7
Ooch

1.

In 2006, John Hanks, a vice president at National Instruments (NI), a company that makes scientific equipment, was deciding whether to make a big bet on wireless sensors. The technology had a lot of promise: A wireless sensor might be installed in a coal mine, in lieu of a canary, to monitor methane levels. Or sensors could send information back from a rotating piece of equipment, like an oil drill head, where a wired solution would be impractical. (Picture spaghetti wrapping around a fork.)

Some of NI's customers were skeptical. Could you secure the data sent by the wireless sensors? How reliable would the sensors be when installed in tough environments? In light of this skepticism, Hanks didn't feel like he had enough information to make a wise decision.

What he needed to do, he realized, was ooch.

To ooch is to construct small experiments to test one's hypothesis. (We learned the word "ooch" from NI, but apparently it's common in parts of the South. Maybe it's a blend of "inch" and "scoot"?) Hanks said, "Part of the culture here is to ask ourselves, 'How do we ooch into this?' … We always ooch before we leap."

Hanks went looking for a good pilot customer—someone he could learn from, someone who had complicated technical needs. When he met Bill Kaiser, he knew he had the right guy. Kaiser, an electrical-engineering professor at UCLA, was working with some biologists to develop wireless sensors to be installed in the jungles of Costa Rica.

The mission of their project was to understand the flux of carbon dioxide (CO_2) in a jungle. To make those measurements possible, the NI team faced a demanding set of challenges: The sensors would have to be installed throughout the jungle. They'd need to be battery powered (since outlets are rare in jungles). They'd need to be resistant to the elements. Not to mention they'd need to take accurate measurements and send them reliably.

In trying to meet the biologists' needs, Hanks's team didn't bother building an elegant product. Elegance is expensive and time-consuming. Instead, they cobbled together a prototype using what they had on hand. Hanks compared the result to a "brick in a bucket."

The UCLA biologists wanted to measure CO_2 levels at different heights in the jungle, so the NI team helped them rig up zip lines between trees. The buckets slid along these cables, powered robotically, taking measurements as they moved. "It was like the ESPN football sports cam for the Costa Rican jungle," said Hanks.

The project gave Hanks a crash course in what it would take to serve a cutting-edge customer with sophisticated needs. If the sensors could work for the demanding UCLA project in the jungles of Costa Rica, then they could probably work anywhere.

The ooch boosted Hanks's faith in the technology, and after a few more experiments, he was ready to stop ooching and start leaping. He gained approval to begin developing wireless sensors, a multiyear project that he estimated would require an investment of $2–3 million. The experiments had allowed him to confirm his intuition about wireless sensors, and now he could proceed with greater confidence.

RATHER THAN JUMP HEADFIRST into the wireless market, Hanks and his colleagues decided to dip a toe in. Rather than choose "all" or "nothing," they chose "a little something." That strategy—finding a way to ooch before we leap—is another way we can reality-test our assumptions. When we ooch, we bring real-world experience into our decision.

Think about a student, Steve, who has decided to go to pharmacy school. What makes him think that's a good option? Well, he spent months toying with other possibilities—medical school and even law school—and he eventually decided pharmacy was the best fit. He's always enjoyed chemistry, after all, and he likes the idea of working in health care. He feels like the lifestyle of a pharmacist, with its semireasonable hours and good pay, would suit him well.

But this is pretty thin evidence for such an important decision! Steve is contemplating a minimum time commitment of two years for graduate school, not to mention tens of thousands of dollars in tuition and forgone income. He's placing a huge bet on paltry information. This is a situation that cries out for an ooch, and an obvious one would be *to work in a pharmacy for a few weeks*. He'd be smart to work for free, if need be, to get the job. (Certainly if he can afford several years of school without an income, he can afford to take a monthlong unpaid internship.)

Surely this concept—testing a profession before entering it—sounds obvious. Yet every year hordes of students enroll in graduate schools without ever having run an experiment like that: law students who've never spent a day in a law office and med students who've never spent time in a hospital or clinic. Imagine going to school for three or four years so you can start a career that never suited you! This is a truly terrible decision process, in the same league as an impromptu drunken marriage in Vegas. (Though maybe that's unfair to Vegas, since a hungover annulment might be preferable to a hundred grand in student debt.)

To correct this insanity, the leaders of many graduate schools of physical therapy have begun forcing students to ooch. Hunter College at the City University of New York, for instance, does not admit students unless they have spent at least a hundred hours observing physical therapists at work. That way, all incoming students are guaranteed a basic understanding of the profession they're preparing to enter.

Ooching is a diagnostic, then, a way to reality-test your perceptions. If you think the wireless-sensor market is promising, try it first. If you think you want to be a pharmacist, try it first.

The strategy is useful even for more subtle situations. Some therapists, for instance, have begun using a cousin of ooching to help people reduce anxieties about decisions in their personal and work lives. The therapists Matthew McKay, Martha Davis, and Patrick Fanning wrote about the case of Peggy, "a perfectionist legal secretary" who was terrified of making mistakes on the senior partner's documents. She would spend hours hunting for and correcting mistakes. Then she'd worry that her corrections might have inadvertently created other mistakes, so she'd start the review over again. After a long day at work, she'd take the documents home, spending hours trying to make them flawless.

It was inconceivable to Peggy that she could proof a document only once and be satisfied with her work. The stakes seemed too high. So, in conjunction with her therapists, she created a list of ooches—small, incremental steps that would allow her to reality-test her fears—to see whether the sky would really fall if she eased up on her proofing regimen. If she survived one ooch, she'd move on to the next. Here was the sequence she mapped out:

1. Take brief home and do three extra passes through it.
2. Take brief home and do two extra passes.
3. Take brief home and do one extra pass.
4. Stay up to one hour late and leave brief at work. No extra pass.
5. Leave brief at work and go home on time. No extra pass.

At each stage, she experienced intense anxiety, worrying about the dire consequences of her decision for the firm and her own job tenure. But after she completed each stage, she was surprised to discover that things worked out fine, which gave her just enough confidence to attempt the next one. Once she had completed stage five, she *really* pushed her comfort level:

6. Deliberately leave one punctuation error in brief.
7. Deliberately leave one grammatical error.
8. Deliberately leave one spelling error.

According to her therapists, Peggy "found that making small mistakes didn't cause the firm to lose cases, and also didn't get her fired. Nobody even noticed the errors."

She eventually eased her way into an editing routine that was strict but not obsessive. She'd ooched her way into making bolder decisions.

OVER THE PAST SEVERAL years, the notion of exploring options with small experiments has popped up in many different places. Designers talk about "prototyping"; rather than spending six months planning the perfect product, they'll just hack together a quick mock-up and get it in the hands of potential customers. That real-world interaction sparks insights that lead to the next prototype, and the design improves in an iterative fashion.

Meanwhile, health-care leaders advise using "small tests of change": piloting new processes or innovations on a small scale to see if they yield measurable results. For business executives, Jim Collins and Morten Hansen advocate a strategy they call "firing bullets then cannonballs," that is, running small experiments and then doubling down on the ones that work best. (This mirrors National Instruments' "ooch then leap.") Finally, for a book-length treatment of the ooching philosophy, see Peter Sims's book *Little Bets*.

The "ooching" terminology is our favorite, but we wanted to be clear that these groups are all basically saying the same thing: Dip a toe in before you plunge in headfirst. Given the popularity of this concept, and given the clear payoff involved—little bets that can improve large decisions—you might wonder why ooching isn't more instinctive.

The answer is that we tend to be awfully confident about our ability to predict the future. Steve, the budding pharmacy student, doesn't perceive himself to be in a state of confusion. Why would he waste his time getting a free internship when he *knows* pharmacy is for him? (If he drops out after a year, he'll say, "It just wasn't for me," as if that were something he never could have anticipated.) In

the design world, the diva product designer just knows, in his gut, that the product is right. The idea of a "quick and dirty prototype" just makes him roll his eyes. *You don't prototype elegance.*

That diva-ish, "I just know in my gut" attitude is inside all of us. We won't want to bother with ooching, because we think we know how things will unfold. And to be fair, if we truly are good at predicting the future, then ooching is indeed a waste of time.

So the key question is: How good are we at prediction?

2.

Early in his career, Phil Tetlock, a professor of psychology and management at the University of Pennsylvania, served on a National Research Council committee with a sobering mission: to assess what the social sciences might contribute to rescuing civilization from the threat of nuclear war. It was 1984, during the first term of Ronald Reagan, who in a speech the previous year had referred to the Soviet Union as an "evil empire." Political experts felt that the relations between the two nations were "precariously close to the precipice," said Tetlock.

Then, a year later, everything changed. Mikhail Gorbachev became general secretary of the Communist Party and ushered in an era of sweeping reforms. In a few short years, fears of nuclear war came to seem absurd. (A colleague even teased Tetlock about the alarmist report that the committee had produced, saying: "So the sky was not falling.")

To Tetlock's surprise, the experts who had utterly missed the rise of Gorbachev never admitted their failures. They'd say America had gotten lucky, or they'd maintain that their predictions about nuclear disaster "almost" came true (which Tetlock calls a "close-call counter-factual").

Exasperated, Tetlock resolved to design a study that would, for the first time, hold experts' feet to the fire. He recruited 284 experts, people who made their living by "commenting or offering advice on political or economic trends." Almost all of them had a graduate

degree and over half had a PhD. Their opinions were eagerly sought; 61% of them had been interviewed by the media.

They were asked to make predictions in their area of expertise. Economists were asked questions like this one:

> With respect to economic performance, should we expect, over the next two years, growth rates in GDP to accelerate, decelerate, or remain about the same?

Political scientists fielded questions like this:

> Do you expect that after the next election in the U.S., the current incumbent/party [i.e., Democrats or Republicans] will lose control, will retain control with reduced popular support, or will retain control with greater popular support?

As predictions go, these were pretty basic—nothing more strenuous than multiple-choice and fill-in-the-blank questions. Tetlock was trying to create such clear questions that experts would have nowhere to hide if they were wrong. So he began collecting predictions, on a small scale, in the mid-1980s, but when he found out how rich and interesting the data was, his enthusiasm for the project surged. By 2003, he had accumulated 82,361 predictions. Two years later, he published his brilliant analysis in a book called *Expert Political Judgment: How Good Is It? How Can We Know?*

How'd the experts do? They underperformed, to say the least. Even the best forecasters did worse than what Tetlock calls a "crude extrapolation algorithm," a simple computation that takes the base rates and assumes that the trends from the past few years will continue (e.g., predicting that an economy that has grown at an average of 2.8% over the past three years will continue to grow at 2.8%). (If you recall the advice from the past chapter—to trust experts about base rates but not predictions—then Tetlock's finding won't come as a surprise.)

Tetlock delivers the bad news: "Surveying these scores across regions, time periods, and outcome variables … *it is impossible to*

find any domain in which humans clearly outperformed crude extrapolation algorithms." In other words, if you gave a teenager some base-rate information and a calculator, she could handily outpredict the experts.

Extra education didn't boost accuracy. Tetlock found that PhDs did no better than those without a PhD. Nor did experience: Experts with two decades of experience did no better than newbies. One trait did prove predictive, though: media attention. Specifically, experts who made more media appearances tended to be *worse* predictors. (Anyone who has spent even a single hour watching cable news can readily attest to this.) These are bracing findings. Experts with impeccable credentials underperform a dumb algorithm that merely assumes that what happened last year will happen again this year.

Sadly, pundits aren't the only experts who have prognostication problems. Previous research has shown that psychologists, doctors, engineers, lawyers, and car mechanics are also poor at making predictions. One academic paper that surveys this research has a subtitle that says it all: "How can experts know so much and predict so badly?"

Does this mean that expertise is worthless? No. At one point Tetlock gave a group of Berkeley psychology majors a page of basic factual information about the politics and economies of various countries and asked them to make a similar set of predictions. They did much worse. For instance, when the students proclaimed themselves 100% certain that something would happen, they were wrong 45% of the time. When the experts were completely certain, they were wrong "only" 23% of the time. (Which is still not so great. Imagine if a home pregnancy test had that kind of "certainty.")

So if you're scoring at home, what the data shows is that applied base rates are better than expert predictions, which are better than novice predictions. (And bringing up the rear are all the people who retreated into the woods in the days leading up to the year 2000, predicting the fall of civilization.)

Tetlock's research demands a bit of humility from us when it comes to our predictive abilities. Whenever possible, we should get out of the business of prediction altogether. If you are a software executive, for instance, there's no reason to think it will be easier for you to predict the evolution of a chaotic technology market than it was for political scientists to predict the presidential-election results of a stable Western democracy.

Ooching provides an alternative—a way of discovering reality rather than predicting it.

• • •

SARAS SARASVATHY, A PROFESSOR at the University of Virginia's Darden School of Business, has found that entrepreneurs are the polar opposite of pundits. One similarity among many entrepreneurs, she said, was an aversion to prediction. "If you give entrepreneurs data that has to do with the future, they just dismiss it," she told *Inc*. magazine. Entrepreneurs don't seem to believe that forecasting is worth the bother: One survey found that 60% of *Inc*. 500 CEOs had not even written business plans before launching their companies.

To study the way entrepreneurs think, Sarasvathy conducted in-depth interviews with 45 founders of companies that ranged in size from $200 million to $6.5 billion. In the interviews, she presented the founders with a case study about a hypothetical start-up and asked how they would make certain critical decisions.

One of the questions was "What kind of market research would you conduct if you were in the entrepreneur's shoes?" In response, one of Sarasvathy's entrepreneurs, trying to be cooperative, began to speculate gamely on the research that he might undertake. Then, in the middle of his answer, he abruptly stopped and reversed course. "I wouldn't do all this research, actually," he said. "I'd just go sell it. I don't believe in market research. Somebody once told me that the only thing you need is a customer. Instead of asking all the questions, I'd try and make some sales."

That's exactly what happened in the late 1990s, in the thick of the dot-com era, when Bill Gross had an idea he wanted to test. Gross, the founder of a start-up incubator called idealab!, got excited about selling cars directly to consumers online. As he envisioned it, customers could search quickly for the exact car they wanted and have it delivered right to their door, thus dodging the car-salesman experience.

He knew, conceptually, that the idea could work, but it was still risky. He could offer a discounted price online, because he wouldn't have to maintain an expensive car lot filled with inventory, but even a discounted car is still a huge purchase to conduct online. Would people really spend $20,000 on a car they'd never test-driven—or even *seen* in person?

To shed some light on the matter, he designed an ooch. He hired a CEO for 90 days and gave him a mission: Sell one car. Andy Zimmerman, the COO of idealab! at the time, recalls what happened:

> In the brainstorming session there was a lot of resistance because some thought it was unlikely that people would buy a big-ticket item like that through the Web. At that time no one was selling cars through the Web. So rather than continue debating it, we put up a Web site with a couple of pages that looked like it would allow you to order a car. But actually the message went to a clerk, who looked up the price in the Kelley Blue Book and sent it back to the user. The next morning Bill discovered we had sold three cars. We had to quickly shut down the site because we were offering a heavy discount on the cars.

Rather than continuing to debate, the team ooched and resolved the uncertainty. The ooch led to the founding of CarsDirect.com, which within three years of its founding was the largest auto dealer in the nation.

Sarasvathy, the professor, found that this preference for testing, rather than planning, was one of the most striking differences

between entrepreneurs and corporate executives. She said that most corporate executives favor prediction; their belief seems to be, "To the extent that we can predict the future, we can control it." In contrast, though, entrepreneurs favor active testing: "To the extent that we can control the future, we do not need to predict it."

This entrepreneurial reasoning is beginning to penetrate large organizations. Scott Cook, the founder of Intuit, has become so convinced of the virtues of ooching that he now endorses what he calls "leadership by experiment." Leaders, Cook believes, should stop trying to have all the answers and make all the decisions. In a 2011 speech he said, "When the bosses make the decisions, decisions are made by politics, persuasion, and PowerPoint." None of those three *P*'s, Cook notes, ensures that good ideas will triumph. By making decisions through experimentation, the best idea can prove itself.

As an example, Cook cited some tense discussions with a team in India that had been working on a new product for Indian farmers. The idea was that farmers would pay a small subscription fee to receive, via their cell phones, information about the current prices being paid for various crops at different markets. That way, they could take their harvest to the market offering the highest price. Cook and some of his leadership team scoffed at the idea. "I thought it was harebrained," he said. But they agreed to let the team in India test a crude prototype of their idea.

To Cook's surprise, the pilot was a hit, and 13 experiments later, the India team had designed a sophisticated product that was paying dividends for farmers, boosting their income by an average of 20%. For many that extra money was enough to allow them to send their kids to school. By 2012, 325,000 farmers were using the system. That number would have been zero if Scott Cook and other Intuit execs hadn't given the idea a chance to prove itself.

IF YOU CAN OOCH in the corporate world, can you also ooch at home? Gabe Gabrielson thinks so. A real estate broker and dad who lives in San Jose, Gabrielson has a nine-year-old son named Colin.

Like many nine-year-olds, Colin frequently finds himself in disagreement with parental policies. In the spring of 2011, for example, he protested Gabe's policy that he get fully dressed before coming down to breakfast. Gabe didn't particularly care what Colin wore at the breakfast table, but he worried that if Colin didn't dress first, he'd wind up late for school. "But I'm more comfortable in my PJs!" Colin argued.

After a few debates that left both of them feeling frustrated, Gabe decided to change strategy. Taking a page out of Scott Cook's playbook, he announced, "Okay, Colin, we'll try it your way for three days. But if you're late to school any of those days, then we go back to the old system."

Colin, amazed by the change in response, aced the trial run. He wore his PJs *and* stayed punctual. As a result, the new practice stuck, and both sides are happier with the outcome. For Gabe, there's less arguing, and for Colin, there's the satisfaction of a successful protest.

Now it's time for a caveat. While we've celebrated the advantages of oooching so far, it's important to point out that oooching is not a decision-making wonder drug. As we've seen, it can be very effective in helping us Reality-Test Our Assumptions, but oooching has one big flaw: It's lousy for situations that require commitment.

Imagine if Colin had been playing baseball and, tired of going to baseball practice after school, wanted to experiment with quitting the team—just missing a few practices to see how it felt. For most parents, that would feel like a breach of obligation: *You committed to play for this team, so you need to see it through.* Or what if the military let people ooch into boot camp, so they could evaluate whether it was good for them? We'd probably have an army of five people.

Oooching is best for situations where we genuinely need more information. It's not intended to enable emotional tiptoeing, in which we ease timidly into decisions that we know are right but might cause us a little pain. Consider two men, Marshall and Jason, who both quit college after two years and now, in their mid-twenties, find that they're getting nowhere in their careers. Marshall knows for sure that he needs a degree to advance in his career, but

he puts it off. He doesn't like school very much, so it's always easy to find a reason to delay. For him, ooching—by, say, taking one class per semester—would be a cop-out, a way of stalling. It would also be likely to end poorly. At that pace of course work, he'd need many years to complete his degree, and with each passing year, it would be easier and easier to quit altogether.

Jason, meanwhile, has always been fascinated by marine biology, but he is wise enough to know that he doesn't fully understand what it entails. He *should* ooch. He should shadow a marine biologist for a few hours a week—does the work appeal to him?—and also audit a class or two at a local university to see if he can handle the course work. If, after he ooches, he becomes convinced that marine biology is a good fit, then he should stop ooching and leap headfirst!

Ooching, in short, should be used as a way to speed up the collection of trustworthy information, not as a way to slow down a decision that deserves our full commitment.

3.

In the spring of 1999, Dan Heath interviewed a guy named Rob Crum, who was applying for a job as a graphic designer at Thinkwell, the textbook-publishing firm Dan cofounded. Here's how he remembers the interview process:

> Crum was a young man with close-cropped hair, glasses, and clothes that were awfully hip for an interview. He had earrings and a big nose ring that was shaped roughly like the ones you see on bulls. During the interview, he answered questions haltingly, as if deciding how much he should share, and some of his comments seemed a little sarcastic. I didn't click with him. Over a few weeks, about 10 candidates interviewed for two designer positions, and Rob was toward the bottom of my list.
>
> As a separate part of the interview process, the candidates were asked to complete a work sample—a timed test,

conducted in our office, that simulated the kind of work they'd be doing for us (e.g., creating a clean-looking graph for a calculus textbook or illustrating the concept of Bernoulli's principle). A colleague coded these samples with numbers, rather than names, so that we could score them without knowing which candidate had submitted them. When my cofounder and I compared our scores, we were excited to discover that we'd ranked the same sample as number one. Then we asked our colleague whose sample it was. It was Rob Crum's.

We debated for a long time whether to hire Rob. I was skeptical; he didn't seem like he was a "culture fit." (Wasn't that crucial?) My first impression had not been very positive. (Aren't you supposed to trust your instincts?) In the end, though, I agreed to trust the sample and hire him.

Thank goodness I caved. From the beginning, Rob was one of our best people and, after two promotions, he became the art director, overseeing a department of about a dozen artists. He was a gifted designer with a knack for clean and simple visuals, and beyond that, he was a hardworking and conscientious manager. Most embarrassing for me, my first impressions of him had been dead wrong. Ridiculously wrong. Rob turned out to be kind, humble, and sincere. He became a good friend as well as a colleague.

I cringe at how much I struggled with the decision to hire Rob and how much weight I gave to my own flawed first impressions. In retrospect, I wonder why I bothered to interview him at all. I was trying to size him up—to peer into his soul and assess him as a potential colleague. I was trying to predict how good an employee he'd be. But I didn't need to *predict* that! The work sample told me everything I needed to know.

By way of comparison, imagine if the U.S. Olympic track coach used two tests in selecting the men who'd run on the 4×100 relay team. Test 1: Get the man on the track to see how fast he runs. And

test 2: Meet him in a conference room and see if he answers questions like a fast runner would.

Note that in most of Corporate America, our hiring process looks more like test 2 than test 1. Let's all slap our foreheads in unison.

Research has found that interviews are less predictive of job performance than work samples, job-knowledge tests, and peer ratings of past job performance. Even a simple intelligence test is substantially more predictive than an interview.

In one study, reported by the psychologist Robyn Dawes, a unique situation emerged that allowed the value of interviews to be assessed. In 1979, the University of Texas Medical School system interviewed the top 800 applicants and scored them on a seven-point scale. These ratings played a key role in the admissions decision, in addition to the students' grades and the quality of their undergraduate schools. UT admitted only students who ranked higher than 350 (out of 800) on the interview.

Then, unexpectedly, the Texas legislature required the medical school to accept 50 more students. Unfortunately, by the time the school was told to admit more students, the only ones still available were the dregs of the interviewees. So the school admitted 50 of these bottom dwellers, who'd ranked between 700 and 800.

Fortunately, no one at the medical school was aware who were the 700s and who were the 100s, so fate had created a perfectly designed horse race between the good interviewees and the lousy ones. The performance difference? Nada. Both groups graduated and received honors at the same rate.

Well, sure, you scoff, the dregs might do fine in the course work, but a good interviewer picks up on social skills! So once the dregs started working in a real hospital, where relationships are critical, it would become easy to sort the socially skilled from the socially skewed.

Nope, didn't happen. Both groups performed equally well in the first year of residency. The interviews seemed to correlate with nothing other than, well, the ability to interview.

With so little proof that interviews work, why do we rely on them so much? Because we all think we're good at interviewing. We are

Barbara Walters or Mike Wallace. We leave the interview confident that we've taken the measure of the person. The psychologist Richard Nisbett calls this the "interview illusion": our certainty that we're learning more in an interview than we really are. He points out that, in grad-school admissions, interviews are often taken as seriously as GPA. The absurdity, he says, is that "you and I, looking at a folder or interviewing someone for a half hour, are supposed to be able to form a better impression than one based on three-and-a-half years of the cumulative evaluation of 20 to 40 different professors."

HopeLab, the nonprofit mentioned earlier that uses technology to improve kids' health, has tried to evolve away from interviews. "Often our best interviewees turn out to be our worst performers," said Steve Cole of HopeLab. In response, HopeLab has begun to give potential employees a three-week consulting contract.

Cole said, "It's unbelievably effective. No more fear. How are we going to make our hiring decisions? We make our decisions based on the empirical performance of the employee in our community, on the kinds of jobs that we do. The job market totally prevents you from getting this kind of useful information. So collect your own personal performance data in your own personal context. In some ways it really doesn't matter how well they did in their last job."

Next time you've got a job opening to fill, consider Steve Cole's advice. What's the best way you could give your potential hires a trial run?

TO OOCH IS TO ask, Why *predict* something we can *test*? Why *guess* when we can *know*? Those questions bring us to the end of this section, in which we've been studying strategies for fighting the confirmation bias. The basic problem we face, in analyzing our options, is this: We will usually have an inkling of the one that we want to be the winner, and even the faintest inkling will propel us to gather supportive information—and sometimes *nothing but* supportive information. We cook the books to support our gut instincts.

To avoid that trap, we've got to Reality-Test Our Assumptions. We've seen three strategies for doing that. First, we've got to be diligent about *the way we collect information*, asking disconfirming questions and considering the opposite. Second, we've got to go looking for *the right kinds of information:* zooming out to find base rates, which summarize the experiences of others, and zooming in to get a more nuanced impression of reality. And finally, the ultimate reality-testing is to ooch: to take our options for a spin before we commit.

Where does this leave us? Armed with better information to make a good choice. In making that choice, which is where we're headed next, we face an unlikely obstacle. If you've ever carefully plotted out a budget, using your best information and analysis, and then promptly ditched it when you came across the perfect pair of shoes —or if you've impulsively bought stocks or fearfully dodged a critical relationship conversation—then you've already encountered the person who is often the foremost enemy of a wise decision: *you*.

Next up: what to do about you.

CHAPTER SEVEN IN ONE PAGE

Ooch

1. Ooching = running small experiments to test our theories. Rather than jumping in headfirst, we dip a toe in.

- *John Hanks at NI ooched with wireless sensors in the Costa Rican jungle.*
- *Physical therapy students volunteer for at least a hundred hours before they enroll.*
- *Legal secretary Peggy made a conscious decision to ooch away from her obsessive editing habits.*

2. Ooching is particularly useful because we're terrible at predicting the future.

- *Tetlock's research showed that experts' predictions are worse than simple extrapolations from base rates.*

3. Entrepreneurs ooch naturally. Rather than create business forecasts, they go out and try things.

- *CarsDirect.com asked: Can we sell one car over the Internet?*
- *Researcher Sarasvathy on attitudes of successful entrepreneurs: "To the extent that we can control the future, we do not need to predict it."*
- *Intuit's Scott Cook believes in "leadership by experiment," not by "politics, persuasion, and PowerPoint." The successful India mobile-phone service would have failed a debate.*

4. Caveat: Ooching is counterproductive for situations that require commitment.

- *The mid-twenties guy who wonders about marine biology should ooch. The guy who knows he needs a degree—but dreads going back—should not.*

5. Common hiring error: We try to *predict* success via interviews. We should ooch instead.

   - *Dan Heath wrongly agonized about whether to hire an obviously qualified artist.*
   - *Studies show that interviews are less diagnostic than work samples, peer ratings, etc. Can you nix the interview and offer a short-term consulting contract?*

6. Why would we ever *predict* when we can *know*?