
THE NATIONAL

LAW JOURNAL

WWW.NLJ.COM

THE WEEKLY NEWSPAPER FOR THE LEGAL PROFESSION

MONDAY, JANUARY 31, 2005

ALM

Jury Research Can Play a Role in Risk Assessment

Probability Scenarios Can Allow Decision-Makers to Quantify the Trial Risks

By Robert D. Minick, Ph.D.
and Dorothy K. Kagehiro, Ph.D.

KROLL ONTRACK®

TRIAL GRAPHIX.

It is estimated that only about 2% of federal lawsuits actually go to trial. Adam Liptak, "U.S. Suits Multiply, But Fewer Ever Get To Trial, Study Says," N.Y. Times, Dec. 14, 2003, at 1. The rest are dropped, dismissed, mediated or settled. While the measure of a trial lawyer's accomplishments lies in the outcomes attained at trial, the measure of a successful litigator, including in-house counsel, lies in the avoidance of unacceptable risk and loss. The decision to settle is made in an environment of uncertainty. The decision-maker often relies on estimates of risk that are highly speculative and subjective-based on past experiences. Even when there are archival data, such as verdict research, the relevance to the case at hand is often difficult to determine and the data are unreliable as measures of likely damages.

However, there is another source of data that is case-specific, and empirically derived. These risk-assessment data come from jury research. While much of the jury research that is conducted is highly qualitative, such as focus groups, there are methods that provide at least the opportunity to yield reliable results that can be assessed for their validity.

Settlement decisions involve two simultaneous risk assessments: trial risk and business risk. The assessment of business risk is an evaluation of risk tolerance: Can the defendant manage the loss, given the most probable worst-case scenario? The assessment of trial risk is an evaluation of the likelihood of winning or losing the liability verdict(s) and the magnitude of the damages that would be awarded if the defendant loses on liability.

For the most part, jury research has little to offer in the assessment of business risk – with one important exception. Jury research can provide an estimate of the most probable worst-case scenario in trial situations where there is uncertainty about the upper limit of the damages a jury might award. Jury research is most promising as an input to the trial risk evaluation process. By presenting an abbreviated version of the case to a sufficiently large, representative sample of surrogate jurors, and measuring their responses to fact, verdict and damages questions, it is possible to provide an estimate of liability probabilities and an empirically derived range of possible damages. Using these parameters, it is then possible to derive probability scenarios that allow the decision-makers to quantify the trial risks – including a probable worst-case scenario.

The question of settlement comes up quickly once a suit has been filed. Many large corporations have an early case-assessment procedure that includes an evaluation of the potential impact of the case on the business unit as

well as the seriousness of the trial threat. Over the years, articles and seminars have touted the use of decision trees and similar forms of probability modeling based on expert judgments or "guesstimates."

Results on damage apportionment yield liability scenarios

These models provide a logical framework for evaluating the various contingencies inherent to the litigation process. Critiques of these models inevitably focus on the questionable reliability of the probability and damage estimates. This serious shortcoming can be addressed by providing empirically derived estimates based on jury research results that are specific to the case.

Assessing Trial Risk

There are a number of ways to use quantitative jury-research data to assess risk. The minimum requirements for gathering useful and reliable data are a representative sample of surrogate jurors; a valid presentation of the case issues; and a reliable measurement of jurors' verdicts and damage awards. Each of these basic requirements can be achieved in a manner that is both reasonable and replicable. That is not to say that it is easy to meet all of these requirements, but certainly there are many jury researchers who have the experience and know-how to carry out such research. Moreover, it is also relatively easy to evaluate the degree to which the research results can be assessed for their reliability and validity. For instance, the amount of confidence that a decision-maker can place in the results is in part a function of the extent to which the results can be generalized to the actual jury pool. The usual measure for this requirement is the margin of error associated with the size of the sample. If the decision-maker is satisfied with a margin of error of plus or minus 20%, a sample size of 30 is sufficient. If the decision-maker would be more comfortable with a higher degree of generalizability, the sample size can be increased.

The key to conducting valid jury research lies in the adequacy of the case presentations used in jury research. These case presentations are often no more than an hour per side. There are certain requirements that must be satisfied to ensure that the case presentations represent the issue in the case adequately. The presentations should be directed toward the verdict questions that the actual jurors will decide. The presentations should profile the likely arguments and key evidence on both sides, and

they should be balanced.

Note that realism per se is not a requirement. It is not necessary that the jury-research presentations mimic the actual trial. Indeed, it is better that they do not. Introducing more reality often introduces new sources of error, and reduces the validity of the research. For instance, using actors to play witnesses not only introduces another variable into the research equation, it may affect the balance between the presentations and among the different factors that affect jurors' decisions.

The cost of the jury research must be factored in as well

When jury research is conducted before discovery is completed or rulings are made on legal issues, there is a possibility that some of the findings of the jury research no longer apply by the time trial starts. This possibility is not as troubling as it might seem. In the first place, the settlement decision is time-bound; while it would always be better to have greater certainty, the opportunity to settle is not always as advantageous closer to trial. Indeed, experience often suggests that plaintiffs' demands change significantly over time – starting out unrealistically high, moderating and then escalating as trial approaches.

Second, in many litigation matters it makes sense to conduct jury research more than once for case-development purposes: once to get a preliminary read on the issues, and again, closer to trial, to finalize trial strategy. There are ways to correct for changes in a case that are due to court rulings or unexpected evidence, using decision-probability models, but only if there is stability in the rest of the model components. That stability is enhanced by using empirical data as opposed to "guesstimates."

There are several ways to analyze jury-research results to give an estimate of probable risk. One way is to use the data in a probability model such as a decision tree or matrix. Rather than using expert judgments to estimate the probabilities associated with verdict outcomes and to estimate damages, the data obtained from jury research would be used. So for example, if the case involved a single verdict question, an apportionment of liability and a single damage question, the jury research verdict form would capture the decisions for each juror, and the results would be plugged into a decision-probability matrix. The weighted average of the different liability scenarios would be the best estimate of trial risk.

A simpler way to analyze the data would be to use the distribution of all the damages awarded by the jurors in the mock jury exercise as the basis for establishing upper and lower limits as well as to identify the median (mid-point) value. This technique has interesting applications in settlement decisions. For instance, the upper range of the distribution of damage numbers is probably not where the defendant would like to be. This "bad" zone includes the worst case scenario. However, it is usually the case that the most extreme end of the spectrum is an unlikely scenario, so the question becomes what is the most likely worst-case or unacceptable scenario. A conventional way to answer that question is to find the median of the upper half of the distribution, and to use that as the lower boundary for the "worst-case scenario." Similarly, if the defendant is looking for a reasonable "good" settlement number, the midpoint of the lower half of the damage distribution makes sense.

Other ways of analyzing jury research data to establish risk parameters involve the use of statistical techniques that mimic jury decision-making. For instance, by determining the proportion of jurors who would likely find for the plaintiff and the proportion who would likely find for the defendant, it is possible to determine the probabilities associated with having a jury panel consisting of various combinations of plaintiff and defense jurors. Each of these combinations can be expected to yield a unique damage award on average. This can be determined empirically in most instances, or can be determined through the use of a logical paradigm based on the typical behavior observed in actual deliberating jury panels.

It is noteworthy that all of these analytic techniques rely on the decisions of the individual jurors in the research exercises rather than group deliberations. The primary reason for this is that the use of these techniques requires a minimum number of observations that is much larger than is practically possible to obtain rising deliberating groups. Mock deliberating groups are subject to unique group dynamics. Determining a typical group response or even a reliable range of group responses would be very difficult unless there were a large number of deliberating groups. Studies in the social psychology of groups have noted that groups are sometimes willing to engage in extreme behaviors even when the individual members would not. This can happen in jury decision-making.

Another common occurrence is for jurors to use damages as a way of achieving a compromise on liability verdicts. This has a moderating effect on damages. One of the values of group deliberations in jury research is to see if group effects are present in any systematic form – either

to accelerate damages or moderate them. When these group effects are noted, it is possible to estimate the impact and to introduce a correction factor into the risk model.

This Is Not Rocket Science

Many litigators, including in-house counsel, claims managers and business unit decision-makers, have used jury research results in their settlement decision-making process. Often the information that is used is highly qualitative and subjective. Observing 5 mock jurors is a real attention-getting experience. It is sometimes a very frightening experience. The worst-case scenario is often played out dramatically in one or more of the mock juries. Though this dose of reality is constructive, there is much more to be learned. By using jury research as an empirical input into decision models that make sense in the litigation context, it is possible to add structure and clarity to the decision-making process.

The requirements cited here are not unique to jury research, and certainly most decision-makers in these matters are capable of evaluating these analyses given the kinds of financial and business concepts they deal with regularly. The logic embodied in the analytical models is straightforward even if the math is somewhat daunting. The obstacles to using this empirical approach to risk assessment should not be the technology. There are others that are probably more meaningful, such as cost v. benefit.

The cost of jury research is a significant factor that includes lawyer preparation, recruiting and paying subjects, paying for a research facility and paying the jury researchers' fees. If the total cost is \$75,000, this needs to be added to the settlement offer. In most larger cases, this would not affect the outcome of negotiations, but in smaller cases, jury research would not be cost-effective.

From the corporate defendant's perspective, settlement of a case is often the preferable route. Timing the settlement, though, can be crucial. The ideal settlement period would be some time after the initial posturing period, before the plaintiff's attorney and the client have too much invested in the case. The

Decision Matrix Analysis

Defendant's Negligence	Plaintiff's Negligence	Probability	Plaintiff's Responsibility	Damages Award	Actual Risk
Yes	Yes	.42	38%	\$9,250,000	\$2,408,700
Yes	No	.39	---	\$11,682,483	\$4,556,885
No	Yes	.19	---	---	\$0
No	No	---	---	---	\$0

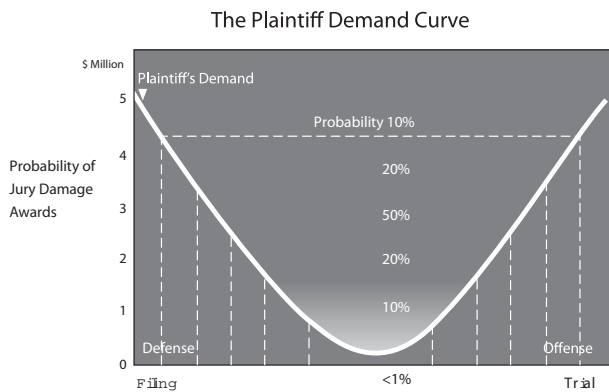
Estimated Risk = \$6,965,585

	Percent of Jurors	Cumulative % of Jurors	
\$0	10%	10%	
\$.75 million	5%	15%	"Defense Win"
\$1.5 million	5%	20%	
\$2.5 million	5%	25%	Lower Quartile (Likely Low)
\$3.0 million	5%	30%	↑ "Most → Median Likely ↓ Range"
\$4.5 million	5%	35%	
\$5.0 million	5%	40%	
\$6.0 million	10%	50%	
\$7.0 million	5%	55%	
\$8.5 million	10%	65%	
\$9.0 million	10%	75%	Upper Quartile (Likely High)
\$10.0 million	10%	85%	
\$11.0 million	5%	90%	"Plaintiff Win"
\$12.5 million	5%	95%	
\$13.75 million	5%	100%	

Probability of a jury consisting of	
6 plaintiff/0 defense	.2084
5 plaintiff/1 defense	.3735
4 plaintiff/2 defense	.2789
3 plaintiff/3 defense	.1111
2 plaintiff/4 defense	.0249
1 plaintiff/5 defense	.0030
0 plaintiff/6 defense	.0001

Plaintiff Jurors	Likely Total Damages	Probability
5-6	Median total award for all plaintiff jurors	58%
4	Average of median total awards for plaintiff jurors and for all jurors	28%
3	Median total award for all jurors	11%
2	Average of median total awards for defense jurors and for all jurors	2%
0-1	\$0	<1%

probable jury award is a constant that sets the evaluation standard for any demand. The defendant cannot control the demand behavior of the plaintiff – it may be rational or highly irrational. However, having a realistic sense of the likely jury damages enables the defendant to make a timely acceptance if the demand is better than the most likely (median) jury award. Although jury research has become an increasingly common feature of high-stakes litigation, it is seldom used in a systematic fashion to inform settlement decision making. The tools and requirements cited in this article have been tested in a number of cases, and have been useful in achieving acceptable settlements that were the equivalent of a defense “win,” given the risk involved.



There are different standards for evaluating the success of a settlement; the most likely jury scenario is a rational alternative in a highly subjective and unstable situation. Jury research is the best available option for determining the most likely jury scenario.

© 2005

This article originally appeared in the January 31, 2005 issue of The National Law Journal.