Unless you’ve been living in a cave for at least a decade, you have heard about cognitive biases. Particularly since the publication of Daniel Kahneman’s *Thinking, Fast and Slow*, terms like “overconfidence,” “confirmation bias,” “status quo bias,” and “anchoring” have become part of daily conversations at the water cooler. Thanks to decades of research by cognitive psychologists and the behavioral economists they inspired, we are now familiar with a simple but crucially important idea: when we make judgments and choices—about what to buy, how to save, and so on—we are not always “rational.” Or at least not “rational” in the narrow sense of economic theory, in which our decisions are supposed to optimize for some preexisting set of goals.

**THE RATIONALITY OF BUSINESS DECISIONS**

This is true, too, of business decisions. Just type “biases in business decisions” into your favorite search engine, and many millions of articles will confirm what experienced managers know: when executives make business decisions (even important strategic ones),
their thought process does not remotely resemble the rational, thoughtful, analytical approach described in business textbooks.

My own discovery of this fact took place long before I’d heard of behavioral science, when I was a young business analyst freshly hired by McKinsey & Company. The first client I was assigned to work with was a midsize European company contemplating a large acquisition in the United States. The deal, if it went through, would more than double the size of the company and transform it into a global group. Yet after we spent several months researching and analyzing the opportunity, the answer was clear: the acquisition did not make sense. The strategic and operational benefits expected from the merger were limited. The integration would be challenging. Most importantly, the numbers did not add up: the price our client would have to pay was far too high for the acquisition to have any chance of creating value for his shareholders.

We presented our findings to the CEO. He did not disagree with any of our assumptions. Yet he dismissed our conclusion with an argument we had not anticipated. By modeling the acquisition price in U.S. dollars, he explained, we had missed a key consideration. Unlike us, when he thought about the deal, he converted all the numbers into his home currency. Furthermore, he was certain that the U.S. dollar would soon appreciate against that currency. When converted, the dollar-based cash flows from the newly acquired American company would be higher, and easily justify the acquisition price. The CEO was so sure of this that he planned to finance the acquisition with debt denominated in his home currency.

I was incredulous. Like everyone else in the room (including the CEO himself), I knew that this was the financial equivalent
of committing one crime to cover up another. Finance 101 had taught me that CEOs are not foreign exchange traders, and that shareholders do not expect companies to take bets on currencies on their behalf. And this was a gamble: no one could know for sure which way exchange rates would move in the future. If, instead of appreciating, the dollar kept falling, the deal would go from bad to horrible. That was why, as a matter of policy, a large dollar-based asset should be evaluated (and financed) in dollars.

To a starry-eyed twentysomething, this was a shock. I had expected thorough analysis, careful consideration of multiple options, thoughtful debate, quantification of various scenarios. And here I was, watching a CEO who basically trusted his gut instinct and not much else knowingly take an unjustifiable risk.

Of course, many of my colleagues were more jaded. Their interpretations divided them into two camps. Most just shrugged and explained (albeit in more tactful terms) that the CEO was a raving lunatic. Wait and see, they said—he won’t last. The others offered a diametrically opposite explanation: the man was a genius who could formulate strategic visions and perceive opportunities well beyond what we consultants were able to comprehend. His disregard for our myopic, bean-counting analytics was proof of his superior insight. Wait and see, they said—he’ll be proven right.

I did not find either explanation particularly satisfactory. If he was crazy, why was he the CEO? And if he was a genius, gifted with powers of strategic divination, why did he need to ask us to apply our inferior methods, only to ignore our conclusions?
The passage of time brought some answers. This CEO was certainly not a madman: before this deal, and even more so after it, he was regarded in his home country as one of the most respected business leaders of his generation.

He was also astoundingly successful. The acquisition turned out to be a great success (yes, the dollar did rise). Several big bets later, many of them equally risky, he had turned a near-bankrupt provincial company into a global industry leader. “See,” some of my colleagues might have said, “he was a genius after all!”

If only it were that simple. During the following twenty-five years, as a consultant to CEOs and senior executives in multinational companies, I had a chance to observe many more strategic decisions like this one. I soon realized that the sharp contrast between the textbook decision-making process and the reality of how choices were made was not a quirk of my first client. It was the norm.

But another, equally important conclusion struck me too: although some of these unorthodox decisions had a happy ending, most did not. Errors in strategic decision-making are not exceptional at all. If you doubt it, just ask the people who observe them most closely: in a survey of some two thousand executives, only 28 percent said their company “generally” makes good strategic decisions. The majority (60 percent) felt bad decisions were just as frequent as good ones.

Indeed, our firm regularly produced voluminous reports warning business leaders against the risks of bad decisions. Along with other consulting firms and an army of academics, we felt compelled
to blow the whistle on specific types of strategic decisions that proved especially perilous. But apparently no one listened. Watch out for overpaid acquisitions, we told executives—who immediately proceeded, like my first client, to buy bigger and more expensive companies, quite often destroying shareholder value in the process. Budget your investments carefully, we suggested, as plans are usually far too optimistic—and optimistic they remained. Don’t let yourself be pulled into a price war, we wrote—but by the time our clients paid attention to this advice, they were deep in the trenches, under heavy fire. Don’t let competitors “disrupt” you with new technologies, we warned—only to watch incumbent upon incumbent go out of business. Learn to cut your losses and stop reinvesting in a failing venture, we advised—and this advice, too, fell on deaf ears.

For each of these mistakes, there were, of course, a few specific examples, presented as cautionary tales. These were striking and memorable, even entertaining for readers given to Schadenfreude. (You will find more such stories—thirty-five of them, to be precise—in this book.)

But the individual stories were not the point. The point was that, when it comes to certain types of decisions, failures are much more frequent than successes. Of course, this is not an absolute, hard-and-fast rule: some acquirers did manage to create value through acquisitions, some incumbents did revitalize their core business before being disrupted, and so on. These successes gave some hope to those facing the same situation. But statistically speaking, they were the exception. Failure was the rule.

In short, when our clients made strategic decisions that turned out great, it was sometimes because they broke the rules and acted unconventionally, as my first client had. But when they failed, they
rarely did so in a new, creative way. Instead, they made precisely
the same poor decisions that others had made before them. It was
just the reverse of Tolstoy’s famous observation about families in
*Anna Karenina*: as scholars of strategic differentiation have long
theorized, every successful strategy is successful in its own way.
But all strategic failures are alike.

**THE BAD MAN THEORY OF FAILURE—
AND WHY IT FAILS**

The standard explanation for these failures remains the one most
of my colleagues had offered on my first assignment: blame the
bad, the incompetent, the crazy CEOs! Whenever a company runs
into trouble, the stories we read in the business press put the blame
squarely on the company’s leadership. Books recounting these
failures generally list the “inexcusable mistakes” of the people in
charge and attribute them without hesitation to character flaws.
The usual ones are straight out of the eight-hundred-year-old list
of the seven deadly sins. Sloth (under the more business-friendly
name “complacency”), pride (usually called “hubris”), and of
course greed (no translation necessary) top the list. Wrath, envy,
and even gluttony make cameo appearances.” That just leaves
lust…well, for that, read the news.

Just as we lionize the leaders of successful companies (the

* Yes, gluttony. A *Fortune* cover story about J. C. Penney, which will be
discussed in chapter 1, notes: “There were hints that the board was not
as focused as it could be. Ackman had consistently complained about
the chocolate-chip cookies served at Penney’s board meetings…. Other
Penney directors also expressed concern about the caliber of cuisine served
at their meetings.”
Great Man Theory of leadership and success), we seem to unquestioningly embrace the Bad Man Theory of Failure. Good CEOs produce good results; bad results are the fault of bad CEOs. This explanation feels morally satisfying and provides justification for holding CEOs accountable (including, importantly, when they are generously compensated for successes). It also seems, at least superficially, logical: if CEOs, despite being copiously forewarned, repeat the mistakes that others have made, there must be something seriously wrong with them.

However, it does not require much digging to see the problems with this theory. First, defining good decisions and good decision makers by the results they will eventually achieve is circular, and therefore useless. If you are making decisions (or selecting people who will make them), you need a way to know what works (or who is good) before the results are in. In practice, as I learned from the divided opinions of my colleagues about my first client, there is no sure way, at the time a decision is made, of telling who is good and who isn’t. Even knowing whether an individual decision is “good” or “bad” would, by this definition of “good,” require an ability to read the future.

Second, if all companies tend to make the same mistakes, it is not at all logical to attribute those mistakes to the decision maker, who is different every time. Sure, incompetent decision makers might all make bad decisions. But wouldn’t we expect them to make different bad decisions? If we observe one thousand identical errors, this seems to call for one explanation, not one thousand different ones.

Third and most importantly, calling these CEOs incompetent or crazy is blatantly absurd. Those who become the CEOs of large, established corporations have put in decades of hard work,
You’re about to make a terrible mistake!

Consistently demonstrating an exceptional range of skills and establishing an impressive track record of success. Short of invoking some mysterious psychological transformation associated with the deleterious effects of supreme power (“whom the Gods would destroy, they first make mad”), it simply makes no sense to assume that so many leaders of large enterprises are mediocre strategists and bad decision makers.

If we rule out the Bad Man Theory of Failure, we’re left with an intriguing problem. Bad decisions are not made by bad leaders. They are made by extremely successful, carefully selected, highly respected individuals. These leaders get advice from competent colleagues and advisors, have access to all the information they could hope for, and are generally incentivized in healthy and appropriate ways.

These aren’t bad leaders. These are good, even great, leaders who make predictable bad decisions.

Behavioral science to the rescue

To this puzzle, behavioral science brings a much-needed solution. Because humans do not conform to the economists’ theoretical model of rational decision-making, they make mistakes. And not just any mistakes: systematic, non-random, predictable mistakes. These systematic deviations from economic rationality are the errors we have learned to call biases. No need to postulate mad decision makers: we should expect sane people, including CEOs, to make the same mistakes others have made before them!

This realization goes a long way toward explaining the popularity of behavioral science among leaders in business and government.
But so far, the most visible manifestations of this popularity have not concerned the decisions of CEOs. Instead, they have taken two forms you have certainly heard about—unconscious-bias training and nudging.

The “unconscious biases” that training aims to eradicate are those we bring to bear in our interactions with people, especially those who belong to minority groups. A growing number of organizations are aware of the problems posed by sexism, racism, and other biases, and train their employees to recognize and fight them. Training makes participants aware that, despite their good intentions, they are susceptible to these biases, and it usually exposes them to different images or models in order to change their unconscious associations. (Whether or not such mandatory training interventions are effective is a hotly debated topic, and not the focus of this book.)

In contrast to these attempts at making biases disappear, the second approach aims to use them productively. This is what the “Nudge” movement, launched by Richard Thaler and Cass R. Sunstein in their book of the same title, does.

The starting point is a debate as old as political science: if the choices of citizens produce outcomes that, as judged by the citizens themselves, are not optimal, what should government do? Some argue government should intervene actively. If, for instance, people don’t save enough, they can be given tax incentives to do so; if they eat too much, taxes and bans can be put in place to deter them. Others, however, retort that adults should make their own choices, which may include making their own mistakes: so long as their choices do not harm others, it is not for government to tell them what to do and what not to do.

Thaler and Sunstein’s great insight is that between these two
views, the paternalistic and the libertarian, there is a third way, which they dubbed “libertarian paternalism.” Choices can be presented in a way that gently “nudges” people toward the best behavior (again, as judged by themselves) without coercing them in any way. For instance, changing the order in which options are presented, and especially changing the option that will be selected by default if an individual does nothing, can make a large difference in many situations.

The UK government was the first to adopt nudging as a policy tool by creating the Behavioural Insights Team, more often referred to as the Nudge Unit. National, regional, and local government institutions (the Organisation for Economic Co-operation and Development counts more than two hundred) have created their own nudge units to assist policymakers in various areas, ranging from tax compliance to public health to waste disposal.

Businesses have adopted the “nudge” terminology as well, sometimes even setting up “corporate behavioral science units.” Some, particularly in finance, have managed to exploit systematic anomalies in trading behavior to their advantage. For the most part, however, the methods businesses “discover” by applying behavioral economics are not new. As Thaler has written elsewhere, “Nudges are merely tools, and these tools existed long before Cass and I gave them a name.” Indeed, exploiting other people’s biases is one of the oldest ways to do business, legitimately or otherwise. When experts in “behavioral marketing” claim to analyze consumers’ biases in order to influence them more effectively, this often leads them to rediscover well-known advertising techniques. And of course, Thaler notes wryly, “Swindlers did not need to read our book to know how to go about their business.”
BEHAVIORAL STRATEGY

There is a third way of using behavioral science. Decision makers who adopt it do not aim to correct the biases of their own employees, as in unconscious-bias training. Nor do they attempt to exploit the biases of others, as with nudges and their corporate equivalents. They want to tackle biases in their own strategic decisions.

Once you think about it, this makes a lot of sense. If you believe your strategic decisions make a difference, and if you accept that biases in decisions result in errors, then your own biases might produce strategic errors. Even if you are a competent, careful, and hardworking executive, you might end up making avoidable, predictable mistakes. This is precisely the mysterious problem of bad decisions by good leaders that we discussed above. Except it is not “them”—it’s you. And it is not mysterious—it is behavioral.

In academia, a new stream of strategy research, appropriately called behavioral strategy, focuses on this topic. In the words of some of its leaders, it aims “to bring realistic assumptions about human cognition, emotions, and social behavior to the strategic management of organizations.” Keywords like cognition, psychology, behavior, and emotion now appear frequently in scholarly strategy journals. (In 2016, they appeared in more than one-fifth of papers in Strategic Management Journal.) Practitioner-oriented publications also reflect the growing interest in this topic. And surveys of decision makers show that many of them feel the need to tackle the bias problem to improve the quality of their decisions: a McKinsey survey of some eight hundred corporate board directors found that “reducing decision biases” was the number one aspiration of “high-impact” boards.

In short, many business leaders now realize that they should do
something about biases in their own strategic decisions. But do what, exactly? Answering that question is the focus of this book.

THREE CORE IDEAS

Here is a very short overview of the answer. It can be summarized in three core ideas, each developed in one of the three parts of this book.

First idea: our biases lead us astray, but not in random directions. There is method to our madness. We may be irrational, but we are predictably irrational, as Dan Ariely memorably put it. In the strategic decisions of organizations, combinations of biases result in recurring patterns of strategic error that we can learn to recognize. These patterns explain the frequency with which we observe bad outcomes of certain types of strategic decisions, those where failure is not the exception but the rule. The first part of this book presents nine such patterns, nine decision traps into which our biases drive us.

Second idea: the way to deal with our biases is not to try to overcome them. Contrary to much of the advice that you may have read on the topic, you will generally not be able to overcome your own biases. Moreover, you don’t need to. Consider a question that skeptics of behavioral science have often raised: how do humans achieve so much, despite their limitations? Or: “If we’re so stupid, how did we get to the moon?” The answer, of course, is that “we,” individual humans, did not land on the moon. A large and sophisticated organization, NASA, did. We have cognitive limitations that we may not be able to overcome, but organizations can make up for our shortcomings. They can produce choices that are less
biased and more rational than our individual decisions would be. As I will show in part 2, this requires two key ingredients: collaboration and process. Collaboration is needed because many people are more likely to detect biases than a lonely decision maker is. Good process is required to act on their insights.

*Third idea: while organizations can overcome individual biases, this does not just happen by chance.* Left to their own devices, groups and organizations do little to curb individual biases. Often, they even exacerbate them. Fighting the effects of biases requires thinking critically about how decisions are made, or “deciding how to decide.” A wise leader, therefore, does not see herself as someone who simply makes sound decisions; because she realizes she can never, on her own, be an optimal decision maker, she views herself as a *decision architect* in charge of designing her organization’s decision-making processes.

In part 3, I will present three principles that decision architects use to design effective strategic decision processes. I will illustrate them with forty practical techniques implemented in organizations around the world, from start-ups to multinational corporations. These techniques are by no means “forty habits” that you should adopt by Monday morning. My hope in presenting this list is to prompt you to select the ones that may work for your organization or team, but also to encourage you to invent your own.

My essential aim in writing this book is to inspire you to view yourself as the architect of the decision processes on your team, in your department, or in your company. If, before your next important decision, you give some thought to deciding how you will decide, you will be on the right track. And you will, perhaps, avoid making a terrible mistake.
PART 1

THE NINE TRAPS
This story is completely true, because I made up the whole thing.

—Boris Vian, *Froth on the Daydream*

In 1975, in the wake of the first oil shock, the French government launched an advertising campaign to encourage energy savings. Its tagline: “In France, we don’t have oil, but we do have ideas.” That same year, two men approached Elf Aquitaine, the French state-owned oil major. The two had no prior experience in the oil industry but claimed to be inventors of a revolutionary method for discovering oil underground without drilling. Their method, they explained, would allow a specially equipped airplane to “sniff” oil from a high altitude.

The so-called technology was, of course, a fraud—and not even a particularly sophisticated one. The con artists had fabricated, ahead of time, the images that the miraculous machine would produce during test runs. When the trials took place, they simply used a remote control to make images of oil reserves appear on the screen.