How to Decide: Simple Tools for Making Better Choices

by Annie Duke

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Dave's Reading Highlights

Why is it so important to have a high-quality decision process? Because there are only two things that determine how your life turns out: luck and the quality of your decisions. You have control over only one of those two things.

What I've experienced in all these different contexts is that people are generally quite poor at explaining how one might go about making a high-quality decision.

For reasons that are going to become clear, a good decision tool seeks to reduce the role of cognitive bias (such as overconfidence, hindsight bias, or confirmation bias) and a pros and cons list tends to amplify the role of bias.

Resulting: Outcomes in the Rearview Mirror May Appear Larger Than They Are: When people result, they look at whether the result was good or bad to figure out if the decision was good or bad. (Psychologists call this "outcome bias," but I prefer the more intuitive term "resulting.") We take this resulting shortcut because we can't clearly "see" whether the decision was good or bad, especially after the fact, but we can clearly see if the outcome was good or bad.

2. The Shadow of Resulting: We want outcome quality to align with decision quality. We want the world to make sense in this way, to be less random than it is. In trying to get this alignment, we lose sight of the fact that for most decisions, there are lots of way things could turn out.

What gives is hindsight bias. When you make a decision, there is stuff you know and stuff you don't know. One of the things you definitely don't know is which of all the possible outcomes that could happen will be the one that actually happens. But after the fact, once you know the thing that actually happened, you can feel like you should have known it or did know it all along. The actual outcome casts a shadow over your ability to remember what you knew at the time of the decision.

Resulting makes you think that you know something about whether a decision was good or bad because you know if the outcome is good or bad. Hindsight bias adds to the ruckus caused by knowing the outcome, distorting your memory of what you knew at the time of the decision in two ways: 1. You did know what was going to happen— swapping out your actual view at the time of the decision with a faulty memory of that view to conform to your post outcome knowledge. 1. You should (or could) have known what was going to happen—to the point of predictability or inevitability.

HINDSIGHT BIAS VACCINE As you were using the Knowledge Tracker, it may have occurred to you that it would be a good idea to journal "the stuff you knew before the decision" while you are in the process of making the decision. It can be hard to accurately recall what you knew before the fact once you already know the outcome. Journaling gives you something concrete to refer back to. Writing down the key facts informing your decision also acts like a vaccine against hindsight bias. Thinking about what you know at the time of the decision in this more deliberative way creates a clearer time stamp, preventing memory creep before it happens. Later in this book we'll take a deep dive into how to better memorialize decisions.

Several states polled as toss-ups before the election, including Florida, North Carolina, and New Hampshire. And that was where Clinton was mainly campaigning. Meanwhile, the polling averages had her ahead by several points in Pennsylvania, Michigan, and Wisconsin. In retrospect, it's easy to see that there was likely a polling error in those three states since Trump significantly outperformed the polls in them. But here's the thing about polling errors: You know there's an error only after the vote is taken. Polling errors reveal themselves only after the fact, not before. Making matters worse, there wasn't a national polling error. The national polls tracked the margin by which Clinton won the popular vote pretty accurately. Nor was it a systematic state polling error. How could the Clinton campaign know, before the vote, that there is a problem in exactly those three states (but not others)? It doesn't seem like she could, at least not based on publicly available information. Yet there is abundance of "She should have knowns" from pundits. There is a lot of "I knew it all along" from them as well, even though a simple Google search reveals that if they did know it all along it was the best kept secret in politics.

Putting Down the Cognitive Chain Saw: Reassembling the tree The first step in trying to resolve the paradox of experience is to put the tree back together. Pick those branches off the ground and glue them back on the tree so you can see the outcome in its proper context. In doing this, an improbable outcome will start to look more like the twig that it was than the thick bough it became. You can get those branches back on the tree by taking the time to sketch out the reasonable set of outcomes, more closely approximating what the tree looked like at the time of the decision instead of how it appears to you after you know how things turned out. Obviously, it would be unwieldy to sketch pictures of actual trees all over the place. But drawing a simple, abstract version of a tree is a good start to seeing outcomes more clearly, in their proper context.

Part of the paradox of experience is that we don't intuitively feel this way. Your gut tells you that the outcome really matters. Your gut tells you that the outcome you got somehow changes the outcomes that

were possible. Taking the time to construct a simple tree helps to put that gut feeling in check.

When evaluating whether the outcome provides a lesson about decision quality, create a simplified decision tree, starting with the following: Identify the decision. Identify the actual outcome. Along with the actual outcome, create a tree with other reasonable outcomes that were possible at the time of the decision. Explore the other possible outcomes to understand better what is to be learned from the actual outcome you got.

All your knowledge, imperfect as it might be, means that your guess isn't random. Although you don't have perfect information, you have a lot more than no information about what the bison weighs. That's why I was willing to bet that you wouldn't guess below one hundred pounds or above ten thousand pounds, because I know you know a lot of stuff. You almost always know something, and something is better than nothing. You might not get it perfect, but when it comes to decision-making, you get credit for showing your work.

It's okay to acknowledge that you're not usually going to hit the bull's-eye; the important thing is to take aim. Aiming for that bull's-eye by making an educated guess gets you closer to a precise hit because it motivates you to assess what you know and what you don't know. It motivates you to learn more. Recognizing that the value in taking aim is the archer's mind-set. Recognizing that guesses aren't random, that all guesses are educated guesses, is the archer's mind-set. Otherwise, your decision-making will more closely resemble a game of pin the tail on the donkey. You'll be purposely blindfolding yourself to the target.

One of the biggest benefits of the Archer's Mind-set, of making yourself take aim, is that it prompts you to ask yourself those two questions we discussed earlier about the value of guessing: 1. What do I already know that will make my guess more educated? (And how can I apply that knowledge?) 2. What can I find out that will make more my guess more educated?

When evaluating a past decision or making a new decision, refer to the Six Steps to Better Decision-Making: Step 1—Identify the reasonable set of possible outcomes. These outcomes can be general scenarios or be focused on particular aspects of the outcomes that you especially care about. Step 2—Identify your preference for each outcome—to what degree you like or dislike each outcome, given your values. These preferences will be driven by the payoffs associated with each outcome. Gains comprise the upside and losses comprise the downside. Include this information in your decision trees. Step 3—Estimate the likelihood of each outcome unfolding. As a start, use common terms that express probabilities. Don't be afraid to afraid to guess. Step 4—Assess the relative likelihood of outcomes you like and dislike for the option under consideration. Step 5—Repeat Steps 1–4 for other options under consideration. Step 6—Compare the options to each other.