Leave the beaten track occasionally and dive into the woods. Every time you do so, you will be certain to find something that you have never seen before.

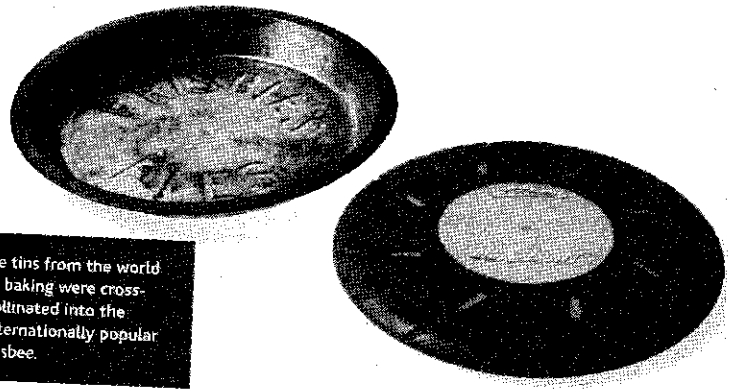
—ALEXANDER GRAHAM BELL

There's magic in cross-pollination—and in the people who make it happen.

Cross-pollinators can create something new and better through the unexpected juxtaposition of seemingly unrelated ideas or concepts. They often innovate by discovering a clever solution in one context or industry, then translating it successfully to another. For example, it was a Cross-Pollinator who transplanted the idea of a piano keyboard from the musical world to create early manual typewriters in the business world, which of course evolved step by step into the electronic keyboards we all use today. And reinforced concrete was originally created by a French gardener trying to strengthen flowerpots, but civil engineers wholeheartedly adopted it to create colossal dams and highway systems, while architects extended the gardener's utilitarian concept to elegant structures from Fallingwater to the Sydney Opera House. Computer pioneers got the idea for IBM punch cards—and arguably even the digital computer itself—from a punch-card system for weaving complex fabric patterns on a silk loom. The concept of an escalator began life as a primitive Coney Island amusement ride that has since grown into a billion-dollar industry. And most Frisbee players don't know that the basic shape and even the name of that ubiquitous flying toy was adapted from the Frisbie Baking Company's metal pie tins, tossed by Ivy League college students a century ago.







Pie tins from the world of baking were cross-pollinated into the internationally popular Frisbee.

Curiosity and an open mind have sparked cross-pollination opportunities throughout history. Food pioneer Clarence Birdseye, for example, was on a Canadian fur-trading trip in 1915 when he noticed his Inuit guides laying out fish to freeze in the cold outdoors, where it stayed fresh for many months. Cross-pollinating that simple technique from a native outdoor culture to his modern indoor world, Birdseye created a frozen-food empire that still bears his name.

Orville and Wilbur Wright cross-pollinated materials and mechanisms from the emerging bicycle industry to build their first powered aircraft. Now, more than a hundred years later, cross-pollination between cycling and aviation routinely flows in the *opposite* direction, as high-performance aerospace materials like titanium and carbon fiber are adapted to lighten and strengthen cutting-edge bicycles. And in the history of innovation, one of the greatest Cross-Pollinators, and perhaps the quintessential "Renaissance man," was Leonardo da Vinci—painter, architect, engineer, mathematician, and philosopher—who blended his diverse talents into a prolific and remarkable legacy.

In the corporate world, you can usually spot people in Cross-Pollinator mode if you know what to look for. They're the project member who translates arcane technical jargon from the research lab into vivid insights everyone can understand. They're the traveler who

ranges far and wide for business and pleasure, returning to share not just what they *saw* but also what they *learned*. They're the voracious reader devouring books, magazines, and online sources to keep themselves and the team abreast of popular trends and topics. Well rounded, they usually sport multiple interests that lend them the experience necessary to take an idea from one business challenge and apply it in a fresh context. They often write down their insights in order to increase the amount they can retain and pass on to others. They're dedicated note-takers, capturing insights in notebooks or electronic form. Cross-Pollinators have eclectic backgrounds and develop a distinctive point of view by combining multiple strengths and interests.

## Cross-Pollinating Inside and Out

Most companies I spend time with talk about cross-pollinating across organizational lines and "blasting through the silos," though in practice many of them have trouble doing so. Consumer products giant Procter & Gamble seems to have recently reenergized the Cross-Pollinators on their team since the arrival of CEO A. G. Lafley. Not only have they built on clever ideas imported from outside the organization (from the now-ubiquitous Swiffer duster to the playful Spinbrush toothbrush), but they also have gotten better at cross-pollinating ideas among previously siloed groups around the company. For example, they combined a knowledge of safe whitening agents from the laundry business with their deep expertise in oral hygiene to create Crest Whitestrips for their Oral Care unit—now grossing over $200 million per year. They combined experience in water purification from their PUR division with anti-spotting know-how from Cascade dishwasher detergent to create a "spotless" car-washing system called Mr. Clean AutoDry. There are dozens of other examples—already on the market or still in the works—that nimbly combine technologies and insights across organizational lines. You can see the effect of Cross-Pollinators at P&G not only on the shelves of your local supermarket but also on the share price, which has doubled in recent years.

Cross-Pollinators stir up new ideas by exploring worlds that may



at first glance seem to have little relevance to the problem at hand. Peter Coughlan and our Transformation team often spark new service directions for our clients by deliberately staging cross-pollination outings with them. He takes companies on field trips to visit and observe analogous operations far outside their own domain. One client, for instance, held the belief that their tradition-bound industry didn't leave much room for innovation, so we took them to visit an enterprising undertaker. The client was stunned and ultimately inspired to see how much innovation was sweeping this (excuse the pun) moribund industry—everything from giving the bereaved a view of virtual custom coffins on giant projection screens to transforming the ashes of a loved one into a beautiful diamond. On a project to help a hospital optimize usage of their 600 hospital beds, we took our clients to a tiny New England bed-and-breakfast, where we found that maids working in two-person teams to clean guest rooms had more fun on the job than solo cleaners and were able to cross-check each other's work. That insight sparked the idea of replacing individual cleaners in the hospital with highly efficient small teams. Similarly, another hospital streamlined the way it transported patients around their large campus in wheelchairs and gurneys based on insights picked up on a visit to a well-run taxicab dispatch office.

## Seeds of Cross-Pollination

The history of IDEO is itself a story of cross-pollination. When I joined the fledgling IDEO some twenty years ago, our workspace was cluttered with machine tools, physical prototypes, and other artifacts of a product-based business. I never would have imagined that someday we would be working on "intangibles" like improving Kraft's supply chain or helping nurses at Kaiser Permanente execute a more efficient shift change. But over time, we learned to apply our "design thinking" approach from product-innovation programs to the world of services, experiences, and even cultures. We've strived to nurture the Cross-Pollinator role from the very beginning, trying to assemble the key elements that encourage the flowering of cross-pollination. I

have listed seven of the "secret ingredients" in our recipe for cross-pollination below, but of course there's nothing so secret about them now. And all of them could be translated to any company in the world that wants to bump up its level of cross-pollination and is willing to give them a try:

1 Show-and-tell. Whenever IDEO groups get together, we enjoy a hearty show-and-tell. In the early days of the firm, that meant sharing fresh insights or new technologies during Monday-morning meetings, when the entire company sat on the floor of my brother's office. The firm has gotten a lot bigger since then (and David's office got a bit smaller), so show-and-tell happens either face-to-face within smaller design groups or electronically across the firm via e-mail or our intranet-based sharing systems. The IDEO Tech Box, a collection of hundreds of promising technologies for potential application to our work, is a systematic approach to collecting and sharing what we know. Show-and-tell is partly serendipity, often resulting from an accidental discovery or surprise, so it doesn't always relate to projects the firm is actively working on right now. But it is always about something either new to the world or newly reinvented, and is a source of continuous renewal built into the work practices of the organization.

2 Hire lots of people with diverse backgrounds. We've never looked at hiring as merely a process of addition or bringing in "more of the same." If the recruiting task were to hire "another engineer just like Chris," then the interview would be a simple matter of pattern recognition. We're more likely to sift through the wide variety of applicants looking for someone who will expand our talent pool or stretch the firm's capabilities.

3 Stir the pot with space. As we'll discuss in the Set Designer chapter, the company's physical workspace can be a powerful tool for advancing your strategic agenda. Grouping all your like-minded people into one floor or building makes sense if you want to emphasize solidarity in one discipline, but at IDEO, we believe there's magic in cross-pollination, and we support that belief with our use of space. We create lots of multi-disciplinary project rooms and leave ample space for "accidental" or impromptu meetings among people from disparate groups. We even make our staircases broad so that people can literally "meet halfway."

No matter where you're from or how patriotic you may be, I hope you're willing to concede that there are more new ideas outside your country than inside.



4 Cross cultures and geographies. IDEO favors a cultural melting pot, seasoned with a steady mix of international flavors. No matter where you're from or how patriotic you may be, I hope you're willing to concede that there are more new ideas outside your country than inside. Importing new insights is always valuable. I've lost track of how many nationalities are represented in our firm, but a few years ago, our Boston office—just for fun—raised a flag for every country represented on their team. Last time I visited, there were eighteen flags hung, a pretty robust tally for an office of forty. And a well-blended international staff just seems to cross-pollinate naturally from other cultures.

5 Host a weekly "Know How" speakers series. Nearly every Thursday evening, a world-class thinker shows up to share their thoughts with us. Not only are their insights often fascinating (Malcolm Gladwell on snap judgments, Howard Rheingold on smart mobs, Jeff Hawkins on the workings of the human brain), but the shared buzz of many IDEO people seeing a speaker sets off a wave of discussions throughout the firm. Know How is a weekly burst of cross-pollination that keeps the thinking—and the conversations—continuously fresh.

6 Learn from visitors. My role at IDEO includes the chance to meet with a continuous stream of interesting people who

travel long distances to visit us each year. Most are prospective clients who typically spend a couple of hours telling us about their industry, their company, and their point of view. Over the years, I've participated in more than a thousand such meetings, and I think of it as a form of postgraduate education. After each visit, I feel a little more up-to-date and attuned to current trends—and, dare I say it, just a little bit wiser for the experience.

7 Seek out diverse projects. There's an old saying that a forty-year career is sometimes the same year repeated forty times. Not at IDEO, or at any other company with a culture of continuous learning. The broad range of our client work—spanning dozens of industries—means that we can cross-pollinate from one world to another.

There's no rocket science involved in building a greenhouse for cross-pollination. None of these individual elements is especially hard to do. But put them all together—along with a hundred tiny details that support the social ecology of the firm—and they represent a commitment to cross-pollination that yields benefits in everything from team morale to competitive advantage.

## Crossing Ideas

Cross-Pollinators are more than good students. They're good teachers as well, helping to spread knowledge and ideas. Ex-IDEOer Haydi Sowerwine and her husband, David, spent the first half of their lives in Silicon Valley, gathering knowledge and soaking up the culture. Now they've spent a decade transplanting IDEO-style design thinking to rural Nepal. Based in Kathmandu, their company, EcoSystems, has built dozens of gondola-like wire bridges over dangerous rivers in Nepal (at a fraction of the cost of suspension bridges), helping thousands of children get to school and villagers get to market



safely. Haydi and David's work recently earned them a Tech Museum Award for technology benefiting humanity, and they continue to expand their influence.

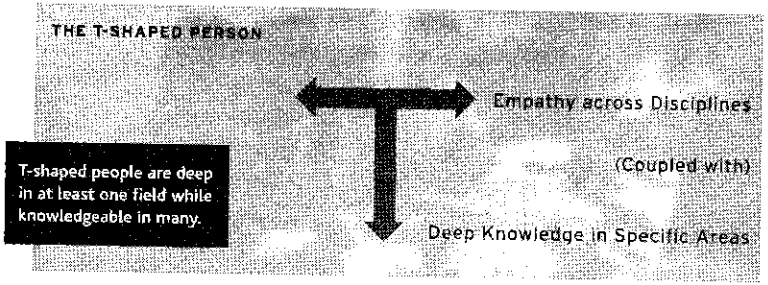
Cross-Pollinators retain the childlike ability to see patterns others don't, and to spot key differences. But they've also honed the very adult skill of applying those subtle differences in new contexts. They often think in metaphors, enabling them to see relationships and connections that others miss. They act as matchmakers, creating unusual combinations that often spark innovative hybrids. Cross-Pollinators frequently approach problems from unusual angles. They sometimes make a practice of "doing without"—tackling a problem by considering solutions without some key element popularly considered standard or essential.

Both the past and the future are great sources of ideas for a Cross-Pollinator, who revels in looking beyond their present challenges. Students of history, they search for concepts that may have been ahead of their time or may be ready for a revival. Conversely, they look for fertile ground in science-fiction stories, open to the possibility that imagined futures might provide a business opportunity today.

I've spent a lot of time with T-shaped people, and one thing I've learned is never to leap to conclusions about them.

At IDEO, we've found that some of our most valuable Cross-Pollinators are what we call "T-shaped" individuals. That is, they enjoy a breadth of knowledge in many fields, but they also have depth in at least one area of expertise. I've spent a lot of time with T-shaped people, and one thing I've learned is never to leap to conclusions about them. It's tempting when you hear one salient fact about a person to start making assumptions, but with a T-shaped person, you are likely to be surprised by what you find out next. In the end, they defy simple categorization, but don't let that bother you. If you're looking for cross-pollination, gather some T-shaped people for your team.

IDEO is full of T-shaped people, and here's a quick glimpse to illustrate what I mean:




- Kristian Simsarian at IDEO San Francisco has a bachelor's degree in computer science, studied robot perception, and did a stint at Edinburgh University's noted Artificial Intelligence Department, where he created his own course of study, spanning ethnography and engineering. He moved to Sweden to pursue a Ph.D., while building digital narrative tools for teachers in Europe. Kristian started his own improvisation group in a Stockholm studio space, and he continues to use improv as an ideation tool at IDEO today. He's a one-man multidisciplinary team, with deep understanding of human/computer interaction, broad interests in the learning process, and fluency in the freewheeling language of improvisation.

- Sabine Voegler combines the cultural influences of her German father, her Brazilian mother, and her California experiences. Having lived on three continents, Sabine is currently at IDEO Munich, where she draws on her uniquely blended worldview to create remarkable customer experiences.

- Owen Rogers, an avid IDEO Cross-Pollinator in our Consumer Experience Design group, describes himself as a former mechanic, stonemason, and disk jockey who "talked his way into" London's revered Royal College of Art. He has a deep expertise in managing large innovation and branding programs, but still maintains his interest in the world of auto mechanics, so he jumped at the chance to work with a client recently on high-end automotive tools.

- IDEOer Kara Johnson, a quintessential T-shaped person, has deep expertise in materials science, with a master's from Stanford, a Ph.D. from Cambridge, and a successful book on the subject. Lest you think she's one-dimensional, however, she also has interests across a broad range of design fields, and she studied sculpture and pottery at Michigan's prestigious Cranbrook Academy. Kara worked on more than fifty projects during her first year at IDEO, spreading the word about new-material options we hadn't fully considered in the past. She has sparked new interest in materials across the firm and encouraged companies to consider alternative and sustainable materials.



Not all Cross-Pollinators are as versatile or multifaceted, but the good ones can send shock waves through an organization as they bring in big ideas from the outside. And Cross-Pollinators don't need to be brilliant inventors or titans of industry. Even small, pointed insights can make a remarkable difference.

## Innovation on a Shoestring

I wonder if innovators everywhere couldn't get some inspiration from the grassroots entrepreneurial efforts of Mohammed Bah Abba, a teacher with a business degree in impoverished northern Nigeria. Bah Abba wanted to help keep food from spoiling so quickly in the intense African heat, but he knew that a standard refrigerator was out of the question for many of his neighbors. Bah Abba cross-pollinated from the past to help make a better future. Descended from a family of potters, he began adapting traditional clay pots and hit upon something remarkable. When he placed one pot within another, filling the space between with wet sand, the water in the sand evaporated toward the

outer shell of the inner pot, cooling the vegetables inside. He spent two years perfecting his clay "fridge," learning to cover the pot with a damp cloth. His cooler required no energy, just periodic wetting of the sand to maintain the cycle of evaporation.

Eggplants that once spoiled in a few days lasted four times as long. African spinach was edible for almost a week instead of going bad in a day. Bah Abba put unemployed potters to work turning out thousands of his clay pots, at a cost of 30 cents per cooler. Today, the lives of thousands of Nigerian villagers have been improved by this brilliantly simple innovation.

There's a principle at work here that we would all do well to respect. Sometimes a lack of resources and tools can prove to be the spark that helps you to seek out and make new connections. It goes beyond the idea that "necessity is the mother of invention." Scarcity and tough constraints force you to break new ground because the "business as usual" path is simply not available. There's an essential truth behind the Silicon Valley legends about companies getting their start in a garage. Lacking money or staff, they had to be resourceful.

Amy Smith, an instructor at Massachusetts Institute of Technology, demonstrates how innovators can turn a resource constraint into an opportunity. How does Smith plunge students from a prestigious New England university into a scrappy mind-set for innovating on the cheap? For one week during the semester, her students have to scrimp by in Cambridge on $2 a day. Along with dealing with hunger, students quickly learn that most of all, they have to be creative to get by on so little. Smith's program has been a catalyst for promising new ideas like a low-cost kit to remove land mines in Zimbabwe; a water-testing rig made with a Playtex baby bottle that costs $20 instead of the traditional $600 setup; and charcoal fuel fashioned out of the inedible remnants of sugarcane.

Amy Smith's MIT program makes me wonder what opportunities we might be missing in the business world because we take resources for granted. To create something new, you may have to take something away. For example, MTV does what they call "deprivation studies," where they get their most frequent viewers to go "cold turkey" for thirty days of no MTV, just to see what clever alternatives they come up with. So try your own version of scarcity. Spend a day generating and communicating ideas without the use of technology. Pass an afternoon prototyping without conventional tools. Like poets working with meter and rhyme, great Cross-Pollinators seek out constraints. The next time your ideas seem stale, challenge a team to come up with something on the cheap. It can be a great innovation exercise.



## Increase Your Fluency

Cross-Pollinators are like linguists, confident in the knowledge that the more languages they master, the easier it becomes to absorb the next one. That's one of the secrets of cross-pollination. Diverse and interesting project work can fuel the fire of a culture of innovation. Give your team greater variety and they will start seeing the outlines of new connections, making new leaps of imagination.

For instance, not long ago we were asked to help redesign the computer science building of a major university. The straightforward approach would be to benchmark lots of other computer science centers for inspiration. Abandoning that traditional model, we instead took our team to Pixar's animation studio, across the bay from IDEO's San Francisco office. Sure, Pixar had plenty of computers, but everything else was remarkably different from the standard university (or corporate) lab. The emphasis on collaborative technical and human resources. The distinct work clusters, or "neighborhoods." Even the great food. Pixar resembles a teeming, electronically charged urban village, a provocative contrast to a university laboratory.

Cross-pollinating works both ways. If universities can learn from a company like Pixar, what might companies learn from Stanford or Harvard? Plenty, I'd suggest, if they toured the campuses with an eye to ideas or concepts that might take root on their own business turf. An open mind is central to cross-pollinating. And the more receptive you are to diverse approaches, the more likely you are to come up with something valuable for your own company.

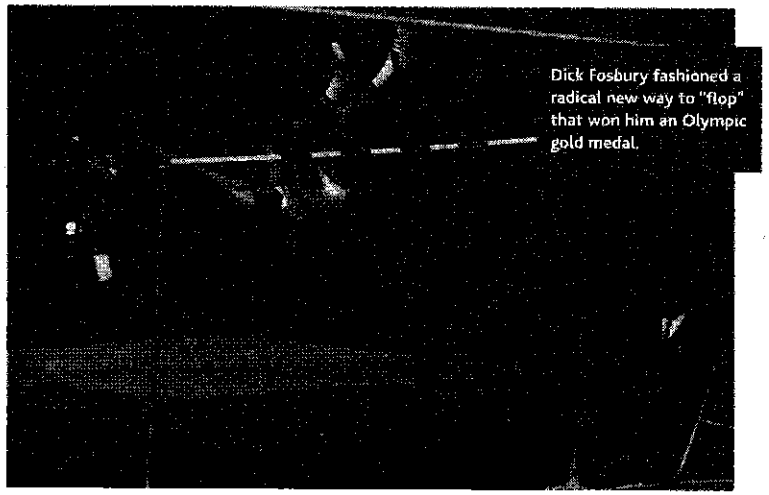
## The Fosbury Flop

Cross-Pollinators sometimes tackle a problem by turning it around. Creativity guru Edward de Bono called it "lateral thinking"—looking at an issue from a completely different perspective. Sometimes you literally need to sneak up on an old problem from a new direction. Instead of heading straight at the challenge, you approach it, well, backward.

To me, one great visual metaphor for "backward" innovation was the high-jump technique dubbed the "Fosbury Flop." Back in the 1960s, a kid named Dick Fosbury was a mostly unremarkable track-and-field athlete at his high school in Medford, Oregon. Fosbury preferred the familiar jumping style called the "scissors," a move you sometimes see on the tennis court when a triumphant player jumps over the net sideways. The scissors jump works pretty well on the tennis court, but his coaches knew that in the high jump he'd be better off with the more efficient and then-popular "straddle"—also called the "belly roll"—in which you throw up your lead foot and follow it with leg, thigh, stomach, and head, swiveling up and around the bar, with trailing foot clearing last. Fosbury did as he was told but was no better than average at the straddle, never eclipsing 5'4". But during one track meet at the age of sixteen, he started scissoring again, going against the conventional wisdom that it would limit his success. Then something unexpected happened. Gradually, as the height was raised, "I started laying out more," he recounted, "and pretty soon I was flat on my back." Fosbury wasn't quite flopping yet, but he was going mostly backward—and clearing 5'10", higher than he'd ever gone before.

The summer after he graduated in 1965, Fosbury started doing his trademark "Flop"—bounding in long, powerful strides, then, at the last moment, twisting to turn his back parallel to the bar and leaping into an arched backward half-somersault—shoulders up, followed by knees, with both feet clearing the bar at the final moment, then landing upon his shoulders, faceup. That summer he flopped over a bar 6'7" high and won a national junior championship. In college, once more his coaches tried in vain to set him straight—but he could never





Dick Fosbury fashioned a radical new way to "flop" that won him an Olympic gold medal.

straddle more than 5'10." Fortunately, his coach gave up his plan to make "a triple jumper out of him."

Fosbury, of course, kept right on flopping—all the way to the Olympic Games. At the 1968 summer Olympics in Mexico City, all 80,000 spectators in the stadium seemed to go silent each time he jumped—backward. I remember watching the Olympics on TV with my father, who said, "Did you see *that*!? Watch this guy when he jumps again. It's the weirdest motion you ever saw." Like a lot of breakthroughs, the Fosbury Flop looked strange the first time you saw it. Really strange.

Experts said Fosbury would break his neck. Instead, he broke the American and Olympic records with a jump of 7'4¼" and won gold. It took almost ten years for Fosbury's innovation to ripple through the ranks of elite athletes, but eventually the Fosbury Flop was fully adopted by every Olympic high jumper in the world. Incredibly, what Fosbury discovered in the mid-1960s—starting with a jumping style from other contexts and evolving it through enlightened trial and error—remains to this day the most efficient way to high-jump. His radical style permitted a faster run at the bar, with less deceleration than the straddle. Decades later, experts would publish elaborate bio-

mechanical studies proving the Fosbury Flop's superior "angular momentum" and "somersault rotation."

Like a lot of breakthroughs, the Fosbury Flop looked strange the first time you saw it. Really strange.

Looking back today, it's abundantly clear that the old straddlers were jumping with an outmoded technique. It took an independent thinker like Fosbury to fashion a genuinely new approach. But Fosbury didn't flop all at once. The breakthrough didn't come in the kind of "eureka" moment so popular in the mythology of invention. He experimented with a style widely considered flawed, adding his own twist, gradually refining his technique, never sure whether he was on a path to success or stumbling down a blind alley. As with many new business innovations, Fosbury was first told that his approach would fail miserably.

I can't think of a better moral for those interested in innovation. The next time someone tells you no one's done it that way before, or that it sounds like a crazy idea, ask them if they know the story of the Fosbury Flop.

Cross-Pollinators keep an open mind. They know that success can come from the most unlikely of all directions.

## The Germ of a Seed

Cross-Pollination begins with people: individuals with restless curiosity and unusual backgrounds who expand your ability to tackle challenges. Some might find the résumés of our best Cross-Pollinators surprising or even eccentric. At IDEO, we've found a couple of great sources of Cross-Pollinators. Of course, we've always relied on a steady flow of fresh thinkers with eclectic experiences right out of college, individuals whose curiosity is still running strong. More recently, however, we're also tapping into the cross-pollination potential of "boomerang" staffers—talented people who worked with us for a while, have gone out and gotten broad experience elsewhere in business, and then come back.



Stanford product-design graduate Bob Adams is one such boomerang Cross-Pollinator. More than a decade ago, Bob spent two years working in India with Hewlett-Packard before joining an earlier incarnation of IDEO. After a couple of years, Bob left to pursue a career as a jazz bassist, getting the chance to play with such luminaries as Joe Pass, Richie Cole, and Stan Getz. Meanwhile, he did a long stint with a Silicon Valley think tank, exploring how musical controllers might improve the digital interface. He also made his own electronic instruments, and he taught at Stanford and briefly at the Royal College of Art in London. Somewhere along the way, Bob found the time to earn a master's in viticulture from the University of California at Davis, and discovered the energy and drive to buy a small farm in the Sacramento Valley. He calls himself a "weekend farmer," but the phrase doesn't do him justice. Bob mans the tractor and other heavy equipment to farm wheat, tomatoes, olives, peaches, and nectarines. His vineyard produces a respectable Zinfandel. He enjoys that rarest of twenty-first-century pleasures—the opportunity to sit down to an entire meal grown completely by himself.

Bob rejoined our San Francisco office a year or so ago, and he has already brought a thoughtful eye to new projects. Bob's passionate about sustainability, and seems well attuned to bringing more sustainable practices to business. More than just immersing himself in the subject and networking with some of the field's leading thinkers, Bob has experience running the ultimate sustainability model—a farm. He knows firsthand how hard it is to farm organically, and understands why farmers use pesticides and fertilizers. That grounding may help make his approach more successful in industry.

Every company could use some good Cross-Pollinators to enliven their culture and lend fresh perspective and experience to their endeavors. You might find their backgrounds surprising, but give them a chance to find some fertile soil and you won't regret it.

## Found in Translation

To those who complain that there's nothing new in their industry, I say get on a plane and see the world. Traveling often and widely is

one of the most effective ways to become a better Cross-Pollinator. Sometimes the most direct route to innovation is to look abroad and translate what you find.

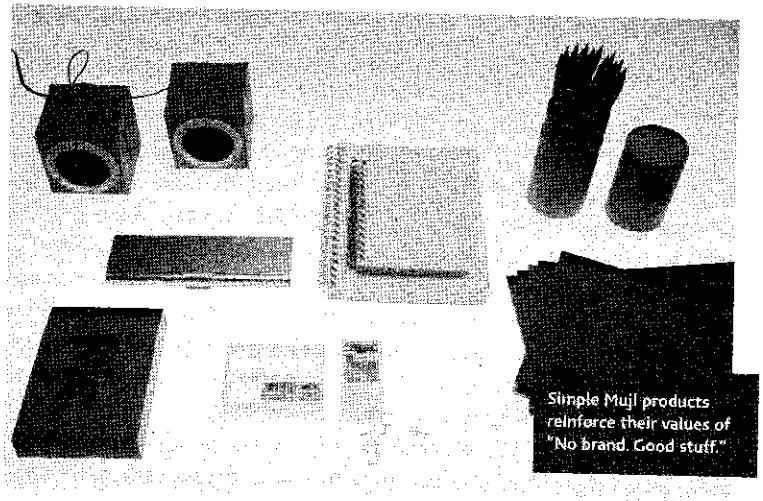
One of my favorite shopping spots in Tokyo—a city of fascinating retail experiences—is a store called Mujirushi Ryohin, better known by its nickname, "Muji." The name translates roughly as "No brand. Good stuff." I think of the store as distinctively Japanese. It turns out, however, that the unique retail chain got its inspiration in America and is one of those stories of something being *gained* in translation. Back in the 1970s, when the Seiyu chain of low-cost department stores was trying to create a new "house brand," they sent a design team far afield looking for new ideas. One team went to the United States, searching for inspiration. During the trip, team member Kazuko Koike (who later became a celebrated art writer) dropped into an American supermarket searching for unusual beer cans to take back for a friend in Japan who collected them. She came across simple "generic" beer, which was part of a series of deliberately unbranded products, with stark black-and-white labeling, that were popular at the time.

Muji was able to take a simple idea from America and turn it into a stellar Japanese success. What ideas are out there waiting for you to tap into?

She liked the simple graphics and iconic no-frills design, and brought the idea back home to explore at Seiyu, which translated the American concept into a stylized, intentionally low-key Japanese design that was "the essence of generic." Seiyu's line of clothing and houseware products use simple materials like unpainted aluminum and minimalist packaging like unbleached paper, with a natural color palette limited to white and black, brown and gray. The resulting "no brand" Muji brand was so successful that, a few years later, Seiyu launched freestanding Mujirushi stores, starting with a location in Tokyo's fashionable Aoyama district. Today, Muji has almost 300 stores spread out from Sapporo to London, and sales of nearly a billion dollars.

That's the heart of cross-pollination. It's a rich source of inspiration for those willing to travel and imagine. Muji was able to take a simple idea from America and turn it into a stellar Japanese success. What ideas are out there waiting for you to tap into? What might U.S. health care firms learn from extraordinary international models like the Aravind Eye Hospital in Madurai, India, a hospital that has done a million cataract surgeries at a cost of roughly $10 each? What popular regional foods, like *açaí* from Brazil or *edamame* from Japan, could be marketed successfully in large markets elsewhere? What concepts from a distant land or a foreign culture might you translate or shape or adapt in a way that makes them distinctively your own? So travel widely when you have the chance. Scour the world for ideas. Reinvent something native to Asia or Europe or the Americas. You just might have a hit.





Simple Muji products reinforce their values of "No brand. Good stuff."

## Reverse Mentoring

The old adage "Mighty oaks from little acorns grow" may be true, but what do you do when your "acorn" days are far behind you? How do you continue to grow and flourish? Mentoring apprentices and pro-

tégés has been part of business as long as we've had crafts and professions. But when you've put a few growth rings under the bark, consider the flip side. Sometimes what managers really need is a mentor from a younger generation to inform and inspire.

The smartest folks I know have what my Stanford professor friend Bob Sutton calls an "attitude of wisdom": enough knowledge to sense when you're on course, enough humility to know when you need help navigating. In our experience at IDEO, we've found that it helps to be open to fresh approaches, even when all your experience suggests maintaining the traditional view. Reverse mentoring can help counter your company's natural tendency to be overreliant on its experience. Consider seeking out younger mentors to provide insights and initiative about what's happening in the world today.

IDEOer Chris Flink has been my de facto reverse mentor for the last few years, though we never really formalized the relationship. He's one of the first people I go to when I'm feeling behind the curve on some new trend that seems like it might be worth knowing about. For example, I noticed a couple of years ago that a lot of younger people around me don't wear watches anymore. So I asked Chris, "What's the story? You've got client appointments. Why no watch?" His response took me by surprise. "Tom, why do I need a watch? My mobile phone keeps perfect time. I don't have to manually adjust it for daylight savings, and when I go to new time zones it updates the time immediately." My first thought was *Wow, there's something that changed about the world when I wasn't looking.* And my second thought was *What if I were Timex? What's my business strategy for a future in which mainstream customers see no need for my product category?*

Reverse mentoring isn't widely practiced yet, though I know of a handful of companies that have realized that a fiftysomething executive could use some of the insights and enthusiasm of a twentysomething. My brother David learned the value of reverse mentoring a couple of decades ago when he found his spiritual home as a professor in Stanford's product-design program. David puts a lot of heart into his Stanford role, but he also benefits from his devotion to teaching. For one thing, he is showered with the ideas and enthusiasm of an unending stream of smart and motivated nineteen- to twenty-three-year-olds. And



these bright young minds keep him informed and up-to-date in a way that those who spend their time exclusively in industry seldom are.

Long before Napster and Kazaa made front-page news in the nineties, my brother knew all about downloading music from the Web. Computer-based video editing showed up in his classes way before it went mainstream in the general population. Same for blogging, instant messaging, and a dozen other technologies embraced by the early adopters in his classrooms. David gets a window into all sorts of trends in fashion and music and video gaming, keeping him up-to-date with—sometimes ahead of—what's happening in the world. Nor is the knowledge he gleans focused entirely on culture and entertainment. David mentioned to me a couple of years ago that his students had shifted en masse from the attitude of "How can I get rich by launching a new product?" to "How can I introduce more of a social conscience in the world of business?" He saw it in the student population years before it really showed up in business discussions. So as part of the process of interacting with student groups, David learns not only what they *buy* but also what they *think*.

Could you benefit from a reverse mentor? Be one yourself? The best part of this cross-humanizing technique is that everyone gains. Consider opening a new line of communication, adopting an attitude that frees you to learn from the youngest members of your staff.

David calls it the eggs teaching the chickens.

## The Gift of Giving

Giving may be the most counterintuitive and extreme form of cross-pollination. You're in business to make money, of course. But generosity can help you get there and be good for your company's karma. Generosity can be the quality that propels you above the crowd. As I wrote the final chapters of this book, major retailers like Niketown, Gap, the Discovery Channel stores, and others were finding that customers have a sincere wish to donate to a good cause—everything from Nike helping Lance Armstrong raise $33 million for cancer research with simple $1 yellow bracelets to Amazon.com generating $15 million in "1-Click donations" for victims of the catastrophic Asian tsunami.

The good karma of giving can be a surprisingly powerful, inspirational force. And you can take giving to a level you might not expect. Sometimes the most strategic branding move you can make is to give away what seems to be your crown jewels. One inspired Cross-Pollinator can make the difference.

Though you've probably never heard of Nils Bohlin, he had a lot to do with Volvo's success over the years. During the 1950s, Bohlin worked for Swedish aircraft company Svenska Aeroplan, where his specialty was ejector seats. In 1958, he became Volvo's first safety engineer. At the time, the two-point seat belt that stretched across your lap was considered state-of-the-art technology—and most cars in the United States had no seat belts at all. So Bohlin, who had spent years dreaming up ways to pop people out of airplanes, came up with a novel way to keep them in. He tossed out the less effective two-point belt and

Volvo inventor Nils Bohlin created the original three-point seat belt—*and then shared it with the world.*



ushered in the three-point shoulder belt, which remains the basis for nearly all automotive seat belts today.

By 1963, Bohlin's invention was standard on all Volvos. But to my mind the unique part of this story is Volvo's extraordinary and brave decision not to patent this remarkable invention to encourage the saving of lives. That pivotal choice and decades of leading-edge research and design have helped make the Volvo brand synonymous with safety. Bohlin went on to lead efforts that resulted in Volvo's highly acclaimed Side Impact Protection System. Today, more than forty years later, Volvo's slogan, "For Life," echoes the company's sincere commitment to making the safest vehicles in the world.

What might you give away that will give you an edge?

## Emulating Nature

Those who practice cross-pollinating, perhaps more than any other persona, intuitively understand the role of serendipity and chance. By actively seeing and connecting with more ideas and people, the Cross-Pollinator becomes a bit like the unlikely bumblebee. Many have wondered how the bumblebee flies at all, with its bulky body and tiny, fragile-looking wings. But the bumblebee doesn't know that, so it goes on flying anyway. Perhaps the answer lies, as it does with so many things hard to comprehend, in the sum of the parts. And so it is with the Cross-Pollinator, a sometimes unsung role in the business world, the person who tirelessly spreads the seeds of innovation.

As you may have figured out, the Cross-Pollinator is in many ways a collection of personas—part Anthropologist, part Experimenter, part personas you have yet to meet. Every organization needs Cross-Pollinators. Maybe, like the bumblebee, you too are an unlikely hero. Do you have wide interests, a voracious curiosity, and an aptitude for learning and teaching? Are there others on your team who have an aptitude for playing this role? You may find your wings can flap faster than you ever imagined. The Cross-Pollinator is an essential part of the ecosystem of innovation. Welcome the role. Encourage it in others. It will help your organization succeed.