Innovate on Purpose

Accidents happen, true. But innovation shouldn't depend on them. Here's a four-step methodology to make innovation more intentional—and more successful.

by Dean Hering and Jeffrey Phillips

MOST OF US AGREE THAT INNOVATION IS ONE of the key paths to growth. The question is how to innovate. Many companies do it by accident—that is, they hope someone will come up with an idea for a product or service and then capitalize on it. At a time when companies need to generate more ideas than ever before and turn those ideas into viable products and services before the competition can catch up, the accidental approach is no longer viable. We need a sustainable, repeatable approach to innovation.

In our work with organizations seeking growth through innovation, we have developed such a process. It's a four-step methodology that can improve your company's idea-management process and help you bring better products and services to market more quickly and effectively. Here is how it works.

Step 1: Generate ideas—good ones

Our clients often say, "We have plenty of ideas; our challenge is evaluation and selection." Many companies are overwhelmed by the number and variation of ideas because they start out with an ill-defined focus. A metropolitan phone book does not provide good sales leads any more than a long list of random ideas provides a good basis for innovation. The first step of successful innovation is better ideas, not more ideas.

To generate ideas, many organizations use brainstorming, both real-time and extended. For brainstorming to be successful, its focus needs to be sharp enough to exclude extraneous ideas but wide enough to allow wild ideas that might be combined to solve the problem in a unique way.

For example, the Vienna, Va.–based National Captioning Institute, the world's largest video-captioning company, decided to develop a real-time scheduling (RTS) system to automatically generate scheduling assignments for more than 90 captioners across the country. NCI tapped managers, functional experts, and employees who scheduled captioners—everyone involved in the caption-

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ing and scheduling processes—for a brainstorming session. Before the session, each participant received a detailed preparation document that outlined brainstorming guidelines (e.g., "Defer judgment"), 22 questions to spark thinking (e.g., "How will the RTS automatically handle sporting event overtime?"), and some basic requirements (e.g., "Captioner skill level must be taken into account"). This level of specificity provided participants with enough context to create useful ideas without forcing a particular solution on the group.

The team initially generated 104 ideas. Through ranking and voting, they quickly narrowed the list to 15 ideas that addressed specific needs or pain points for scheduler requirements and prioritized them for the design team. This allowed the design team to understand the most important requirements and know whom to consult for more detailed information for the technical design. An open-ended "How can we better schedule?" or a specific "Let's look at scheduling systems" would have been much less effective.

Another useful approach is identifying and nurturing so-called lead users, people who are at the forefront of a trend and have created a solution to a need they've recognized. As Eric von Hippel points out in his work on lead users, *Democratizing Innovation* (MIT Press, 2005), mountain bikers began building their own bikes in the early 1970s from various motorcycle and bicycle parts supplied by the Morgan, Calif.–based company Specialized Bicycle Components. Recognizing that there might be wider demand for such bikes, Specialized began building and selling its own mountain bikes. As of 2000, mountain bikes represented more than 60% of the specialty bicycle market, up from zero in the late 1970s.

How do you find lead users? Go to your customers' conferences, and watch and listen. Build online communities and observe. As reported in *Wired* magazine, The Lego Group engaged four expert Lego builders from Brickfest, the annual Lego-user conference, to help design the next

generation of its robotics kit Mindstorms, which was released in August.

Step 2: Capture ideas

The capture phase of innovation is the point where many organizations stumble. Few firms have organization-wide idea-management systems. Instead, companies develop spreadsheets, wikis, databases, and other mechanisms on a team-by-team basis, leading to redundancy, inefficiency, and, in some cases, the waste of great ideas.

For example, we're familiar with the experience of the management team of a major division of an outdoor products supplier. Divisional leaders had visited an idea-generation firm and returned with several ideas they thought had merit—including one that would vastly benefit another division in their company. Unfortunately, upon returning from the brainstorming session, the manager in charge put the rolled-up butcher paper with the ideas in the corner of his office—and there it remains to this day.

While those ideas were captured, they weren't shared or incubated. Ideas that aren't shared are ideas that never become revenue drivers. Initial idea concepts need discussion, interaction, and incubation. Several Web-based idea-capture-and-evaluation tools allow users to enter and interact with ideas; add documents, links, and comments; participate in online discussion forums; visually connect ideas and people; set up and use evaluation schemes; and compare ideas. The organization has control of who can access what and who can invite external customers, experts, and others to provide input. Such a tool not only encourages wider participation in the innovation process, but it also helps ensure that potentially valuable new ideas don't end up gathering dust in the corner.

Step 3: Evaluate ideas

Now that you've generated focused ideas and captured them in a collaborative system, the next step is using a transparent, consistent system for evaluating them. Evaluation criteria should be appropriate to the idea category, line of business, type of innovation, and/or market you intend to serve. For example, pharmaceutical companies generally look at intellectual property protection and risk before pursuing research, while commercial lawn equipment manufacturers look at technical feasibility and market competition. Your goal is to evaluate ideas to determine their viability. Transparency in the process is important. Contributors need to know how ideas will be evaluated and why an idea is accepted or rejected, or they will be less likely to contribute in the future.

Another benefit of a consistent evaluation system is that

QUESTIONS TO ASK YOURSELF ABOUT YOUR INNOVATION PROCESS

Generate

- Do we routinely brainstorm and examine opportunities with staff, customers, suppliers, experts, and others in a focused manner?

- Have we defined effective ways of directly observing and gathering unarticulated needs of existing and new customers? Of lead users?

- Who is looking at trends?

Capture

- If an employee, customer, partner, supplier, or anyone else valued by our organization has an idea, do they know how to contribute it?

- Do we have an idea-capture system that people can use to share and incubate ideas? Is it available 24/7/365?

- Do people know what happens after they contribute an idea?

Evaluate

- Do we have a defined process for evaluating contributed ideas?

- Do contributors know how the process works and what to expect?

- Are we focusing on the right mix in our portfolio of ideas?

Develop

- What is our mean time from idea to prototype?

- Are we focusing on what we need to develop by exploiting prototypes we can throw away?

- What's the best way to provide a prototype or simulation to the customer of a new product or service as quickly as possible?

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it provides documentation for innovation decisions, thereby allowing a team to gather and share information about both successful *and* unsuccessful ideas. Because any organization that innovates constantly will fail frequently, it's important to capture and preserve that knowledge so you can build on that information in the future. An idea

that isn't acted upon now may well be one you use in the future. Millions of paying guests have seen the *Nautilus* and the windmill Ferris wheel at Disneyland Paris; both concepts were shelved decades before, revisited under new circumstances, and finally resurrected to become popular attractions. The combination of capture and evaluate allows Disney to build on such past ideas and implement them when the time is right.

A consistent evaluation framework also aids in the creation of a well-balanced idea portfolio, one made up of ideas bearing different levels of risk, potential yield, and time to payoff. Much as an investor uses assessment tools (analysts' advice, past performance) to select the optimal mix of financial instruments in an investment portfolio, companies are well served when they have the means to assess and categorize ideas to create a diversified idea portfolio. Ensuring that managers across an organization evaluate ideas using the same framework allows company leaders to balance investment among incremental innovations (low risk, with reasonable yield) for short-term results, breakthrough innovations (medium risk, with potentially greater yields) for medium-term results, and game changers (high risk, with potentially the greatest yields) that might open up new markets with new technologies and business practices.

MANAGING LAUNCH LOGISTICS

Many companies find managing the complicated logistics of the launch to be the most challenging part of the innovation process. Fortunately, tools exist to make this easier. Our company, OVO (Raleigh, N.C.), makes one, but many are available; the Project Management Institute's Web site (www.pmi.org) is a good resource.

When choosing a tool, look for one that will help you identify:

- All stakeholders related to the launch (e.g., internal departments, external vendors).

- The launch-related deliverables that each stakeholder will have to produce.

- The key activities associated with each deliverable.

- Any key interdependencies among stakeholders, deliverables, and activities.

- The time and resource requirements to complete all launch preparations.

Step 4: Bring ideas to life with prototypes

Customers have difficulty defining requirements for products or services they have not seen. But when you can present an example, they will provide excellent feedback. We've found it is more important to create a reasonable facsimile of the final product and let the customer interact with it as quickly as possible, even if all the bells and whistles don't work, than to pursue a traditional requirements-definition approach.

One of us worked with Michelin to put together a cutting-edge promotion of its new performance tires for its booth at the 1997 Detroit Auto Show. OVO's idea was to create a virtual reality (VR) experience. People would step into a go-cart, put on a VR helmet, and have the sensation of being pulled behind a Dodge Viper driven by a former NASCAR star and outfitted with Michelin's new tires.

We created a prototype and tested it at the annual SEMA convention three months before the Detroit show. We quickly learned how we could make a greater impact in Detroit. Participants at the SEMA event wanted to be in a Dodge Viper themselves rather than in a go-cart. What's more, they didn't want to be towed behind the Dodge Viper; they wanted to be able to pass it. Making these changes paid off handsomely. Attendees at the Detroit Auto Show voted Michelin's booth one of the top-three displays to visit, and it earned a spot on *Entertainment Tonight*. Not bad for the only nonautomotive booth there—and all because creating a prototype highlighted what needed to be adjusted in the final version.

Repeatable success

Creating a sustainable business process requires a repeatable, easily understood set of steps or phases. By following this four-step approach and integrating it with the processes and systems within your organization, you can begin to manage innovation in the same manner that you manage your other critical business functions. This approach will shorten the cycle time from idea to product or service, improve idea evaluation and analysis, and, best of all, increase your ROII: return on innovation investment. ◆

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