**W1 V1 Decision making overview**

0:10  
In this video, we're gonna introduce you to the three general principles that we're gonna use to analyze decision making.

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I would strongly advise you to do every topic that we do to look for these three general principles and how we're adapting them to answer the questions at hand.

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It's going to make your study a lot easier and a lot more effective, and it's going to make you a better economist.

0:32  
OK, now why do we even think about analyzing choices or decision making?

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Simple fact that while our wants are infinite, our resources are finite, right?

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We have a finite amount of land, technology, and even things like personal relationships.

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And we've got to figure out how to allocate these resources in the best possible way.

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OK, I'm gonna put best in quotation marks for now and leave it because we're gonna have to define what this means.

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But what I want you to remember is what economists do is we focus on questions of allocation, how to best allocate those finite resources.

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We have to do this, we're gonna build models.

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So why do I say three general principles?

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Sounds very simple.

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Because we've got this complicated real world, and the reason we do that is we can focus on the important aspects, right?

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So we simplify this complicated relation, this complicated real world, by making a whole bunch of assumptions.

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And that allows us to focus on what's truly important from an economic perspective in here.

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Now we're going to use these models to make predictions.

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Some of them will be quantitative, right?

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So prices will go up by 10% and you're going to need to use the basic math to answer this in one-on-one.

1:49  
So please get comfortable with the math that we're gonna require in one-on-one.

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The other type of predictions we're gonna make is qualitative.

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So stuff goes up, stuff goes decreases.

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How and why for everything we do.

2:02  
Our ultimate disciplining device is data, right?

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If our model predictions don't match the data, then we go back to the drawing board and typically we start back up with our assumptions.

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So in everything we do, please keep track of the assumptions that are underlying.

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We don't repeat them very often, so we lose track of them.

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But everything comes down to those assumptions that we make.

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OK, Now there are broadly two types of questions that we ask with our models.

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The first one is kind of asking about the predictive power of our model and its ability to kind of match the data, right.

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So we ask questions that can be proven true or false with data.

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So we're going to predict prices go up by 10% when this happens and the data will tell us true, false.

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Another type of questions or analysis that we do is what we call a normative analysis, right.

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So this is more about statements or questions that make recommendations and hidden inside there is a value judgment, right, because we're saying this is what the government should do.

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This is what we recommend should happen in this case.

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Let me give you a few examples because it sounds vague when I make definitions like this.

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So for example, if we're talking about academic scholarships to high school students, if we make a statement that says providing academic scholarships to low income students will increase high school completion rates, that's going to be a positive statement, right?

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Because we are saying scholarships will actually increase completion rates and this is something that we can check and prove true or false with the data.

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Another type of statement that we can make is the following.

3:51  
The government must give $1000 scholarship to low income students.

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Now, this is a recommendation for those of you who try and identify normative statements by focusing on the word should, be careful because they don't always contain the word should.

4:08  
But what they do contain is a recommendation, right?

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It's an imperative statement.

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In that way, we're saying that the government must give here.

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The government should give this scholarship.

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Underlying this is a whole bunch of value judgments that people who get the scholarships are really happy.

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But what about where the money is coming from and underlying all of that?

4:27  
OK.

4:27  
So we in one O 1 are going to focus on the first type of questions because we're just being introduced to economics, right?

4:35  
We are just going to be thinking about what is happening and trying to understand that, taking that to the data and checking whether it's true or false.

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Sometimes we'll get into a little bit of critical analysis where we'll ask your opinion what you should do.

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And that case we'll get into a little bit of normative territory.

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But our primary goal with that is to focus on your critical analysis and thinking about how you came up with that value judgment.

5:01  
OK, Now let's start talking about modeling.

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The first thing we do is our basic assumption is what do people care about, OK.

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And we make a very simple assumption in economics is that people choose to do an action as long as the benefit is at least as high as cost, right?

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Why?

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Because if the benefit is slightly higher than the cost and you get something extra by doing this action right, we call this extra surplus.

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It's a jargony term and we'll talk about later.

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But the fundamental approach that we have is when people are thinking about doing something, they're looking at costs or looking at benefits and they're choosing on that basis.

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Now that has a whole bunch of implicit assumptions in here.

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So for example, they can correctly evaluate costs and benefits.

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And that's a big hidden assumption in there because sometimes they're not obvious or easily kind of measurable.

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Now, if I'm going to say that you're going to compare costs and benefits, we are used to thinking about costs as something that's in dollar terms, right?

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That's pretty intuitive for us.

6:11  
But when I ask you what's the benefit that you're getting from wearing AT shirt, right, if implicitly you can explain it to me, but if I need to compare it to costs, I need them to be in the same kind of unit, right?

6:24  
Otherwise I'm comparing apples and oranges and that's not going to make any sense.

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So when I'm talking about benefit versus costs, I also have to do hidden step in between where I need to quantify benefits in a way that makes it easy to compare to cost.

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And a common measure here is going to be dollars.

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So it's not that we are saying, not that economists are saying people care only about money because we've got dollars and dollars.

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Economists are saying if I want to compare two things, I need them to be in the same unit because otherwise I can't make an effective comparison.

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OK, so when we're asking for benefits and costs, we're going to people and asking them to tell us their valuation.

7:06  
We're not telling them how much to value wearing this T-shirt.

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We're asking them to tell us how much you value it.

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But tell it to me in a unit that makes sense for me to compare it to your cost.

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So express it in dollars.

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You're gonna see this term a lot where we're gonna say the value of AT shirt expressed in dollars is $50.00, right?

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Implicitly, the thing that we're doing now is we're getting people to put their emotions, how they think about how much money they're spending, how they think about how their friends are going to feel about them wearing this T-shirt.

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Think about all of those things, all of the benefit they got.

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Put it into a dollar value and give it to us so we can analyze your choice.

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OK, that's it.

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We've got hidden deeper assumptions as well, right?

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So it doesn't stop that.

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First thing is, though, you know your value with certainty, right?

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So if I come up to you and stop you on the road and say what's the value you get from wearing this T-shirt?

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You can give me a number.

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It's a strong ask, right?

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You're willing to make these calculations.

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So you are actually sitting down there and thinking very carefully about the money you spend on a T-shirt and also that they're making the choices that are in their self-interest.

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Now, self-interest is a loaded term, but what we are doing is asking you to tell us what you care about, right?

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And then we will evaluate your choice.

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It doesn't mean that we're telling you you need to be selfish because you can't care about the environment, for example.

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But that needs to be reflected in your evaluations.

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And then we can talk about how that affects your choices.

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OK.

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So let's start off with the first principle.

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The first principle is going to be the bulk of what we're going to talk about this first week, this idea of opportunity cost.

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OK, So when we're asking you to make a choice, you're not making this choice in isolation.

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You're always thinking about alternatives.

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This you may not be explicitly, may not be a front of mine, but when we look at how people make choices, it feels to us as economists and that's reflected in the data that they are thinking about alternative to the back of their head.

9:04  
We call this alternative and how we reflected in cost, a fancy term opportunity cost.

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OK, in the first week, maybe in the second week we'll use opportunity cost, opportunity cost all the time.

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But as we go on, we're going to drop the word opportunity because for us economists every single cost is an opportunity cost.

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There is no cost by itself and it is a mouthful to say every single time, OK, So in the beginning we'll be more mindful and constantly say opportunity cost, we'll drop it as we go on.

9:34  
But when economists say up costs, we mean opportunity cost.

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All costs for us are opportunity cost when you're talking about allocation decisions, OK, because allocation means if I put money here, I'm taking it away from somewhere else.

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If I'm choosing to go out with my friends, I'm choosing to take time away from, I don't know, studying or volunteering or attending a student club.

10:05  
Second principle, I want to buy granola bars.

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OK, so if I walk into Metro and I'm looking for granola bars, I don't first think about buy granola bars or not.

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I first think about if I were to buy granola bars, how many would I buy?

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Because I don't know what my valuation from granola bars is until I know how many granola bars I'm going to buy S The second principle is always if there is a quantity dimension, choose your quantity first, then you're going to have to use what we call and it's explained in a subsequent video thinking at the margin.

10:47  
So we're going to use jargony term but explain later marginal costs and benefits to determine quantity first, if you were buying, OK, we're not asking you to buy yourself just yet, but if you were to buy, what would you do?

11:02  
The third principle tells us whether you actually want to follow through with this or not.

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OK, so once I have the quantity of granola bars, then I can say this is my valuation.

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For each one of those granola bars in my basket.

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I now have a total benefit from granola bars, total cost of granola bars, and then I can decide do I want to buy or sell this quantity of granola bars.

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So I cannot think about buying or sell anything that has a quantity dimension without doing a quantity choice first.

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Once I have the quantity, I compare total benefits and costs to determine whether I actually want to follow through or not.

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So these are the three basic principles that we're going to adapt for every single thing that we do.

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Every cost for us as economists is an opportunity cost.

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Please don't forget that even though the word opportunity may not be repeated as we go on.

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2nd, if there is a quantity choice, first determine that using marginal costs and benefits.

12:06  
Then we take a step back.

12:08  
Based on that quantity, we calculate total costs and benefits and then decide whether I want to follow through with this or not.