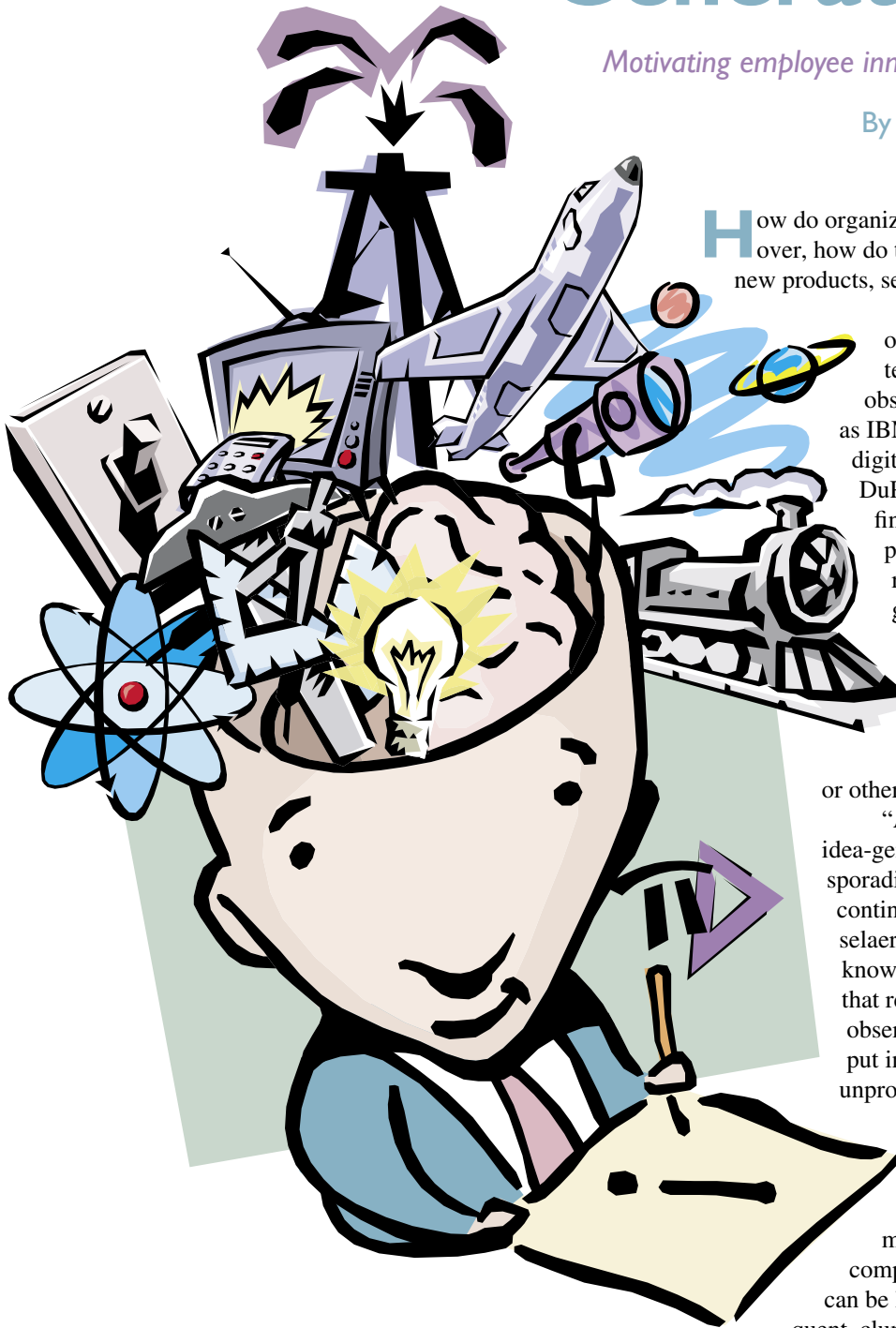


Seven Strategies for Generating Ideas

Motivating employee innovation to spark company growth

By Robert B. Tucker



How do organizations come up with new ideas? Moreover, how do they use those ideas to create successful new products, services, businesses and solutions?

To answer these questions, a team of researchers from Rensselaer Polytechnic Institute in New York spent time observing radical innovation projects such as IBM's silicon-germanium devices, GE's digital X-ray, GM's hybrid vehicles and DuPont's biodegradable plastics. Their key finding? Most of the ideas behind these projects came from "happy accidents" rather than some ongoing process to generate ideas.

In more than a few cases, individuals or small groups were simply "freelancing," working on ideas on their own initiative rather than being directed by some "new venture" board or other idea management system.

"Almost without exception, these idea-generation methods have been applied sporadically, rather than systematically, continuously and strategically," the Rensselaer researchers concluded. "In no case [we know of] has an ongoing process been set up that regularly requests such ideas. What we observed were one-time acts, or new systems put in place whose staying power remains unproven."

It is little wonder that so many good ideas never even come to the attention of management, or that so many die short of development – and miles from commercial success. In most companies today, the "practice" of innovation can be likened to the mating of pandas: infrequent, clumsy and often ineffective. Its practice is largely unchanged from 20 years ago. While the world

has changed drastically, and organizations pride themselves for having a process for everything, the process of innovation remains ad hoc, unsystematic, piecemeal, seat-of-the-pants and, as the Rensselaer researchers confirmed, heavily dependent on luck.

Creative, game-changing ideas will always have an element of serendipity to them and will never be producible on demand. However, today's present economic climate of stalled growth and fewer ideas (growth in the number of patent

requests have stagnated in recent years) has caused a small but growing group of organizations to rethink how ideas happen and to examine what they can do to implement better innovation processes.

Fortifying the Idea Factory

Three-fourths of companies are consistently disappointed in their innovation results, according to global surveys of executives. On the other hand, a minority of organizations – the innovation vanguard – recognizes the need for change if their results are to improve. Put simply, if good ideas don't get hatched, they won't get launched.

The “vanguard organizations,” 23 of which we studied for a recently released book, create stronger idea factories by cultivating the conditions whereby “happy accidents” are more likely to occur. The vanguards are, in essence, reinventing inventiveness. They are paying much more attention to the oft-called “fuzzy front end” of innovation where possibilities first come to light. Moreover, they are managing these notions in vastly different ways so that large quantities of ideas eventually fill the pipeline and emerge as tangible results.

In reviewing the unconventional methods of these vanguard organizations, we found that, while innovation and breakthroughs can never be commanded from the top, leaders can do much to increase throughput of significant ideas. Indeed, they must. We see these leading-edge organizations using seven key strategies for fortifying the idea factory:

1. Invite everyone in the quest for new ideas.
2. Involve your customers in the process of generating ideas.
3. Involve customers in new ways.
4. Focus on the needs that customers don't express.
5. Seek ideas from new customer groups.
6. Involve suppliers in product innovation.
7. Benchmark idea-creation methods.

Clearly the customer plays an important role in these strategies for strengthening the organizational idea factory. It only makes sense. The goal is to create ideas – the building blocks of new products, services, processes and strategies – the users of which are customers.

Strategy 1: Involve everyone in the quest for ideas.

While suggestion boxes have been around for over 100 years, innovation-vanguard organizations are wiring their suggestion boxes so that they become a powerful, energizing force for corporate creativity.

Bristol-Myers Squibb (BMS), a global pharmaceutical firm, does not restrict its definition of innovation to activities related to finding the next breakthrough drug. Rather, it sees the need for new ideas in much broader terms and involves employees constantly in the quest. BMS has developed a series of ideation campaigns for internal customers under the leadership of Marsha MacArthur, “idea searcher,” and Mark Wright, vice president of U.S. market research and business intelligence.

When the patent was about to expire on Glucophage, an oral medication for Type Two diabetes, MacArthur helped coordinate a campaign to solicit ideas on how to get more people to use the drug in the meantime. Rather than classifying this as a marketing problem and letting the people in that functional area work on it, the ideation campaign was a sort of call for ideas to all corners.

The campaign was publicized by employees walking around wearing sandwich boards declaring, “We're waging war on diabetes, and we need your help!” Town Hall meetings were set up for the team to describe the problem in detail: How do we drive patients to their doctors' offices? How do we get patients to switch from the medications they're currently using?

Tip lines were then set up on BMS's intranet site so employees could submit their ideas. One idea was to run a national campaign declaring war on diabetes. Another was to create a museum for diabetics.

“I was really proud of everybody and the ideas that were submitted,” says MacArthur. “They weren't obvious ones like, ‘talk to doctors.’ We already do that. They were quite well thought out.”

That single ideation campaign generated 4,000 inquiries from 429 employees all over the world. In a typical year, idea searcher MacArthur coordinates 20 to 30 such campaigns, both at the division level and enterprise-wide.

Lesson: Organizations can enlarge their pool of ideas by including more employees in the process of new product and service innovation, and in solving vexing organizational problems. Start by encouraging them to listen to customers. Don't allow management, technical, purchasing, finance or human resource professionals to participate in new product/service/market development decisions unless they spend at least 20 percent of their time with current (or future) customers and suppliers.

Strategy 2: Involve customers in your process. New products are most often initiated by ideas from customers, rather than in-house brainstorming sessions or internal research and development, according to a study by business researchers Robert G. Cooper and Elko J. Kleinschmidt of McMaster University in Ontario.

If you immediately think “focus groups” when the subject of involving customers comes up, better think again. Vanguard firms are going well beyond such techniques as they seek more powerful insights and ideas.

To maintain its market positioning as the “ultimate driving machine,” Munich-based BMW must constantly seek new technologies and design features that keep it slightly ahead of the pack. To accomplish this objective, BMW tossed conventional wisdom to the roadside and created what it calls a Virtual Innovation Agency (VIA) to listen to customers directly. Car buffs worldwide can access the VIA Web site and join online discussions to share their ideas with other enthusiasts around the world – and with the BMW Group.

The VIA submission process allows anyone with Internet access to submit ideas, and the ideas are protected. If the idea has potential, it's routed to the appropriate working group at BMW for follow-up. Within the first week after VIA was launched in July 2001, 4,000 ideas had been received.

Lesson: The traditional focus group needs more focus. Form advisory boards of key customers to serve as sounding boards for ideas. Identify customers who tend to buy the latest versions of your products. These "lead adopters" can provide you with insights about where the market may be headed and how your organization can best position itself.

Strategy 3: Involve customers in new ways. Organizations evolve and embrace new ways of doing things at different rates. Nowhere is this more evident than in the ways they listen to customers. For instance, customer surveys may be old hat to retailers, but they blow the lids off homebuilders.

KB Home, a market-leading homebuilder based in Los Angeles, only began surveying customers in the late 1990s. In a very short time, it gained insights on new ways of doing business. In Denver, KB Home built houses with fireplaces and basements, assuming that's what everyone wanted. However, some buyers weren't biting. CEO Bruce Karatz eavesdropped on a sales pitch to prospective buyers who wanted to save money. The couple said they didn't need a basement, but the salesperson kept pushing them to accept it, as everyone else had.

Karatz decided then and there to survey customers. Their answers shattered KB Home's preconceived notions about what homebuyers wanted. In Denver, people were more than willing to do without basements when omitting them to cut the price by as much as 20 percent. In Phoenix, where covered porches were thought mandatory, fewer than half of the buyers said they cared about them.

By polling for preferences, KB Home opened up its business to budget-minded buyers. Furthermore, it discovered other, more desirable amenities that customers were willing to pay for, such as coffee bars in the master bedroom, built-in home offices and higher-quality windows. This "amenity customization" proved popular for buyers – and traumatic for competitors still locked in to the one-size-fits-all housing approach.

DaimlerChrysler used a more experiential approach to try to divine what fickle car buyers wanted next, turning to anthropology and ethnography for a process known as "archetype research." The development team created a prototype model of a vehicle mixing retro and futuristic design elements. But instead of then testing the prototype with traditional focus groups, such as young men ages 18 to 24, they chose people that represented the entire national culture and studied their emotional responses to the prototype.

The designers realized that participants were looking for protection from "the jungle out there." The retro/futuristic prototype was too playful, too toy-like; they

seemed to be saying, "give me a big thing like a tank." The revised design: the PT Cruiser, which was an instant success when it was introduced in North America in 2000.

Lesson: Look outside your own field or industry for ideas on how to get customer input. Automakers, retailers and consumer electronics manufacturers, for instance, are on the leading edge of customer surveying and are often considered the early adopters of ideational techniques.

Strategy 4: Focus on the unarticulated needs of customers. Another reason traditional focus groups are inadequate idea generators is that they provide feedback only on existing ideas. How do you get feedback on ideas that don't exist?

One approach growing in popularity is to probe the unarticulated needs of customers, asking them to consider hypothetical products and prototypes to see how they would respond.

Consider the microwave oven. Asked why they like it, most people would say it's because it heats food up faster than conventional ovens. Asked how they actually use it, most people might say "to heat up my coffee" or "to pop popcorn." What they don't say (their unarticulated desire) is that when they try to use their microwave to make a "real meal," such as a roast or a steak, the results are ugly, gray and unappetizing.

GE probed just such unarticulated needs in 1999 and came up with Advantium, a speed cooker for roasts, steaks, and other items. A white-hot halogen bulb browns the outside part of the meat while microwaves cook the inside. The result: home-cooked meals that are fast and good.

Another great innovation-vanguard organization is Callaway Golf, creator of the Big Bertha. Callaway's innovators went out to country clubs and public courses, and observed how golfers approached the game, quizzing them on how they felt about their skills. The observers discovered that many golfers felt frustrated and intimidated by the game. The unarticulated need was simply to succeed at something they loved doing.

Callaway's breakthrough Big Bertha club features a large and forgiving "sweet spot" and a longer shaft, making it easier for golfers to hit the ball and to hit it farther. As a result, new players took up the sport, and old players traded in their drivers for Big Berthas. By focusing on customers' unarticulated needs, Callaway's innovators created a blockbuster.

Lesson: Learn from customers by observing what they are not doing, listening to what they are not saying. Recognize the sources of their frustration, and find potential ways of eliminating it.

Strategy 5: Seek ideas from new customer groups. Most organizations should have a good idea of who their customers are. However, if you expand your definition of customer, you can also expand your ability to generate winning ideas.

The medical products division of Holland-based Philips Electronics had assumed its only customers were doctors in hospitals, since they were the ones making decisions about medical supplies. Then Philips managers looked more deeply at changes in the health-care industry and saw that more services were being provided in nontraditional environments, such as at outpatient clinics, in homes and even on the street for homeless people.

By asking themselves what these customers in non-hospital environments might need, Philips came up with such products as a stethoscope with improved acoustics to filter out voices, traffic and other background noise, making it easier for caregivers in chaotic settings to hear heart murmurs or breathing problems.

Lesson: Look at your customers' customers and your competitors' customers. Instead of looking only at the present, look also at the past (former customers) and the future (anyone you haven't done business with yet). Ask how you might meet those customers' needs.

Strategy 6: Involve suppliers in product innovation. Suppliers can be key partners in the idea-creation process, but many organizations are reluctant to share information with suppliers (who, after all, might be partners with the competition as well). Other obstacles include cultural differences, lack of cooperation, lack of resources and lack of vision (an inability to conceptualize new opportunities).

The chief global purchaser for a leading consumer products company used to visit suppliers and try to solicit ideas by saying, "If you have any new ideas or technologies you think we'd be interested in, be sure to let us know."

Result: zero new ideas.

Now, he brings his problems to his suppliers: "What I need to know, for example, is whether you might have an adhesive that would work well on elderly skin, sensitive skin, bruised skin, diseased skin and five other kinds of skin that we've identified." This approach encouraged suppliers to contribute to the company's idea-creation process, the manager reported. "Even one of our notoriously non-creative suppliers developed two proprietary materials for the company in the last 12 months. It's unbelievable how excited some of our suppliers get when we ask them to be creative on our behalf." Moreover, the seemingly routine procurement process added value to other departments in the organization, from R&D to marketing.

Lesson: Just as you look to your customers for new ideas (such as by detecting their unarticulated needs), think of your organization as your supplier's customer. You, too, have unarticulated needs. Try articulating them and get your supplier's idea-generating capacity working in concert with yours.

Strategy 7: Benchmark ideation methods. Innovation-vanguard organizations actively manage the ideation process by examining its effectiveness and questioning how the ideas-to-results process might be improved. Ideation is not something that should be left to chance.

Ideation specialists can be called on to teach new techniques, shake things up and inject maverick thinking into the process. One leading-edge ideation specialist is Doug Hall, a former product manager at Procter & Gamble who runs idea sessions at Eureka! Ranch outside Cincinnati, OH, for companies like Celestial Seasonings.

Hall's replicable, quantifiable process for inventing breakthrough ideas involves a combination of play, "sensory overload" and analytical rigor. The goal is to generate as many new product ideas as possible. No idea is too radical, he tells his groups. "Breakthroughs are going to contradict history, so you have to break rules," he says. Eureka! Ranch sessions promise clients 30 commercially viable ideas in three days.

Lesson: Organizations that rely on innovation need to seriously examine the climate in which ideation takes place, and put someone in charge of making the process better, more productive and more innovative. Innovation-adept firms invest in ideation sessions, read books, attend seminars and constantly seek to improve their skills.

Monday Morning at the Idea Factory

As the world changes at a faster and faster pace, ideas and ways of operating that were adequate only yesterday no longer suffice. Given the torrid pace of change, the rapid commoditization of products and the convergence of strategies, firms that rely on yesterday's ideas, yesterday's products and yesterday's assumptions are clearly vulnerable.

Organizations need a constant stream of new ideas if they are to create exciting and prosperous futures. Yet, in most organizations, there is resistance to change the approach to innovation lest it upset the status quo. Most companies today have allowed their methods of encouraging, nurturing and acting on new ideas to languish while they focused on more immediate concerns, such as taking costs out of existing processes, products and services.

However, it is precisely because of the present economic climate that firms should be increasingly willing to rethink their most central of processes: how they motivate innovation.

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