How Good Data Leads to Bad Decisions

Looking to the past for guidance may skew your view of present facts. Here's how to refocus your decision-making lens.

BY DAVID STAUFFER

HE 1994 PURCHASE OF Snapple by Chicago-based food giant Ouaker Oats appeared to be a no-brainer. CEO William Smithburg had engineered Quaker's spectacularly successful 1983 buyout of the slumping sports-drink company Gatorade, amid grave doubts expressed by industry analysts. With the Gatorade win behind him-he paid \$220 million for the company and grew it into a business worth \$3 billion—he seemed to have a gift for identifying smart buys. So the Quaker board gave him the go-ahead on the Snapple deal.

But that acquisition proved to be one of the most unsuccessful in American corporate history. It also cost Smithburg his job. Quaker unloaded Snapple in 1997 for \$300 million, having paid \$1.8 billion for it.

How could the Snapple purchase have gone so wrong after Gatorade had gone so right? The answer lies in our very human tendency to rely on historical precedent. It's in our DNA to seek help with today's decisions by recalling past decisions in situations that seem analogous. Only too late—and sometimes never—do we see that the earlier situation was quite different in fundamental ways.

Where do we err? We misremember. We remember selectively. We recall what's recent and neglect what's more distant. Or we recall what's traumatic and ignore what's subtle. "Where you stand today dictates what you see in the past," says Paul C. Nutt, author of

Why Decisions Fail and professor of management sciences at Ohio State University (Columbus, Ohio). Thus, he notes, Quaker seems to have decided to purchase Snapple because it attributed the success of the Gatorade buyout largely to Smithburg's insight rather than to its actual basis: good luck.

Making a decision based on historical precedent has numerous pitfalls. But if you're thinking you're better off not to factor in any memories—forget it. Research shows that you'll consider past experience subconsciously, even if you disregard it overtly.

Fortunately, we aren't doomed to use historical precedent to misinform today's decisions. In fact, we need past events, experts say, to help us cope with the mind-boggling complexity of today's critical business decisions.

What's more, the beneficial use of past experience doesn't have to be a complicated or time-consuming effort. "You don't need a Ph.D. in decision making to be a little more orderly in making decisions," says John S. Hammond, head of his own decision-making consulting firm in Lincoln, Mass., and a former professor at Harvard Business School.

Here are the most important steps that decision-making experts recommend:

1 Cross-examine every precedent

Subject the first historical precedent that occurs to you to a merciless bar-

rage of validity tests. Research shows that the memory that bubbles up first is more likely than any other to steer you toward a bad decision. We're often unconsciously recalling a past event that confirms the decision we're already leaning toward.

"It's called the prism effect," explains Jack Beauregard, CEO of the Cambridge, Mass., consulting firm Innervisions Associates. "We only recall the analogy that confirms our present thinking."

Ernest H. Forman, professor of management science at George Washington University and coauthor of Decision by Objectives (World Scientific, 2002), concurs. "We're all prone to go with what worked out well," he says. And we're led even further astray if that past outcome, like Ouaker's purchase of Gatorade, worked out by chance. "It's in your brain for the next 10 years" that your great insight produced the favorable result, says Forman. The top-of-mind recollection, once surfaced, tends to resist all logic that suggests its inapplicability. That's because the mind tends to overweight first thoughts and underweight subsequent evidence. This phenomenon is called "anchoring bias," says Hammond. "It's unbelievably powerful."

So how do you avoid it? "Look for disconfirming evidence," suggests Cornell University Graduate School of Management professor J. Edward Russo. "First, force yourself to list as many ways that your top-of-mind precedent is a mismatch as it is a match. Next, force yourself to come up with what at first seems to be a less similar precedent." Then try to list as many or more ways that it's a better match with your current decision than you listed for your first precedent.

The first precedent that comes to mind is often nearer in time to the current decision than it is closer in similarity. Get past this "recentness bias" by coming up with at least two events from the more distant past that seem in any way applicable, then follow Russo's advice to try to make them work better.

President John F. Kennedy battled recentness bias by having his aides read a history of World War I, says John C. Mowen, professor of marketing at Oklahoma State University, Stillwater. "JFK's intent was to get them thinking of precedents other than those arising from World War II," which they all had lived through and in which many, including the president, had fought.

Kennedy's successor, Lyndon Johnson, might have avoided the quagmire of the Vietnam War had he tested the top-of-mind precedent. "As an exercise, take the exact opposite view that memory presents," advises Fred Turner, a visiting scholar in communication at Stanford University and author of Echoes of Combat: Trauma, Memory, and the Vietnam War (University of Minnesota Press, 2001). That would have meant that the Johnson administration "would have considered whether their enemy, rather than they, had the popular support of the people—which we now know would have been a correct assumption."

Clearly, emotion and personal attachment loom large in dictating the historical precedent that most readily comes to mind. Another way to soften the outsize impact is to introduce more-objective decision-making criteria, a tack recommended by The GenSight Group (Doylestown, Pa.). "This helps you get the emotion and opinion out of recollections of past experience," says Jon Donnelly, vice president of strategic planning and process excellence for Janssen Pharmaceutica, a unit of Johnson & Johnson based in Titusville, N.J., that has started to implement decision processes suggested by GenSight.

"Much more often than not," says Donnelly, eliminating emotion and opinion also eliminates the supposedly analogous precedent in its entirety. "Suppose we are faced with alternative investments to either expand a sales force or invest in additional clinical trials. A decision maker who was once a field sales manager or a clinical director might base his recommendation on his experience of five or six years ago. That might have been a big factor—literally decisive in a traditional environment. We consider many factors today—both financial and strategic. As it is, the former sales manager or clinical director is as likely as anyone to eventually see that the precedent's current applicability is minimal or nonexistent."

2 Require proof of common knowledge

"Memory is contrived and re-created to suit our current needs," observes GenSight Group President Michael Menard. So apply factual research to the historical precedent that's so widely accepted in an organization that it's no longer challenged. Things deemed to be common knowledge are often the result of inferences made by the "primal" mind—they're a product of evolution, and so tend to be governed by emotions and instinct.

"We can't reverse evolution, but we can use our 'analytical' mind to understand and better cope with the ways evolution causes us to think," Menard continues. An essential part of applying our analytical mind in decision making "is to collect, manage, and visualize relevant data."

"The beauty of being able to display data is that it can be very objective," says Todd D. Render, director of research and development for Warsaw, Ind.—based DePuy Orthopaedics, another unit of Johnson & Johnson that is implementing GenSight's decision processes. "You can display multiple factors, such as risk and

expectations, in ways that make choices obvious to decision makers."

Render acknowledges that he can't quantify bottom-line benefits to the company of the new decision process. "But what I can say is that everyone—marketing, development, operations, and so forth—has input and everyone communicates. I think those may be our biggest gains. I'm certain we're getting better-quality decisions because we're using better inputs."

Those inputs need not be sophisticated or extensive. "Gathering data doesn't mean you study a decision to death," says consultant Larraine Segil, a former aerospace company CEO who is founding partner of The Lared Group, a strategic alliance advisory firm in Los Angeles. "What's important is doing some cognitive screening, which can get us sufficiently disentangled from our past experience to assess it intellectually."

3 Encourage others to challenge your thinking

The relevance of a particular historical precedent can be more solidly established if you invite others to comment on its validity—others who feel free to dismiss the past events you may consider significant. Just be careful that you don't restrict their comments. Says Forman: "Many CEOs ask for a briefing: 'Just give it to me in a nutshell.' You can't fit very much in a nutshell."

In general, the more people challenging your precedents and suggesting their own, the better, Forman continues, "particularly if they're people with motivations different from yours." Sometimes, however, the decision-making group can turn into a "BOGSAT" (bunch of old guys/gals sitting around talking). Such a bunch is highly prone to "groupthink," a term popularized by the late decision researcher Irving L. Janis in his classic 1982 book, *Groupthink*. Janis demonstrates how decision making

can go very wrong "when a 'wefeeling' of solidarity is running high" in a decision-making team and its members fall prey to "concurrenceseeking behavior."

The tendency toward decision biases, such as the recentness bias, increases when groups make decisions, as compared with when individuals do, says Oklahoma State's Mowen. "The dominant view will be enhanced as others participate." To counteract the tendency, "you need a devil's advocate," he says. "Among my five partners and me, at least one of us is playing devil's advocate for every significant decision," says James Segil, president and COO of Los Angeles—based enterprise software developer Knowledge-Base Solutions.

Turner approvingly calls the formal creation of a naysayer role an encouragement of "heretics and heretical thinking. Some people play that role intuitively," he says. "But in some large organizations, such as AT&T and Shell Oil, it's done intentionally, by design." Heretics also aid decision making by advocating radical departure from the path everyone else is taking. "They urge a contrarian decision. For example, if I were a venture capitalist right now, I might be investing heavily in dot-coms, because everyone else has fled that market following its traumatic meltdown."

Segil strongly endorses the contrarian approach. He launched his current enterprise just under two years ago, when the pervasive historical precedent looming over almost everyone's decision making was the dot-com crash. "It seemed to me to be the best time to start a business. Most people were too scared to do it. The few of us who did seem to be succeeding."

4 Never rely solely on precedent

"History, contrary to the popular saying, never precisely repeats itself," Turner asserts. "Looking to the past can often limit the possibilities you see in the future."

He notes that Shell was the only major oil company to anticipate the oil price shock of the 1970s. Why? "Because their then-new scenario planning team

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considered the possibility of something everyone else thought impossible: that oil prices could shock." It's called thinking outside the box, where the box is all past experience.

Which is not to say that historic precedent should ever be completely discarded. Russo notes that some people do that, saying, "Everything's changed."

5 Above all, develop a process

Surprisingly, seat-of-the-pants decision making predicated on false or flimsy precedent occurs more frequently in today's sophisticated global economy than you might imagine. "We're shocked by the extent to which corporate America continues to ignore even the most basic practice of good decision making," says Menard.

For hope—and guidance—cast an eye toward Detroit and a long-standing paragon of American enterprise. There, a decision process being implemented at General Motors is built around something called a decision record. This document asks a few simple but critical questions about a decision, explains Nick Pudar, director

of GM Strategic Initiatives. For example: What was the context of the decision? What was the decision? What resources were allocated? What alternatives were considered but not selected? Why? What assumptions were made? What outcome were you looking for? By when?

The document is completed and signed by the decision makers after a decision is reached but before it's implemented.

"It's quite an eye-opening experience," says Pudar. "People are forced to be clear. It can be painful. Decision makers will sometimes see the absence of substantiation staring at them from the page they filled out. But they can also solidify in their own minds exactly what they're deciding." *

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