New initiatives often gain momentum even as it becomes clear that they're doomed. The reason: blind faith in their success.
YOU CAN STILL FIND THEM on eBay, sleek and gleaming videodisc players with LP-sized discs. The product: RCA's SelectaVision — one of the biggest consumer electronics flops of all time.

But it isn't simply the monumental failure in the marketplace that makes the SelectaVision story worth remembering. It's that RCA insisted on plowing money into the product long after all signs pointed to near certain failure. When the company developed its first prototype in 1970, some experts already considered the phonograph-like technology obsolete. Seven years later, with the quality of VCRs improving and digital technology on the horizon, every one of RCA's competitors had abandoned videodisc research. Even in the face of tepid consumer response to SelectaVision's launch in 1981, RCA continued to develop new models and invest in production capacity.
When the product was finally killed in 1984, it had cost the company an astounding $580 million and had tied up resources for 14 years.

Companies make similar mistakes – if on a somewhat more modest scale – all the time. Of course, hindsight is 20/20; it's easy after the fact to criticize bold bets that didn’t pay off. But too often managers charge ahead in the face of mounting evidence that success is pretty well unachievable.

Why can’t companies kill projects that are clearly doomed? Is it just poor management? Bureaucratic inertia? My research has uncovered something quite different. Hardly the product of managerial incompetence or entrenched bureaucracy, the failures I’ve examined resulted, ironically, from a fervent and widespread belief among managers in the inevitability of their projects’ ultimate success. This sentiment typically originates, naturally enough, with a project’s champion; it then spreads throughout the organization, often to the highest levels, reinforcing itself each step of the way. The result is what I call collective belief, and it can lead an otherwise rational organization into some very irrational behavior.

Of course, a strongly held conviction and the refusal to let inevitable setbacks undermine it are just what you need to get a project up and running. But there is a dark side: As the project moves forward, faith can blind you to increasingly negative feedback – from the lab, from vendors and partners, from customers.

To better understand why this happens and what can be done to prevent it, I analyzed two failed product innovations at two large French companies. (For a brief description of my research, see the sidebar “What Were They Thinking?”) One was a new lens created by Essilor, the world’s largest maker of corrective lenses for eyeglasses. The other was an industrial additive used in manufacturing paper, paint, and plastics, developed by Lafarge, the largest producer of building materials. In both cases, the projects absorbed millions of dollars of investment before the companies finally abandoned them.

My analysis revealed a number of practices that can help companies avoid this kind of disaster. For one, they can assemble project teams not entirely composed of people enthusiastically singing from the same hymnbook. They can put in place a well-defined review process – and then follow it. Perhaps most important, companies need to recognize the role of “exit champions”: managers with the temperament and credibility to question the prevailing belief, demand hard data on the viability of the project, and, if necessary, forcefully make the case that it should be killed. While the importance of project champions is well documented, the value of someone who is able to pull the plug on a project before it becomes a money sink hasn’t generally been appreciated.

**Faith That Wouldn’t Be Shattered**

Essilor has long been proud of its research. In 1959, it invented the Varilux “progressive” lens, for instance, which corrects both near- and farsightedness without the telltale lines that denote traditional bifocals. But this story starts in the summer of 1979, when a similar breakthrough appears possible. Since 1974, the company has been working on a composite glass-and-plastic material that’s lightweight, shatter resistant, scratch resistant, and light sensitive.

Now a researcher has come up with a way to make a lens from this material. Essilor’s research manager immediately takes a personal interest in the idea, and he orders the creation of a trial lens. Two days later, it’s done.

The news spreads quickly throughout the company and is greeted enthusiastically. The research manager seeks and gets approval to proceed with additional research. The CEO himself helps select the managers who will oversee the project, many of whom have worked together on the Varilux lens and other successful projects.

Early on, some questions are raised about the potential cost of this new composite lens, as well as its durability. It’s common for layers of any composite material to separate. Indeed, the director of research and manufacturing questions whether the product is even viable. But his concern isn’t heeded because he is, as one colleague says, “always skeptical.” No initial marketing studies are conducted, but none had been done for Varilux, either; in both cases, the projects are driven by the exciting technology. Based on the current sales of other Essilor products, internal estimates predict sales of nearly 40 million units a year by 1985. In April 1980, the project is accepted for development and a target launch date is set for late 1981. Excitement is high.

In September 1980 though, some bad news arrives: Corning, which supplies the glass for the composite lens, says that meeting the U.S. Food and Drug Administration’s test for shatter resistance is proving more difficult than expected. If this continues to be the case, company estimates indicate that sales in 1985 will total just 10 mil-

*Isabelle Royer is an assistant professor at the University of Paris, Dauphine, and is affiliated with the university’s DMSP Research Center, which focuses on marketing and strategy issues.*
lion units. Then, pilot tests in January 1981 reveal a number of other problems, including a tendency of the lens to crack as it's mounted into the frame. Researchers are confident that this problem can be solved (though the company later decides it will offer an exchange guarantee to opticians). Despite the problems revealed in the pilot test, production facilities are built, and trial manufacturing begins. But now another issue arises: Production costs turn out to be twice what was forecast, which will make the lens as much as six times as expensive as normal lenses.

Essilor proudly launches the lens in June 1982. The president of the company sends a sample to the French Ministry of Industry. One researcher tucks a prototype away in his attic so that he can someday show his son “how you do innovation.” The manager who unveils the lens at a press conference says he feels a sense of “real jubilation.”

Customers are less enthusiastic. Opticians complain about the price and the difficulties of mounting the lens. Essilor has forecast sales of 200,000 units by the end of 1982, a number limited solely by initial production capacity. But sales reach just 20,000 by that date. What's more, concerns about the tendency of the lens's layers to separate are proving justified.

These setbacks are an emotional blow to those involved in the project but are not enough to destroy their belief. “It felt like a knockout,” one recalls. “Still, although we were in shock, we knew failure was impossible.” After all, those involved point out, initial sales of Varilux had also been slow, because people found the progressive lens difficult to get used to.

The problems continue. In 1985, Essilor launches a second-generation lens meant to fix the separation problems, but it fails to do so. Sales drop below 15,000 units a year. In 1986, a modified composite material solves the separation problem, but the lens remains difficult for opticians to mount in the frame. Researchers are asked to fix this problem before the company will commit itself to launching a third-generation lens.

After a year of further research, the problem still isn't solved. But the research manager argues to the executive committee that, since the separation problem has been corrected, the third-generation lens should be launched. The company does so at the end of 1987, and, in 1988, sales grow to a lackluster 50,000 units.

Then, in the spring of 1989, because of retirements and a restructuring of the company's overall research and production activities, four new managers join the project. A new research manager replaces the lens's foremost champion. In September, the new research manager completes his own evaluation of the project. Sales are still low, and the U.S. market remains out of reach because the lens still hasn't passed the FDA test. The investment needed to develop a full range of products, including a progressive lens, could double what has been spent so far. He recommends that the lens be abandoned.

Top management rejects his recommendation. The company does decide, however, to conduct a thorough evaluation of the project. To no one's surprise, a business analysis shows that the lens currently doesn't generate a profit. But a marketing study further concludes that even if the quality problems are ironed out, potential sales will reach only 1.5 million units per year, a fraction of the 40 million originally predicted. The implication: The lens will never be very profitable.

In September 1990, with quality problems still unsolved and no prospect of passing the FDA test, the company decides to call an immediate halt to research on the lens and stop production within a year. It's been ten years since the first warning signs arose. It has cost Essilor Fr 300 million, or more than $50 million in 1990 dollars.
A Belief in Crystals

Lafarge, like Essilor, has a big stake in the success of the product it is developing. It's early 1985, and research that Lafarge has done on the crystallization of gypsum, a mineral commonly used in the company's core building-materials businesses, looks like it is about to bear fruit. The engineering manager of the gypsum division has concluded that the crystals could serve as a superior substitute for the ground-up minerals commonly used in making paper and paint. The market could be large: One internal forecast puts potential annual sales at Fr 400 million, or about $40 million at the time. And pride as well as profit is at stake. Lafarge has typically grown through acquisition; here is a chance for the company to prove it can grow organically by leveraging its resources into new businesses.

Later that year, the engineering manager of the gypsum division begins research on the use of the crystals as a paper filler (something added to paper stock to improve such physical or optical properties as texture or opacity). He finds a partner in a big paper producer, Aussedat Rey. The engineering manager and his boss, the division's director of operations, seek and receive project backing from Lafarge's top management. Because the crystal-based approach is so innovative, enthusiasm quickly grows.

Over the next several years, the project enjoys both successes and setbacks. The paper filler product is superior in a number of ways to existing fillers, and the crystals turn out to have another potential application in plastics manufacturing. Aussedat Rey agrees to pay for further paper filler tests.

These highlight several problems. The product has the potential to clog certain papermaking machines. And it is not concentrated enough, making it relatively expensive for customers to use. Researchers are confident, however, that these problems can be solved. Lafarge's top management accepts the project for development, including applications for paper, paint, and plastics, and sets 1990 as the target launch date.

Aussedat Rey's first production trial of the paper filler in December 1987 is a technical success, although the paper company still wants a more concentrated version. The successful trial heightens Lafarge's optimism; informal estimates of annual sales grow to Fr 1 billion, or about $190 million in 1988 dollars. To be sure, projections indicate that the paper filler itself probably won't be profitable. But the full range of products for paper, paint, and plastics taken together should be. Unfortunately, only the paper filler has advanced beyond the laboratory stage.

Still, people are eager to get the product to market. To begin production in 1990, the gypsum division's director of operations needs funding to break ground on the plant in 1989. At the end of 1988, Lafarge's top management, aware that tests on the more-concentrated version of the paper filler have not yet been run, approves funding for the plant, so long as certain criteria are met. Before the money is released, the project team must have "verified the feasibility of the manufacturing process in the pilot workshop and the product's quality and acceptability to customers."

This tentative go-ahead is greeted enthusiastically by project members. A lone dissenting voice is Lafarge's new mineral-fillers manager, recently recruited from a consumer products company. He raises concerns about remaining technical challenges, especially after a more-concentrated version of the paper filler fails a new test at Aussedat Rey. But his concerns are generally ignored because of his lack of experience in industrial products. In fact, others involved in the project repeatedly remind him of this fact. He stops raising questions — and ultimately resigns.

Meanwhile, Aussedat Rey is showing less interest in the paper filler and repeatedly delays further trials. (It later will sever its relationship with Lafarge because the price of the paper filler is too high.) The paper filler's "quality and acceptability to customers" — the criteria that must be met to receive funding for the plant — seem far from assured. And yet, after a presentation by members of the project, top management gives the plant a green light, and it is inaugurated in September 1990. Several weeks later, at Lafarge's annual meeting of researchers from labs across the company, the paper filler researchers and their managers present the project as an example of a successful internal research initiative.

But the new plant remains idle, as no product has yet emerged from the lab that is ready for production and no customer or partner has been found to fund further tests.

Meanwhile, one of the project's champions, the gypsum division's director of operations, has left Lafarge for health reasons and has been replaced by an operations director from another division of the company. He forms a task force to formally evaluate the viability of the project. This isn't easy because of the lack of data. For example, although an initial market study was done, there have been no follow-ups to gauge demand for a product that is now likely to lack some of the features originally envisioned. Still, in April 1991, the task force's report confirms that the paper filler itself won't be profitable and estimates that two years and another Fr 30 million (about $5.3 million in 1991 dollars) would be needed to get other products ready for pilot testing. The new director of operations recommends terminating the project.

Most team members agree with the factual findings, but many reject the recommendation that the project be killed. So, although top management stops development of the paper filler, it authorizes continued research on products to be used in paper coating and plastics manufacturing. At the end of 1991, however, a test of the paper-
coating product produces poor results and offers little hope that it can be improved. In early 1992, the plant is sold and the entire project is stopped, having cost a total of Fr 150 million (nearly $30 million in 1992 dollars) over seven years.

The Seductive Appeal of Collective Belief

So what got into the decision makers at these two companies? Why did Essilor persist with the development of its new lens in the face of so much negative evidence? Why did Lafarge build a brand-new production facility before determining whether its gypsum crystal additive had a future in the marketplace?

These were not cases of bureaucratic inertia. If anything, the procedures and controls over these projects were too lax rather than too unresponsive or inflexible. Nor were these cases in which project champions were flogging a dead horse to justify their original touting of it. What the many interviews and myriad contemporary documents reveal in both companies is the power, and troublesome implications, of a very human impulse: the desire to believe in something—in these situations, in the projects' ultimate success. In both companies, this belief was held not just by a handful of individuals but by much of their organizations.

How does that happen? Collective belief arises because individual belief is often contagious, particularly when it reinforces others' perceptions and desires. When this is the case, the belief can spread easily among the various decision makers who control a project's fate. Here's how that played out at Lafarge and Essilor.

The Emergence of Belief. The original true believer is a project champion, who holds an unyielding conviction—based, often as not, on a hunch rather than on strong evidence—that a project will succeed. This belief then spreads to others; how quickly and with what intensity depends on a number of factors. Some of these are organizational and some are particular to the champion—for example, his personal credibility and charisma and the robustness and range of his social network within the company. Indeed, if the champion's reputation is strong enough, the belief can pass from person to person until it is shared by individuals who don't even know the champion and know little of the project.

At Lafarge, two project members candidly admitted that they couldn't truly assess the potential of the new product but took the word of one of the project's champions that it was a winner.

Belief in a project is all the more contagious when its ultimate success is something that people greatly desire. For both Essilor and Lafarge, the two projects furthered important companywide goals: the development of products that embodied a strong technological tradition of "research for the sake of vision" at Essilor, and the desire to generate organic growth rather than growth through acquisition at Lafarge.

But a project can also satisfy individual desires, ones that are often quite various and even potentially conflicting. Some at Essilor reported they saw the lens as something "that would permanently eliminate competitors." Others hoped the project would maintain employment levels in the glass factories as plastic lenses grew in popularity. Some senior executives saw the composite glass-and-plastic lens as a way to strengthen corporate culture: Essilor was born from the merger of Essel, a glass-lens manufacturer, and Silor, a rival that made plastic lenses, and the two divisions still competed against each other.

At Lafarge, some viewed the new additive as a way to enhance the reputation of the company's R&D function. Others saw it as a strategically important move beyond building materials. In both companies, the collective belief served as an umbrella that sheltered an array of hopes and dreams; those, in turn, worked together to reinforce the collective belief.

The Persistence of Belief. Once a collective belief takes hold, it tends to perpetuate itself. For one thing, groups have a way of drowning out dissent. At Essilor and Lafarge, both lone initial dissidents—Essilor's director of research and manufacturing and Lafarge's mineral fillers manager—were generally ignored or told that the questions they raised reflected their lack of experience or competence. Eventually, they stopped raising questions. This self-censorship gave the groups an illusion of unanimity and invulnerability, which in turn helped sustain individual belief. One manager at Essilor said that the lens's failure in the market in 1982 raised doubts in his mind. But he chose not to voice these and, because of the group's apparent unanimity, soon forgot them.

Curiously, setbacks, rather than undermining faith, often drive people to work all the harder to maintain it. Despite the Essilor lens's poor market performance, the company continued to produce it in vast quantities, consistently more than were sold. Since project members believed the market failure was only a prelude to ultimate success, they exhibited what one manager called "technological relentlessness" in their pursuit of both improvements and customers.
This intensity is not surprising, given the emotional attachment people feel for a project they passionately believe in. As one Essilor manager said of an early version of the lens: "It was a dream, and a dream come true on top of that! The product existed! It was beautiful." Another manager, recalling a setback in lens development, observed, "We didn't dare wonder whether we should stop or not. It was too hard."

The Consequences of Belief. The greatest danger posed by an organization's collective belief in a project is that problems, even if acknowledged, won't be seen as signs of failure— or at least as issues that should be resolved before moving on to the next stage of development. At Essilor, some managers explained away the lukewarm initial demand for the lens as an aberration related to the soon-to-be-solved technical problem of layer separation, forgetting that the market was generally unaware of this problem. At Lafarge, one manager knew that the decision to build the plant was probably premature, given the available test results for the product, but he said nothing because he was eager to move forward on an enterprise everyone was certain would succeed. Managers at
both companies referred to the blindness that resulted from their faith in the projects.

This blindness persists in part because collective belief undermines normal organizational procedures and safeguards. For one thing, the enthusiasm generated by faith in a project can lead to an unrealistically tight development timetable. Essilor canceled some tests and substituted shorter, less reliable ones in order to stick to its aggressive development schedule. A test to see how durable the lenses remained over time, for example, was shortened from two years to six months. Lafarge’s desire to remain on schedule was the driving force in the construction of the plant before necessary tests on the additive had been completed.

Enthusiasm also can result in lenient procedures for reviewing the viability of a product throughout its development. For instance, scratch-resistance specifications for Essilor’s new lens were not defined until 1990, eight years after the product was initially launched. Furthermore, widespread enthusiasm can lead to the formation of a project team filled with, and overseen by, uncritical boosters of the initiative.

Together, these factors can create a reinforcing chain that perpetuates collective belief. Decision makers’ faith in the project results in an absence of clear decision criteria, which leads to ambiguous information, which in turn favors wishful thinking by those decision makers and further bolsters their belief in the project’s success. In a sense, the project takes on a life of its own.

Avoiding the Dangers of Blind Faith

In your own company, you have undoubtedly known projects that dragged on but went nowhere. You may be aware of a handful of bad projects that are grinding along, or even picking up speed, right now. How can companies prevent this sort of thing? How could the managers at Essilor, for example, have known that the composite lens project wouldn’t turn out the way the Varilux lens effort did?

They probably couldn’t, at least for a while. But they could have done a number of things that would have made them better able to judge their progress and counteract the distorting effects of collective belief. Two kinds of safeguards can be built into a project before it even gets under way. Another one requires a manager involved in a project to play an important, new role.

Beware of cheerleading squads. All too often, project teams are self-selected. They include people who have volunteered because they share an initial enthusiasm for the project. They may even have worked together on successful projects in the past. They know the drill and can anticipate one another’s moves. In fact, they know them too well. As they interact, there are none of the awkward missteps or misunderstandings that can produce unexpected insights—or signs of trouble. Warning flags that do appear may be ignored; after all, everyone is rooting for something they believe in.

Executives launching a project would do well, then, to include skeptics along with believers in the project teams from the outset, paying particular attention to those who will be directly involved in making decisions. Then, over the course of the initiative, some decision makers should be replaced with others, who will look at the project with fresh eyes.

At Essilor and Lafarge, top management populated the projects with true believers. In fact, in both cases, the sole initial critics joined the projects somewhat by chance. Essilor’s director of research and manufacturing was involved only because he was the immediate supervisor of the manager of the plant where the lens would be made. Lafarge’s mineral-fillers manager had originally been hired for another job and joined the project only because Lafarge had difficulty finding someone with both minerals and project expertise to fill out the team. At Essilor, personal relationships also came into play; some members had been friends for 20 years—a further reason that robust criticism, which might jeopardize those friendships, didn’t emerge.

Only when turnover occurred for reasons unrelated to the project—retirement, health problems, the restructuring of a companywide research function—was the cohesiveness of the project groups disrupted and some measure of objectivity introduced.

Establish an early warning system. From the start, no matter how exciting or important a project is, a company needs to make sure that its control procedures and criteria for evaluating project viability at each stage of development are truly working—that they are clearly defined, rigorous, and actually met. Big companies like Essilor and Lafarge typically have these kinds of effective internal controls for all sorts of processes—for example, “stage gates” that companies must go through as they proceed with a potential acquisition. But they can easily forget to establish such structures at the beginning of a project that seems bound for glory. Or even if they do establish processes for good decision making, they can end up ignoring them—or the results—amid the excitement generated by a new project.

Lafarge executives concede that they failed to adhere to their own decision criteria when they went ahead and built the plant—although the criteria were vague enough to make this fairly easy to do. Essilor had several clear procedures for testing the lens during development that weren’t followed; others produced negative results, which were ignored. As one Essilor manager said: “The decision to launch was implicit. It was just a question of when.”

Recognize the role of the exit champion. Sometimes it takes an individual, rather than growing evidence, to shake the collective belief of a project team. If the problem with
unbridled enthusiasm starts as an unintended consequence of the legitimate work of a project champion, then what may be needed is a countervailing force—an exit champion. These people are more than devil's advocates. Instead of simply raising questions about a project, they seek objective evidence showing that problems in fact exist. This allows them to challenge—or, given the ambiguity of existing data, conceivably even to confirm—the viability of a project. They then take action based on the data. At both Essilor and Lafarge, exit champions—the new research manager at Essilor, and the new operations director at Lafarge—joined the projects as evidence of their unpromising futures was mounting. But supporters were still clinging to the shreds of positive evidence that occasionally emerged—or ignoring the evidence altogether. Had it not been for these exit champions, team members said later, the projects probably would have continued for months or even years.

To be effective, an exit champion needs to be directly involved in the project; a negative assessment from someone based elsewhere in the company is too easy to dismiss as ill-informed or motivated by organizational rivalry. The exit champion also needs a high degree of personal credibility. The managers at Essilor and Lafarge who had raised questions about the lens and paper filler during the early development stages lacked this credibility. Essilor's director of research and manufacturing was known within the organization as a naysayer; Lafarge's mineralfillers manager, who came from another company, appeared to lack industry experience. The exit champions, by contrast, had been with their companies for a long time and were well regarded by top management. Both had a strong network of people at different levels of the company ready to provide support when they decided the project should be killed.

What kind of person would willingly assume such a role? Even if killing a project doesn't put an exit champion out of a job—the individuals at Essilor and Lafarge had responsibilities beyond the projects in question—the role, unlike that of a traditional project champion, seems to offer little in the way of prestige or other personal rewards. (For a discussion of the differences between the two roles, see the sidebar “The Exit Champion and the Project Champion.”) In fact, the exit champion faces inevitable hostility from project supporters; those at Essilor and Lafarge were variously described as villains or dream breakers.

Consequently, exit champions need to be fearless, willing to put their reputations on the line and face the likelihood of exclusion from the camaraderie of the project team. They need to be determined: Both Essilor's and Lafarge's exit champions failed in their first attempts to stop their projects. Perhaps most important, exit champions need to have some incentive for putting themselves out to halt a bad project. For many, this will simply be an acute distaste for wasted effort. As one exit champion at another company I researched said, “When I work, I need to believe in what I do. I don't want to waste time on something that is worthless.”

It is important to understand that an exit champion is not a henchman sent by top management to kill the project. The exit champions at Essilor and Lafarge certainly weren't: They were assigned their positions only because their predecessors had left the company, and they simply took the initiative to determine if their projects were likely to be successful. Indeed, it wasn't initially clear to either of them that their respective projects should be killed. Although signs that the projects wouldn't succeed were accumulating, in neither case was the evidence conclusive because it wasn't based on hard data.

Senior executives need to recognize the exit champion as a defined role that someone might play in the organization—otherwise, they may not know an exit champion for who he is and give him the support he will need. And they can take steps to create an environment in which such a savior would be more likely to emerge. Just as companies celebrate and recount stories of the great successes of product champions, they could perhaps identify and spread tales of courageous exit champions in their midst (or at other companies) who saved their organizations millions of dollars. Top managers should at the least make it clear that challenges to a popular project would be welcome or even rewarded. At the same time, though, they need to demand from the exit champion strong evidence of the project's weaknesses—just as they should have earlier demanded growing evidence of its viability.

It Couldn't Happen Here

When all is said and done, do Essilor's and Lafarge's experiences—not to mention RCA's in the case of its ill-fated SelectaVision—simply reflect bad business judgment? Were they nothing more nor less than dumb business moves? Aren't situations like these unlikely to be repeated at your company?

Don't bet on it. Although they may not always be played out on such a grand scale, stories like these are all too familiar in business. That's because belief is a powerful sentiment, and collective belief is even more powerful. Clearly, any project has to start with faith because there typically isn't much objective evidence, if any, at the beginning to justify it. But, as a project unfolds and investments increase, this faith has to be increasingly tested against the data. Indeed, the challenge for managers in the “can-do” culture of business is to distinguish between belief as a key driver of success—and belief as something that can blind managers to a project's ultimate failure.