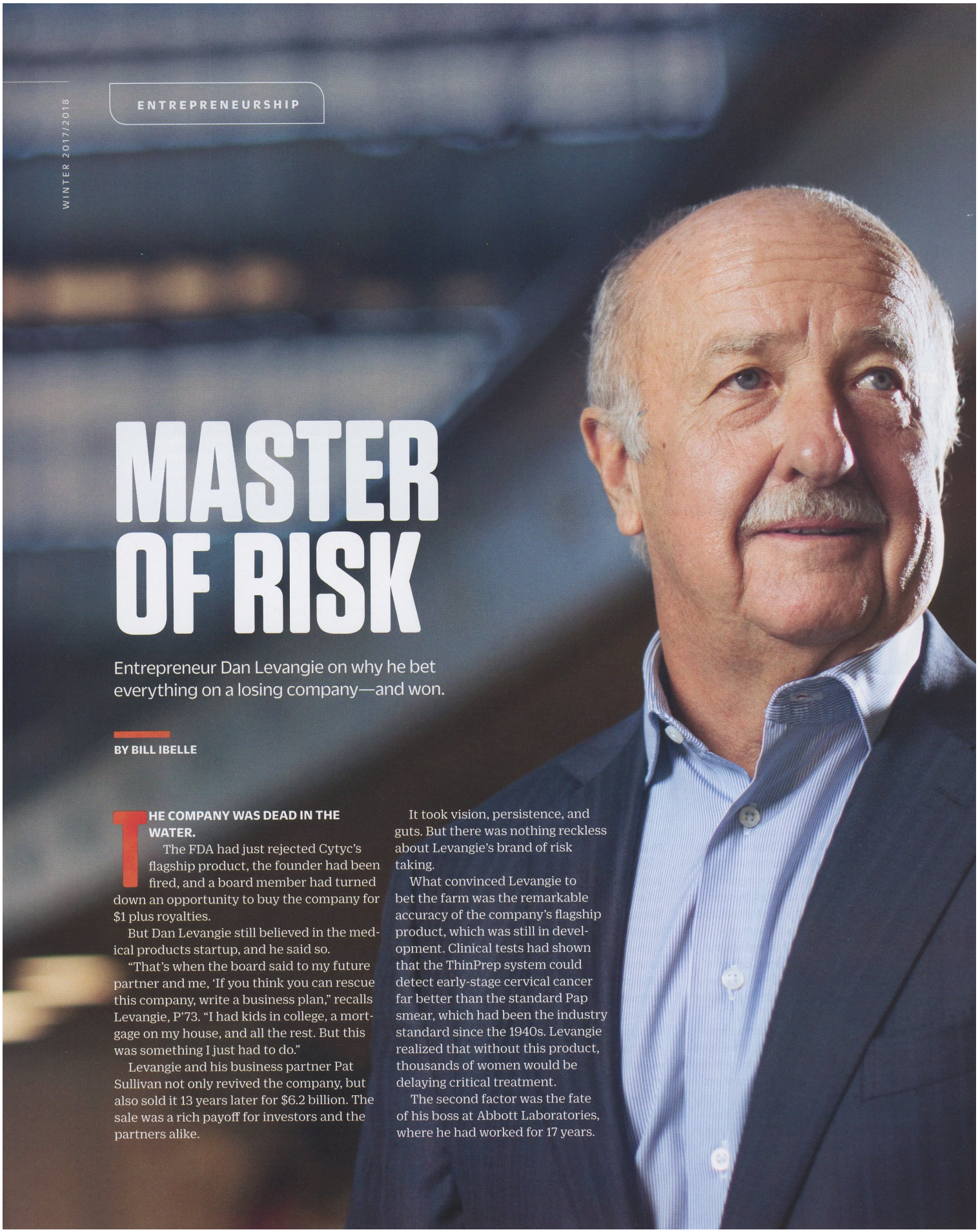

MASTER OF RISK

Entrepreneur Dan Levangie on why he bet everything on a losing company—and won.

BY BILL IBELLE

THE COMPANY WAS DEAD IN THE WATER.

The FDA had just rejected Cytyc's flagship product, the founder had been fired, and a board member had turned down an opportunity to buy the company for $1 plus royalties.

But Dan Levangie still believed in the medical products startup, and he said so.

"That's when the board said to my future partner and me, 'If you think you can rescue this company, write a business plan," recalls Levangie, P'73. "I had kids in college, a mortgage on my house, and all the rest. But this was something I just had to do."

Levangie and his business partner Pat Sullivan not only revived the company, but also sold it 13 years later for $6.2 billion. The sale was a rich payoff for investors and the partners alike.

It took vision, persistence, and guts. But there was nothing reckless about Levangie's brand of risk taking.

What convinced Levangie to bet the farm was the remarkable accuracy of the company's flagship product, which was still in development. Clinical tests had shown that the ThinPrep system could detect early-stage cervical cancer far better than the standard Pap smear, which had been the industry standard since the 1940s. Levangie realized that without this product, thousands of women would be delaying critical treatment.

The second factor was the fate of his boss at Abbott Laboratories, where he had worked for 17 years.

"THE YEARS 1996 TO 1999 WERE TOUGH YEARS FOR US. WE WERE RUNNING ON FUMES."

–DAN LEVANGIE, P'73

"When I was at Abbott—a very successful company with 40,000 employees worldwide—the CEO changed several times, and the stock prices didn't change," he says. "I thought, 'If the CEO's not important, how important am I?' That's when I decided that I wanted to take a risk with an early-stage company and see how good I was."

So Levangie made the leap. But within a year, the FDA rejected the product, and Cytyc was about to fold up shop. Levangie and Sullivan saw it as an opportunity.

"We were taking on a 50-year standard of care [the Pap smear] that was widely available, inexpensive, and reasonably effective," he says. "But this was my chance to build a company that had a highly differentiated product that could make a difference in the care of patients."

Levangie and Sullivan hit the fundraising trail to raise the money needed to keep the company alive while they ran a new series of clinical trials. It wasn't easy.

"I remember one meeting in a fancy office in a Boston high-rise with a view out over the harbor," he says. "We walked into a room with six potential investors, so there were eight of us altogether. But when the caterers arrived, they only brought six lunches. That sent a pretty clear message."

They persisted, raised the money, ran the improved clinical trials, and a year later, in 1996, the FDA approved the product. But their troubles were far from over.

"We hit another wall when the insurance industry refused to provide reimbursement for the test," he says.

So the partners hit the road again, putting on 80 presentations in two weeks to take the company public and raise the money needed to keep it afloat.

"The years 1996 to 1999 were tough years for us," he says. "Fighting the reimbursement battle was expensive and frustrating for the company and our advocates."

In the end, they won that battle, too—and the rest is history.

"When the Pap smear was introduced in the 1940s, the number of cases of cervical cancer in the U.S. steadily dropped from 40,000 a year to 15,000 a year," says Levangie. "The incidence rate stayed steady for 30 years until we came up with a better test. With the adoption of the ThinPrep System, that number fell to 9,000 a year."

MAINTAINING MOMENTUM

Not long after they sold Cytyc in 2007, Levangie and Sullivan were at a Christmas party and struck up a conversation with a former colleague. The partners had recently formed Constitution Medical Investors and were searching for their next big innovation.

"He mentioned that he was flying to Japan in the morning to raise money for a new medical device he had invented," says Levangie. "We had him draw the product concept out on a napkin and when he finished, we said, 'Don't go to Japan.'"

Although this may sound impulsive, it was far from reckless. The provisional agreement was based on mutual trust from their years together at Cytyc—and they didn't reach a formal investment agreement until they spent six months doing market research with physicians and negotiating an agreement with investors.

The device was Bloodhound, which increased the efficiency of the complete blood count, a ubiquitous medical test used in routine physical exams to diagnose hundreds of diseases.

It took five years to develop the product, and in 2013, they sold the company to Roche Diagnostics—the world's largest in vitro diagnostics company—for more than five times their investment.

NOT MADE FOR RETIREMENT

At age 63, Levangie was officially retired. But that didn't last long. He and Sullivan teamed up again to form ATON Partners. Their first company is CereVasc, which

DAN LEVANGIE'S latest project is developing a treatment for hydrocephalus, or water on the brain.

"WE BECAME ALMOST RELIGIOUS ABOUT CONDUCTING INTENSIVE PRODUCT REVIEWS."

is developing a medical device to revolutionize the treatment of hydrocephalus, commonly known as water on the brain. The eShunt System, which is being tested in animals, would simplify the surgery needed to insert brain shunts to drain fluid.

"The current treatment requires extremely invasive brain surgery, general anesthesia, and two to four days of hospitalization," says Levangie. "In the current procedure, a neurosurgeon drills a hole in your skull, inserts a plastic straw aimed for the ventricle that contains excess fluid, and then tunnels under the skin with a catheter from your scalp to your abdomen. The failure rate is 40 percent in the first year after surgery, which requires a repeat procedure."

The eShunt System will allow placement of a tiny shunt endovascularly by going through the vein in the groin, up through the heart, and into the cerebral vasculature, taking a page from the treatment of stroke victims.

"This may allow a procedure that can be done in day surgery with conscious sedation," he says.

Levangie attributes his long string of successes to diligent market research.

"Over the years, we became almost religious about conducting intensive product reviews with potential customers, who are typically doctors and hospitals," he says. "We start with a thesis about why the product will improve care and decrease costs—and then we test that thesis with as many potential users as possible."

Sometimes their enthusiasm is confirmed by medical specialists, as was the case with the ThinPrep System, the Bloodhound System, and the eShunt System, but there have also been times the feedback was surprising. For example, in 2005, they were preparing to invest in a product that would predict premature rupture of membranes during preterm labor. It was accurate and simple to perform.

"But when we interviewed physicians, their feedback was lukewarm," he said. "We learned that doctors today are far more tuned in to high-risk pregnancies than they were 20 years ago, and the predictive accuracy of this test just didn't provide enough value."

Their meticulous research prevented what could have been a lackluster investment.

Levangie has come a long way from the kid from Braintree, Massachusetts, who worked three jobs to put himself through Northeastern.

"I worked at Goddard Hospital, and when I was done there, I went to my job at Cardinal Cushing Hospital, and in between, I worked in the meat department at Stop & Shop," he says. "That's the kind of gritty mentality that I saw at Northeastern with many of my classmates and has stayed with me my entire life."