Turn Your Company Into an Idea Factory

Inspiration may be the mother of invention, but it’s not enough. To succeed at innovation, organizations must have a systemized process for transforming ideas into killer products.

Forget about the widgets, doodads, or whatever a company actually sells because ideas are the real stock in trade of every successful organization. The problem is that only a handful of companies understand where today’s ideas for tomorrow’s blockbuster products come from, much less how to properly develop a vague vision into a perpetual money machine. Like rare orchids, ideas need to be firmly planted, fed, and at times pampered to properly take root. Do otherwise, and they will die on the vine.

Forget about the image of the lone, misunderstood inventor toiling away in obscurity because innovation doesn’t just happen. It takes time, effort, and hard work. From initial idea to technological advance, every step of the process is fraught with opportunities to ignore, sidetrack, or dilute its inspiration. Look beneath the surface of the companies we admire most, such as Apple, GE, and Sony, and you’ll find a dedication to coming up with new concepts and commercializing them into products. Some strive for continual improvement in their processes, while others seek extensions to existing products or invent whole new product categories. In a very real sense, they are no longer mere manufacturers; they’re idea factories.

“"The best companies excel at identifying and fostering good ideas every minute of every day,” explains Tom Kelley, general manager of IDEO, the Palo Alto–based design consultancy, and author of the book The Art of Innovation. The firm, which he runs with his brother David, has helped hundreds of companies transform raw ideas into memorable products as diverse as Polaroid’s IZone mini-camera, Eli Lilly’s Humalog reusable...
insulin-injecting pen, and Steelcase’s Leap ergonomic office chair. “Companies that don’t act on new ideas,” warns Kelley, “will be left behind by those that do.”

The Science of Creativity
As much art as science, finding and acting on ideas is no accident. “An idea is merely a connection between things in one’s mind,” describes Winston J. Brill, an innovation consultant and speaker. “The more you think about something, the greater the chance of making an important connection.” The challenge for the creative company is to allow time to make these connections and then develop the good ideas while passing on the bad ones (see “The Eureka Moment!”).

It may sound warm and fuzzy, but it all comes down to establishing what Brill calls an “innovative attitude” at work. It doesn’t matter if it’s a factory floor, drive-in window, or executive suite, the notion that ideas and fresh thinking are crucial to the firm’s survival should pervade all a company does. In other words, what’s needed is an atmosphere that values and supports free thinking and getting genuinely excited about the result. “If the work environment encourages enthusiasm for new projects, then employees will always be on the lookout for good ideas,” explains Brill. “Both will succeed.”

The Greenhouse Effect
While serendipity surely plays a role in turning an idea into an innovation, brainstorming can bring out the best in people. Think of it as the work equivalent of free association, where new ideas are openly brought up, discussed, and evaluated before moving on to the next topic. It brings out the best in people, and often pushes its participants beyond what they thought they were capable of. When done right, the group really does become more than the sum of its parts because participants think and share ideas freely, while making new connections, no matter how ridiculous they might seem. “Ideas come from all places,” enlightens Kelley, “sometimes where you least expect it.”

By encouraging wide, deep, and thorough thinking, brainstorming places equal emphasis on every member of the team. Often the quiet woman sitting in the corner of the room is the one with the key breakthrough that comes out of left field to connect disparate ideas into a cohe-

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sive whole. The challenge is to get her to open up and speak her mind.

While brainstorming requires some structure and discipline, above all, it should be fun because when people are relaxed and enjoying what they’re doing, the barriers to imagination are swept away. To remove all obstacles, be ready to explore a wide variety of topics without regard to where it takes you, oh, and “it’s O.K. to laugh now and then,” adds Kelley.

But there’s obviously more to it than that. Based on Brill’s survey of how 350 great ideas became products, only 2% came from scheduled meetings. “Two-thirds were thought of away from work, while driving, in bed, or in the shower,” he claims. The key is to keep the idea alive, vibrant, and
current until it fits into a project or becomes the seed for an entire new area of growth. Ideas are just that until they are brought up at work, transforming the daydream into reality.

**Dilbert Rules**
As we have all seen, all it takes is one closed-minded executive to create a Dilbertized workplace where new ideas are met with stony silence at best or cutting insults at worst. "I've seen some really bad office environments over the years and only a couple good ones," jokes Scott Adams, Dilbert's creator and a former cubicle dweller at Crocker Bank and Pacific Bell. "Fostering creativity is not some-the opposite viewpoint, "fear is the greatest enemy of innovation," Kelley warns. "There should be no fear to try new things out and show imperfect ideas to superiors. They can be the fuel for an innovation engine."

When it doesn't work, it's as bad as a dysfunctional family with all the associated tensions and frustrations. Adams thinks of a stifling corporate culture as akin to a toothpaste tube with the cap on: Squeeze it, and the toothpaste has to come out somewhere. It might be in practical jokes, computer viruses, or even the occasional satirical cartoon strip. But, one place it won't be channeled is into the critical analysis and forward

**Work environments that nurture creativity create spaces that encourage interaction and impromptu meetings. They also let workers celebrate their individuality.**

thing you can do with a memo. It's really a matter of not squashing or slapping down people whenever they have an idea."

Kelley's IDEO is the epitome of enlightened thought, with a corporate culture that encourages openness and improvisation and allows employees to devise their own furniture. To promote this, employees can personalize their workspaces in oddly idiosyncratic ways and are encouraged to redo the floor plan periodically. "It's really important, and not that common, to have a creativity-friendly work environment," advises Kelley.

While the conventional corporate wisdom is that innovation is the result of spending on research and development, it is less a matter of new technology and more a matter of figuring out a way to foster dreams and help make them come true. Without this anxiety-free zone, workers at all levels will be afraid to take chances. From thinking that can bring about the next generation of products and services. "There's no holding it back," adds Adams. "Chances are that if there's a cubicle; the odds of fostering creativity are very low."

**Model for Success**
Even the best idea is not an end in itself. It requires support, development, and more than a little luck to bring it to reality. Stealing a page from Hollywood's swat-team approach for turning ideas into movies, independent groups evaluate the concept. One team tries it out on family members and fellow employees while another evaluates competing products and a third figures out how to actually make and market it. Because they work in parallel, the job is finished quickly, and as soon as the project is on its way, the teams dissolve and reform around the next idea.

Every great idea deserves a prototype or model that turns thought and
random scribbles into something real. There's nothing like holding an item in your hands to try it out, so this is a must. Not only does the prototype illustrate the idea's possibilities and how it should work; it can open a door on which materials to use and often provides insight on how to make and sell it. The physical act of carving, gluing, and painting actually breaks down the dams on the flow of the creative juices while providing priceless feedback by revealing what's important and what's not.

"It's the essential first step toward turning any idea into a product," adds Kelley. It doesn't matter if the model is clunky and made of found items, like duct tape, discarded boxes, or whatever is handy. "Rube Goldberg rules," he shortens. "As long as people say 'Yeah, that's it,' it doesn't matter how sloppy or ugly it is."

Nobody gets it right on the first try, so expect to spend some time refining the design and how it works with multiple models, each hopefully just a little better than its predecessor. The goal shouldn't be to ignore the faults that the model exposes, but to reveal in them and turn problems into possibilities for the next model. "Try lots of things," advises Adams. "Eventually, something's got to work. Dilbert started as an idle doodle—part me, part others at work—and slowly took shape. It didn't just happen."

Winners and Losers
The dividing line between success and failure is thin these days, but over the years, some companies have consistently done better than others at finding and following up on ideas with new and pioneering products. In addition to Cargill and 3M, IDEO's Kelley points to Proctor & Gamble's recent record of turning ideas into hit products. For instance, the company latched onto the notion that powered toothbrushes didn't need to be expensive and complicated, and thus was born the $5 SpinBrush toothbrush.

The company didn't stop there. P&G took the concept to its logical conclusion with a variety of dental-hygiene spin-offs, from premium products to ones that help whiten teeth to those for children and, of course, replacement brushes. Rather than just a toothbrush, P&G created an entire consumer product category that its competitors continue to try and catch up with. Or, as Kelley puts it, "The most innovative companies never sit still. They're always working and thinking."

By contrast, Xerox's Palo Alto Research Center (PARC) spent millions to create futuristic computing concepts, such as the graphic computer interface, Ethernet networking, and laser printer. The company's development lab was second to none at creating many of the advanced technologies that we now rely on, but PARC failed dismally at turning these breakthroughs into products and sales. While 3Com and others capitalized on Ethernet, Microsoft and Apple developed the graphic interface into an art as Hewlett turned the laser printer into an office mainstay. As the personal-computer era began, Xerox not only let others eat its lunch, but also picked up the check. "The contrast couldn't be starker," comments Kelley. "One is thriving; the other is declining."

At the end of the day, a company is nothing more than a group of individuals, hopefully with similar goals and aspirations. "People who are enthusiastic about company goals have the best ideas," observes Brill. "We all have the potential to be creative, but those who are not enthusiastic about company goals rarely think of great ideas."

To even billion-dollar corporations with thousands of employees, successful innovation doesn't occur overnight but comes down to being patient. "Nine out of ten ideas don't work is the bad news," quips cartoonist Adams. "The good news is that nothing stops you from trying ten times."

—Brian Nadel
The Eureka Moment!

Want to take a bite out of a breakthrough notion? Deciding which ideas work as commercial products and which don’t is an art that takes practice.

The most precious thing in our world is a great idea that is ahead of its time. Sad to say, most companies passively wait for ideas to fall into their lap. The more adventurous go after new concepts by shaking the idea tree or even pelting employees with apples of inspiration.

That’s the easy part since the typical organization generates hundreds, if not thousands, of new concepts every week. What is hard is separating the good ideas from the bad because most are half-baked, too scattered, or just not realistic. Here’s how:

1. Eliminate the turkeys quickly.
Gather the real clunkers together, and put them aside. Failure is a great teacher, and sometimes an ugly duckling can turn into a swan, as evidenced by the adhesive used in 3M’s Post-it notes. It all started as a failed attempt to improve the acrylate glues used on Scotch tape, but it took the vision of product-development researcher Art Fry to create the product that we all use today.

2. Trust excitement.
Look for ideas that accomplish a clearly defined purpose and have enthusiastic sponsors, because even a brilliant idea with a wishy-washy sponsor won’t go far. “If someone has a great idea but isn’t enthusiastic, the idea will likely fail,” says creativity consultant Winston R. Brill. “With enthusiasm, cohorts will figure out how to follow up.”

3. Put yourself in your customers’ shoes.
Market surveys and focus groups can help pinpoint the good ideas by letting potential customers try them out, but radical concepts require the personal touch. Early in the development of the revolutionary Palm Pilot, its creator Jeff Hawkins spent weeks walking around with a wooden mock-up in his shirt pocket, showing it to friends, coworkers, and even strangers to see what they thought of it. This feedback led to the most personal of computers and launched an industry.

4. Try it out.
Turning the idea into a prototype or model may sound a little too much like returning to high-school shop class, but it’s the best way to appraise how good it is at accomplishing its task. Hold it, try it out, and see if it actually works (or doesn’t), then go back and make a new—and hopefully better—model. “Make as many as you can, to see if the idea cuts it,” advises IDEO’s Tom Kelley.

5. Work quickly.
Time may be of the essence, but don’t hesitate to try a lot of things out. “Time pressure is one of the best ways to get the job done,” adds Kelley. “Demand unrealistic results, and they’ll deliver.”

—Brian Nadel