

Mental Models and Strategic Decision Making

*What gets us into trouble is not what we don't know.
It's what we know for sure that just ain't so.*

—Mark Twain

AT ITS HEART, strategy deals with an unknown future. Strategic planning should be the one opportunity to challenge past actions and assess a range of future investments to establish a path forward into the ever-evolving future. Thus, strategy should be a creative act. Unfortunately, most strategic planning efforts accomplish little more than incremental changes to past activities, even when faced with challenges that are radically different than those encountered in the past. A leadership team's failures of strategy are often *failures to anticipate a reality different than what the team is prepared or willing to see*. As Steve Lohr (2007) writes in an article profiling Microsoft, "One of the evolutionary laws of business is that success breeds failure; the tactics and habits of earlier triumphs so often leave companies—even the biggest, most profitable and most admired companies—unable to adapt."

Thus, before outlining the tools for transformational strategic planning and execution in times of uncertainty, leaders must determine what decision-making processes are essential to the effort.

Approaching strategic planning with an unconstrained mind-set is critical to identifying and prioritizing future opportunities. Without such a mind-set, the resulting plan tends to look to the past, incrementally moving the healthcare organization forward while lacking the creativity and insights to layer on transformational changes critical for future success.

Daniel Kahneman notes (Lewis 2016, 198):

In making predictions and judgments under uncertainty, people . . . rely on a limited number of heuristics which sometimes yield reasonable judgments and sometimes lead to severe and systemic error.

The good news, Kahneman, Lovallo, and Sibony (2011) argue, is:

Executives can't do much about their own biases. . . . But given the proper tools, they can recognize and neutralize those of their teams.

Most of the time, decisions are made intuitively, quickly, and subconsciously. After all, problem solving, or thinking analytically, takes energy and time. "Going with your gut instinct" is easier, especially if one has deep content knowledge in the area and has dealt with comparable problems multiple times in the past. However, for more complex issues with major consequences, "Sober reflection is indispensable . . . logic trumps intuition" (Dobelli 2013, 305). The difficulty lies in distinguishing between the two situations. While Kahneman, Lovallo, and Sibony (2011) are not sanguine about the ability of individuals to correct their own decision-making errors, they say:

There is reason for hope . . . when we move from the individual to the collective, from the decision maker to the decision-making process, and from the executive to the organization.

Thus, before outlining the best methodologies or tools for strategy development and transformational change, teams should step back and ask the following questions:

- *What major issues is the team trying to resolve, and what assumptions and potential options about them can be discerned?* For example, if part of the leadership team thinks the way forward is to reduce operating costs while another group assumes only innovative investments in new delivery models will drive future success, consensus will be hard to achieve when establishing future priorities.
- *What data will be essential to make fact-based, objective decisions?* Whether consciously or subconsciously, most individuals seek data sources that support their *existing* points of view. Even the Internet, which holds the promise of unlimited information, “is contributing to the polarization of America, as people surround themselves with people who think like them and hesitate to say anything different” (Miller 2014).
- *How will the leadership team make choices that are built from all points of view?* Leaders should avoid defaulting to the way things have always been done or, worse, making decisions that primarily reflect a powerful minority who wield influence. As articulated by David M. Cote, executive chairman of Honeywell International (Bryant 2013, emphasis added):

Your job as a leader is to be right *at the end of the meeting*, not at the beginning of the meeting. It's your job to flush out all the facts, all the opinions, and at the end make a good decision, because *you'll get measured on whether you made a good decision*, and not whether it was your idea from the beginning.

- *Is the leadership team willing to change course?*
Contemplation of a world that is **v**olatile, **u**ncertain, **c**omplex, and **a**mbiguous—a VUCA world—includes recognition and acceptance that the future will be different—possibly radically different—from the world of today. However, once decisions are made, the psychological “stickiness” of sunk costs, or expenditures made to bring those decisions to fruition, leads most teams to resist changing direction, even when presented with data that challenge the efficacy of past decisions (Dobelli 2013, 13–15).

DECISION MAKING AND DECISION TRAPS

How might a team best address these questions? Many articles and books have been written offering a variety of approaches to improving decision making (e.g., Schoemaker 2002; Ariely 2008; Kahneman 2011; Thaler and Sunstein 2008; Dobelli 2013); however, most are in agreement about the importance of the following four steps suggested by Russo and Schoemaker (2001):

1. Understand the issue(s).
2. Gather relevant, impartial information.
3. Make a fact-based, objective decision.
4. Be willing to reassess that decision on the basis of changing conditions and the degree of progress made.

One impediment for most organizations is the fact that individuals—and, by implication, teams—are hardwired to fall into one or more of the following decision traps while executing each of these steps:

- Frame narrowness
- Confirmation bias

- Groupthink
- Attribution bias

Healthcare leaders and their teams must work to overcome these decision traps. For example, prior to embarking on strategy development, teams should make sure they have appropriate processes in place, and take the time to review those processes, for overcoming each type of trap, as discussed in the following paragraphs.

Frame Narrowness

Leaders tend to want and expect to reach a solution quickly. Too often, however, they fail to spend adequate time considering the exact problem that needs to be addressed and uncovering the team's assumptions about the related issues. Some observers attribute that tendency to cave dwellers' primordial need to decide quickly whether that movement in the bush is a man-eating lion or just the wind, speculating that humans today frame problems rapidly, intuitively, and almost effortlessly.

To compound this desire to make decisions quickly, individuals rarely make their assumptions explicit, leaving the others on the team to guess about potential agendas or preferences. Furthermore, the lack of time spent assessing the true problem at hand leads teams to address nonissues or revisit previously resolved—or abandoned—concerns.

To avoid frame narrowness, at the beginning of a transformational strategic planning effort, ask each participant on the leadership team to independently answer the following questions:

- Why was our institution or group successful in the past?
- What needs to be done in the future to maintain, or increase our chances for continued, success?
- Looking forward, what assumptions does each participant have about the overall strategic planning effort? For

example, if several members of the strategic planning team assume whatever changes are made to healthcare coverage in the United States will only minimally affect ongoing operations, while several others assume the opposite, participants will struggle to find common ground because of their (often subconscious) assumptions. Only in calling out those assumptions and encouraging awareness of each member's "frame" can teams search creatively for solutions.

For further insights on framing and frame narrowness, see Wedell-Wedellsborg (2017).

What Is the Problem?

As an exercise to enhance team members' awareness of frame narrowness, ask the group to discuss the essential issue at the core of each of the following two real-world problems:

- Residents in an older building complain that the elevator is terribly slow. Management, while sympathetic, is unwilling to invest the millions of dollars needed to install a new elevator system.
- In the 1980s, Delta Air Lines experienced a number of nonfatal but highly embarrassing errors, such as planes landing at the wrong airport, which were usually the fault of decisions made by Delta pilots.

As the discussion progresses, observe how individuals frame the problem, especially the tendency to immediately propose a solution. The key to avoiding frame narrowness is to postpone fixing the problem until enough time has been spent eliciting opinions on what the real problem is. For

example, in the elevator scenario, is the issue one of elevator speed and aging equipment, or are the complaints caused by some other factor? Have the team list other possible issues, come to a consensus on the core problem, and only then discuss possible cures.

How was the real-world elevator problem addressed? The building owners placed mirrors in the elevator waiting area, and complaints about the “terribly slow” wait times dropped to near zero. The building’s management determined that the residents simply needed to occupy themselves while passing the time: by looking at themselves.

In the case of Delta Air Lines, the core problem was not a technical or even strictly a personnel issue but rather a cultural one. Traditionally, the chief pilot was never challenged once he made a decision—even when others in the cockpit felt the chief was wrong. Once this problem was diagnosed as one of status and deference in a culture characterized by rigid hierarchy, Delta engaged all of its pilots in breaking down those cultural norms; within six months of sensitivity training, landing errors disappeared.

Confirmation Bias

Leaders tend to make choices on the basis of a few experiences. The problem with that approach, as Paul Schoemaker (2002, 225) writes, is that “We are too sure of our single view about the future, and we fail to consider alternative views sufficiently.” As a result, changing beliefs is difficult, as challenges to existing orthodoxy are often dismissed as irrelevant. Furthermore, such challenges to existing beliefs are emotionally difficult to handle (Festinger 1957) and, according to more recent research, desirability bias, or the tendency to trust the information one wants to believe, may further inhibit objectivity (Tappin, van der Leer, and McKay 2017).

Closely related to confirmation bias is **overconfidence**, or the belief that one is more knowledgeable or capable than he or she is in reality. Individuals—and collectively, teams—are notoriously

Confirmation Bias/Overconfidence: The Financial Meltdown of 2007–2008—Did Anyone See It Coming?

“Even though annual housing prices had not declined in nominal terms in modern memory, the forecasts of continued market growth with containable downside risks made no sense to hedge fund analyst [Steve] Eisman. Mortgages had become too easy to obtain. He and a few colleagues dove into the data, collected input from multiple sources, and spotted inconsistencies in the performance of the housing market. They worked through the longer-term consequences and realized that none of the possible outcomes justified the market’s increasing exuberance.

“Eisman’s ability to spot ambiguous threats and opportunities at the periphery of his business is rare among leaders. For several years, he resisted the temptation to do what everybody else was doing: going for the quick buck. Instead, he shorted the subprime mortgage market, and his fortitude paid off: Eisman’s wider scanning and earlier detection yielded around US\$1.5 billion for his hedge fund, **FrontPoint Partners**, a subsidiary of **Morgan Stanley**. His actions exemplify what **Nate Silver** [in his book *The Signal and the Noise*] calls ‘the Prediction Paradox’. The paradox is that, the more humility we have about our ability to make predictions, the more successful we can be at anticipation. Why? Because open-mindedness encourages inquiry, debate and doubt.”

Source: Excerpted from Schoemaker and Krupp (2015); emphasis in original.

error prone when assessing the risks of a given situation objectively, such that they underestimate the extent to which risks will derail them or their efforts. Similarly, people tend to overestimate their abilities, as demonstrated in the following examples (Dobelli 2013, 44; Thaler and Sunstein 2008, 32):

- 93 percent of US student drivers think they are “above average” drivers.
- 68 percent of University of Nebraska professors rated themselves in the top 25 percent for teaching ability.
- Entrepreneurs starting new businesses say their chances for success are 90 percent—when statistics show a 50 percent failure rate on average.

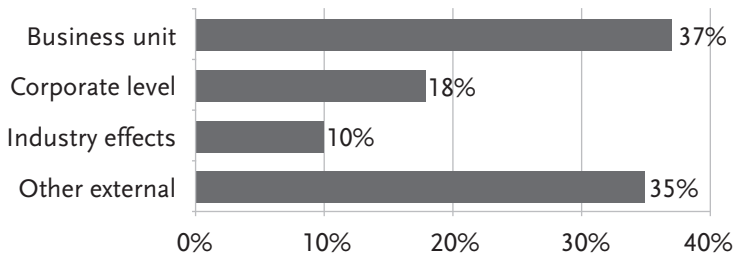
While perhaps comical, these examples point to fundamental ways in which individuals are “predictably irrational”: First, most leaders believe they have more control over their business and the external environment than they do. According to studies reviewed by Schoemaker (2002, 6), “While managers concentrate most of their energies on the existing business, the management of external uncertainty may have more potential for creating value.” In fact, as shown in exhibit I.I, nearly half of an entity’s return on assets results from external influences over which executives have no control (Roquebert, Phillips, and Westfall 1996).

Second, as Yale University economist Robert Schiller explains, “people tend to make judgments in uncertain situations by looking for familiar patterns and *assuming future patterns will resemble past ones*, without sufficient consideration of the reasons for the pattern or the probability of the pattern repeating itself” (de Jong 2015, 124; emphasis added). Yet, in times of uncertainty, the past is *not* a guide to the future.

Before the leadership team begins to examine the strategic implications of healthcare reform and gather relevant data, it should discuss the following questions:

Exhibit 1.1: Drivers of Return on Managed Capital

How much is the variance due to actions/influence from the . . .



Source: Roquebert, Phillips, and Westfall (1996).

Note: Return on managed capital is profit realized relative to the amount invested.

- Where are we too reliant on a *single, common view of our strategic options*?
- Who can provide an *alternative perspective* on the data we will examine to help us broaden our strategic planning efforts and avoid strategic “myopia”?
- How can we avoid overconfidence through exploring a range of *perspectives* inside and outside of our group?

Groupthink

At a subconscious level, most individuals want to be part of a group, a member of the so-called A team. After all, the worst form of punishment is considered by many to be solitary confinement. Once an individual is part of a group, he or she has difficulty challenging the prevailing mores or beliefs of that group. Individuals quickly understand what is and is not acceptable in their team, such as what the boss or most senior person wants to hear and what topics of discussion are out of bounds (Asch 1955).

Even when teams are admonished to challenge existing orthodoxies in brainstorming sessions, for example, team members often stifle their innermost thoughts to fit with prevailing team norms.

Janis and the Power of Groupthink

Irving Janis (1972), a leading academic in the study of *groupthink* (a term coined by William Whyte in 1952 in *Fortune* [Whyte 2012]), described it as (de Jong 2015, 137):

the mode of thinking that persons engage in when concurrence-seeking becomes so dominant in a cohesive in-group that it tends to override realistic appraisal of alternative courses of action. The more amiability and *esprit de corps* there is among the members of the policy-making in-groups, the greater the danger that independent critical thinking will be replaced by groupthink, which is likely to result in irrational and dehumanizing actions directed against out-groups.

Specifically, Janis argued that groupthink is powerful because of the following factors:

- Members cultivate a team spirit, often fostered by a strong leader.
- Often (subconsciously), members feel superior to those outside the group.
- Contact with outsiders or nonteam members is limited.
- Little dissent is voiced to preserve team unanimity.
- Members are (emotionally) content to be part of the team.

Therefore, as Adam Grant (2016) explains, before beginning a group brainstorming effort, team leaders should require each person to generate his or her ideas individually and then come together to brainstorm. Grant (2016, 10) notes:

For a culture of originality to flourish, employees must feel free to contribute their wildest ideas. But they are often afraid to speak up, even if they've never seen anything bad happen to those [who] do.

To assess transformational opportunities, groups must be willing to challenge existing orthodoxy—to break groupthink. Part of the problem with disrupting groupthink, however, is that groupthink can expand a team's capabilities. When resolving issues of high complexity, we must rely on the expertise of others. As Yuval Harari (2017, 15) writes:

From an evolutionary perspective, trusting in the knowledge of others has worked extremely well for humans.

But when groups become echo chambers of like-minded colleagues, reliant on data that reinforce existing points of view and loyalties, Harari explains (2017, 15):

Most of our views are shaped by communal groupthink rather than individual rationality, and we cling to those views because of group loyalty. Bombarding people with facts and exposing their individual ignorance is likely to backfire.

Two possible frameworks or approaches may help teams avoid the perils of groupthink. The first, proposed by Kathleen Eisenhardt, an anthropologist at Stanford University, and colleagues studying how Silicon Valley management teams made tough, strategic decisions, derives from the observation that best-in-class firms—the

JFK and the Cuban Missile Crisis

US President John F. Kennedy assembled a cabinet known as “the best and the brightest.” Yet, as a group, they supported the Bay of Pigs invasion, a military operation to support insurgents against Cuba’s communist leader Fidel Castro, resulting in a spectacular failure. Fourteen months later, Kennedy faced another major challenge, which became known as the Cuban Missile Crisis. The Soviet Union was in the process of supplying 20,000 ground troops and tactical atomic weapons to Cuba, an island just 90 miles from the southernmost point of the United States. Most historians credit Kennedy with skillfully handling the Cuban Missile Crisis, as, in a departure from the Bay of Pigs decision making, he overcame the cabinet’s tendency to demonstrate groupthink. What changed? Russo and Schoemaker (2001) note that Kennedy

- created two separate working groups to develop options;
- stopped attending meetings, as even senior leaders were uncomfortable challenging the president;
- requested the options be presented to him, inviting outside advisers to comment; and
- designated two key advisers as critics to question him throughout the decision-making process.

Russo and Schoemaker (2001, 168) conclude, “After nearly two weeks of discussion, Kennedy ordered the island blockaded. Six days later Soviet prime minister [Nikita] Khrushchev agreed to remove the missiles.”

best-performing companies across different industries—consistently apply the following four strategies in their management meetings (Eisenhardt, Kahwajy, and Bourgeois 1997):

- *Independent data.* They begin discussions by asking: “What *independent, third-party data* do we have that are relevant for this issue(s)?” Rarely do they rely on in-house sources of information. If such independent, third-party data are not available or are insufficient, they stopped discussions until they could obtain such information. In those cases where a decision is required immediately and third-party data are not available, these teams make the best decision possible on the basis of available evidence, subject to review once independent data can be found or generated, thereby offsetting confirmation bias.
- *Brainstorming as part of the decision-making process.* With the independent data in hand, high-performing teams list any and all options that emerge from a brainstorming session. No potential solution or explanation is rejected. Rather, the effort is focused on understanding what the situation requires from as many angles as possible, thus offsetting frame narrowness.
- *Clear decision rules.* At the end of the brainstorming portion of the meeting, a designated individual or a small executive team makes the decision. Those decision rights are agreed on prior to the meeting. Eisenhardt, Kahwajy, and Bourgeois (1997) found that as long as all the participants feel their ideas are fairly presented and given consideration by the decision maker(s), team members demonstrate a high level of support for decisions, a threshold that is critical for execution to be effective (see chapter 4).
- *Trust.* Team members at best-in-class firms trust and like each other. The challenge with such a high level of affinity is in balancing the need for diversity of viewpoints with cultivating trust. If teams constitute themselves on the basis of “those we like,” they may end up lacking diversity of perspective, which is essential in dealing with uncertainty and change (Grant 2016).

The second approach, instituted by Kleiner Perkins Caufield & Byers (KPCB)—one of the most successful US venture capital firms in history—is called the *balance sheet process*, and it is used to bring forth different points of view (see exhibit 1.2).

When the firm faces a major strategic decision—whether to raise a new fund, change its investing criteria, or shuffle the leadership at an acquired firm, for example—each partner completes the balance sheet from his or her point of view to indicate the pluses and minuses of the proposed action. A first critical step in the process is that, before they come together to discuss the proposal, each partner provides the others with background documents (notes detailing the individuals’ ideas, rationales, and other considerations in preparing the balance sheet) ahead of time so that each partner can prepare his or her individual response. Second, before decision making begins, they go around the meeting room and read from their balance sheets. By being “forced to listen to the views of others first,” partners at KPCB report they have changed their original points of view (Lovallo and Sibony 2010). The essential element of this exercise is to *delay* discussion, as the moment discussion begins, listening stops or becomes difficult because of the human penchant to shift from “taking in” to “pushing out”—to stop listening in the rush to explain one’s own ideas or point of view (Kahneman 2011).

Exhibit 1.2: Ideal Group Process—the Balance Sheet

+	-

Source: Lovallo and Sibony (2010).

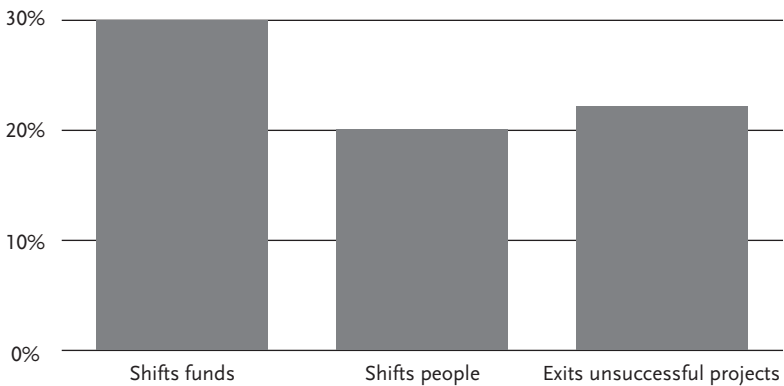
Attribution Bias

Objectively speaking, how are causes identified and attributed once decisions are made and outcomes realized? To ask the question differently, how easy is it to change course when new data are presented? According to a study by Sull, Homkes, and Sull (2015) on why execution fails, most organizations report that moving people or resources when markets change is extremely difficult (see exhibit 1.3).

Humans tend to see failure as a reflection of one's personal abilities rather than as a potential outcome of the business effort that, even in failure, offers learning possibilities. Every leader has experienced less-than-optimal outcomes. The ability to learn from these challenges is one key differentiator between highly successful leaders and average performers (Bennis and Thomas 2002). Nonetheless, most people fear the downside of a proposed action *two to three times as much* as they welcome the upside (Kahneman 2011). Objectivity is often lacking when assessing progress toward meeting goals and determining what needs to be done to improve outcomes. When

Exhibit 1.3: Rates of Adaptation to Changing Market Conditions

Percentage of senior executives who say their organization effectively . . .



Source: Sull, Homkes, and Sull (2015).

an individual or a team is successful, the individuals tend to laud personal efforts; when things do not go so well, team members often attribute the failure to external factors—pressures or issues that “no one could control.” Examples of this tendency can be found in a study of quarterly reports released by Fortune 500 companies (Salancik and Meindl 1984):

- When budgets met the actual results, 79 percent of the performance was attributed to internal factors, thereby implying that what managers did was critical to success.
- In quarters that missed estimates, 75 percent of the blame was attributed to external factors.

Apart from individual responses to changing circumstances, healthcare’s unique environment can also impede change. As Tucker and Edmondson (2003, 63) found in studying organizational failures at major hospitals:

The lack of organizational learning from failures can be explained instead by three less obvious, even counterintuitive, reasons: an emphasis on individual vigilance in health care, unit efficiency concerns, and empowerment (or a widely shared goal of developing units that can function without direct managerial assistance). These three factors, while seemingly beneficial for nurses and patients alike, can ironically leave nurses under-supported and overwhelmed in a system bound to have breakdowns because of the need to provide individualized treatments for patients.

In summary, as Warren Buffett states (Dobelli 2013, 19):

What the human being is best at doing is interpreting all new information so that their prior conclusions remain intact.

The challenge for leadership teams in facing the VUCA world of US healthcare is to be as objective as possible in seeking future opportunities—by understanding and preparing for how we are all predictably irrational. In his book *How Doctors Think*, Jerome Groopman, MD, writes that even when he has made a diagnosis, he tries to keep an open mind toward seeking other options (Groopman 2007, 66):

Most errors are mistakes in our thinking. I learned from this to always hold back, to make sure that even when I think I have the answer, to generate a short list of alternatives . . . this simple strategy is one of the strongest safeguards against cognitive errors.

Generating that “short list of alternatives” is the focus of chapters 2 and 3.

CONCLUSION AND QUESTIONS HEALTHCARE LEADERS AND TEAMS SHOULD ASK

As Dan Ariely (2008) explains, individuals—and, consequently, the teams on which they participate—are predictably irrational in certain situations. The challenge is to be aware of the decision traps discussed in this chapter and build mechanisms into the strategic planning effort to mitigate potential shortcomings inherent in them (Kahnemann, Lovallo, and Sibony 2011). Therefore, before beginning the strategic planning effort itself (see chapter 2), the leadership team needs to assess *how* it will achieve the unconstrained, creative mind-set among team members that is critical for a robust strategic plan.

Questions

Specifically, leadership teams should discuss the following questions for each type of decision trap:

1. Framing/assumptions
 - a. Why was the institution successful in the past?
 - b. What needs to be done to be successful in the future?
 - c. What could disrupt these ideas or perspectives?
2. Confirmation bias/overconfidence
 - a. Is the leadership team relying on an overly narrow, shared view of the future?
 - b. How can the leadership team gain fresh insights to broaden its strategic planning assumptions and perspectives?
 - c. What can be done to leverage viewpoints inside and outside of the institution or group to challenge the tendency to focus on data that confirm existing beliefs?
3. Groupthink
 - a. How will prevailing beliefs be challenged?
 - b. Are all the points of view in the leadership team being surfaced and heard?
 - c. What are the steps to reaching consensus? What will be the decision-making process?
4. Attribution bias
 - a. What are the success metrics in broad terms for the strategic planning effort?
 - b. How will progress to date be assessed, and how will the need to shift investments, people, and resources be triggered if circumstances change?
 - c. How will the leadership team avoid the sunk-costs syndrome of spending more and more resources on losing strategic initiatives?