

# How to Use Decision Trees In Negotiation and Mediation: The Power of Numbers

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I am very pleasantly surprised how well my original LinkedIn Decision Tree article was received. It just goes to show the depth of geekiness in the LinkedIn community. Good form!

In my first article, [“How to Handicap a Lawsuit: Decision Trees and Probability Analysis,”](#) I described decision tree logic and process, and how to use these tools for strategy development and case valuation. In this article, I discuss how decision trees can also be used as tools of persuasion in negotiation and mediation.

The examples below are derived from my own experience with decision trees as a mediator, negotiator and advocate. Just so we can jump right into the discussion, I am not going to repeat here the logic and process of building a decision tree. That is all set out in my first article above. So, if you haven't already, I suggest you take a few minutes to look at that article. It's a quick read.

## The Power of Numbers

As I have said many times before, preparation is key to successful negotiations and mediations. Using decision trees as part of that preparation contributes significant advantages:

- Providing a disciplined platform for you and your team to understand your case, including what is important and what is not.
- Allowing you to evaluate various potential settlement positions.

- Documenting your thinking in a permanent visual form – a road map – that provides a quick reference as you work within the negotiation.
- Will likely result in you being the most prepared and knowledgeable negotiator in the room.

But, in addition to these values, decision trees give you the Power of Numbers. We live in a quantified society where numeric standards and measurements carry weight. Whether it is the SAT, LSAT or MCAT, numbers often influence our perceptions of skill, ability and preparedness. At the very least, by presenting a decision tree to a mediator or opponent, you are making a strong statement that you have thought deeply about the case. We have all walked into mediations and negotiations where the other side has done little hard thinking. No matter, “Fortune Favors the Prepared Mind” - Dr. Louis Pasteur.

On several occasions, I have used decision trees to “anchor” a mediator to my position, thus turning his focus towards moving the other side. With a sophisticated (or maybe even unsophisticated) mediator, it is amazing how well this technique can work. The scenario goes like this:

- Mediator walks into the private session and begins.
- “I know those guys are too high, but don’t you think you should go up with your number? Have you thought about this risk or that? And what about attorney fees if you go to trial?”
- You give the mediator your decision tree, which addresses all of the issues he raised.
- He studies it for 5-10 minutes and then says, “Ok, give me the information I need to beat up these guys.”
- He leaves the room to talk to the other side and comes back three hours later with a settlement number at or close to your case valuation.

Honestly, I’ve seen it happen. It’s the Power of Numbers.

## **The Moot Decision Tree to Make a Point**

I have to emphasize that I refuse to falsely play with the percentages and outcomes in a decision tree in order to bamboozle a mediator or opposing negotiator. The tree is not a brief and to game it is, IMHO, a lie and unethical. And, I’m not suggesting that, as a matter of course, you should always reveal your finished tree. After all, it is clearly an example of attorney work product. If you are going to present it, you better be convinced that the tree favors your position because, at the very least, your valuation will become

the floor or ceiling of the negotiation. It's a call you have to make considering the specific case and your case strategy.

But if, for whatever reason, you don't want to give your tree to your opponents, you can still make a point with a Moot Tree. By Moot, I mean a tree that is admittedly mocked up as an example of potential outcomes to get the other side to reconsider their position. The following are examples of using Moot Trees in settlement negotiations.

## The 50 / 50 Decision Tree

I have used the 50 / 50 Decision Tree to bring some reality to disputes where the Plaintiff has an unrealistic expectation of success at trial. For this example, let's use the very simple contract dispute tree below, which includes:

- A Summary judgment issue that could resolve the entire case in favor of the Defendant.
- An expert evidentiary issue.
- The ultimate breach issue.
- Two levels of potential damages based on different damage theories -- \$10 million and \$250,000.
- The Plaintiff's generous settlement offer of \$5 million.

We begin the negotiations by explaining that, just to keep it neutral, we are assigning a 50% probability of winning and losing to each individual issue. That sounds fair, right?

Now, remember the multi-variable equations discussed in the first article and how a string of probabilities is calculated. When we run the numbers, the Plaintiff sees that assigning a 50% probability to each issue does not mean a 50% chance of being awarded \$10 million. Instead the probability of winning \$10 million is  $.50 \times .50 \times .50 \times .50 = .06$  or 6%. And, since that same equation appears in two outcomes, the total probability of winning \$10 million is about 12%, with a total case value of about \$1.28 million.

Yes, I will admit that there is some statistical gamesmanship here. Even so, this use of decision tree tools may well cause the Plaintiff to do a double take and reconsider its settlement position.

## **The How to Turn a Dog Case Into a Winner Tree**

Often, the best strategy for negotiation is changing your opponent's perspective about its probabilities of success. A Moot Tree can be a valuable tool to achieve this transformation.

Here is a version of a decision tree I created on the fly during a settlement negotiation regarding environmental liability. We had demanded that our codefendant (or PRP, to put it in CERCLA parlance) make an additional contribution to the cleanup of a Superfund site. In support, we had three admittedly weak claims, each of which could lead to the same \$1 million award. That is, the claims were not cumulative.

At first, the other side scoffed at even considering settlement given the weakness of our claims. To which I replied, "Come on, give me a 20% probability of success on each claim. Just about anything in litigation is worth at least 20%." They agreed. Scoff Scoff.

When I ran the probability numbers, our opponents looked on in disbelief. How could those weak claims result in a case value of \$488,000? I replied, "The answer is simple. I only have to win one claim, but you have to win all three." Their perspective had been changed and they wrote a check that day.

## **The Mediation Reevaluation Tree**

As a mediator, I have used decision trees to get the parties to reevaluate their positions and narrow the spread. This technique works best when the important issues are relatively straight forward and accepted by both parties. In such cases, I walked into the mediation with a basic tree already sketched out. I then work with each of the parties privately to assign probabilities, which essentially locks them into their individual value calculations. The result is two separate trees – a Plaintiff Tree and a Defendant Tree. Then I run the numbers and compare.

For this example, I am using our basic contract tree discussed above. I have tried to keep it simple and still allow for the effects of bias between the parties' positions. To that end, in the Plaintiff Tree, I have assigned a 60% probability of success to each issue favoring the Plaintiff and 60% to each favorable issue in the Defendant's tree. Here are the two trees.

And we compare the results:

- Plaintiff's Maximum Award = \$10,000,000
- Plaintiff's Settlement Offer = \$5,000,000
- Plaintiff's Expected Value = \$2,196,000
- Defendant's Expected Value = \$664,000
- Expected Value Delta = \$1,532,000

Now we have something to work with and to drive further discussions.

Application of decision tree tools can be very creative and modified to allow for a number of different types of analyses. Other examples include:

- Regulatory disputes and strategies.
- Valuing liabilities acquired in M&A.
- Evaluating the strength of multiple patent portfolios to assert in patent licensing programs.
- Developing Y2K legal process maps.

I'm not kidding. I did a bunch of Y2K trees! That must be the reason the disaster was averted.

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