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JULY 10, 2006

COVER STORY

How Failure Breeds Success

Everyone fears failure. But breakthroughs depend on it. The best companies embrace their mistakes and learn from them



Ever heard of Choglit? How about OK Soda or Surge? Long after "New Coke" became nearly synonymous with innovation failure, these products joined Coca-Cola Co.'s (KO) graveyard of beverage busts.

COVER
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Choglit, in case you blinked and missed it, was a chocolate-flavored milk drink test-marketed with Nestlé (NSRGY) in 2002. OK Soda, unveiled in 1994, tried to capture Generation X with edgy marketing. The "OK Manifesto," parts of which were printed on cans in an attempt at hipster irony, asked: "What's the point of OK Soda?" It turned out customers wondered the same thing. And while

Surge did well initially, this me-too Mountain Dew later did anything but. Sales began drying up after five years.

Given that history, failure hardly seems like a subject Chairman and CEO E. Neville Isdell would want to trot out in front of investors. But Isdell did just that, deliberately airing the topic at Coke's annual meeting in April. "You will see some failures," he told the crowd. "As we take more risks, this is something we must accept as part of the regeneration process."

Warning Coke investors that the company might experience some flops is a little like warning Atlantans they might experience afternoon thunderstorms in July. But Isdell thinks it's vital. He wants Coke to take bigger risks, and to do that, he knows he needs to convince employees and shareholders that he will tolerate the failures that will inevitably result. That's the only way to change Coke's traditionally risk-averse culture. And given the importance of this goal, there's no podium too big for sending the signal. "Using [the annual meeting] occasion elevates the statement to another order of importance," Isdell said in an interview with *BusinessWeek*.



Slide Show >>

CLOSE TO BLASPHEMY

While few CEOs are as candid about the potential for failure as Isdell, many are wrestling with the same problem, trying to get their organizations to cozy up to the risk-taking that innovation requires. A warning: It's not going to be an easy shift. After years of cost-cutting initiatives and growing job insecurity, most employees don't exactly feel like putting themselves on the line. Add to that the heightened expectations by management on individual performance, and it's easy to see why so many opt to play it safe.

Indeed, for a generation of managers weaned on the rigors of Six Sigma error-elimination programs, embracing failure — gasp! — is close to blasphemy. Stefan H. Thomke, a professor at Harvard Business School and author of *Experimentation Matters*, says that when he talks to business groups, "I try to be provocative and say: 'Failure is not a bad thing.' I always have lots of people staring at me, [thinking] 'Have you lost your mind?' That's O.K. It gets their attention. [Failure] is so important to the experimental process."

That it is. Crucial, in fact. After all, that's why true, breakthrough innovation — an imperative in today's globally

competitive world, in which product cycles are shorter than ever – is so extraordinarily hard. It requires well-honed organizations built for efficiency and speed to do what feels unnatural: Explore. Experiment. Foul up, sometimes. Then repeat.

Granted, not all failures are praiseworthy. Some flops are just that: bad ideas. The eVilla, Sony Corp.'s (SNE) \$500 "Internet appliance." The Pontiac Aztek, General Motors Corp.'s (GM) ugly duckling "crossover" SUV. For good measure, we'll throw in our own industry's spectacularly useless flop: the CueCat. A marketer's dream, the device, which was launched in 2000 (when else?), scanned bar codes from magazine and newspaper ads, directing readers to Web sites so they wouldn't have to go to the trouble to type in the URL.

But intelligent failures – those that happen early and inexpensively and that contribute new insights about your customers – should be more than just tolerable. They should be encouraged. "Figuring out how to master this process of failing fast and failing cheap and fumbling toward success is probably the most important thing companies have to get good at," says Scott Anthony, the managing director at consulting firm Innosight.

"Getting good" at failure, however, doesn't mean creating anarchy out of organization. It means leaders – not just on a podium at the annual meeting, but in the trenches, every day – who create an environment safe for taking risks and who share stories of their own mistakes. It means bringing in outsiders unattached to a project's past. It means carving out time to reflect on failure, not just success.

FAILURE PARTIES

Perhaps most important, it means designing ways to measure performance that balance accountability with the freedom to make mistakes. People may fear failure, but they fear the consequences of it even more. "The performance culture really is in deep conflict with the learning culture," says Paul J. H. Schoemaker, CEO of consulting firm Decision Strategies International Inc. "It's an unusual executive who can balance these."

Some organizations have tried to measure performance in a way that accounts for these opposing pressures. At IBM (IBM) Research, engineers are evaluated on both one- and three-year time frames. The one-year term determines the bonus, while the three-year period decides rank and salary. The longer frame can help neutralize a year of setbacks. "A three-year evaluation cycle sends an important message to our researchers, demonstrating our commitment to investing in the early, risky stages of innovation," says Armando Garcia, vice-president for technical strategy and worldwide operations at IBM Research.

In addition to making sure performance evaluations take a long-term view, managers should also think about celebrating smart failures. (Those who repeat their mistakes, of course, should hardly be rewarded.) Thomas D. Kuczumski, a Chicago new-product development consultant, even proposes "failure parties" as a way of recognizing that it's part of the creative process. "What most companies do is put a wall around a failure as if it's radioactive," says Kuczumski.

Intuit Inc. (INTU), based in Mountain View, Calif., recently celebrated an adventurous marketing campaign that failed. The company had never targeted young tax filers before, and in early 2005 it tried to reach them through an ill-fated attempt to combine tax-filing drudgery with hip-hop style. Through a Web site called RockYourRefund.com, Intuit offered young people discounts to travel site Expedia Inc. (EXPE) and retailer Best Buy Co. (BBY) and the ability to deposit tax refunds directly into prepaid Visa cards issued by hip-hop mogul Russell Simmons.

But even hip-hop stars can't make 1040s cool enough to get young adults excited about taxes. "We did very few returns" through the site, says Rick Jensen, vice-president for product management at Intuit's consumer tax group. "It was almost a rounding error." Through a postmortem process, the team that developed the campaign documented its insights, such as the fact that Gen Yers don't visit destination Web sites that feel too much like advertising. Then, on a stage at the Dolce Hayes Mansion in San Jose, Calif., last October in front of some 200 Intuit marketers, the team received an award from Intuit Chairman Scott Cook. "It's only a failure if we fail to get the learning," says Cook.

In addition to postmortems, Intuit has begun plucking insights from its flops through sessions that focus on failure. Jana Eggers, who heads up Intuit's Innovation Lab, held the first such "When Learning Hurts" session recently. There, she recounted the story of QuickBase, a software application that failed for its initial market, small business

customers, but is now finding fans among large companies. Eggers hopes future conferences will feature even more presentations on failures. She also plans to distribute "narrative storytelling booklets" about failed projects so people can "feel the pain."

Unlike Intuit, most companies don't spend enough time and resources looking backward, says Chris Trimble, a professor at the Tuck School of Business at Dartmouth College and co-author of *10 Rules for Strategic Innovators*. That's a mistake. "How do you learn if you don't examine the past?" asks Trimble.

General Electric Co. (GE) is trying to do just that. The company, which is well-known for sharing best practices across its many units, has recently begun formally discussing failures, too. Last September the company set up a two-hour conference call for managers of eight "imagination breakthroughs" that didn't live up to expectations and were being shelved, or "retired," in GE's parlance. ("Imagination breakthroughs" – IBs – are new businesses or products that have potential sales of \$100 million within three to five years.)

Such discussions can be nerve-racking, especially in companies where failure has traditionally been met with tough consequences. That was the case at GE, which is now three years into the effort spearheaded by Chairman and CEO Jeffrey R. Immelt to make innovation the new mantra at the \$150 billion behemoth. "I had some offline conversations with some of the IB leaders reassuring them that this was not a call where they were going to get their pink slips," says Patia McGrath, a GE marketing director who helped put together the call. "The notion of taking big swings, and that it's O.K. to miss the swing, is something that's quite new with Jeff."

Some companies have gone even further, taking a comprehensive look at all their previous failures. That was the case at Corning Inc. (GLW), which found itself teetering on the brink of bankruptcy after the once red-hot market for its optical fiber collapsed during the telecom bust. Following that debacle, then-Corning CEO James R. Houghton asked Joseph A. Miller Jr., executive vice-president and chief technology officer, to produce an in-depth review of the company's 150-year history of innovation, documenting both failures and successes.

One of the failed products Corning investigated was the DNA microarray, or chip, which the company began developing in 1998. Genomics research was heating up at the time, with Dr. J. Craig Venter launching Celera Genomics that year. Corning, which makes laboratory sciences equipment, saw an opportunity. Its DNA chip was designed to print all 28,000 human genes onto a set of slides that could be used by researchers. By 2000, Corning had invested \$100 million in the project and announced a partnership with Massachusetts Institute of Technology.

"WE WERE LATE"

But while Corning was trying to launch the chip, another company, Affymetrix Inc. (AFFX), commercialized one. "They had the dominant design on microchips, and they were the first out," says Peter F. Volanakis, now Corning's chief operating officer. "We were late." Quality problems plagued the project, and customers had not been brought in early. With Corning in a freefall financially, the DNA chip was killed in 2001.

Still, the experience opened Corning up to a whole new market. "We had discovered the marketplace of drug discovery," says Miller. By combining its introduction to the drug research market with another failed business, photonics, which manipulates data using light waves, it created Epic, a revolutionary technology for drug testing that it will launch this fall. By using light waves instead of fluorescent dyes, Epic promises to accelerate dramatically the process of testing potential drugs and improve its accuracy.

One key difference? This time, 18 pharmaceutical companies have tested Epic before the launch. By 2010 to 2012, Jeff Mooney, who led Epic's development, projects that Epic sales could reach \$100 million to \$300 million a year, and more than \$500 million annually long-term.

As Corning learned from the DNA chip and with Epic, getting potential users in before a project goes too far helps to prove the market for it. But outside perspectives can also help neutralize emotions and biases about failing product lines, says Duke University Fuqua School of Business professor William Boulding. In research published in the April issue of the *Journal of Marketing*, Boulding and his colleagues contradict the common notion that teams cling to a project because they want to save face or salvage the "sunk costs." Rather, the problem is with the objectivity of the people involved. "Even if you're not on the hook in terms of financial embarrassment or psychological embarrassment," says Boulding, "you did form beliefs, and that causes you to warp new feedback."

That's why W.L. Gore & Associates Inc. in Newark, Del., makers of the waterproof fabric Gore-Tex, recognizes outsiders – people within Gore but not on the product development team – who make the call on projects that need to be pulled. When Brad Jones led Gore's Industrial Products Div., which makes sealants and filtration systems, he handed out "Sharp Shooter" trophies to these outside managers when a project was effectively killed. These marksmen, so to speak, freed from the trappings of familiarity, can identify potential snags that the team may have overlooked. "We're effusive in our thanks for that contribution," says Jones. "We ask them to write up what they learned from it, and how we could have made the decision [to kill the project] faster."

FIND YOUR OWN FLAWS

The mindset that Gore looks for in these outsiders – the ability to home in on uncertainties – requires employees to reframe their thinking. Most people naturally seek positive outcomes and set about trying to prove that an experiment works.

But designers, inventors, and scientists, all models for companies struggling to be more creative, take the opposite tack. They try to prove themselves wrong. That focus on potential flaws makes failure, and the lessons that come with it, happen earlier. Amy Edmondson, a professor at Harvard Business School who has studied how organizations learn from failure, says managers would do well to think more like scientists. "Failure provides more 'learning' in a strictly logical or technical sense" than success, she says. "It's a principle of the scientific method that you can only disconfirm, never confirm, a hypothesis."

Failure's capacity to teach is exactly why venture capitalists often look for managers to run startups whose résumés include experience with a flop. Gordon McCallum, CEO for Richard Branson's Virgin Management Ltd., can point to managers within Virgin who might have been overlooked by other companies because of failures in their careers. He's also quick to note that errors on the job, as long as they aren't repeated, are not only supported, but valued.

One example: Virgin Atlantic Airways Ltd.'s J2000 seats, a \$67 million investment made in 2000 to create new sleeper seats that reclined at an angle for the airline's "upper-class" seats. Although sleeper seats had long existed in first class, airlines had not yet adopted them for business class. Virgin was the first to announce it would be offering "a bed in business," says Joe Ferry, Virgin's head of design, who led the design of the J2000 seats. Within a year, however, Virgin's idea was one-upped by its chief competitor, British Airways PLC (BAB), which rolled out a truly flat bed. While customers were initially enthusiastic about the J2000, some complained about sliding and discomfort. In the end, says McCallum, it "was wildly unsuccessful. Everybody acknowledged that it was not as good a product as our principal competitors'." Agrees Ferry: "We were an also-ran, which didn't really sit well with us."

But Ferry didn't get the ax. In fact, Virgin entrusted him to take on another extraordinary risk, committing a huge \$127 million to an overhaul of the airline's upper-class seats years before the traditional product life cycle would have ended. And the company stuck by its investment even after September 11. The new version, launched in 2003, has been a solid success. Called the "upper-class suite," Ferry's makeover made a design leap beyond merely being flat. Flight attendants flip over the back and seat cushions to make the bed, allowing for different foam consistencies for sitting and sleeping. While Ferry hoped the new seats would eventually improve Virgin's business-class market share by 1%, they've already exceeded that goal.

TREMORS AND THRILLS

A company's reaction in the face of intelligent failures, whether it's Virgin reinvesting in a pricey design revamp or Intuit giving an award to its marketing team, can send tremors or thrills through a culture. If top executives are accepting, people will embrace risk. But if managers react harshly, people will retreat from it.

That's something Eric Brinker, JetBlue Airways Corp.'s (JBLU) director of brand management and customer experience, wants to make sure doesn't happen. Last year, JetBlue, which tries to limit its in-flight snack mix to keep costs low and reduce complexity, began hearing that some of its customers wanted a healthier choice. Brinker and his team decided to replace a popular but hardly healthy mix of Doritos chips called Munchie Mix. "It's the ultimate junk food," says Brinker.

The junk food fans revolted. "The tribe had spoken, and these guys wanted Munchie Mix," Brinker says. "People wrote really spirited letters, saying: 'This is the only reason I flew JetBlue!'" Brinker realized he would have to

reverse course, but he didn't want his team to think change wasn't encouraged.

So he decided to make fun of himself to keep the reaction lighthearted. On the company's intranet, Brinker started up a "Save the Munchie Mix" campaign that read: "Some pinhead in marketing decided to get rid of the Munchie Mix!" He invited employees to write in poems and stories about why the snack should return to JetBlue. The point? By keeping things fun, he hoped employees wouldn't hesitate to make their own creative decisions. "If we don't have people willing to risk something, then we'll really end up like our competitors." And that, of course, would be a failure indeed.

By Jena McGregor, with William C. Symonds in Boston, Dean Foust in Atlanta, and Diane Brady and Moira Herbst in New York

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SEPTEMBER 14, 2006

SMALL BIZ

By Stacy Perman

Some Brilliant Mistakes

Every entrepreneur errs, but these fumbles often provide a model for later success. Just ask Thomas Edison—or Bill Gates



SLIDE SHOW >>

Chances are, if you've been in business for any period of time, you've made a mistake. In fact, if you're an entrepreneur, making mistakes is part of your DNA, since entrepreneurs are invariably risk takers, and those that take risks make mistakes (see BusinessWeek.com, 7/10/06, "**How Failure Breeds Success**").

The key is to learn from those mistakes. Success is success, but it's rarely, if ever, achieved without failure along the way. After all, if it weren't for a few mistakes, those famous bicycle builders from Dayton, Ohio—Wilbur and Orville Wright—would never have flown for 12 seconds, 120 feet above in Kitty Hawk, N.C. And then where would modern aviation be?

Or take Thomas Edison. During the 1870s, the inventor of the phonograph and the light bulb encountered a number of misses en route to his legacy of enduring innovations. He picked the wrong business partners and invested in great concepts that unfortunately had no market. But he also learned valuable lessons from those mishaps, such as the importance of doing market research and the need to consider the economic factors of his inventions.

IMPORTANT FOUNDATION. Microsoft (**MSFT**) founder Bill Gates, who's responsible for what he has called some "expensive mistakes," once said: "In the corporate world, when someone makes a mistake, everyone runs for cover. At Microsoft, I try to put an end to that kind of thinking. It's fine to celebrate success, but it's more important to heed the lessons of failure. How a company deals with mistakes suggests how well it will bring out the best ideas and talents of its people, and how effectively it will respond to change."

While B-schools often make case studies of notable successes, it's the mistakes that test the mettle of any business. And any success is built on a foundation of mistakes, because mistakes are often challenges that force entrepreneurs to grow, compete, and to find new solutions on the way to ultimately achieving their goals.

To see a slide show on entrepreneurs' favorite business mistakes and how they dealt with them, [click here](#).

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