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SPOTLIGHT ON PRODUCT INNOVATION

How P&G Tripled Its Innovation Success Rate

Inside the company's new-growth factory
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BACK IN 2000 the prospects for Procter & Gamble's Tide, the biggest brand in the company's fabric and household care division, seemed limited. The laundry detergent had been around for more than 50 years and still dominated its core markets, but it was no longer growing fast enough to support P&G's needs. A decade later Tide's revenues have nearly doubled, helping push annual division revenues from \$12 billion to almost \$24 billion. The brand is surging in emerging markets, and its iconic bull's-eye logo is turning up on an array of new products and even new businesses, from instant clothes fresheners to neighborhood dry cleaners.

This isn't accidental. It's the result of a strategic effort by P&G over the past decade to systematize innovation and growth.

To understand P&G's strategy, we need to go back more than a century to the sources of its inspiration—Thomas Edison and Henry Ford. In the 1870s Edison created the world's first industrial research lab, Menlo Park, which gave rise to the technologies behind the modern electric-power and motion-picture industries. Under his inspired direction, the lab churned out ideas; Edison himself ultimately held more than 1,000 patents. Edison of course understood the importance of mass production, but it was his friend Henry Ford who, decades later, perfected it. In 1910 the Ford Motor Company shifted the production of its famous Model T from the Piquette Avenue Plant, in Detroit, to its new Highland Park complex nearby. Although the assembly line wasn't a novel concept, Highland Park showed what it was capable of: In four years Ford slashed the time required to build a car from more than 12 hours to just 93 minutes.

How could P&G marry the creativity of Edison's lab with the speed and reliability of Ford's factory? The answer its leaders devised, a "new-growth factory," is still ramping up. But already it has helped the company strengthen both its core businesses and its ability to capture innovative new-growth opportunities.

P&G's efforts to systematize the serendipity that so often sparks new-business creation carry important lessons for leaders faced with shrinking product life cycles and increasing global competition.

Laying the Foundation

Innovation has long been the backbone of P&G's growth. As chairman, president, and CEO Bob McDonald notes, "We know from our history that while promotions may win quarters, innovation wins decades." The company spends nearly \$2 billion annually on R&D—roughly 50% more than its closest competitor, and more than most other competitors combined. Each year it invests at least another \$400 million in foundational consumer research to discover opportunities for innovation, conducting some 20,000 studies involving more than 5 million consumers in nearly 100 countries. Odds are that as you're reading this, P&G researchers are in a store somewhere observing shoppers, or even in a consumer's home.

These investments are necessary but not sufficient to achieve P&G's innovation goals. "People will innovate for financial gain or for competitive advantage, but this can be self-limiting," McDonald says. "There needs to be an emotional component as well—a source of inspiration that motivates people." At P&G that inspiration lies in a sense of purpose driven from the top down—the message that each innovation improves people's lives.

At the start of the 2000s only about 15% of P&G's innovations were meeting revenue and profit targets. So the company launched its now well-known Connect + Develop program to bring in outside innovations and built a robust stage-gate process to help manage ideas from inception to launch. (For more on C+D, see Larry Huston and Nabil Sakkab, "Connect and Develop: Inside Procter & Gamble's New Model for Innovation," HBR March 2006.) These actions showed early signs of raising innovation success rates, but it was clear that

P&G needed more breakthrough innovations. And it had to come up with them as reliably as Ford's factory had rolled out Model Ts.

Idea in Brief

Procter & Gamble is a famous innovator. Nonetheless, in the early 2000s only 15% of its innovations were meeting their revenue and profit targets. To address this, the company set about building organizational structures to systematize innovation.

The resulting new-growth factory includes large new-business creation groups, focused project teams, and entrepreneurial guides who help teams rapidly prototype and test new products and business models in the market. The teams follow a step-by-step business development manual and use specialized project and

portfolio management tools. Innovation and strategy assessments, once separate, are now combined in revamped executive reviews.

P&G's experience suggests six lessons for leaders looking to build new-growth factories: Coordinate the factory with the company's core businesses, be a vigilant portfolio manager, start

small and grow carefully, create tools for gauging new businesses, make sure the right people are doing the right work, and nurture cross-pollination.

without a further boost to its organic growth capabilities, the company would still have trouble hitting its targets.

P&G's leaders recognized that the kind of growth the company was after couldn't come from simply doing more of the same. It needed to come up with more breakthrough innovations—ones that could create completely new markets. And it needed to do this as reliably as Henry Ford's Highland Park factory had rolled out Model Ts.

In 2004 Gil Cloyd, then the chief technology officer, and A.G. Lafley, then the CEO, tasked two 30-year P&G veterans, John Leikhim and David Goulait, with designing a new-growth factory whose intellectual underpinnings would derive from the Harvard Business School professor Clayton Christensen's disruptive-innovation theory. The basic concept of disruption—driving growth through new offerings that are simpler, more convenient, easier to access, or more affordable—was hardly foreign to P&G. Many of the company's powerhouse brands, including Tide, Crest, Pampers, and Swiffer, had followed disruptive paths.

Leikhim and Goulait, with support from other managers, began by holding a two-day workshop for seven new-product-development teams, guided by facilitators from Innosight (a firm Christensen cofounded). The attendees explored how to shake up embedded ways of thinking that can inhibit disruptive approaches. They formulated creative ways to address critical commercial questions—for example, whether demand would be sufficient to warrant a new-product launch. Learning from the workshop helped spur the development of new products, such as the probiotic supplement Align, and also bolstered existing ones, such as Pampers.

In the years that followed, Leikhim and Goulait shored up the factory's foundation, working with Cloyd and other P&G leaders to:

Teach senior management and project team members the mind-sets and behaviors that foster disruptive growth. The training, which has changed over time, initially ranged from short modules on topics such as assessing the demand for an early-stage idea to multiday courses in entrepreneurial thinking.

Form a group of new-growth-business guides to help teams working on disruptive projects. These experts might, for instance, advise teams to remain small until their project's key commercial questions, such as whether consumers would habitually use the new product, have been answered. The guides include several entrepreneurs who have succeeded—and, even more important, failed—in starting businesses.

Develop organizational structures to drive new growth. For example, in a handful of business units the company created small groups focused primarily on new-growth initiatives. The groups (which, like the training, have evolved significantly) augmented an existing entity, FutureWorks, whose charter is to create new brands and business models. Dedicated teams within the groups conducted market research, developed technology, created business plans, and tested assumptions for specific projects.

Produce a process manual—a step-by-step guide to creating new-growth businesses. The manual includes overarching principles as well as detailed procedures and templates to help teams describe opportunities, identify requirements for success, monitor progress, make go/no-go decisions, and more.

Run demonstration projects to showcase the emerging factory's work. One of these was a line of pocket-size products called Swash, which quickly refresh clothes: For example, someone who's in a hurry can give a not-quite-clean shirt a spray rather than putting it through the wash.

P&G's Four Types of Innovation

Sustaining

Sustaining innovations bring incremental improvements to existing products: a little more cleaning power to a laundry detergent, a better flavor to a toothpaste. These provide what P&G calls “er” benefits—better, easier, cheaper—that are important to sustaining share among current customers and getting new people to try a product.

Commercial

Commercial innovations use creative marketing, packaging, and promotional approaches to grow existing offerings. During the 2010 Winter Olympics, P&G ran a series of ads celebrating mothers. The campaign covered 18 brands, was viewed repeatedly by hundreds of millions of consumers, and drove \$100 million in revenues.

Sharpening the Focus

By 2008 P&G had a working prototype of the factory, but the company's innovation portfolio was weighed down by a proliferation of small projects. A.G. Lafley charged Bob McDonald (then the COO) and CTO Bruce Brown (a coauthor of this article) to dramatically increase innovation output by focusing the factory on fewer but bigger initiatives. McDonald and Brown's team drove three critical improvements.

First, rather than strictly separating innovations designed to bolster existing product lines from efforts to create new product lines or business models, P&G increased its emphasis on an intermediate category: *transformational-sustaining* innovations, which deliver major new benefits in existing product categories.

Consider the Crest brand, the market leader until the late 1990s, when it was usurped by Colgate. Looking for a comeback, in 2000 P&G launched a disruptive innovation, Crest Whitestrips, that made teeth whitening at home affordable and easy. In 2006 it introduced Crest Pro-Health, which squeezes half a dozen benefits into one tube—the toothpaste fights cavities, plaque, tartar, stains, gingivitis, and bad breath. In 2010 it rolled out Crest 3D White, a line of advanced oral care products, including one that whitens teeth in two hours. Such efforts helped Crest retake the lead in many markets. Pro-Health and 3D White were both transformational-sustaining innovations, meant to appeal to current consumers while attracting new ones. These sorts of innovations share an important trait with market-creating disruptive innovations: They have a high degree of uncertainty—something the factory is specifically designed to manage.

Second, P&G strengthened organizational supports for the formation of transformational-sustaining and disruptive businesses. It established several new-business-creation groups, larger in size

and scope than any previous growth-factory team, whose resources and management are kept carefully separate from the core business. These groups—dedicated teams led by a general manager—develop ideas that cut across multiple businesses, and also pursue entirely new business opportunities. One group covers all of P&G's beauty and personal care businesses; another covers its household care business (the parent unit of the fabric-and-household and the family-and-baby-care divisions); a third, FutureWorks, focuses largely on enabling different business models (it helped guide P&G's recent partnership with the Indian business Healthpoint Services). The new groups supplement (rather than replace) existing supports such as the Corporate Innovation Fund, which provides seed capital to ideas that might otherwise slip through the cracks. P&G also created a specialized team called Learning-Works, which helps plan and execute in-market experiments to learn about purchase decisions and postpurchase use.

Third, P&G revamped its strategy development and review process. Innovation and strategy assessments had historically been handled separately. Now the CEO, CTO, and CFO explicitly link company, business, and innovation strategies. This integration, coupled with new analyses of such issues as competitive factors that could threaten a given business, has surfaced more opportunities for innovation. The process has also prompted examinations of each unit's “production schedule,” or pipeline of growth opportunities, to ensure that it's robust enough to deliver against growth goals for the next seven to 10 years. Evaluations are made of individual business units (feminine care, for example) as well as broad sectors (household care). This revised approach calls for each business unit to determine the mix of innovation types it needs to deliver the required growth.

Transformational-Sustaining

Transformational-sustaining innovations reframe existing categories. They typically bring order-of-magnitude improvements and fundamental changes to a business and often lead to breakthroughs in market share, profit levels, and consumer acceptance. In 2009 P&G introduced the wrinkle-reducing cream Olay Pro-X. Launching a \$40-a-bottle product in the depths of a recession might seem a questionable strategy. But P&G

went ahead because it considered the product a transformational-sustaining innovation—clinically proven to be as effective as its much more expensive prescription counterparts, and superior to the company’s other antiaging offerings. The cream and related products generated first-year sales of \$50 million in U.S. food retailers and drugstores alone.

Disruptive

Disruptive innovations represent new-to-the-world business opportunities. A company enters entirely new businesses with radically new offerings, as P&G did with Swiffer and Febreze.

Running the Factory

Let’s return now to Tide, whose dramatic growth highlights the potential of P&G’s approach. Over the past decade the brand has launched numerous products and product-line extensions, carved new paths in emerging markets, and tested a promising new business model.

If you had looked for Tide in a U.S. supermarket 10 years ago, you would have found, for the most part, ordinary bottles and boxes of detergent. Now you’ll see the Tide name on dozens of products, all with different scents and capabilities. For example, in 2009 P&G introduced a line of laundry additives called Tide Stain Release. Within a year, building on 26 patents, it incorporated these additives into a

sible to 70% of Indian consumers and has helped to significantly increase Tide’s share in India.

More radically, Swash moved the Tide brand out of the laundry room. The line has clear disruptive characteristics: Swash products don’t clean as thoroughly as laundry detergents or remove wrinkles as effectively as professional pressing. But because they’re quick and easy to use, they offer “good enough” occasional alternatives between washes. Swash took an unconventional path to commercialization. When the products were first sold, in a store near P&G’s headquarters in Ohio, they carried a different brand name and had no apparent connection to Tide. After that experiment, P&G opened a “pop up” Swash store at The Ohio State University. Both

Tide Dry Cleaners is a factory innovation that represents an entirely new business model.

new detergent, Tide with Acti-Lift—the first major redesign of Tide’s liquid laundry detergent in a decade. The product’s launch drove immediate market-share growth of the Tide brand in the United States.

P&G has also customized formulations for emerging markets. Ethnographic research showed that about 80% of consumers in India wash their clothes by hand. They had to choose between detergents that were relatively gentle on the skin but not very good at actually cleaning clothes, and more-potent but harsher agents. With the problem clearly identified, in 2009 a team came up with Tide Naturals, which cleaned well without causing irritation. Mindful of the need in emerging markets to provide greater benefit at lower cost—“more for less”—P&G priced Tide Naturals 30% below comparably effective but harsher products. This made the Tide brand acces-

tests helped the company understand how consumers would buy and use the products, which P&G then began selling exclusively through Amazon and other online channels. In early 2011 the company ramped down its promotion of Swash, although learning from the effort will inform its work on other disruptive ideas in the clothes-refreshing space.

Whereas Swash was a new product line, Tide Dry Cleaners represents an entirely new business model. It started when a team began exploring ways to disrupt the dry-cleaning market, using proprietary technologies and a unique store design grounded in insights about consumers’ frustrations with existing options. Many cleaning establishments are dingy, unfriendly places. Customers have to park, walk, and wait. Often the cleaners’ hours are inconvenient. P&G’s alternative: bright, boldly colored cleaners

The Factory's Consumer Research at Work

In October 2010 P&G launched the Gillette Guard razor in India, a transformational-sustaining innovation whose strategic intent was simple: to provide a cheaper and effective alternative for the hundreds of millions of Indians who use double-edged razors.

The company's researchers spent thousands of hours in the market to understand these consumers' needs. They gained important insights by observing men in rural areas who, lacking indoor plumbing, typically shave outdoors using little or no water—and don't shave every day. The single-blade Gillette Guard was thus designed to clean easily, with minimal

water, and to manage longer stubble. The initial retail price was 15 rupees (33 cents), with refill cartridges for five rupees (11 cents). Early tests showed that consumers preferred the new product to double-edged razors by a six-to-one margin. Its breakthrough performance and affordability position it for rapid growth.

featuring specialized treatments, drive-through windows, and 24-hour storage lockers to facilitate after-hours drop-off and pickup.

Using the new-growth factory's process manual, the development team identified key assumptions about the proposed dry cleaners. For example, could the business model generate enough returns to attract store owners willing to pay up to \$1 million for franchise rights? In 2009 P&G's guides helped the team open three pilots in Kansas City to try to find out. That year P&G also formed Agile Pursuits Franchising, a subsidiary to oversee such efforts, and transferred ownership of the dry-cleaning venture to FutureWorks, whose main mission is to pursue new business models that lie outside P&G's established systems. It remains to be seen how Tide Dry Cleaners will fare, but one promising sign came in 2010, when Andrew Cherng, the founder of the Panda Restaurant Group, announced plans to open 150 franchises in four years. He told *BusinessWeek*, "I wasn't around when McDonald's was taking franchisees, [but] I'm not going to miss this one."

To ensure strategic cohesion and smart resource allocation, Tide's innovation efforts have been closely coordinated through regular dialogues among several leaders—CEO McDonald, CTO Brown, the vice-chair of the household business unit, and the president of the fabric care division. They've also been the focus of discussions at Corporate Innovation Fund meetings and similar reviews.

This isn't just the methodical pursuit of a single innovation. It's part of a steady stream of ideas in development—a factory humming with work.

Lessons for Leaders

Efforts to build a new-growth factory in any company will fail unless senior managers create the right organizational structures, provide the proper resources, allow sufficient time for experimentation

and learning, and personally engage. Our journey at P&G suggests six lessons for leaders looking to create new-growth factories.

1. Closely coordinate the factory and the core business. Leaders sometimes see efforts to foster new growth as completely distinct from efforts to bolster the core; indeed, many in the innovation community have argued as much for years. Our experience indicates the opposite. First, new-growth efforts depend on a healthy core business. A healthy core produces a cash flow that can be invested in new growth. And we've all known times when an ailing core has demanded management's full attention; a healthy core frees leaders to think about more-expansive growth initiatives.

Second, a core business is rich with capabilities that can support new-growth efforts. Consider P&G's excellent relationships with major retailers. Those relationships are a powerful, hard-to-replicate asset that helps the factory expedite new-growth initiatives. Swiffer wouldn't be Swiffer without them.

Third, some of the tools for managing core efforts—particularly those that track a project's progress—are also useful for managing new-growth efforts. And finally, the factory's rapid-learning approach often yields insights that can strengthen existing product lines. One of the project teams at the 2004 workshop was seeking to spur conversion in emerging markets from cloth to disposable diapers. Subsequent in-market tests yielded a critical discovery: Babies who wore disposable diapers fell asleep 30% faster and slept 30 minutes longer than babies wearing cloth diapers—an obvious benefit for infants (and their parents). Advertising campaigns touting this advantage helped make Pampers the number one brand in several emerging markets.

2. Promote a portfolio mind-set. P&G communicates to both internal and external stakeholders that it is building a varied portfolio of innovation

approaches, ranging from sustaining to disruptive ones. (See the sidebar “P&G’s Four Types of Innovation.”) It uses a set of master-planning tools to match the pace of innovation to the overall needs of the business. It also deploys portfolio-optimization tools that help managers identify and kill the least-promising programs and nurture the best bets. These tools create projections for every active idea, including estimates of the financial potential and the human and capital investments that will be required. Some ideas are evaluated with classic net-present-value calculations, others with a risk-adjusted real-option approach, and still others with more-qualitative criteria. Although the tools assemble a rank-ordered list of projects, P&G’s portfolio management isn’t, at its core, a mechanical exercise; it’s a dialogue about resource allocation and business-growth building blocks. Numerical input informs but doesn’t dictate decisions.

A portfolio approach has several benefits. First, it sets up the expectation that different projects will be managed, resourced, and measured in different ways, just as an investor would use different criteria to evaluate an equity investment and a real estate one. Second, because the portfolio consists largely of sustaining and transformational-sustaining efforts, seeing it as a whole highlights the critical importance of these activities, which protect and extend

legitimate disagreement about the best way to organize for new growth. Whereas we believe in a factory with relatively strong ties to the core, some advocate a “skunkworks” organization. Others argue for “distinct but linked” organizations under an “ambidextrous” leader; still others recommend mirroring the structure of a venture capital firm. (P&G’s factory uses several organizational approaches.) Treating capability development itself as a new-growth innovation lets companies try different approaches and learn what works best for them.

A staged approach serves another important purpose: It’s a built-in reminder that a new-growth factory is not a quick fix. The factory won’t provide a sudden boost to next quarter’s results, nor can it instantly rein in an out-of-control core business that’s veering from crisis to crisis.

4. Create new tools for gauging new businesses. Anticipated and nascent markets are notoriously hard to analyze. Detailed follow-up with one of the project teams that attended the pilot workshop showed P&G that it needed new tools for this purpose. P&G now conducts “transaction learning experiments,” or TLEs, in which a team “makes a little and sells a little,” thus letting consumers vote with their wallets. Teams have sold small amounts of products online, at mall kiosks, in pop-up stores, and at amusement parks—even in the company store

P&G now conducts “transaction learning experiments,” which let consumers vote with their wallets.

core businesses. Finally, a portfolio approach helps reinforce the message that any project, particularly a disruptive one, may carry substantial risk and might not deliver commercial results—and that’s fine, as long as the portfolio accounts for the risk.

3. Start small and grow carefully. Remember how the new-growth factory began: with a simple two-day workshop. It then expanded to small-scale pilots in several business units before becoming a companywide initiative.

Staged investment allows for early, rapid revision—before lines scribbled on a hypothetical organizational chart are engraved in stone. It also provides for targeted experimentation. For example, there is

and outside company cafeterias. P&G devised a venture capital approach to testing the market for Align, its probiotic supplement, providing seed capital for a controlled pilot. The company has also tested entire business models—recall the Kansas City pilots of Tide Dry Cleaners.

5. Make sure you have the right people doing the right work. Building the factory forced P&G to change the way it staffed certain teams. At any given time the company has hundreds of teams working on various innovation efforts. In the past, most teams consisted mainly of part-time members—employees who had other responsibilities pulling at them. But disruptive and transformational-sustaining efforts



GILLETTE GUARD

After thousands of hours of research in the field, P&G learned that a single-blade razor was a cheaper and effective alternative to double-edged razors for many consumers in India.



CREST 3D WHITE

Usurped by Colgate in the late 1990s, Crest has regained the lead in many markets owing to its introduction of several innovative oral care products, including ones that make teeth whitening at home affordable and easy.



TIDE DRY CLEANERS

Still in an early stage, this innovation arose in part from insights about consumers' frustrations with the dinginess and inconvenience of most existing dry-cleaning establishments.

require undivided attention. (As the old saying goes, nine women can't make a baby in a month.) There need to be people who wake up each day and go to sleep each night obsessing about the new business.

New-growth teams also need to be small and nimble, and they should include seasoned members. P&G found that big teams often bog down because they pursue too many ideas at once, whereas small teams are better able to quickly focus on the most-promising initiatives. Having several members with substantial innovation experience helps teams confidently make sound judgment calls when data are inconclusive or absent.

Finally, building a factory requires a substantial investment in widespread, ongoing training. Changing mind-sets begins, literally, with teaching a new language. Key terms such as "disruptive innovation," "job to be done," "business model," and "critical assumptions" must be clearly and consistently defined. P&G reinforces key innovation concepts both at large meetings and at smaller, focused workshops, and in 2007 it established a "disruptive innovation college." People working on new-growth projects can choose from more than a dozen courses, ranging from basic innovation language to designing and executing a TLE, sketching out a business model, staffing a new-growth team, and identifying a job to be done.

6. Encourage intersections. Successful innovation requires rich cross-pollination both inside and outside the organization. P&G's Connect + Develop program is part of a larger effort to intersect with other disciplines and gain new perspectives. Over the past few years P&G has:

- *Shared people with noncompeting companies.* In 2008 P&G and Google swapped two dozen employees for a few weeks. P&G wanted greater exposure to online models; Google was interested in learning more about how to build brands.

- *Engaged even more outside innovators.* In 2010 P&G refreshed its C+D goals. It aims to become the partner of choice for innovation collaboration, and

to triple C+D's contribution to P&G's innovation development (which would mean deriving \$3 billion of the company's annual sales growth from outside innovators). It has expanded the program to forge additional connections with government labs, universities, small and medium-sized entrepreneurs, consortia, and venture capital firms.

- *Brought in outside talent.* P&G has traditionally promoted from within. But it recognized that total reliance on this approach could stunt its ability to create new-growth businesses. So it began bringing in high-level people to address needs beyond its core capabilities, as when it hired an outsider to run Agile Pursuits Franchising. In that one stroke, it acquired expertise in franchise-based business models that would have taken years to build organically.

SOME THINK it's foolish for large companies to even attempt to create innovative-growth businesses. They maintain that organizations should just outsource innovation, by acquiring promising start-ups.

But P&G's efforts appear to be working. Recall that in 2000 only 15% of its innovation efforts met profit and revenue targets. Today the figure is 50%. The past fiscal year was one of the most productive innovation years in the company's history, and the company's three- and five-year innovation portfolios are sufficient to deliver against their growth objectives. Projections suggest that the typical initiative in 2014 and 2015 will have nearly twice the revenue of today's initiatives. That's a sixfold increase in output without any significant increase in inputs.

Our experience tells us that although individual creativity can be unpredictable and uncontrollable, collective creativity can be managed. Although the next Tide or Crest innovation might stumble, the factory's methodical approach should bring many more innovations successfully to market. The factory process can create sustainable sources of revenue growth—no matter how big a company becomes. ♥

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At P&G's "disruptive innovation college," people working on new-growth projects can choose from more than a dozen courses.