, he made zero profit. So, now if you think about it, how would you approach this problem? How we think about achieving the goal of 1.5 million profit, or nine million revenue? So, what I want you to reflect on this a little bit and come up with, what are the things you possibly will do? Again, you can do a lot of things, remember we talked about the profitability can be improved through different means, right? You can work on your pricing. You can work on improving the sales, you can think about improving the quality, you can think about reducing the cost and so on and so forth. So, when you're thinking about it, try not to worry too much about the cost side. Let's keep the cost side aside, and let's not worry too much about the advertising and changing the product quality.

Let's think more in terms of what can we do in the current setup itself to achieve that profitability. So, nothing drastically changed over the last year. So, you can expect the similar kind of sales if you don't do anything. And then remember, the goal is to achieve 1.5 million targets. So, what price will you set if you think about changing the price? Because remember, price is the sharpest lever, right? 1% change in the prices can lead to 9% changes. That's what the McKinsey study find. So, maybe there is some scope of adjusting the prices. So, what prices will you set?

Video 4: Law of Demand

So, I hope you were able to think through the problem. And I hope you got some ideas about how you are going to change the prices or what are the other things you want to do. But here is one thing I wanted to highlight here, so, suppose you came up with that, okay. There, I should increase the price, right? So, suppose think about if you are increasing the price by 10%, and if you look at the new numbers, and depending on how the market reacts to your higher prices, right?

So, here's a possibility that when you increase the price, there is not much loss of demand because most of the customers who are buying from you, actually like your product. They're not going to move away to your competitor because you increase the price. And in that case, so suppose the sales decline is only 5%. If the sales decline is 5%, what you will see, is that actually your profits increase if you increase the price by 10% and here are the calculations. But there is a possibility that your product is not very differentiated and your competitors are very strong, and when you try to increase the price by 10%, the demand falls drastically. In other words, a lot of your current customers or the customers who were buying from you last year, actually end up going to your competitor, and the fall in the sales is huge, say 33%. And if you do the calculations, the fall in the sales is 33%, then increasing the price by 10% actually will put you in a deeper hole, right? You, in fact, instead of not making zero profit, you might end up making losses of 750,000.

So, that means increasing the price may or may not be the right strategy, depending on what kind of market you are operating in, what kind of product you are selling, and how your competitors look at your product offerings. Now, so think about the other case, may be decreasing the price is the solution, right? So, think about suppose you

want to decrease the price by 10%. And again, that gets two possibilities, when you decrease the price, maybe you can steal the demand from your competitor, and if you can steal a lot of demand from your competitor and your sales increased by 33%, then you look at the numbers you will end up making, actually profit, 600,000 versus, when you decrease the price and the impact on sales is very minimal. So, suppose you are only able to increase the sales by 5% by decreasing the price by 10%. Then, in that case, you actually again end up in the hole, right? So, you end up making losses of 480,000. So, the point what I wanted to make here is that, whether you should increase the price or decrease the price, depends very critically on how the market reacts, right? And these are the things which we'll try to understand is that, if you are in the market, what we use, the how is the price sensitivity of the market, how the market reacts to your price changes, that piece of information becomes very critical when you're thinking about setting the prices.

Now, if you think about the demand, the demand actually depends on lot of factors. It depends on what price is you are charging, what prices your competitors are charging, what kind of other marketing strategies, advertising and things like that you are doing, what kind of product line you have, what kind of product line and the marketing strategies your competitors are using. All this affects your demand.

So, any of these variables when change, your demand also changes or your sales also change and the sales is very critically related to the profitability, because sales not only change your revenue, but it also changes your cost. And remember, the revenue minus the cost is the profit. So, there is a lot of things which you have to worry about when you're thinking about the price changes. See, another way to look at this is profit is simply revenue minus the cost, right? And what I wanted to allude to is that usually when think about the pricing, and particularly the firms who are anchoring themselves in the costless pricing, usually forget to take into account this very fundamental aspect of demand that when you change the prices, it changes the demand, right?

Now, qualitatively, we do understand when you increase the price, sale goes down and when decrease the price sales goes up, right? But we really need a more quantitative way, more systematic way to take this piece of information. So, we'll talk about how to measure these things. And there is a huge so many different tools, firms use to try to estimate this thing. But remember, whatever method you are using, do not try to underplay this particular piece of information, because whether you want what prices you're going to set critically depends on this piece of information, which is marked as a red arrow. And of course, there are other things also which are going to affect the demand, and that is something you have to take into account. But this is something what I call the minimum piece of information, right?

This is the bare minimum piece of information you must have when you're thinking about setting the price. So, another way to again look at the same information is, when you're thinking about the price and, from price to profitability. The entire system flows like this again, is a relatively simplified system, but you can see that the prices affect the sales volume, sales volume affects the revenue, prices directly affect the revenue, revenues affect the profitability. When you think about changing the prices, your competitors might react, right? and that will have an impact on the sales volume, right?

And the change in the sales volume will have an impact on the cost, and the cost has an impact on the profit.

So, you see so many different links. So, when you're thinking of pricing in isolation, you have to take into account so many pieces of information. Some of the pieces of information are more economic relationships, right? So, there as long as you know the theory and how these are related, you're fine. Some of the pieces of information about the cost and all, it can come from the accounting data. And some of the pieces of information you have to actually actively seek out in the market, right? When I change the price, how do generally my competitors react, right? And that's where a lot of past data and all these things and analytics is used to kind of an estimate. But the most critical piece, which is the red arrow, is what is the impact of price change on the sales volume? And that is something very, very critical. I'm not saying the other things are not critical, but what I found in my personal experience, that the firms often underplay this link and overlay other links.

So, I wanted to bring this to the table here, that if anything, when you're thinking about the pricing, this is one piece of information you must worry about, right? As I said, there are multiple ways to kind of you know to get to that information. Largely, what we're talking about, this is about the price sensitivity of demand, right? If I change the price, how the sales respond, and the response of the sales could come from lot of other things, not only the prices. It could come from you know the customer, right?

What kind of category you are selling, right? how many substitutes or complements are available? what do customers expect when they're buying these products? what are their habit patterns, right? what are their income and preferences? and in other module, we talk about how to understand consumer preferences and things like that customer needs. Now, as I said, there are multiple ways to kind of get to this piece of information, and here I am going to give you the broad overview of what are the different methods firms use.

So, either firm, actually use the past purchase data, right? The data they have collected over the time because think about the retailer. When you're buying at the retail shop, they have the information about your transactions, right? A lot of time you have the loyalty card, through that they can pin down actually, what are you buying over the time, right? And lot of this kind of data is used through the analytics to figure out the price sensitivity of each and every individual households, or in that case, you know individuals itself.

So, this is like actual purchase data past data I can analyse to figure out the price sensitivity, and then aggregate it over all the customers and that will give me the sense of, if I change the prices, who are the customers who will leave? Who are the customers I might be able to gain? And what will happen to the demand at the aggregate level. The other kind of information, firms actually use to get the sense of the price sensitivity is, through the survey methods, right? By directly asking questions like, what is your willingness to pay?

Well, it may sound very dumb if you ask somebody you know directly, what is the willingness to pay for this product, but there are more systematic way to get to that piece of

information, right? And that's where the direct questioning idea come in, we will talk about few of the methods, how to estimate the willingness to pay. And, of course, in another module, we talked about the conjoint analysis, and that's I said you know, one of the very powerful technique, not only for understanding what kind of products probably will have the higher market shares and will be more profitable for the firm, but also can be used to estimate the price sensitivity and things like that.

And of course, nowadays you might have seen that the firms actually use real experiments, right? They actually can do the real time experiments by changing the prices and see how the customers respond in the real time. But remember, this is little tricky in the sense that you have to run these things in the real time and you have to critically evaluate the strategy whether this is the viable strategy, in your case, when you are actually differentially changing the prices in the real time.

But at the core of it, we are interested in how the aggregate demand will respond to my price changes, right? And as I said, this will critically depend on lot of things and particularly think about the customers, what kind of product category they have, right? What kind of price framing and references they use when they think about buying products, right? What kind of other competitive offerings in the market and so on and so forth.

Video 5: Role of Variable and Fixed Costs

So, let's look at this profit equation again, right? We talked about the impact of prices. It affects your demand, but prices also not only affect the demand, the demand actually affects your cost also, because the more you sell or less you sell is going to change the total cost, and that's in turn, will affect your profitability. So, profit is equal to price times the sales or the demand minus the variable cost times the number of units you're selling, the sales again, minus the fixed cost.

So, although, it's important to understand the relationship between the price and demand, can we completely forget about the cost side of the question? And the answer is no. And that relationship is again coming from relationship between the price and the demand, right? Because if you change the price, demand changes, and then when the demand changes, your cost also changes. So, we will talk about how to estimate this relationship.

But let's focus a little bit on the cost side of it, because eventually your profitability will depend on the cost, right? And now the cost, we're going to look at two different kinds of costs, one is the variable costs and the fixed costs, and we'll try to understand how the variable cost affect the profitability and the fixed costs affect the profitability, and how should I think about the cost when we're thinking about the pricing decision.

Now, what is the variable cost? variable cost is something, as you all know, hopefully, is that the cost of material, right? The redirect cost, in other words, a simple way to think about that is, is that if I produce one more unit, what is the additional cost I'm going to incur? and that you can think of that as a variable cost. and then there is another component of the cost, which doesn't depend on the demand, right? It doesn't

depend on how many units you're selling. For example, the manufacturing plant, the electricity cost, maybe the people you have employed.

The marketing cost may not critically depend on how many units you are selling, and that's the fixed part. Now, the fixed cost also, eventually, whatever your fixed costs you are incurring, will lead to your profitability, right? Higher your fixed costs, lower your profits, higher your variable costs, lower your profits. But what is important to know is that, that when you are thinking about the pricing decision, the fixed costs are less important, and particularly at the tactical level, right?

Because the fixed costs only play a role when you're thinking about launching a new product at that time, you should be thinking about the fixed costs, right? Whether actually I should have this product, and I should launch this product in the market. Because once you have made that decision, the fixed cost is fixed, right?

It doesn't depend on what prices you are going to charge, because whatever prices you are going to charge will affect the demand, and it will affect the variable cost, but it will not affect your fixed costs. But remember, the key point here is that the variable cost depends critically on the prices and through the demand, but the fixed cost does not, right? So, you have to be careful about when you are actually calculating the cost of the products, right?

Often, I have seen that the accounting way is basically whatever your fixed costs is, try to divide it by the number of units or expected units you're going to sell. So, often managers basically think about the fixed costs and converting that into the variable costs, and that's what they take into account, we think about, okay, this is my cost, and then slap on the mark-ups, right? What I would encourage you not to change your fixed costs in and kind of a treat that is a variable cost.

Rather treat that separately, treat variable cost separately and the fixed cost separately, okay? Now, here is the saddle point. When we are thinking about the tactical level pricing decisions, actually, the fixed cost doesn't matter, because my decisions about the prices do not change the fixed costs, okay, and that's why you leave fixed costs when you are thinking about the price change decisions or price setting decisions.

But as I said, it's very critical because your profitability critically depends on the fixed costs. So, in the long run, you should be able to recover enough profits, enough contribution from each and every unit you sell, so that you cover your fixed costs. In that sense, it's important, but from the price setting sense it's not, and this is a very important thing to remember.

Now, your R&D expenditure, for example, in the dead development case, that's a sunk cost. You already spent the money, you have already figured out all, for example, the product development costs, right? Irrespective of what prices you charge, it's not going to change your fixed costs, think about that as in a sunk cost, right? The only thing you can do is you can do the best by using the analytics or using the proper strategies to have the higher contribution margins, and the part of it will recover your sunk costs or the fixed costs. But really, you can't do anything with your fixed costs itself, right? For example, you already have the manufacturing facility.

The only decision there is not about how much to produce in that manufacturing facility. The only decision is either basically shut down the plant, and you can actually save that cost, or you can continue with the plant, and there is an operational cost of the plant, which largely will be unaffected by the number of units you are selling, right? Similarly, the advertising costs and the training cost, these are the costs which are overheads, and the administrative costs usually are fixed in the nature.

And don't try to convert that into the variable cost, and often firms who actually rely on the cost-plus pricing, end up doing this mistake. Well, fixed cost is important because it does go to affect the profitability. But really, from the pricing perspective, pricing decision perspective, you can leave them aside. So, again to summarise, when we're thinking about the tactical level pricing decisions, pricing setting decisions.

Remember, the only costs which are relevant are incremental and should be avoidable. What do I mean by incremental and avoidable? That if I do not produce additional units, I can save the cost of material and things like that. So, they are incremental and I can avoid them by not selling those units, right? This is the cost which you cannot avoid and which are not incremental in nature. For example, the administrative overheads, manufacturing plants, R&D expenditure should not play a role in your pricing decisions.

Video 6: Few Survey-Based Estimation Techniques: Expert Judgement

So, remember, we talked about two different primary methods of estimating the relationship between the price and the demand. One is looking at the past data and using analytics, right? And the other is that you directly ask your consumers to get the sense of what their willingness to pay is. And within that, you can go the route of trying to understand what their preferences are and how to convert that into a monetary value. In one of the modules, we talked about that approach, or you can use a conjoint study, but you can directly actually go to the consumers and ask them about their willingness to pay. Not directly asking them what is your willingness to pay, but there are multiple ways to get to that piece of information through survey-based methods, right? So, we're going to talk about three different methods which are useful at three different stages of the product development, right?

So, one is the expert judgement, right? Where we don't really have lot of information about our product is also at the very early stages. But still, we want to get the sense of what kind of pricing we can expect for this product so that we can estimate, is it the profitable way to go about it, right? Should we even think about launching these products or not, right? The other is, when you have the product already, good sense of concepts are ready, and you are ready to launch these products in the market, what you can directly ask consumers by showing them some prototypes or the concept and trying to get to the willingness to pay, right? And then, of course, there is a third more nuanced willingness to pay survey method, which is called the price sensitivity meter.

So, let's start with the expert judgement. This is the case where we really don't have a lot of information about the product, it's at the very early stages. And we want to get

the rough sense of how much consumers would be willing to pay for something like this if I want to offer in the market, right? Now, at that point of time, we really don't have lot of information. So, in these cases what firms do is they rely on the experts, and who are the experts? expert could be anyone, expert could be the manager who has been selling the similar products in the market, right? You can talk to him and saying, this is the idea I want to bring to the market, what do you think? how much price I can expect from this, right? you can hire a consultant, right? who has been consulting in this particular area? your salespeople, right? In fact, some of your marquee customers can also help you identify what is the good price.

Again, the idea there is a ballpark picture of the price, and the reason you want to estimate is you want to get the sense of if you create this product, what volumes you can expect, what pricing you can expect, and how much it will cost you to actually produce this product, right? and what would be the cost of developing and things like that and at that time you can decide whether actually you want to go in that route. Now, when we are going to the expert, there are multiple ways you can collect that information. You can go and talk to each and every expert, interview them and discuss and things like that or you can actually ask all these experts to come in one single room and discuss about that this is the product we are thinking about launching. What do you think what sales we would expect, what challenges we will face, what pricing we can expect, and things like that, right?

Now, just imagine for a second suppose... So, suppose I go the interview route. Then, in that case, for each and every individual, I'm trying to get the information from there. But different experts will have a different perspective on this particular product, right? And what we really want is we want to get the big picture, full picture, and in fact, that's why the focus groups approach where we bring a lot of experts, like three or four or five or six experts in a single room, and they discuss among each other so that they can share information among each other. And then you might get a better picture, a better sense of what are the challenges and what you can expect in the market, because one expert might forget or not take into account the certain aspects and the other person can bring that up and then he can use that information to update his priors about what the sales and the prices would look like. But here is the challenge in that case also.

The challenge there is, suppose you have in the room, there is a big consultant in sitting there. The vice president is sitting there because he knows about the category. Some of your salespeople are sitting there, and everyone is discussing, right? And let's imagine that what happens during these discussions, the most powerful and the most vocal guy, basically influences the entire group. If the vice president says, I think this is a good idea, let's launch it and I think we can actually sell it at \$50, right? Then the salespeople will be reporting to the vice president will say, "Yes, sir. This is a good idea and we agree with you, right?" So, he had hijacked the thing when really the salespeople independently might think is a bad idea, right? How to avoid that? Although you want to share this information, the salespeople might have certain piece of information which vice president may not have, or your customer might talk about something which is also important in this court. And that's where the Delphi method comes.

A Delphi method was invented in 1950 by the RAND Corporation, right? and this really goes to the core of this problem of that, in the group's usually the strongest or the senior most guy overwhelms the entire discussion in the sense that his ideas get more prominence and the other ideas, although might be important, actually do not come to the surface. Okay, so what Delphi method does. Delphi method, instead of bringing all these experts to the room, we send them some survey, right? So, in this context, the survey will send us. We will describe that this is the product we want to launch in the market, and we'll ask them that what price we should actually think about? We will ask them what sales in this particular region in your region we can expect when we launch this product, right?

So, these are the two pieces of information we want, and we also want them to tell us some of the things, right? Why do they, why they think this is the good price? Why do you think this is the market share will be able to capture the sales we will be able to achieve, right? And then you collect this information from independently from each and every expert, right? Collect all the information, right? And then bigger... Make a big document and this document should be anonymous, right? There should not be the names of the people or their designations. Is the expert one says, you know, this is the good price for this particular pricing for this product concept, this is the sales they expect and these are the reasons why he thinks this is the right thing to do, right? And then expert two again and you basically bring all this information and share it with each and every expert and ask them that the expert two's opinion was this, expert three's opinion was this, four's opinion was this, so that what will happen. They will look at each other's, what their guess estimates were, if you want to say that.

And then they will look at what is the rationale? Why they think this, this is what the price should be or this is what the sales would look like, and then they can take into account information with the other expert is using which otherwise, they actually overlooked at, there might be certain things okay, yes, I think this expert is saying to your sales volume will be much lower because he knows that there are very strong competitor in the market who is actually going to offer a similar product. And that piece of information was not available to expert one. Now, he can take that into account. And made their estimates re-estimates, and then maybe qualify them, right? So, again you're going to ask each and every expert to revise their estimates and send it back to you after looking at the estimates of all the experts. And that's when they're going to send you the new estimates hopefully, right? And using those new estimates you can know you are ready.

Now, you can actually iterate it one more time but really one iteration is good enough, okay? For all practical purpose. And then using that piece of information, now you say okay, these are the different price points. And again, those price points and the sales figures will not match, they will not converge to one single number. There you can use, maybe use averages or maybe some weighted averages, some other managerial judgement to analyse this data to get the sense of what would be the market share and what would be the good price for this product, right? That's what in natural the Delphi method is, and it's quite often used as you can imagine in the cases where at the very early stages of the product development, we then we really don't have a lot of market data, we don't even have the product concepts in a fully articulated.

So, let's look at the example. In the consumer non-durable market, a firm wanted to introduce this product in three of the European regions, right? So, they went to the experts and experts here are the managers from these three regions. And then they asked them specifically these three questions to get to sense of what kind of profitability they can expect when they are launching this product. So, they asked them the lowest realistic price and the first-year sales volume expected from this particular product, right? What is the highest realistic price we can expect to launch this product at? And what would be the sales look like in that case, right? And what is the expected sales and the reasonable price for this product, right? And as I said, you collect this important information independently from each and every expert and then try to collate. In this case, there was lot of discrepancies in terms of the estimates which came and they're in this particular case because these were the managers of their own firm. They were able to hold the meeting and try to get to the consensus.

But really, the Delphi method says, you know, you collate all this information and send it back to the managers and let them independently revise these estimates, right? And as I said, it will not converge but you get the good sense of and why did we ask three different questions? Why did they ask three different questions? Because really, to make any demand curve, right? The relationship between the price and the demand, you need at least two points on the curve, right? That if this is the price, what the volume will look like if I increase the price to this much, how much would be the volume look like? And using that information which came from the experts, we were able to actually create this graph, right? So, we had different price point, what the estimated sales look like. We have some estimate of what the contribution margins are in this sense because we know what the variable cost is.

Remember the variable cost, not the fixed cost. And then based on the variable cost and the expected prices and the sales, we can actually figure out what total profits would be expected in a first year, maybe in the second year and the third year and the total profits from launching this product, right? And then we know what is the product development costs, right? And at that point, you can decide the total profits or the contributions from launching this product that will across the next three years. Is it higher than the product development cost? Is it good enough for us to actually go or no go, right? And that's a way to rightly think about how to use the expert judgement.

Video 7: Few Survey-Based Estimation Techniques: Purchase Intention Survey

So, we talked about the case where at the very early stages of the product development, we want to get the idea of what would be the good price. And if we launch this product, what kind of numbers we can expect in terms of profitability and is it good decision to actually go and launch something like that. So, once suppose you decided that, okay, this is the good idea and you have developed the product or the services, then before the launch, you want to kind of, now get the better estimates of what prices would be the good price for this particular product. So, in that case,

usually what we do is, we directly go to the customers because now, we have the concept ready, we have the prototypes at least ready, right?

And we can directly ask consumers, this is the product or this is the service or this is the concept or the idea, well defined and well-articulated. We wanted to bring to the market. Would you be interested in buying this product? how much you will be willing to pay for this product? So, these are the kind of things, but clearly as you can understand directly asking people that this is the product I have, how much you'll be willing to pay for this product, would not go very far right? Because people will end up, overstating or understating their preferences in terms of how much they are willing to pay for the product. So, the right way to go about that is asking them the same question in a very different way right. So, kind of underplaying the price and rather bring the quality or the product itself at the forefront. And that is what we call the purchase intention survey.

So here, instead of directly asking people, this is the product, how much you'll be willing to pay for this product? We ask it kind of in a different way. We say, how likely are to buy this product at say \$30? And they will give you that, okay they will definitely buy, they will not buy, they're interested in things like that. There're five-point scale, seven-point scale which I've seen in the other module, right? So, we can use five-point scale or seven-point scale in terms, how likely they want to buy or they're not definitely not going to buy. So, this is the case which was the kind of method which was used when the KODAK wanted to launch a polaroid camera. They exactly after kind of creating the product, because it was a very innovative product, and there was nothing very similar in the market. And they wanted to kind of get the sense of how much consumers would be willing to pay for this polaroid camera, where we can actually produce the instant pictures. And remember at that time there was nothing very similar to that.

So, this method actually came very handy, where they already had this product ready, and they wanted to kind of get the sense of, how much will be able to sell at different price points. So, they asked consumers, they basically went to the target consumer segment, which they thought would be interested in buying this polaroid camera. And then they asked them, "This is the kind of product we have, how likely are going to buy this product at \$30?" And then they use okay, I would definitely buy, some people said, I might not buy, or somebody said I'll definitely not buy. But when you collect this kind of information, remember, we wanted to get the estimate, we're not interested in the price itself. Because different people willingness to pay would be very different.

Somebody will say, if you can really get to the true willingness to pay, some person might be willing to pay \$50 for the camera and somebody else might be willing to pay \$150 and somebody will say, no it's only \$10 worth for me. So, what we really wanted to get is, if I change the price, if I launched it at \$30, if I launch it at \$20, what kind of demand I can expect? Not at the individual level, but at the market level, at the aggregate level. But what we are interested in, should I launch it at low prices, or should I launch my product at the high prices? And for that, what you need is this relationship. If I change the price, if I increase the price, how the demand actually changes?

So, in this particular case, what we did is basically we asked only one question that, this is the product at \$30, how likely are going to buy this product? But you're really interested in a different price-points, peoples, if you want to say purchase intention. So, often managers make a mistake of asking the same question again and again to the respondent by changing the price because they know that they want to test multiple price points. And you already have a respondent. You ask them okay, if this product is at \$30, how likely are going to buy? Then whatever he said is say definitely will buy, then you basically ask next question and say, how likely you're to buy this product at \$100? And he might say, I would probably buy or may definitely not buy or something like that. And then I can ask a much lower number, how likely you are to buy this product at \$10? But don't do that, this is the bad idea, because what you have done is exactly instead of asking three questions you could have directly ask what is the willingness to pay, this three-question is as bad as directly asking that. The idea of kind of framing this question, how likely or to buy this product at \$30, was to not bring price at the forefront, rather bring the product at the forefront. And by repeatedly asking the same question and changing the price, what you have done, is basically made the price very salient in consumer's mind. They know that this whole thing is about figuring out the price.

So, again the thing which we wanted to get away with, we got into the same trouble. But really, we are interested in testing multiple price points, right? What should be the optimal price and for which, I need to have at least the number across three different prices. So, the way to go about this is suppose you think you're going to survey 100 people for this one particular question, how likely to buy this product at \$40? So, you divide your sample into three parts, for one set of consumers you are going to ask the price that, how likely going to buy this product at \$30? Under the set of consumers, you're going to ask the question, how likely to buy this product at \$50? And another set of consumers you're going to ask a question, how likely are to buy this product at \$10? And that's how you collect the information across three different price points. Okay, so remember that don't repeat this question to the same respondent again and again, rather, divide your sample into how a number of price points you want to test.

Usually, I recommend the three price points is good enough because it will give you the sense of, how the sales will respond at different price points. Then the question comes, how do you analyse the data? So, in this table, as you can see that 150 respondents were asked 50 in each bin, and the three price points were tested, \$150, \$80 and the \$40. And what this table is showing you that what percentage of people actually respondent. And remember, these are three different group of people. So, when the group of people who were shown the stimulus of \$150, 4% of them said, definitely would buy and 65% of people basically said they will definitely not buy.

To the group of people who heard the stimulus was \$80, 5% of them said definitely would buy, 14% said probably would buy, and 54% of people say definitely not buy. And when the group of people who were shown this product along with the price tag of \$40, 15% of the people said definitely would buy and 30% of people definitely would not buy. So, using these pieces of information now, I can actually get the estimate of the demand curve. If I launch the product at \$40, how much the demand I would

expect? kay, now generally what happens the consultants, the marketing research firms have a lot of information about the categories.

So, remember, still one issue about that they might be, not really be able to tell you the truth because at the end it's a question, and it has some signal about what would they do in the real world when the time comes of purchasing the product but that's the only thing. So, the information you have collected here, will give you the good sense of that, but really, it's not the actual. It's still, even when the respondent who said would definitely will buy, may not end up buying when the time comes, so that how can we correct for those biases? And we know systematically, these biases exist. What people tell you versus what they actually do might be correlated, but not really exact thing.

Now, marketing research agencies have the ways to correct for this, but maybe you don't have that kind of an information. So, here is my recommendation. This is how you basically go about it. You just look at; suppose you use the seven-point scale. You look at different price points, how many people actually said 1, 2 or 3, definitely would buy or probably would buy and things like that. So, you can say that at \$40 if you add up all the demand, so 15 plus 2 plus 30, that's 47%.

Now, at \$80 when you add these three cells, it turns out to be 19%. And at \$150 that number comes out to be the 11%, and that is what you want. Now, you have the demand curve the sense of the demand curve. Because, really, it's not the demand curve because the market potential is a different thing, you have to multiply for that, but you know how the market will respond when I change the prices.

So, in other words, you can plot this curve that at \$40, this is my 47% is a demand. If I increase the price to \$80, 19% will be the demand, if I increase the price 150, 11% would be demand. So, now you have the demand curve. Now, you know that if I increase the price, how the demand will change. Now of course, this doesn't tell you what the total number of the sales would be, but that is not required. That is a scaling factor and it has nothing to do with their optimal price setting. But this is something, if you think carefully about its price setting, yes, it does matter, how much would be your total profit, but the market potential is just the multiply, it has no effect on the optimal prices. So, whatever information you get, as long as you have this the shape of the demand curve, the slope of the demand curve if you want to call it, that's enough for you to figure out what should be the optimal price is, as long as you know your variable cost.

So, price minus the variable cost is the contribution margin from each and every unit you're going to sell, times the expected demand, in this case, is just the percentage term and that will give you the profit. And you can test different price points. You say okay, plug in the \$40 price, you know the variable cost and the expected demand is 47, what is the profit? Plug in the \$80, you know the variable cost, what is the expected demand at \$80, it's 19. What is the profit? plug in the 150 number, minus the variable costs which you know, and the expected demand is 11%, what is the profit? And among three of these, you kind of get the sense of, which is the best price to launch it.

Now, you can test the intimated prices also. So, it's not like, you're stuck with only 40, 80 and 150. Might turn out that actually at \$50 your profits are maximised. And the way to do that is if you draw the curve, you should be able to from that curve, you should be able to estimate at \$50 what the demand would look like. Again, as I said, these are all the guess estimates, right? In fact, let me tell you, even if you use the very sophisticated data analytics AI, NMN and all these things at the end, everything is the approximation of the reality. No model actually captures the everything in entirety. It's just some of them a little bit closer to the reality and some of them may be, have little bit more noise.

And how do you decide, how much information and how precisely want to capture the information, depends on it could be very costly. In fact, you can do the entire thing through the conjoint analysis, and that will give you much better estimates of the optimal profits and the profitability. But as you probably have seen in one of the modules, that's a pretty involved study. It's going to cost you quite a bit of money to actually get to that. So, that is the kind of call you have to make. Is that simple method good enough for me, for all practical purpose or really, I need a more precise information, and then I want to use the more precise tools for that.

Video 8: Few Survey-Based Estimation Techniques: Van Westendorp Price Sensitivity Meter

So, we talked about two methods, one which is very useful at the very early stages of the product development, and the second one is when it's closer to the product launch, right? So now we're going to look at another very popular method which is called the Van Westendorp Price Sensitivity Meter. This method is a little bit more sophisticated than the earlier one. What we have learned is the purchase intention survey, and I'll talk about where the sophistication comes from, and why this is so popular. So, think about when you're buying a product, right. You want to minimise your risk, right? minimise the risk in the sense you don't want to overpay for the products, right? Because whatever your assessment of the quality is, you want the products at the reasonable prices or the cheaper prices.

So, this is one kind of risk that you bought something, assuming that this is the quality of the product, and what we really found is that actually you kind of paid too much for it, right? The other kind of risk is that come from the other side, that you actually bought the product, which was very, very cheap. This is not performing as what you expected, right? So, you want to make a good call-in term of that you don't overpay for the products, and at the same time on the other side, you don't want to underpay also, because you know, if the products are very cheap, potentially, they could be a bad product. So, how do we minimise that risk? So, these are the two kinds of risk which are playing kind of opposite role. They know that when they're paying more for the product is actually, they are paying for the quality. But at the same time, there is the issue that this project is so expensive that this is beyond my ability to pay, right? On the other side, there is the issue of this is too good to be a product which is at such a low price. There might be something catch there, something might be hidden, maybe I'm getting conned, right?

So, this method basically tries to handle these two sources of anxiety consumers have when they're buying the product, right? So, what we do is, instead of asking a simple question that this is the product, tell me how likely you are to buy this product, we ask, actually, four different questions. In fact, there are five or six in the demographic information there are in the entire survey. But the core of it is the four questions, right? And the questions they ask is, this is the product, at what price do you think this product will be so cheap that you will start doubting the quality of the product?

So, suppose somebody shows you a phone, smartphone, and this smartphone he says, has this 24 megapixel and big RAM, and the battery life is 48 hours and so on and so forth, and it's only 5,000. You'll say, "probably it's not true, right? This guy is trying to cheat me, right?" And that's the question you want to get. At what price consumers really will start doubting the quality of the product? And then on the other side, there is another thing that okay, I know this product is good, but you know what? This is 80,000 rupees they are asking for, this too much for me. So, because it's out of your range, they're not going to buy, or if they start doubting the quality of the product, they will not buy. These are the two risks you try to minimise and try to find the sweet spot; the range of the prices which are acceptable for this particular product. So, that's the idea.

This is not going to the price point per se but giving the good sense of what is the good range of prices. And the four questions we ask is, at what price do you think this product will be too cheap, and you'll start doubting the quality of the product? At what price it's a good bargain? At what price you are still willing to buy, but you think this is not a bargain but I can still afford because I really like the quality of the product. And at what price basically you will not completely you will not consider buying this product. So, these are the four questions you ask, right? And then using these pieces of information, the four questions, the answers how many people said this and what are the prices they basically told you about these four questions, we analyse the data. And this is a little bit involved exercise, and we will have an assignment on that, but here I give you an intuition of how you're going to analyse this data.

So, think about there are two types of consumers, right. Different consumers have a different kind of taste for the quality. Some consumers really like the quality and they're willing to pay for the quality. And some consumer care more about the prices. They go and buy only inexpensive products, still, the good quality in their own mind, but they're not the consumers who are going after the iPhone of the world. They are okay with maybe the Redmi's of the world because they think that is good enough, right? So, the question number one and three in some sense is all about the consumers who are a little bit price sensitive. And the question number two and four is catering to the type of consumers who are more quality sensitive, okay? And because we can go to set only one single price for the product, we need to kind of balance these, the two groups of consumers, right?

And by the way, when I said everyone in certain contexts become very quality conscious and you remember, and then the other context you'll become the price sensitive. When you're at the airport, you behave differently; you are willing to pay 50 rupees or 100 rupees for the cup of coffee and the same coffee, the same quality,

when you are maybe in the city, you probably will not consider that. So, it's not like the two different groups of consumers is the two different kinds of needs, depending on the context, right? And we really don't know which context you will be in, right? And that's why we're trying to get around this. So, what we do is we plot all the information, right?

But largely the question number one and three, we plot kind of in a cumulative distribution of that. And for two and four, and we look at the intersections of these curves. An intersection of these curves basically tells you a different story, right? And here there are a lot of different things consultants do when the marketing research firm tell you. But let me tell you one thing, in my mind, the most important piece of information which comes out of this analysis is the price range, right?

There are two points which are called the point of marginal cheapness and the point of marginal expensiveness. These are the intersections of the curve one and three and two and four, and that gives you the range. And once you get to that range, then you have to use a lot of manageable judgement call, right. Figure out, use maybe some other methods to figure out what would be the optimal price. So, again, remember, what is the kind of information you are getting from this. And as I said, this is a very, very popular method. It's a very powerful, very widely used across services, products...

Remember, nowadays everything is also available free on the Internet, right? You can see that one firm is they're basically asking you to pay a lot of money, and the other firm is basically giving the same thing roughly at free, right? So, really, there is a whole range of prices you will observe on the Internet and the real world. But really, for your product, what would be the sweet spot is what you're trying to get a sweet spot in the sense, that kind of range. And these methods bring that to the table.

Video 9: Strategic Pricing

So, we have talked about the role of cost in setting the prices. We actually talked about the customer willingness to pay. And in another module, we talked about the value-based pricing, which basically starts the anchor there as the competitive pricing. So, now when you think about the pricing, all these three different methods might lead to a completely different answer, right? So, when you start from the cost-plus kind of pricing thinking, then you will come up with this number that this is the good price. When you do the customer survey, willingness to pay or elasticity or whatever method you're using, you might end up with completely different number.

Or you start the value-based pricing, it might give you a completely different picture, right? Then always the question may be, which is the right method? No, there is no right and wrong method. Pricing strategy, as you've seen, is quite complex. Remember, from the core marketing, basically, marketing has four P's, the product is one of the P's. You can change the product, and that will basically, will help you improve your profitability for the firm. You can kind of think about the placement strategies, you can think about the promotional strategies, and the pricing strategies. So, four P's of the marketing, three P's are all about firm's investment.

So, they invest, they launch new products, they figure out what the distribution channels should be, what kind of advertising they have to create, these are all investment for the firm. Pricing is one of the P's, which is harvesting all this investment. And this is where basically, firms have to focus a lot of effort, but at the same time, not because it's important, but it's actually a little bit more twisted and complex, right? It flows through all the other things, the product quality, your distribution system, your advertising, all affects the demand. And this demand is very tightly related to the prices and the profitability.

So, as I said, these three different starting points might lead to completely three different answers. So, don't worry about that. You kind of, now think about that as you were looking at some complex object and you got three different projections of it. And having a three different projections might give you a better idea of what the right price is rather than just looking at one dimension of it. That's how I would like you to think about the pricing strategy.

Now, again, if you start from the cost-plus pricing, often we ask a question, price should cover my cost, and that's how your kind of cost-plus pricing thinking goes. This is what my cost is, this is the kind of internal rate of return I expect from the product, or this is the kind of markups I should do, and that will achieve my profit objective. That's not the right way to think about it. The right way to think about is, how much sales gain would be required to profit from the price changes? So, in other words, you should give enough attention to the how the prices actually change the demand, so that relationship we talked about if you change the prices, demand will change.

At least, unless you incorporate that piece of information when you're thinking about the cost-plus pricing, you will be very, very far away, in terms of the profitability, what your potential profitability could be. And in fact, you might end up making a wrong decision, because cost is only one component of it. The other component come from the competition and the customer willingness to pay, okay? Now, when you're thinking about the firms we started in the first slide, that the firms sometimes anchor themselves in the competition, they look at the competitive offering, what are the prices they are offering, and based on that, they make the judgement call. That's also unidimensional approach. You should definitely do that exercise but should not make all your pricing decision just based on that.

Rather, you should be thinking about what shares of the market, I can profitably serve. When you're thinking about the competition, always think about that the market basically consists of very heterogeneous consumer's needs, and then you can actually very profitably serve one kind of customer needs, and the competitor serves another kind of customer needs. And that's how you should be approaching the pricing problem from the competition's point of view. Now, as I said, the other very common approach in the B2B setting is the sales-based pricing. All these products are often customised in terms of the number of quantity or the quality or the services they offer. Then usually, the salespeople work with the client to figure out how much they will be, willing to pay, and based on that, they try to set the prices.

But again, that's not enough, because when you're thinking, you're again leaving one part of it, what is your costs? So, what is the right way to do about that is, if you want

to go in this direction, I would suggest that you use the value-based pricing approach. So, what a due point example we talked about, and that's how you should be thinking about when you're thinking about from the customer's perspective, particularly in the B2B setting. Now, as I said, all these different kinds of starting points will lead to a different answer for you, but yes, the pricing strategy requires you to think about all the three things; the cost, you need to think about your customers' willingness to pay, and you need to think about the competition. What kind of product offerings are available in the market, and putting all these three things together, will really give you the good sense of what should be the optimal price?

Now, from the customer's perspective, depending on the category in the context B2B, B2C, there are a lot of factors which play into role. And we talked about that how, when we're collecting the information from the customers, their perceptions and needs and all these things, we try to take that into account. In fact, in the conjoint analysis module, we talked about how can you actually convert those needs and benefits more into the monetary value. You're going to use those kinds of approaches to figure out what the customer actual evaluation is, because you might say, my particular say smartph one is offering you a much, much better camera.

But the customer says, I don't care about your camera. And you wanted to charge for the camera. He is not because he says, I have my own camera, which I use for taking pictures, I don't need a very high-end camera on my smart phone. So, those are the things. What is important for the customer, how much he's willing to pay. The right way to think about that is through the customer need analysis and things like that. And from the cost perspective, always remember that don't make a mistake of converting your fixed costs into a variable cost. Just taking the fixed cost, whatever that is and divide by the number of expected units you're going to sell. Don't convert that into variable costs and then do the markup to come up with the price.

Rather, think more in terms of, what is the variable cost, and that is what you should be accounting for. Is fixed cost not important? Yes, it's important because that is going to eventually lead to what your profits look like. But this is not the right way to think about the fixed cost in the pricing decisions. Fixed costs are important for the product launch decisions, but they are not important at the price setting level. And of course, another we talked about is the value-based pricing which we have covered in the other module. So, you're going to kind of look at all the different perspectives and use the managerial judgement to set the prices.

Video 10: Summary

So, I hope in this module you were able to get the sense of how should you approach the pricing problem from the new products perspective. So, at the start of this module, we talked about the common pricing approaches, why pricing is so important, how important it is, the McKinsey study where they looked at the income statements of lot of firms, and then they figured out that 1% change in the prices can actually have the very major impact, or roughly like 9% impact on the profitability.

We looked at the common pricing approaches used by the firms, and there we talked about the three primary anchors. A lot of firms anchor themselves their pricing decisions into the cost, a lot of firms anchor their pricing decision into their competitive prices, and lot of firms in the B2B space anchor their pricing decisions based on the customer's, their willingness to pay is. Then we looked at what is the role of cost in the pricing decisions, how should you think about variable costs and fixed costs, and how should you take that into account in your pricing decisions.

And most importantly, we talked about the relationship between the price and sales, and that's the most critical thing. You need to have some sense of what that relationship is. And in there, we talked about three different survey-based methods to get to the willingness to pay, and from the willingness to pay, we can get this sense of, if you change the prices, how it will impact to demand. So, I hope with all these three different things we have covered in this module, you should be able to get a very good sense of what price points you want to launch your products at.

Video 11: Price Sensitivity Meter

So, let me walk you through the Price Sensitivity Meter app. Although the analysis you can do in the excel also, but if you feel like you can actually use this app to do the analysis and create the price sensitivity meter graph or the plots, right? So here again, I have the sample input data for you, so you can download the sample data, and then you go to browse to wherever you have downloaded your sample data. So, here the sample data is downloaded in my download folder. I'm going to point to that file. Here remember, this data is in the Excel format, right? So, once you upload the data here, you can view what the excel sheet looks like, right? So, it had five columns, and the first column was survey number of basically the respondent ID. And then, there were four questions remember, in the price sensitivity meter.

So, first question was, at what price do you think the product seems too cheap that you start doubting the quality of the product? or the one question was, right, at what price it becomes too expensive and you would not be interested in buying this product, right? So, different respondents basically give you those numbers, right? So, that's the raw data. And then, you can look at the summary of data. What is the mean, median and max and things like that? and often in the data, there are some missing values, basically we'll take care of all those issues.

And it has two options in terms of how many bins you want to use when you're creating the histograms and some kind of the highest price range. Right? Because sometimes people just put too high a number, and then you don't kind of want to cut those observations or put all the observations where, for example, in this case, if the price is somebody said is more than \$100, you can kind of assume that is saying that more than 100 is too expensive for me, right? So, these are not necessary options, but you can kind of play with that to see how what it does to the analysis.

Now, in the next tab, the app will automatically create these histograms for you and then, you can see for each and every question you have the distribution and we're going to use these CDFs to kind of create the price sensitivity meter. Now, just to

quickly show you that what this highest price does is, for example, if I make it 1000, then you will see actually, there were few respondents who said ₹500 or 300 or whatever those high numbers, right? So, we've all wanted to kind of say, "Okay, why don't we club all these numbers to 100?" and that's what this option does. If you make it highest price as 100, then all the numbers which were greater than high kind of squeezed into this part, right?

You can make it 40 also, or whatever you think is the reasonable. This is only for you to kind of look at the how the data looks like. But really, what you are interested in this price sensitivity meter plot, right? And there are a lot of things which you can read from this graph. And by the way, these curves what you're seeing are the same histograms. So, for the two cheap CDF, we inward that cheap CDF. So, instead of going up what is basically coming like this and I'm saying we do for the plot, right? And then, really, what we are interested in is the most important thing is the intersection of this, right? So, this is called the point of marginal cheapness.

Point of marginal cheapness is basically the intersection of a two cheap curve and it's worth it, right? And this is kind of to think about is the lowest bound or the lower bound of the acceptable prices. And similarly, when you look at the intersections of this blue and red dotted curves, that gives you the point of marginal expensiveness, and that is the upper bound of the acceptable price right range. So, this gives you the sense of what is the reasonable price range in which you can kind of expect the maximum kind of people would be interested in buying. Because, really, what it's doing is in one intuitive way to think about it, if you are kind of pricing your product too low, then lot of people kind of start doubting the quality of the product. That maybe this product is because it's so cheap, it's probably not that good, right?

And if you charge very high price, then again people are not interested because they say, "okay, product is probably very good, but it's outside and it's too expensive for me. Maybe I can look for something which is more reasonable." And that's how the price sensitivity meter graph can be understood. And this is the range is what I always recommend is how you should be using the price sensitivity meter for rather than trying to identify or nail down the exact price is, right? So, this gives you the sense of what is the reasonable price at which you can kind of launch a product? And then, you can use more managerial judgement and the other kind of information to figure out, "Okay, what exactly should be the price?"