Don’t Roll the Dice! Use Decision Tree Analysis When Calculating Your BATNA

Bob, the Project Executive, had made up his mind. “I’m rolling the dice and taking the electrical subcontractor’s claim to trial!” Bob exclaimed. “We all know that contractors are gamblers. Right?” Bob asked. “I’m going to take my chances. It’s in my DNA,” Bob added.

“How do you think you’ll do at trial?” Jim asked. Jim was a battle-hardened project manager and had been down the litigation road before. “Is there any chance the case might settle?”

“No,” Bob replied. “Not unless that good-for-nothing electrical sub gets real on his numbers. He’s got a legitimate beef, but I think his claim is trumped up. If he doesn’t budge, we’re headed to trial.”

“Have you considered the legal costs to get to a verdict or the costs of an appeal if you lose?” Jim asked. “Have you considered the cost of having your project staff tied up in discovery, producing copies of project documents, sitting through hours of depositions, and preparing for trial? If I were a betting man,” Jim added, “I’d bet that you haven’t considered your BATNA. Gambling may be in your DNA, but have you considered your odds of winning at trial?”

“My what?” Bob asked. “What the heck is a BATNA?”

“Your BATNA is your Best Alternative To a Negotiated Agreement,” Jim replied. “Gambler or not, you shouldn’t engage in litigation as just another crapshoot. If you know your BATNA, you can develop an informed litigation and settlement strategy without simply relying on a random roll of the dice. Successful gamblers do three things from the start. Successful gamblers learn the rules of the game, evaluate the stakes, and decide the anticipated quitting time, wouldn’t you agree?”


“I’m sure that the construction lawyer you’ve hired can help,” Jim replied. “In my experience, your BATNA is sometimes obvious, but if the dispute and litigation is complex, using a decision tree helps.”

Understand your BATNA and develop a settlement strategy early.

As the discussion between Bob and Jim suggests, it is critically important to develop and understand your BATNA from the very early stages of the dispute resolution process that you are using, whether the process involves negotiation, mediation, arbitration, litigation or some combination of these approaches. Whether you are the plaintiff or the defendant, developing your BATNA will help you determine the point at which the risk of taking your case all the way through trial outweighs any concessions you are willing to make in order to settle the dispute early. Your BATNA should consider all non-monetary aspects of the dispute such as the litigation’s impact on your time, energy and emotion. Because construction disputes almost always involve a claim for money, your BATNA must also
consider the monetary aspects of the dispute. If you’re the plaintiff, your BATNA will include a calculation of the lowest amount that you would be willing to accept to settle the dispute before it makes more sense to go all the way through trial. If you’re the defendant, your BATNA will include a calculation of the highest amount that you would be willing to pay to settle the dispute before it makes more sense to go all way through trial. Even if you firmly believe that the plaintiff’s claim has absolutely no merit, you should still consider both the non-monetary and monetary “nuisance value” of the claim when developing your BATNA and calculating the claim’s “settlement value.”

Use Decision Tree Analysis to calculate the expected monetary value (settlement value) of the claim.

A decision tree is an analytical tool that can be used to evaluate the alternatives to taking a dispute all the way through a verdict at trial. The use of a decision tree results in a theoretical unemotional evaluation of the possible outcomes at trial. The result of the decision tree analysis can be a very important factor in informing your decision whether to settle a dispute early or to follow through to a final determination or verdict at trial. The decision tree can be used to analyze the risks, probabilities, and the costs associated with the possible outcomes.

A decision tree is a diagram that is built much like a flow chart. When considering the resolution of a dispute, the base of the tree begins with the question whether or not to settle. The first main branch of the tree assumes that you will settle the dispute and notes the dollar amount at which you would agree to settle. The second main branch of the tree assumes you will litigate. Subsequent branches are then added to the tree to represent the various stages and elements of the litigation. For example, pretrial motions might be filed, which could dispose of a case early such as a motion to dismiss or motion for summary judgment. Counterclaims and cross claims may be filed, which will change the stakes for all parties involved. Damages and attorneys’ fees may be awarded at the conclusion of the trial and an appeal may follow.

Once all of the branches of the tree are sketched out in a diagram, the probability of success or failure at each branch is estimated and noted on the diagram. You would note, for example, the probability that the court will decide an anticipated pretrial motion in your favor; the probability that liability will be found on each claim; the probability that liability will be found on each counterclaim; and the relative probabilities that a low, midrange, or high amount of damages will be awarded as to each claim or counterclaim. Not surprisingly, the decision tree can become quite complex given the typical complexity of construction litigation. The probability at each branch of the tree is then multiplied by the probability that was assigned to the following branch until you reach the furthermost branch. For each series of branches, the furthermost branch represents one possible outcome. Effectively, the decision tree allows you to visualize all of the possible ways that the litigation may end together with the respective weighted probability for each possible outcome. When building the tree and assigning probabilities at each branch, you must be careful. Just as in preparing a competitive estimate and bid on a construction project, garbage in will result in garbage out and may lead you to make a poor business decision.

Consider the following oversimplified example, which does not reflect
any pretrial motion practice, counterclaims, attorneys’ fees, or appeal. Assume that you are a defendant and the plaintiff has asserted a claim for $500,000. You believe that the plaintiff has a relatively strong claim and that there is an 80% chance that liability will be established. You believe, however, that the plaintiff’s claimed damages are trumped up and that if liability is established, the low, medium, and high ranges of damages that could be proved and awarded are as follows: 50% chance that the plaintiff will prove and be awarded $100,000; 30% chance that the plaintiff will prove and be awarded $250,000; and a 20% chance that the plaintiff will prove and be awarded $500,000. Keep in mind that, in this example, there is a 20% chance (100% minus 80%) that liability will not be found and thus a 20% chance that the plaintiff would not be awarded any damages. However, given the 80% chance that liability will be established, you need to calculate the range of values and expected low, medium and high “discounted” damage award values. For each range, multiply the 80% chance that liability will be established times the odds that a specific dollar amount will be awarded times that specific dollar amount. The information in the table below would appear on the branches of your decision tree diagram.

<table>
<thead>
<tr>
<th>Low Range</th>
<th>Medium Range</th>
<th>High Range</th>
<th>EMV</th>
</tr>
</thead>
<tbody>
<tr>
<td>80% x 50% x 100,000</td>
<td>80% x 30% x 250,000</td>
<td>80% x 20% x 500,000</td>
<td>$40,000 + $60,000 + $80,000</td>
</tr>
<tr>
<td>$40,000</td>
<td>$60,000</td>
<td>$80,000</td>
<td>$180,000</td>
</tr>
</tbody>
</table>

Once the discounted monetary value in each range is calculated, the expected monetary value (EMV) (often referred to as the settlement value) is calculated and expressed as a single numerical value. In theory, the EMV is considered to be the most the defendant should pay to settle the dispute and the least that the plaintiff should accept. This single numerical value is calculated by adding together the discounted dollar values of each possible outcome. Thus, the EMV in this example would be $180,000 ($40,000 + $60,000 + $80,000) assuming an 80% chance that the defendant would be found liable. If liability was actually established, the value of the case could range from $100,000 to $500,000 because, in this example, there is a 20% chance that the plaintiff could be awarded all of its claimed damages. Once the EMV is calculated, you can use this information to help determine your BATNA. In this example, you would consider whether it is better to settle the dispute by agreeing to pay the plaintiff $180,000 or roll the dice at trial and expect to wind up paying an amount between $100,000 and $500,000.

On a construction project of any complexity, disputes are often the rule—not the exception. During the lifetime of most construction companies, it is likely that the company will become embroiled in a claim or dispute that threatens the economic success of the project and which cannot be resolved outside a courtroom. Of course, it is best to avoid construction claims and disputes from the beginning of a project and prudent to resolve claims quickly and efficiently if and when they do arise. Unfortunately, sometimes litigation is unavoidable. With the rules of the game in hand, however, you can develop your BATNA and use a decision tree to evaluate the stakes.
and calculate the probable outcomes at trial. Once you perform your
decision tree analysis and fully develop your BATNA, you will be
able to recognize when settlement prospects are ripe and, like any
good gambler, know when it’s quitting time.

© Smith, Currie & Hancock LLP

This article originally appeared in Construction Connection

Gene invites you to connect with him on LinkedIn at:
http://www.linkedin.com/in/constructionlawgeneheady

Eugene J. Heady is a Partner in Smith, Currie & Hancock’s Atlanta
office. Smith, Currie & Hancock is a national law firm focusing on
construction law, government contracts, environmental law, and
commercial litigation. Gene is a regular contributor to the
Construction Connection Newsletter. He has over 30 years of
experience as a problem solver in the construction industry.
Following a successful career in the construction business, Gene
began practicing law in 1996. He represents and assists owners,
general contractors, builders, subcontractors, suppliers, architects,
enGINEERS, designers, sureties, real estate developers, and
manufacturers in avoiding and resolving disputes related to
construction projects throughout the continental United States,
Alaska and the Caribbean. His work involves private, local, state
and federal government contracts and commercial, industrial and
institutional construction projects. Gene literally grew up in the
construction industry; his father was a successful electrical
contractor. Unlike most construction attorneys, Gene has hands-on
experience. Gene has worked with the tools, at the drafting table
and at the helm of a construction company. In 1981, Gene earned a
B.S. degree in Engineering from the University of Hartford, majoring
in Electrical Contracting. Before law school, he worked in the
electrical construction business as a project engineer, project
manager, and construction business owner. Gene is a prolific writer
and has published numerous works related to the construction
industry. He is also a frequent lecturer on construction law topics.

Contact Gene at gjheady@smithcurrie.com or directly at 404-582-
8055.