When to TRUST Your GUT

How do business executives make crucial decisions? Often by relying on their keen intuitive skills, otherwise known as their "gut." But what exactly is gut instinct and how does it work? Scientists have recently uncovered some provocative clues that may change the way you work.

by Alden M. Hayashi

The intuitive insight that would save Chrysler in the 1990s came to Bob Lutz, then the company's president, during a weekend drive. On a warm day in 1988, Lutz took his Cobra roadster for a spin. As he raced along the roads in southeastern Michigan, he tried to relax, pushing aside what critics had been saying about Chrysler—that the company was brain-dead, technologically dated, and uninspired and that it lagged dangerously behind not only the Japanese automakers but also General Motors and Ford.
Ironically, Lutz found it difficult to enjoy himself precisely because he was finding the drive so pleasurable. “I felt guilty: there I was, the president of Chrysler, driving this great car that had such a strong Ford association,” he says, referring to the original Cobra’s Ford V-8 engine. In fact, Lutz’s strong sense of corporate loyalty had earlier led him to remove the “Powered by Ford” plaques from his car. Still, the guilt needled him, and on this drive he began wondering about replacing the Cobra’s engine with one from Chrysler. Perhaps then he could enjoy his beloved sports car in peace. But he quickly realized that Chrysler did not have a V-8 engine that was up to snuff. If he made the switch, the car would lose considerable performance. “Chrysler was way, way, way behind,” he remembers admitting to himself.

Soon Lutz’s mind was racing. Didn’t Chrysler have a powerful ten-cylinder engine in development for its new pickup truck? Could that be the answer? And, wait, wasn’t Chrysler also building a five-speed, heavy-duty manual transmission for that truck? Why not co-opt those monster parts for a sexy, expensive, two-seat concept sports car that would be as revolutionary as the Cobra had been in the 1960s? Wouldn’t that silence everyone who had written off Chrysler?

That Monday, Lutz leapt into action, enlisting important allies at Chrysler to develop a muscular, outrageous sports car that would turn heads and stop traffic. After seeing a full-size clay model of the car—later to become the Dodge Viper—Lutz was all the more determined. But the naysayers were many. Chrysler’s bean counters were arguing that the $80 million investment would be better spent elsewhere, perhaps to pay down the company’s debt or refurbish plants. The sales force warned that no U.S. automaker had ever succeeded in selling a $50,000 car. At the time, Dodge cars were priced under $20,000, and customers were mainly blue-collar workers. But Lutz persevered, pushing the project forward with unwavering commitment. Amazingly, he had no subconscious, visceral feeling. And it just felt right,” he says. Lutz is not alone. In my interviews with top executives known for their shrewd business instincts, none could articulate precisely how they routinely made important decisions that defied any logical analysis. To describe that vague feeling of knowing something without knowing exactly how or why, they used words like “professional judgment,” “intuition,” “gut instinct,” “inner voice,” and “hunch,” but they couldn’t describe the process much beyond that.

Intrigued, I turned to leading scientists who have studied how people make decisions. Although the inner workings of the human mind are a mystery that may never be solved, I found that recent research has uncovered some striking clues suggesting that our emotions and feelings might not only be important in our intuitive ability to make good decisions but may actually be essential. Furthermore, I was told, the type of instinctive genius that enables a CEO to craft the perfect strategy for usurping competitors could require an uncanny ability to detect patterns, perhaps subconsciously, that other people either overlook or mistake for random noise.

So, then, what exactly is your gut and how does it work? When does it tend to be right—and wrong? An explanation of how your intuition works may surprise you; it might even change the way you make decisions. Before that, though, comes a more basic question: why is your gut important in the first place?

An X Factor

Over the years, various management studies have found that executives routinely rely on their intuitions to solve complex problems when logical methods (such as a cost-benefit analysis) simply won’t do. In fact, the consensus is that the higher up on the corporate ladder people climb, the more they’ll need

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well-honed business instincts. In other words, intuition is one of the X factors separating the men from the boys.

Ralph S. Larsen, chair and CEO of Johnson & Johnson, explains the distinction: "Very often, people will do a brilliant job up through the middle management levels, where it's very heavily quantitative in terms of the decision-making. But then they reach senior management, where the problems get more complex and ambiguous, and we discover that their judgment or intuition is not what it should be. And when that happens, it's a problem; it's a big problem."

What has exacerbated that problem is that many companies now find themselves in increasingly turbulent waters. Thanks to rapid advances in technology (the Internet is a prime example), business models in some markets are changing seemingly overnight and new competitors are emerging from nowhere. "Often there is absolutely no way that you could have the time to thoroughly analyze every one of the options or alternatives available to you," says Larsen. "So you have to rely on your business judgment."

Richard Abdoo, chair and CEO of Wisconsin Energy Corporation, agrees. "As we move to a deregulated marketplace, we don't have this slow process of hearings and review and two years to make a decision. We now have to make decisions in a timely manner. And that means that we process the best information that's available and infer from it and use our intuition to make a decision."

Obviously, gut calls are better suited to some functions (corporate strategy and planning, marketing, public relations, human resources, and research and development) than others (production and operations management and finance). But the top jobs at any organization all require sound business instincts. J&J's Larsen uses an example to explain why: "When someone presents an acquisition proposal to me, the numbers always look terrific: the hurdle rates have been met; the return on investment is wonderful; the growth rate is just terrific. And I get all the reasons why this would be a good acquisition. But it's at that point—when I have a tremendous amount of quantitative information that's already been analyzed by very smart people—that I learn what I get paid. Because I will look at that information and I will know, intuitively, whether it's a good or bad deal."

After 11 years at the helm of J&J, Larsen says that one thing his experience has taught him is to listen to his instincts. "Ignoring them has led to some bad decisions," he notes. Adds Abdoo, "You end up consuming more Rolaids, but you have to learn to trust your intuition. Otherwise, at the point when you've gathered enough data to be 99.99% certain that the decision you're about to make is the correct one, that decision has become obsolete."

Many executives like Lutz, Larsen, and Abdoo have made multimillion-dollar decisions based on their gut instincts. How do they do it? A look at the biological basis of intuition may provide some insights.

**What Is Your "Gut"?**

Imagine that you're walking in the woods and suddenly come across a large rattlesnake. What happens right before you're consciously aware of the danger? Scientists say that the image of the snake quickly passes from your eyes to your brain, where the information reaches your visual thalamus, which then relays it to your amygdala. A major component of your limbic system, the amygdala then begins sending instructions to your body to increase your heart rate and blood pressure. At this point, though, your visual cortex has yet to confirm that the object you have encountered is indeed a rattlesnake.

Of course, fear is a primal emotion, and the gut instinct that tells a CEO to nix a business deal or promote one vice president over another is a far subtler feeling that is infinitely more complex. But there are two important points.

First, your mind continuously processes information that you are not consciously aware of, not only when you're asleep and dreaming but also when you're awake. This helps explain the "aha" sensation you experience when you learn something that you actually already knew. (This article may be eliciting that very reaction.) Henry Mintzberg, professor of management at McGill University and a longtime proponent of intuitive decision making, says the sense of revelation at the obvious occurs when your conscious mind finally learns something that your subconscious mind had already known. To distinguish between the two kinds of thought, Mintzberg and others have adopted the lay terms "left brain" for the conscious, rational, and logical and "right brain" for the subconscious, intuitive, and emotional. (Although the two terms are gross simplifications of how the human brain actually works, they do provide a convenient shorthand.)

Many executives have learned to tap into their right-brain thinking by jogging, daydreaming, listening to music, or using other meditative techniques. "I get most of my ideas while I'm taking a very long, hot, zoned-out shower in the morning," says Bob Pittman, president of America Online. Pittman also courts his intuitive skills by placing himself in unfamiliar situations. When he was CEO of Six Flags Entertainment, he once worked incognito as a janitor at one of the amusement parks, and on that day he had an epiphany that helped explain why Six Flags was having problems with its janitors being surly to guests. The reason, Pittman realized as he swept the streets, was because management had been ordering the janitors to keep the parks clean, and customers
were the ones who were making it dirty. “So we had to go back and redefine their jobs,” says Pittman. “We said, ‘Your main job isn’t to keep the park clean. Your main job is to make sure that people have the greatest day of their lives when they come to Six Flags!’ Oh, and by the way, what would prevent customers from enjoying themselves? A dirty park.”

Second, your brain is intricately linked to other parts of your body through an extensive nervous system as well as through chemical signals (hormones, neurotransmitters, and modulators). Consequently, some neuroscientists assert that what we call the “mind” is really this intertwined system of brain and body. This, then, helps explain why intuitive feelings are frequently accompanied by physical reactions. When Michael Eisner, CEO of the Walt Disney Company, hears a good idea, for example, he says his body often reacts in a certain way—he sometimes gets an unusual feeling in his stomach, other times in his throat, and other times on his skin. “The sensation is like looking at a great piece of art for the first time,” he says.

But how exactly could Eisner’s subconscious know that ABC’s Who Wants to Be a Millionaire—a game show, on prime time, no less—would become a smash hit? In other words, what makes some people’s right brain so smart?

The Importance of Being Emotional

Scientists are far from the answer to that question, but recent research has uncovered some provocative clues. Antonio R. Damasio, a leading neuroscientist at the University of Iowa College of Medicine, has been studying people who have suffered brain damage to a specific area in their prefrontal cortices, where we process secondary emotions, such as sorrow aroused through empathy (as opposed to primary emotions, such as fear triggered by the sight of a snake). Such patients retain normal function in many respects—their language and motor skills, attention, memory, intelligence—but they have trouble experiencing certain emotions. When shown photos of people injured in gruesome accidents, for example, they feel nothing.

During his research, Damasio began to notice something peculiar: these patients also had difficulty making simple, even trivial, decisions. In his book Descartes’ Error, Damasio recounts one particularly bizarre incident in which he asked a patient to choose between two dates for his next appointment. The patient pulled out his engagement book and began going through the myriad reasons for and against each date, taking into consideration his previous commitments, the proximity of them, the possible weather on the two days, and so on. After almost a half hour of listening to this excruciatingly tiresome—yet perfectly rational and logical—analysis, Damasio chose a date for the patient.

To explain this phenomenon, Damasio contends that decision making is far from a cold, analytic process. Instead, says Damasio, our emotions and feelings play a crucial role by helping us filter various possibilities quickly, even though our conscious mind might not be aware of the screening. Our intuitive feelings thus guide our decision making to the point at which our conscious mind is able to make good choices. So just as an abundance of emotion (anger, for example) can lead to faulty decisions, so can its paucity.

This point was echoed by Eisner. In my interview with him, he had great difficulty describing how his intuition worked. But when I asked about the possible role of emotions, his response was quick and emphatic: “Balanced emotions are crucial to intuitive decision making,” he declared. To explain further, Eisner cited the surrealist painter Marc Chagall’s imagery of a horse and man, the former symbolizing our emotions and the latter our rational intellect. “When Chagall drew paintings of a small horse and a giant man,” Eisner said, “the horse was too small and couldn’t get up on its feet. And when he drew a giant horse, the animal would throw the man off. But when Chagall drew pictures of the horse with the right kind of simpatico with the man—that is, emotions and intellect in balance—then you have instincts that are proper.”

A Pattern in Patterns

General intuition is one thing, the business instinct that tells a seasoned venture capitalist whether a start-up will succeed is another. Nobel laureate Herbert A. Simon, a professor of psychology and computer science at Carnegie Mellon University, has studied human decision making for decades and has come to the conclusion that experience enables people to chunk information so that they can store and retrieve it easily.

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In chess, for instance, Simon found that grand masters are able to recognize and recall perhaps 50,000 significant patterns (give or take a factor of two) of the astronomical number of ways in which the various pieces can be arranged on a board. Associated with that knowledge is important information, such as possible offensive and defensive maneuvers that each cluster of pieces
might suggest. "Experts see patterns that elicit from memory the things they know about such situations," says Simon.

AOL's Pittman couldn't agree more. "Staring at market data is like looking at a jigsaw puzzle," he says. "You have to figure out what the picture is. What does it all mean? It's not just a bunch of data. There's a message in there." This is why Pittman routinely loads himself up with as much data as possible. "Every time I get another data point," he explains, "I've added another piece to the jigsaw puzzle, and I'm closer to seeing the answer. And then, one day, the overall picture suddenly comes to me."

In his varied career, Pittman has seen many patterns at work. A cofounder of MTV, he rightly realized when he first arrived at America Online that the company's single most important job was to continue building and establishing its brand—just as it had been for MTV in its early days. Pittman also pushed hard for AOL to continue moving away from a business model based on consumer subscriptions. (Previously, AOL had charged customers by the hour before going to a flat monthly fee.) The bigger bucks, Pittman knew, were in advertising and e-commerce revenues, not in subscriptions. "Most people had been thinking about advertising as money coming out of people's media budgets. I wanted to take a broader view and define advertising as what it really is: renting our consumer relationship to unaffiliated third parties for money." That change in thinking was a masterstroke, enabling AOL to move to a multibillion-dollar revenue stream in just a few years. How could Pittman have intuited that? Perhaps he was influenced by his previous experience at Six Flags Entertainment: the profits from amusement parks derive mainly from selling merchandise and refreshments, not from the admission tickets.

Various studies of experts in diverse fields—parole officers predicting which criminals are likely to break the law again, doctors making diagnoses, school admissions officers predicting which students will succeed, and so on—have confirmed that professional judgment can often be reduced to patterns and rules. In fact, Robyn M. Dawes, a professor in the department of social and decision sciences at Carnegie Mellon University, has uncovered something surprising in his extensive review of these studies: statistical models based on rules typically outperform human experts. For one thing, Dawes says, the models are more consistent: they never suffer from a bad breakfast or a fight with a loved one.

Although little research has examined experts in the business field, several studies confirm Herbert Simon's contention that "intuition and judgment are simply analyses frozen into habit." In one experiment, for example, statistical models using numerous financial ratios (cash flow to total debt, for example) were more accurate in predicting whether a business would fail than bank loan officers making the same judgments. In a different study, statistical models performed as well as two types of retail experts: professional buyers forecasting the catalog sales of different fashion items and brand managers predicting the redemption rate of discount coupons.

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According to Simon, when we use our gut, we're drawing on rules and patterns that we can't quite articulate. "All the time," he says, "we are reaching conclusions on the basis of things that go on in our perceptual system, where we're aware of the result of the perception but we're not aware of the steps." Simon claims that intuition is merely those steps, that in-between mechanism that is mysterious only because we don't yet understand how it works. According to him, even extremely sophisticated processes, such as a CEO's deciding whether to acquire a company, can in principle be broken into patterns and rules.

"We've been working on expertise of one kind or another since the early 1970s," says Simon, "and wherever we've turned, we found that what distinguishes experts is that they have very good encyclopedias that are indexed, and pattern recognition is that index."

Cross-Indexing

Truly inspired decisions, however, seem to require an even more sophisticated mechanism: cross-indexing. Indeed, the ability to see similar patterns in disparate fields is what elevates a person's intuitive skills from good to sublime.

Remember Bob Lutz's decision to build the Viper? Today, he justifies that gutsy move by using an analogy. "When you're going too slow in an airplane," he explains, "your aerodynamic drag builds up because the nose of the airplane is positioned too high and you can actually get to the point where, even at full power, you can't get the airplane to climb anymore. So your only solution is to drop the nose and trade off some altitude to gain speed." Similarly, Chrysler in the late 1980s had lost so much momentum that it was in danger of stalling. To prevent that, the conventional wisdom called for cost cutting to gain altitude. But Lutz knew better. "People were saying, 'You're low and slow and you're struggling for altitude.' What an incredibly bad time to drop the nose and dive some more by spending cash on a frivolous vehicle like the Dodge Viper," he remembers. "But the Viper gave us the forward momentum we desperately needed, both internally and externally with the financial community, the automobile magazines, and all of those constituents that create the psychological climate in which your company either prospers or doesn't."

Lutz, a former Marine fighter pilot, says that when he first made the gut call to build the Viper, he was not consciously aware that an aerodynamic
analogy held the answer to Chrysler's plight. But it's entirely conceivable, he adds, that on a subconscious level your intuition made the connection. "I think I've always had this ability to think laterally," he says. "If I'm learning something specific, I find it very easy to relate it to analogous situations in completely unrelated fields. As long as I understand a basic mechanism, I can usually apply it to a whole lot of other things."

Obviously, the power of cross-indexing increases with the amount of material that can be cross-indexed. Says Lutz, "I find that in general management, people with varied and diverse backgrounds are, all other things being equal, going to probably be more valuable and will learn faster because they'll recognize more patterns." Lutz himself grew up in Europe and has a varied background that is part academic, part military, and part business. Eisner agrees that good intuitive skills must summon the entire mind. "When you see a gas station sign or a certain formation of the clouds," he says, "reams of historical information about yourself that you remember from when you were a child can pop into your mind. Gut instincts are the sum total of those experiences—millions and millions and millions of them. And that sum total enables you to make reasonable decisions."

Know—and Check—Thyself

That said, executives like Lutz and Eisner will be the first to admit that their instincts are often plain wrong. The fact is that various traits of human nature can easily cloud our decision making. For example, we will often take unnecessary risks to recover a loss—the classic gambler's syndrome. Another potential pitfall is our tendency to see patterns where none exist, what statisticians call "overfitting the data."

That our gut instincts are often wrong is exacerbated by the factors that prevent us from realizing just how faulty our intuition can be. First is a tendency toward revisionism: we frequently rehash decisions or do we just want some initial good fortune. However, Eisner still wants to make sure that person's success, in the end justify our original decision but obscuring whether our choice was actually a good one.

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A dangerous ingredient in this mix is our tendency toward overconfidence. Various surveys have found that we overestimate our ability in just about everything—driving, being able to tell which jokes are funny, distinguishing between European and U.S. handwriting, and so on. Take, for example, our ability to tell when others are lying. Paul Ekman, a professor of psychology at the University of California, San Francisco, has found that we are actually a lot less capable than we think—most of us have only a 50-50 chance of detecting a stranger's lies. The main problem, Ekman says, is that many of us never really find out whether our judgments are accurate, and this lack of feedback is pernicious. If we don't even know we've made mistakes, we can't learn from them, and this blissful ignorance leads us to gain unwarranted confidence in our abilities.

To avoid such pitfalls, many top executives seem to possess a powerful self-checking mechanism. "I am acutely aware of my decisions, and I'm much more aware of the bad decisions that I've made than the good ones," asserts Larsen. Abdoo, the Wisconsin Energy CEO, specifically sets aside about eight hours every week for riding his Harley motorcycle, walking, and working in his basement shop. "During those reflective times," he says, "I often rehash decisions I've made. And when I do, I frequently learn something that helps me when I'm confronted with similar situations in the future."

Such self-assessment can be continual throughout the decision-making process. Says Eisner, "I often sit back and ask myself: why are we doing this, and is it right for the company? Are we making this acquisition for the right reasons, or do we just want some initial good press in the Wall Street Journal?"
incidentally, Daniel Goleman, a pioneer in the field of emotional intelligence, lists self-awareness—people's ability to recognize their own moods, emotions, and drives—as one of the key criteria for effective leaders.

To see this self-checking mechanism in action, consider how Lutz avoided making a crucial mistake with the Viper project. "When I saw the initial design of the car, I was disappointed because I had expected something that would more closely resemble the original Cobra," he recalls. But soon Lutz became aware that his personal bias for the Cobra was tainting his gut reaction. "I then realized that, much as I liked the Cobra, we couldn't do that car again or it wouldn't have been a Chrysler car," he says. So Lutz in this case went against his instincts and approved the initial design, which became the successful signature look of the Viper.

Because self-checking and feedback are crucial for sound intuitive decisions, some organizations have made these processes part of the culture in executive suites. Top managers at companies like Johnson & Johnson routinely solicit the opinions of others when faced with tough choices. Says Larsen, "Whenever I have this uneasy feeling about a decision we're about to make, for example, about a new product or a major organizational change, I will often ask other trusted advisers who may not have been in the original discussion." The goal is to get to the root of the decision maker's uneasiness. "Then all of a sudden," he says, "the light goes on." And this is why, Larsen adds, "in our senior management group, we say we don't really make decisions, we extrude them."

But perhaps the greatest power of intuitive decision making coupled with continual feedback is that the process can be honed into an effective management style for quick action. Pittman is a leading practitioner. "Probably more than half of my decisions are wrong," he explains. "But if I have quick decision making, when I inevitably make the wrong decision, I can quickly change it to something else. And, therefore, over time I will have more right decisions working in our business than wrong ones." For example, Pittman might take a particular course of action based on certain assumptions (perhaps a pattern he thinks he sees); but he'll quickly change that decision when new information contradicts some of those assumptions (that is, perhaps the "pattern" really wasn't a pattern after all). Pittman, who is expected to assume a key position in the scheduled merged operations of AOL and media giant Time Warner, has this final piece of advice, culled from his years of experience in making gut calls: "Don't fall in love with your decisions. Everything's fluid. You have to constantly, subtly make and adjust your decisions."

Since my interview with Pittman and other executives, I have found myself trying to make and tweak decisions quickly based on my gut feel. And I no longer attempt to squelch my emotions during the process, although I vigilantly strive to discern the underlying reasons for those feelings. Even with little practice, I do think I have become slightly better at making smart choices, and I strongly believe that people can substantially increase their decision-making prowess by tapping into their intuitions. Pittman, who is expected to assume a key position in the scheduled merged operations of AOL and media giant Time Warner, has this final piece of advice, culled from his years of experience in making gut calls: "Don't fall in love with your decisions. Everything's fluid. You have to constantly, subtly make and adjust your decisions."

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