



as Teflon-coated Glide dental floss (developed by W. L. Gore) or the SpinBrush—now the top-selling toothbrush in the United States—a low-cost, battery-powered disposable toothbrush that was developed by a small team of external entrepreneurs.

P&G's strategy is to search the world for ideas and technologies that can be packaged with its own competencies and assets to create new wealth. As an example, the Mr. Clean Magic Eraser is based on an innovative foam product developed by the chemical firm BASF. The strategy also works in reverse. P&G licenses some of its assets to other companies to develop revolutionary new products. For example, the Philips IntelliClean power toothbrush system dispenses liquid toothpaste that was specially formulated by Crest.

The point here is that you should learn to look not just at your own organization, but also at the world outside as a Lego kit of interesting skills, technologies, assets, brands, and so on—and start to think about all the exciting combinational and contextual possibilities.

REQUIRED READING:
Consumers
Innovation to the Rescue
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UNDERSTANDING UNARTICULATED NEEDS

Radical innovators are deeply empathetic; they understand—and *feel*—the unvoiced needs of customers. They bypass traditional market research methods, relying instead on “getting into the customer’s skin.” They recognize needs that customers don’t even know they have yet. Or they solve some common frustration in a way that people could never have imagined—which is precisely why they are not articulating the need or asking for a specific product, service, or business to address it.

Nobody, for example, was asking years ago for a global overnight courier service, or a way to buy made-to-order computers directly over



Customer Insight:

An unmet need or a customer frustration that can serve
as the basis for a new business opportunity

the phone, or a comfortable “third place”—somewhere between home and work to hang out and enjoy coffee, or an online store where you could find and purchase practically any book on earth. Yet visionary entrepreneurs gave us FedEx, Dell, Starbucks, and Amazon.com—new business models that solved problems or addressed needs we were not aware we had.

Look around your own home. Chances are, you have a lot of expensive IT equipment in one form or another. Ask yourself what is easier: getting somebody to come and service your \$500 dishwasher or getting somebody to come and service your several thousand dollars' worth of IT? Who do you call when you need some help installing a Wi-Fi network in your house or getting rid of all the spam and spyware on your computer? Clearly, there is a need here, but have you heard masses of people crying out for a solution? Enter Geek Squad (now owned by Best Buy)—the 24/7 computer support task force, with its tongue-in-cheek “special agents” and “Geekmobiles.” It’s a company that has focused directly on addressing this unarticulated need.

Caroline Kovac runs IBM Life Sciences, a company she built from a two-person group in 2000 to a \$1 billion, fifteen-hundred-employee business today. Kovac learned that her mother had developed health complications during hospital treatment when she reacted adversely to a particular medication. Although her records were updated to warn doctors not to repeat the treatment, just three days later another doctor missed that warning and gave her the very same medicine. Kovac was shocked to find out how common this experience is. Statistics show that around one hundred thousand people die every year in U.S. hospitals due to medical errors like false medication, incorrect dosage, inefficient diagnostics, duplicated procedures, operations on the wrong side of the body, and so forth. “It’s an appalling safety record,” says Kovac, “the equivalent of crashing a large plane every week.” Yet, in health care, she argues, people accept this as “just part of the system.”⁹ Kovac saw the problem and started thinking about how IBM could solve it. She became convinced there was a big opportunity in using IT systems to help hospitals manage their patient data more effectively, in much the same way that companies manage their supply chains. And IBM responded.

These and many other examples teach us that uncovering unsolved problems, unvoiced needs, and market inefficiencies can lead to significant innovation opportunities. This is the fourth perceptual lens that innovators use to discover new insights—the ability to see an unmet customer need—not only before the competition, but before the customer is even aware of it or has articulated it.

Getting Started

Your mission with the fourth lens of innovation is to look for deep, unarticulated customer needs and frustrations—in an effort to uncover new and unexploited innovation opportunities. This is not about conducting traditional market research—that is, asking customers to go through a questionnaire, either on paper, online, or by phone. Neither is it about going out and directly asking customers what they want. Methods like these rarely yield the most useful customer insights. Typically, the answers they generate are the obvious suspects: “I want it cheap,” “It should be easy to buy and use,” and “Make it work really well, too.”

If you truly want to understand customers’ wants and needs, you need to remove the distance between you and them. You need to immerse yourself in their environment and make their needs, frustrations, and desires your own. That means getting out of the office and into the field, using a variety of tools and techniques to derive new customer insights first-person—from observation and direct customer experiences—rather than relying on others to conduct research. Somehow, you want to “become” the customer, to *feel* the customer’s experience, to identify and understand the customer’s problems, and then look for ways to solve them.

Here are three effective methods you can use:

1. *Direct observation* “Shadowing” the customer from multiple vantage points; making photo or video diaries
2. *Customer experience mapping* Developing a deep, empathetic understanding of what it feels like to be a customer at every stage of the demand chain

3. Analogies *from other industries*: Learning from other companies around the world—from outside your industry—that are dramatically reshaping customer expectations

1. Direct observation

Today, more and more companies are making an effort to understand the unmet needs of their customers by using the power of observation. Whirlpool's Hank Marcy, while president of Corporate Innovation and Technology, put it this way, "We spend a lot of time working with consumers. We get out into people's homes, into where they buy the products, and get to consumers at the front end of a product's technology string to understand consumers' wants and needs." He adds, "When we go through our innovation process now, we no longer are looking to improve the traditional white box with bells and whistles. Instead, we're looking for consumer solutions."¹⁰ What companies are coming to understand is that many breakthrough innovation opportunities are found not by looking at the product, but by looking at the user.

To discover customers' deep, unarticulated needs, Procter & Gamble is increasingly shifting the focus from traditional market research (for which the company became famous) to "day in the life" observational research. In one exercise, P&G's designers went to various countries to look at the way people clean their bathrooms. After observing women in South America using brooms to clean their showers and walls, P&G developed the Mr. Clean MagicReach, which combines a cleaning pad with a four-foot extendable pole. Consumers loved it.

When P&G discovers a customer need, it goes out of its way to find possible solutions. The company calls this "matching what's needed with what's possible." Remember, for example, when you had to wash your hair first with shampoo, then apply a conditioner and wait around for it to set, and then finally rinse it all out? Nobody really has time for that in the morning—they need something quicker. So P&G spent three years developing Pert Plus: a two-in-one product that gives you a shampoo and a conditioner in one bottle so you can simply "wash and go." Then the company got to thinking about hairspray, which usually does a good job of holding your hairdo in place but tends to leave the whole thing stiff and sticky—yuck! Spotting an unmet customer need, P&G

scientists developed a special holding ingredient called Elastesse, which they added to the formula of their Pantene Pro-V hairspray. It gives your hair a flexible, almost natural hold, instead of all that stickiness—so you can still run a comb or your fingers through it. This was the first major breakthrough in hairspray technology for forty years.

At times, observation can uncover some very surprising things. Haier, the hugely successful appliance manufacturer from China, observed that customers in poor rural areas were using their washing machines not just to clean clothes but also to clean vegetables and even to make goat cheese! Instead of discouraging this practice, Haier recognized the unarticulated customer need, made some modifications to its washers, and put large stickers on them telling customers how to wash vegetables safely and how to make the cheese.

In the United States, Haier sent its product designers to visit college dormitory rooms and observe the way students used their refrigerators. One thing they discovered was that, in these cramped spaces, students were sometimes laying a board on top of the cooler to build a makeshift desk. Spotting a need, Haier introduced a new refrigerator with a fold-out worktop. The product took off immediately.

The point: developing an empathetic understanding of customers' frustrations and anxieties through the power of observation can be a great way to get deep insights into unarticulated needs.

2. Customer experience mapping

Look at the entire customer experience surrounding a particular product or service. Ask yourself what could be displacing or substituting for that product or service.

As an example, consider a major U.S. hospital—one of the largest and busiest hospitals in America—an organization that cares for more than 1 million patients a year. Some years ago, the hospital's leadership team was searching for ways to create a more serene, patient-centered experience. They knew it wouldn't be very useful just to ask patients what they thought could be improved. Most people are prisoners of their experiences (and their understanding of how a particular service or product is usually delivered), so most of those patients would have a preconceived idea about what a hospital should be like. What they did

—Lead users

instead was to map the entire patient experience—from the first symptoms of illness right through to the final billing from the hospital.

At several stages, they found that the patient has significant needs, problems, and frustrations:

- *Stage 1:* “I’ve had an adverse health event, but how do I find the physician or the health-care provider who is right for me?”
- *Stage 2:* “I lead a busy life and have very little time for physicians’ appointments, particularly if these involve long waits.”
- *Stage 3:* “I need to feel I am getting the physician’s full personal attention; I want to be treated with sensitivity, dignity, and compassion.”
- *Stage 4:* “I need to feel that my privacy and dignity are being respected in the examination room.”
- *Stage 5:* “Why is the hospital making me wait, and wait, and wait to get an appointment for surgery?”
- *Stage 6:* “How can I weave the treatment procedure into my busy life?”
- *Stage 7:* “I want a hospital room that reduces my anxiety and meets my family’s needs.”
- *Stage 8:* “During the hospitalization, I need timely and accurate information about various appointments, or visits by family members and friends.”
- *Stage 9:* “Now that I’ve been discharged from the hospital, I don’t understand all these bills. Why can’t I get a bill that is simple to understand?”

Instead of looking at the whole experience in an abstract way, the hospital’s leadership team focused on the realistic problems that certain individual patients would face. For example, they developed profiles like this one:

Joan is the linchpin of her family. Without her pushing, pulling, directing, or just flat-out “doing,” nothing gets done in her five-

person household. After the birth of her youngest, Emma, she developed back pain that has become progressively worse during the last year. Her physician, having exhausted medications, is recommending back surgery. Surgery will put her out of commission for at least a week. A week! And to make matters worse, the only available window the surgeon is offering is the week before school opens. How is she going to manage to work her way through this one?

Taking this profile, they began to ask themselves, How many of our patients are time-starved professionals who are single parents—people whose lives are already too hectic and complex, and for whom an urgent health-care issue causes even more chaos and disorder? What if we made their problem *our* problem? How could we show that we understand the patients' time constraints by coordinating the hospital's activities around *their* lives—and around their schedule—rather than ours?

3. Analogies from other industries

Another way to get at unarticulated needs is to ask yourself, What are the needs that other industries, products, or businesses fulfill that our company has not yet been responsive to? Are there analogies in the ways other industries and markets are solving customer problems? Could we use these analogies to create a more ideal customer experience in our own industry?

Let's look at how this method was used by the major hospital we described above. One thing the organization's leadership team came to appreciate was that they were never going to understand how to reinvent the hospital experience by looking at other hospitals. Instead, they would have to look outside their industry, try to identify what they thought were some of the very best customer experiences one could have in life, and then use these as analogies for what they could do differently.

Thus, team members said things like "Okay, let's spend a day at Walt Disney World," or "Let's fly British Airways first-class to London," or "Let's stay at the Four Seasons for a couple of nights." They decided to search out those really positive experiences and to capture what they saw and felt—using photos, or video, or just little note cards where they could write down what made the experience so special. Sometimes it was just the little things: "Everyone at the hotel addressed me by name, and

they even pronounced it right,” or “British Airways gave me these wonderful pajamas,” or “Disney made sure everything was perfect, right down to the last detail.”

Afterward, they came back and spent several days as “patients” in their own hospital. They had to use the bedpan; they had to walk around in those green hospital gowns that open up at the back; they were left sitting half-naked outside the radiology room for a few hours; and every time they had a negative feeling, they recorded it.

Finally, the team members put up all their photos and cards and stories around the walls of their room, and asked themselves, How can we take what we’ve learned about creating these positive and negative feelings, and start making changes to the hospital experience? What could we do to alleviate this particular negative and turn it into a positive?

ORGANIZING THE DISCOVERY PROCESS

Here’s the core lesson: radical innovators build their game-changing ideas on the four specific types of strategic insights we have outlined in this chapter: unexamined dogma, unexploited trends, underutilized competencies and assets, and unvoiced customer needs. They discover those insights not by snatching them out of the air but by looking at the world—either consciously or subconsciously—through one or more of the lenses of innovation. You can do the same. And so can your organization.

What is missing in most large companies is a *theory* of innovation. They haven’t yet grasped that these four kinds of insights are the building blocks—the raw material—for innovation breakthroughs. That’s why they typically have no methodology for systematically generating them—no organized discovery process aimed at looking through the four perceptual lenses we have described.

Sure, they may already invest money in accumulating insights of one sort or another, but they usually don’t invest enough in generating the *right kinds* of insights, and all too often their insights are neither fresh nor differentiated. Our argument is that you can’t build a highly differentiated strategy—and this is the only kind of strategy that delivers above-average performance—with undifferentiated insights. Putting