

## Organizational Integrity Group

*Solving The Whole Problem™*

First Principles  
*Understand  
Probabilities*



### Understanding Probabilities Can Promote Problem Solving

Consider this real-life riddle. You're involved in litigation with the Department of Justice. Your client asks you the question all lawyers dread: "What are my chances of winning?" After a long litany of caveats, you take out your No. 2 pencil and jot down some numbers. You're bullish on your Summary Judgment motion, so you evaluate your chances of success at 50%. If you lose your SJ motion, you think you still have a 40% chance of winning at trial. Finally, if you lose at trial on liability, you think your top-notch accounting experts still will give you a 30% chance of zeroing out damages. What, then, is the probability that you will "win" the case?

This is a surprisingly hard question for most decision-makers. When we present this fact pattern at conferences, we hear responses ranging from 30% to 60%. The answer, however, is that you have an 80% chance of victory.

***"This is a surprisingly hard question for most decision makers."***

### Probabilities vs. Probabilities

The reason so many of us underestimate the likelihood of success in the foregoing scenario is that we don't remember how to deal with independent probabilities.



To understand how probabilities work in this context, let's first contrast a very different scenario: throwing dice. The odds of rolling a six (or any number for that matter) on a single throw of a die is 1:6. The odds of rolling a six three times in a row, then, is 1:6x6x6, or 1:216. The odds are so bad because you only get one bite at the apple so to speak. If you don't throw a 6 on the first roll, you don't even get your second roll, let alone your third roll.

In our litigation scenario, however, you get three bites at the apple. If you don't win on your first roll (i.e., your SJ motion), you still get two more rolls. Thus, your probability of winning on at least one of your rolls (which is all you need) must be higher than the probability of winning on any given roll.

Understanding probabilities, of course, not only is helpful in dice. It is helpful in solving complex risk problems. Businesses operate in an uncertain environment. Leaders regularly are asked to make important decisions based upon incomplete and imperfect information. Should I litigate? Should I settle? Should I invest in a new compliance program? Should I terminate our best sales rep? Should I make a self-disclosure? The array of judgment calls that face decision-makers on a daily basis can be staggering. And the pressure of making those calls against the backdrop of incomplete and/or imperfect information just adds to the stress.

Sheppard Mullin's Organizational Integrity Group understands decision-making, and we understand probabilities. We don't shy away from judgment calls. Like our clients, we are used to operating in an environment where important decisions often must be made on the basis of incomplete or imperfect information. Indeed, those are the judgment calls that bring our clients to our door. If the path were clear, judgments wouldn't be necessary.

Understanding probabilities is just one of the many tools that can help solve complex problems. Failing to understand probabilities, on the other hand, can lead to disastrous results. Just ask anyone who thinks the

odds of rolling three sixes in a row is the same as the odds of rolling at least one six in three rolls.

## How Probabilities Can Impact Decision-Making

- **Valuing Settlement Offers.** To realistically value a settlement offer, one must have a realistic view of the likelihood of success. Misunderstanding probabilities can skew such an assessment dramatically.
- **Evaluating Settlement Demands.** Just as probabilities can inform a settlement offer, they equally can inform the evaluation of a settlement demand. Remember, the demand itself is not relevant. Only the realistic assessment of the risk is relevant.
- **Making Compliance Investment Decisions.** Most complex organizations invest in compliance infrastructure. But resources are not unlimited, and most organizations must make cost/benefit trade-offs every day. Understanding the likelihood of events (and the likely impact of those events) can help inform internal investment decisions.
- **Making Litigation Decisions.** Litigation is never a sure thing. You win some and you lose some. And it's typically expensive. Evaluating the potential risks and rewards of litigation requires a realistic application of likely outcomes.



*"Understanding probabilities is just one of the many tools that can help solve complex problems."*

For more information regarding Sheppard Mullin's Organizational Integrity Group or to learn more about how we work with our clients to craft multi-disciplinary solutions to complicated problems, please visit us at [www.sheppardmullin.com/OIG](http://www.sheppardmullin.com/OIG).

Visit our blog at [www.organizationalintegrity.com](http://www.organizationalintegrity.com)

## About Sheppard Mullin's Organizational Integrity Group

Sheppard Mullin formed the Organizational Integrity Group because most problems facing sophisticated organizations cannot be solved by legal analysis alone. Complicated problems are solved through a thoughtful, deliberate, and holistic approach; an approach that seeks to identify the root causes of problems and to craft solutions that are practical, effective, and sustainable. We look at the bigger picture. We ask questions that transcend a traditional, stove-piped legal analysis. Is the problem one of compliance, or is there an underlying institutional or cultural issue at its core? Are there business imperatives or reputational risks that must be considered before moving forward with a solution? If we attack the manifestation of the problem, will we actually cure the root cause of the problem? What does the organization's mission, vision, and values tell us about how we should respond?