

DECISION TREES -- ANOTHER TOOL FOR INHOUSE COUNSEL

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Introduction

An inhouse counsel is employed to perform whatever legal services the company requires: negotiating contracts, maintaining the corporate structure, navigating the in's and out's of the Uniform Commercial Code, or whatever else the company needs. Unless an inhouse counsel has a steady diet of litigated matters, however, one of the most challenging aspects of the job is supervising outside counsel in the conduct of litigation.

One tool available to inhouse counsel to help in the process of controlling the costs of litigation and for managing and communicating with outside counsel is decision trees.

The Problem

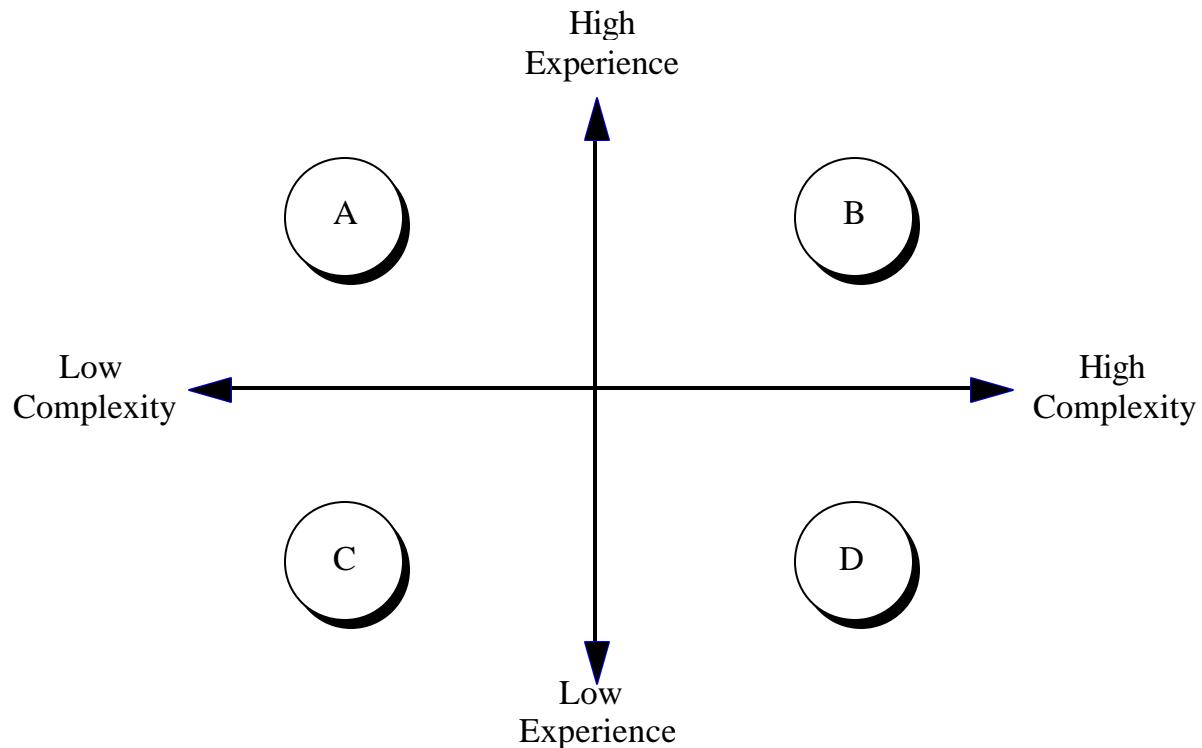
Inhouse counsel who do not do a substantial amount of litigation themselves can be unfamiliar with the litigation process. This lack of experience is compounded by the fact that, not only are inhouse counsel called upon to supervise the activities of outside counsel (who are normally involved precisely because they know more about the litigation process than inhouse counsel), but inhouse counsel must also be able to explain the process to the non-lawyers in the company (who can be somewhat demanding about estimates and budgets for how much all this is going to cost).

If in the course of your career you had litigated 50 cases involving allegations that your company had violated Section 20.1 of its form services contract, and each case had been tried by the same outside attorney against the same opposing attorney in front of the same judge and the same jury, you would have probably developed a pretty good ability to forecast what the chances were of losing Case Number 51, as well as what the damages would be if you lost and how much the legal fees would be. In that instance, you would be dealing with a matter of low complexity (because there is really only one legal issue: breach or no breach) in which you had a high degree of experience.

It starts to get more difficult if you add a couple of more variables to the equation. Instead of 50 cases, you haven't actually handled any. But your research finds five similar cases. And each one also included a claim for breaches of multiple -- but different -- provisions of similar, but not identical, sales contracts. And the judges and juries and opposing counsel were all different, and

the applicable law was just a smidge different, too. Your ability to predict the outcome of the case as to liability, damages, or legal fees would be different.

The point is that your confidence in your ability to forecast the outcome is a function of two variables: complexity and experience. The relation between those two variables can be described graphically as follows:



Case Number 51 is at Point A, as a case of Low Complexity and High Experience. Often, the inhouse attorney is at the low end of Experience, either with litigation generally, or with this type of case, or both. With a Low Complexity case (Point C), however, this may not be a problem. If the lawyer is of at least average competence, and has the time and inclination, he or she can analyze the Low Complexity case and make a pretty good estimate of the likelihood of a negative outcome on liability and the range of potential damages, and the expected attorneys fees. Or inhouse counsel can chose to farm the litigation out. In that case, inhouse counsel should be able to communicate with outside counsel as to the issues and the prospects for the case. Inhouse counsel can apply his or her general judgment and exercise the necessary control over outside counsel, and thereby manage, if not the litigation, at least the costs of it. And inhouse counsel should be able to communicate clearly with the internal client as to the numbers involved.

But if the case is of moderate or high complexity, experience becomes more important to the ability to predict the outcome with confidence, as High Complexity cases should probably be handled at Point B rather than Point D. One way that the inhouse counsel can acquire this experience is to

hire outside counsel with the necessary experience, and thereby move from Point D to (or in the direction of) Point B. Through clear communication with outside counsel with the necessary experience, inhouse counsel can predict the outcome with more confidence and discuss those predictions with the internal client. But even then, the language used to convey outside counsel's subjective judgment of the possibilities is rife with opportunities for confusion and unintentional miscommunication.

One Tool

One tool that can help inhouse counsel access the full benefit of outside counsel's experience and expertise is decision tree analysis. This also provides a convenient vehicle to assist both inhouse and outside counsel in the evaluation of complex cases.

What Are Decision Trees?

One of the pioneers in the use of decision trees in connection with litigation is Marc Victor, who presents this concept in his engaging seminars on Litigation Risk Analysis.TM In his seminars, Mr. Victor borrows and expands on a business school model for reducing the ambiguity in the communication of subjective judgments of uncertainty. This is helpful both for communication between inhouse and outside counsel, and for communication between inhouse counsel and the internal client. While a lot of the focus on (but not necessarily in) Litigation Risk Analysis is on the flow chart, the real benefit of applying decision tree analysis to litigation is the procedural framework for analyzing the case itself. By disaggregating the complex, inter-related issues, and dealing with the issues one at a time, complex cases can, indeed, be "managed."

The business school model of decision trees is a procedure for listing the elements that influence the choice of one business decision over another, whether that decision be to open a new plant or to buy a business or to implement a new marketing strategy. The purpose of the tool is to identify the potential consequences and costs of each available option, and their respective likelihoods.

As applied to litigation in a manner similar to that used in the business school methodology, this procedure is helpful in structuring the analysis of case decisions, such as whether to settle, or to depose an expert, or to file a motion for summary judgment. Another, and perhaps more valuable, application in the context of litigation is the use of decision trees in case evaluation and client communication.

Method of Analysis

Under Mr. Victor's Litigation Risk Analysis, a legal case is analyzed as follows:

1. Isolate the various legal issues involved in the case;

2. Identify any linkages between the outcome of one or more of those issues on the outcome of other issues;
3. Present the variables in a graphic form;
4. Identify factors that might lead to either positive or negative outcomes on each one of the legal issues involved;
5. Quantify the probability of a positive or negative outcome on each issue;
6. Estimate the amounts and ranges of potential dollar outcomes;
7. Calculate the estimated present "value" of the case as a whole; and
8. Estimate the worst reasonably possible result, and its likelihood.

Then, run the numbers and establish the “expected value” of the case, and depict the likely outcomes in a manner that is familiar to, and readily understandable by, non-lawyers.

What is Decision Tree Analysis Good For?

For the occasional litigator, decision tree analysis provides a helpful framework for approaching a non-routine task. It helps to isolate and frame the issues, as well as to identify and validate unstated assumptions. Trying to value the case as a whole, rather than its individual elements, can lead to unconscious assumptions as to the outcome on various issues. Segregating the issues and dealing with them individually reduces this unconscious linkage. Performing this level of analysis also provides the occasional litigator with an additional level of confidence in the analysis and valuation of the case and, over time, is designed to lead to "better," or at least more informed, decisions.

In complex cases, the use of this framework helps identify the critical issues and the critical path. Certainly, it helps to establish what is the approximate settlement value of the case, if any, and can also be helpful in identifying which of the available litigation strategies, options, and projects are more valuable to the overall outcome in the case.

Decision tree analysis also provides a helpful communication vehicle in case-planning discussions with outside counsel. It helps to separate answers to questions requiring legal judgment and expertise from answers to those questions requiring primarily business judgment. This also clarifies the communication of outside counsel's relative level of uncertainty (which is an inherently subjective assessment), and permits inhouse counsel to maximize the utility of outside counsel's experience.

Another helpful facet of decision tree analysis is that it provides an outline for discussions with clients as to the process the lawyers have gone through. Certainly, demystifying the method of legal analysis is helpful. MBAs and engineers, in particular, appreciate the graphical presentation, as it is a method of communication with which they are familiar and comfortable. One of the roles of inhouse counsel is translating law into business; using tools the business people are familiar with makes this job easier. And the clients appreciate it.

It is possible to use these graphical presentations, without numeric values, as a framework for discussion of settlement possibilities with opposing counsel. Such presentations are also helpful for memorializing the thought process, so that when the known facts change over the life of the case, the case valuation can be updated with minimal effort.

Simple Mechanics

Under Mr. Victor's Litigation Risk Analysis approach, at least 50 percent (and perhaps as much as 75 percent) of the time should be devoted to analyzing the case, with the remainder of the time being devoted to the graphical outline of the problem and the calculations and sensitivity analyses. The upfront investment is where the real value of the process lies. But when introducing lawyers to this concept, it has been found non-productive to start with a complex legal case that requires substantial thinking time. For simplicity's sake, the normal approach is to use examples where the legal analysis is simplistic, and to focus on the procedure rather than the substance.

By way of illustration, suppose you are presented with a case involving an allegation that your company breached a contract. This is the first time that this precise issue has been presented in this type of contract for your company. Plaintiff has proposed to settle for \$30,000.

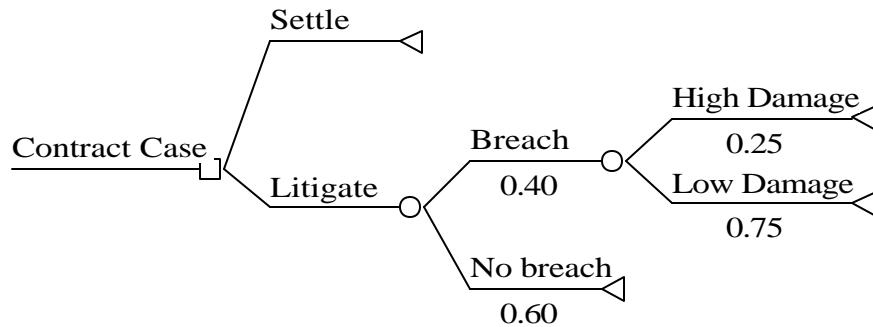
The analysis of this case is simple and straight forward. You review the contractual language, and, if applicable, the contract drafting history relating to the provision allegedly breached. You do a factual investigation regarding the incidents leading to the claim of breach. You then make a subjective judgment as to how likely it is that the court will find the contractual provision was breached and, if so, what the potential range of damages and legal fees might be. Further, you probably consider the attendant costs of litigation, such as the amount of your time and management time that this litigation will take, as well as the impact of this litigation on business relationships with the other party. Based on this analysis, you assign a value to this case. This value might be higher, of course, if the contract at issue was a standard contract that your company had used with hundreds of customers and if the allegations of breach might lead to other cases being filed.

Is \$30,000 a good offer of settlement, or should you try the case?

For purposes of this simple example, assume that your legal fees to try this case are estimated at \$20,000. Based upon your factual investigation and legal research, you estimate the likelihood of the judge or the jury finding that the contract had been breached at 40%. If the contract is found

to have been breached, you feel there is a 75% chance that the damages will be \$35,000, and a 25% chance that the damages will be \$55,000.

The decision tree for this simple pattern is as follows:



The first box is a “decision node,” where you make the decision whether to settle or to litigate. The choice to litigate raises the issue of breach or no breach. One branch from that circle (a “chance node”) reflects the possibility that the court determines the contract was not breached, in which case there is no liability. The other branch is for the possibility that the court finds that there was a breach, and then awards damages (either high or low). Your calculations need to recognize the cost of attorneys' fees in the defense of the case. Depending on your assessment of the probability of the court finding that the contract was breached, it is possible to assign a value to this case.

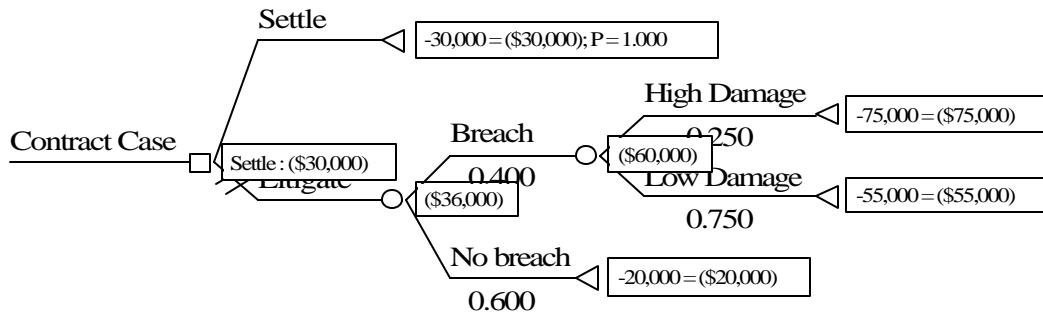
Here are the possible outcomes:

Outcome	Probability	Loss	Value
Settle	100%	30,000	30,000
No Breach	60%	0	0
Breach - Low Damage	$40\% \times 75\% = 30\%$	35,000	10,500
Breach - High Damage	$40\% \times 25\% = 10\%$	55,000	5,500
Total Litigation Weight			16,000
Legal Fees			20,000
Expected Value			36,000

This chart lists the possible outcomes, and the probability of the occurrence of each. If you decide to settle, then there is a 100% chance that the settlement will cost you \$30,000. If, however, you decide to litigate, then there is a 60% chance that you will win, and owe no damages. But you will incur \$20,000 in legal fees. If you litigate, there is a 30% chance (40% chance of finding of breach, multiplied by a 75% chance of a low damage verdict) of a \$35,000 verdict. The probability weighted “value” of that outcome is 30% times \$35,000, or \$10,500. And a 10% chance of a \$55,000 verdict, which is weighted at \$5,500. Thus, the “expected value” of the decision to litigate is \$10,500 plus \$5,500 plus, of course, the \$20,000 in legal fees, or \$36,000. Based on just the economics, the settlement at \$30,000 (or really at any number less than \$36,000) is a good option. Assuming the time value of money, and the time it will take to incur the legal fees and reach a judgment, other adjustments not made here may need to be considered.

One important point in this distribution is that there is a 10% chance of a total loss of \$75,000 (attorney’s fees plus damages). This point becomes more important, as the client may be concerned about the possibility, even though remote, of a large loss. This is a measure of the client’s aversion to risk.

The calculated, expected value of this case, in decision tree format, is as follows:



The box following the “Settle” path reads “ $-30,000 = (\$30,000)$; $P = 1.000$.” What this means is that if you settle, there is a probability (P) of 1, or 100%, that the cost of this result would be a negative 30,000 (-30,000), or a loss of \$30,000. The numbers following the other paths represent the dollar costs of those possible outcomes.

Reading from the right hand side of the chart to the left, there are boxes at the various chance nodes with dollar values in them. These boxes represent the weighted value of the outcome if you are at that node. For example, if the court or jury finds a breach, then the weighted value of the damages that will be found, together with the attorney’s fees you will have to pay, is (75% times \$55,000, plus 25% times \$75,000), or \$60,000. If you litigate rather than settle, there is a 40% chance of a loss of \$60,000 and a 60% chance that your loss will be limited to your attorney’s fees of \$20,000. Thus, the total weighted value of the litigation option is \$36,000. Since the value of the settlement option is \$30,000, the computer program (Data Analysis by TreeAge) tells you that “Settle : (\$30,000)” is the best option. Only the “preferred” path has the probability figure ($P = 1.000$).

On a case this simple, going through the additional time and effort of a decision tree analysis may not add a lot of value, except to demonstrate to a non-lawyer the process that the lawyer went through to recommend accepting the settlement offer. For more complex cases, involving factual or legal disputes as to the existence of the contract or a potential waiver of the alleged breach, the analysis becomes more complex, and the tool becomes more valuable.

Suppose you were considering filing a motion for summary judgment in this more complex case on the issue of breach. The motion will cost \$5,000 to file.

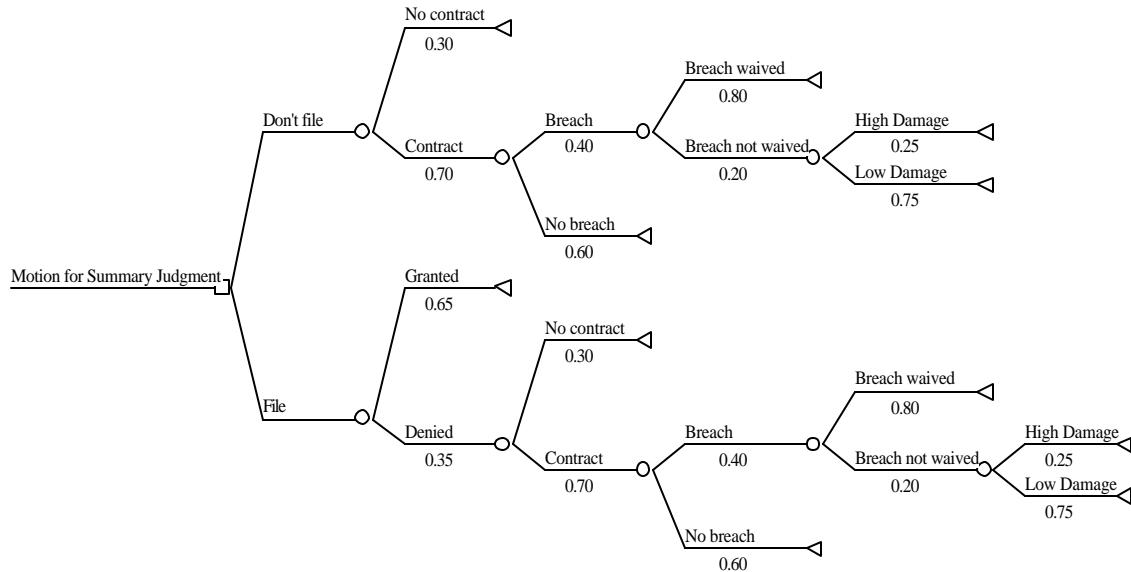
Is it worth it?

The possible outcomes are as follows:

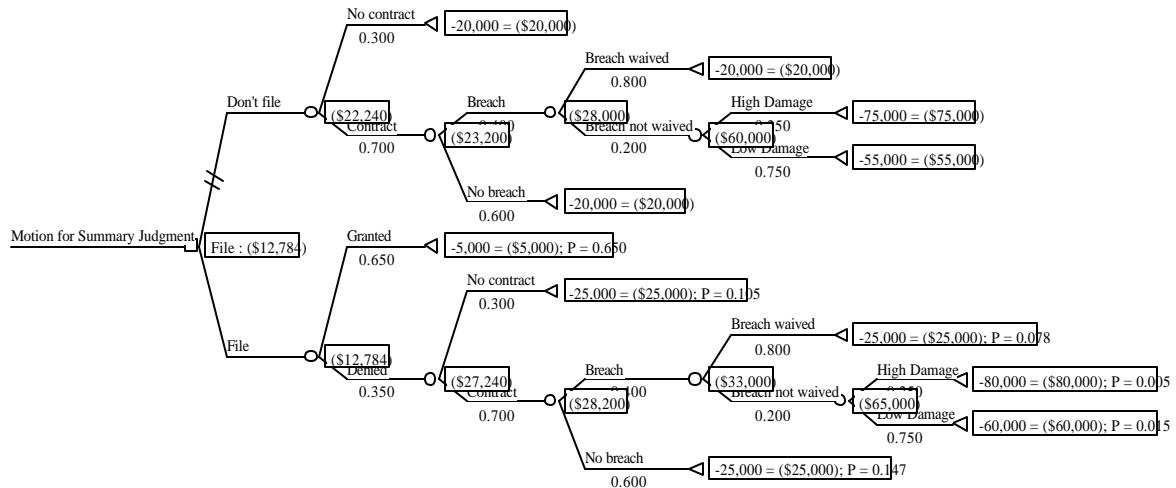
Outcome	Probability	Loss	Value
Don't File MSJ			
No contract	30%	0	0
Contract, No Breach	$70\% \times 60\% = 42\%$	0	0
Breach, Waived	$70\% \times 40\% \times 80\%$	0	0
Breach, Low Damage	$70\% \times 40\% \times 20\% \times 75\%$	35,000	1,470
Breach, High Damage	$70\% \times 40\% \times 20\% \times 25\%$	55,000	770
Total Litigation Weight			2,240
Attorney Fees			20,000
Total			22,240
File MSJ			
MSJ Granted	65%	0	0
Denied, No Contract	$35\% \times 30\% = 10.5\%$	0	0
Denied, No Breach	$35\% \times 70\% \times 60\% = 14.7\%$	0	0
Denied, Breach Waived	$35\% \times 70\% \times 40\% \times 80\%$	0	0
Denied, Low Damage	$35\% \times 70\% \times 40\% \times 20\% \times 75\%$	35,000	515
Denied, High Damage	$35\% \times 70\% \times 40\% \times 20\% \times 25\%$	55,000	269
Total Litigation Weight			784
Attorney's Fees MSJ	65%	5,000	3,250
Attorney's Fees Total	35%	25,000	8,750
Total			12,784

Note here that, if you file the motion for summary judgment, that motion will be granted 65% of the time. In that event, your legal fees will be limited to \$5,000. But if the motion is denied, your total legal fees will be \$25,000. Clearly, filing the motion is justified based on these numbers.

The decision tree might look something like this:

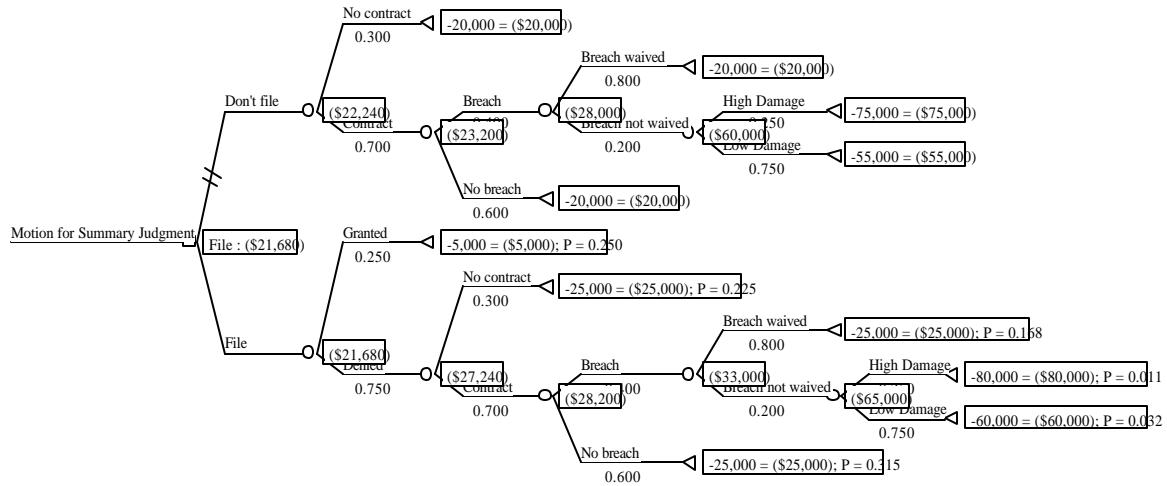


Here's the calculated value, and recommended path, in the decision tree format:



Here, once again, the probability values (P) are placed only on the “preferred” paths: File : (\$12,784).

But what if, after discussing the case with outside counsel, you change your assessment of the chances of success on the motion for summary judgment from 65% to 25%? Is the motion still worthwhile? By changing the percentage in the decision tree, you can quickly revise the tree, and thereby test the sensitivity of the decision to file or not to file to changes in the probability of success on the motion. In that case, the decision tree would look like this:



Thus, even if you have only a 25% chance of prevailing on the motion for summary judgment, it makes sense to file it.

Conclusion

Decision trees are a helpful process check for the occasional litigator, and are a helpful communication tool, both for communications between inhouse and outside counsel, and for communications between inhouse counsel and the client.

In a simple case, there may be little added value to going through the additional formal step of preparing a decision tree analysis. In repetitive matters, the same is probably true, although there may be some value in documenting an experienced attorney's thought and analytical process in order to delegate case preparation activities to a lower-cost attorney, whether inhouse or outside.

In a complex case, however, decision tree analysis provides a vehicle for organizing the thought processes and insuring that the lawyers -- outside and inside -- limit their advice to legal issues and judgments and that the business people make the business calls based on their aversion to risk.

