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## How Tide Cleaned up the Competition

July 12, 2004



Tide detergent was disruptive technology at its best, positioning Procter & Gamble for decades of growth. An excerpt from *Rising Tide*, a new history of Procter & Gamble from Harvard Business School Press.

by David Dyer, Frederick Dalzell, and Rowena Olegario

Over the first half of the twentieth century, P&G scraped and clawed its way to industry leadership. Its increasingly sophisticated capacity for brand building gave it a narrow competitive advantage over its rivals, enabling it to hold market leadership in its core soap categories. The company remained hard-pressed, however, and unable to achieve anything like breakout success against Colgate or Lever Brothers. Business was profitable, but by no means comfortable, through 1945.

Then, in a case rich with lessons in innovation and brand building, P&G decisively altered this ambiguous competitive position. By injecting a radical, new, disruptive technology and then masterfully exploiting the strategic opening thus created, the company built a brand bigger than anything it had created before. Tide was not just a new product, but a new *kind* of product, based on synthetic compounds rather than soap chemicals. Neil McElroy was scarcely exaggerating when he called synthetic detergents "the first big change in soapmaking in 2,000 years."<sup>1</sup> Indeed, it proved bigger than what P&G had initially planned: Tide quickly spilled over the boundaries that company strategists had drawn for the product and ripped through P&G's core markets. Within a handful of years, Tide displaced P&G's most profitable brands and its best-selling ones and sharply repositioned the company against its competitors.

That change worked just as powerfully internally on P&G as it did on the marketplace. The experience of developing and marketing synthetic detergents rapidly dissolved and reconstituted the company's understanding of itself, its resources, and its opportunities. To an extent few people realized in 1946, when Tide went into test markets, P&G was undertaking a venture that would transform the company from the inside out. As one researcher described the shift in strategic outlook, P&G "would no longer be a soap company" in the wake of Tide, "it would become an industrial corporation with its future based on technology. We had done some things up until then . . . but we were still a soap company with these things as extras. With Tide, we were no longer a soap company."<sup>2</sup> For P&G, leveraging the technology of synthetic detergents ultimately meant managing a profound transition, from soap company to technology firm.

Procter & Gamble's success in managing that transition would position the company for decades of growth and expansion. But the transition did not come easily for a company that had, after all, been in the soap business for more than a hundred years, by 1946. Developing Tide meant pushing P&G in directions the company at times seemed collectively ambivalent about taking. Indeed, "Product X" (as the project was known before it was branded) very nearly died in the lab. And bringing it to market stretched the company as it had never been stretched before. From the outside, P&G appeared to ride Tide masterfully and smoothly to a commanding market position. But behind the scenes, piecing this technology together and readying it for market took courage and resourcefulness, a willingness to work against the rules and outside the confines of normal

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P&G processes. The experience drew deeply on the company's vaunted expertise, but also demanded improvisation and risk taking. Tide's original marketers would debut the product with declarations of a "Washday Revolution." The full implications of that revolution would take a little while to dawn on the company that was driving it. Procter & Gamble had invited a storm of creative destruction into its core business. Still, critically, the company recognized the opportunity it was creating and proved adept at modifying its resources and processes to exploit the opening. [...]

### **Strategizing: planning for rollout**

Procter & Gamble's senior managers received their first detailed briefing on Product X sometime between late summer and early fall 1945, at a meeting that would turn out to be one of the most important executive sessions the company ever convened. Along with Brodie, President Richard Deupree, Ralph Rogan (vice president for advertising), and Neil McElroy (then an advertising manager) gathered to evaluate the demonstration staged by Coith and Halberstadt.<sup>9</sup> The executives heard out the researchers, agreed they had something big on their hands, and began mapping out strategies. How long, Deupree asked Rogan, would it take his people "to merchandise" a synthetic detergent based on the formulation the researchers had worked up? Several months to get samples, Rogan replied. Then P&G could set up blind tests in two or three cities and analyze the results. Allow five, maybe six months for that. Then, of course, further time would be needed to incorporate the modifications suggested by the blind testing. It would be a year or so, probably, before the company could gear up for shipping tests, try out advertising strategies, poll consumers, and hone the product and the marketing. In sum, Product X could be ready for test marketing in two years, with a national launch maybe a year or so after that.

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That, at least, was the timetable dictated by normal procedures. Going by the book, Product X would take two or three years to roll out on a national basis—and P&G was a company famous for going by the book: studying thoroughly, preparing painstakingly, and moving forward slowly and methodically. Rogan was invoking deep and abiding business wisdom for P&G—wisdom, moreover, that seemed particularly

applicable in this case. For in the case of Product X, P&G was dealing not with a new soap, which would have been relatively familiar, but with a new synthetic formula unlike anything it had taken to market before. Deupree took in Rogan's assessment, Halberstadt remembered, then turned to Brodie: "Kirk, do you fit into that schedule?"<sup>10</sup>

"We could," Brodie responded, "but I wonder if that's the best way to go." Brodie, having mulled over the situation since seeing the data back at the lab, was becoming convinced the situation called for bolder action. Sticking to the normal timetable would let Lever and Colgate get samples of the product soon after P&G started blind testing, allowing the competitors to put something comparable on the market shortly after. "Surely their product will not be as good as ours, but they will crowd the market with similar advertising and they will have a competitive product. We will not be alone," Brodie warned. Under the circumstances, he felt the company should seize and consolidate as much of the market opportunity as it could, which meant moving as quickly as possible. "We should bypass both the usual blind tests and the shipping and advertising tests," he urged. "This would give us almost two years start over Lever and Colgate." Rogan demurred, reminding people that this would mean a major and an essentially blind commitment of resources—at least \$15 million, perhaps as much as \$25 million, serious sums for a company doing less than \$500 million in sales. Procter & Gamble had never moved without running blind tests or shipping tests, Rogan added. ("Kirk, you know we've never done that!" Halberstadt remembered Rogan protesting.) Brodie replied, "I know, but this product has so many advantages. It is in a different class from any other new product we have ever introduced. Certainly there are risks, but the potential is so great, I think we should take those risks."

It was a bold assessment—bolder, perhaps, than is easy to appreciate today. Procter & Gamble in 1946 had just weathered a long depression and a wrenching world war. Now it faced another reconversion to peacetime status, and uncertain economic prospects. Was it really the best time to make a major bet? In any event, long experience in the fiercely competitive soap business had keenly sharpened company tactics. The meticulous, methodical market and product research Rogan was proposing for Product X was what gave P&G its edge over Colgate and Lever. Brodie's proposal cut deeply against the grain of the company.

Still, there were the data; there were the results. And the men who stood over them knew enough about their business to share Brodie's sense of the opportunity at hand. Product X truly

did look to be extraordinary. Perhaps it did call for extraordinary handling. According to Halberstadt's account, Deupree "looked from one to another and then said, 'I don't know, it's a real tough one.' Then, turning to Mr. McElroy he said, 'Mac, what do you think?' Mr. McElroy said, 'It sure is a tough one, but from what I have seen and heard today, I think it's the best prospect I have ever seen in P&G. For my money, I would take the chance and blast ahead as Mr. Brodie suggests. If the product turns out to be a winner as it appears to be, a two-year lead would be like a license to steal.'" Deupree nodded. By now Rogan was getting caught up in the excitement, too. "It's a risk," he reiterated. "But since we all understand that[,] I would go along." "Okay, Kirk," Deupree declared, "crank her up. Full speed ahead!"

### **Branding**

Product X had taken form on the periphery of the company, outside its main channels. Now, as the company shifted from product formulation to process engineering and merchandising, development accelerated rapidly. In short order, P&G's designers and marketers chose the name *Tide* and began assembling a brand identity to crystallize the product's qualities in the popular imagination.<sup>11</sup> Fittingly (and in typically cantankerous fashion), Byerly provided a key marketing element for the new brand when Tide's advertisers, Benton & Bowles, interviewed the product development team in search of marketing ideas. According to the recollection of another researcher who sat in on the meeting, "Each time [Byerly] would try to explain a feature of Tide, one of the agency people would ask about Tide's sudsing. After several interruptions of this type, [Byerly], a little exasperated, said, 'Oh, Tide makes oceans of suds.'" That slogan became a centerpiece of Tide's early marketing.

Arguably, though, it was the box itself that most dynamically conveyed the new product's extraordinary power. Tide appeared on supermarket shelves in a box radiating concentric rings of vivid orange and yellow, superimposed by the name Tide in blue. Crafted largely by P&G art director, Charlie Gerhart, in collaboration with input from the Compton agency, the layout registered a strong visceral impact. The bull's-eye motif, which the company had already featured in designs for the laundry soaps Dash and Oxydol, created a familiar context for the new product, while the coloring scheme conveyed an aggressive impression of the "rugged strength" of this detergent's cleaning power.<sup>12</sup>

The initial marketing strategy centered on the concept of the "Washday Miracle." Announcing that P&G had developed a revolutionary new technology, Tide advertising promised consumers to wash "cleaner than soap," with "oceans of suds." It all might have sounded hyperbolic or breathless—except, of course, that the technology was revolutionary and the performance truly superior. For millions of households in hard-water regions, the product truly did transform the experience of laundering clothes. Tide's early marketers also capitalized on a happy coincidence: the simultaneous spread of automatic washing machines in the United States. In the flush of postwar economic growth and consumer affluence, many households bought new appliances, including innovative, new top-loading agitator washers. With Tide coming onto the market at precisely the same time, P&G managed to fuse the two innovations in the popular imagination. Tide's advertisements picked up on the theme, prominently featuring the new machines. Exclusive agreements with washing machine manufacturers, in which boxes of Tide were packed in with new machines, reinforced the association. Eventually the U.S. Federal Trade Commission disallowed such exclusive agreements, but by the time it did, Tide had become embedded as the definitive product for use in the new appliances.<sup>13</sup>

### **Engineering production**

Given a two-year head start, Brodie and McElroy had argued, P&G could consolidate a commanding first-mover advantage over its competitors. The conviction created a driving, new imperative: Speed to market now became absolutely vital. Procter & Gamble was not necessarily geared for speed, but the opportunity at hand was energizing and Product X began hurtling to market. McElroy and his team drew up an improvised, streamlined rollout process with compressed test marketing and concurrent blind testing. Even while branding was still in the planning stage, the company laid plans to build four new towers to granulate, or blow, the new product. The expansion represented a major capital commitment, particularly in the context of the postwar environment, when steel and equipment suppliers were still recovering from the war effort. (The company's standing soap towers could not be converted to Tide production, since synthetic formulation required a fundamentally different granulation process.) Meanwhile, the company's process engineers began working out the manufacturing processes for granulating the new detergent.<sup>14</sup> At this stage, Bruce Strain played a key role in developing new patented processes and formula modifications.

Everyone had their job cut out for them. "There were no experimental towers as they have these days," recalled James Ewell, plant manager at St. Bernard, Ohio. "The first experiments were

run over on the Dreft tower at Ivorydale, and they were failures. I know because all the product that was made, which was unusable, got shipped over to St. Bernard, and we had to incorporate it into soap just to sell it."<sup>15</sup> According to Dean Fite, cost chief at the St. Bernard Plant in 1946, "the first Tide produced came out in the shape and size of a baseball and was hard as marble."<sup>16</sup>

**Product X had taken form on the periphery of the company outside its main channels.**

"Blowing a granule sounds like an easy thing, but it isn't," explained Ewell. "You can't get the right density, all sorts of strange things happen inside synthetic towers. And they didn't know enough about the operation of towers in those days, especially with a heavily built product like Tide. It had a lot of phosphate in it. Dreft didn't have any builders, so it was a completely different

operation. Takes different spraying equipment, different swirl in the tower, all sorts of things must be changed."<sup>17</sup> Including the detergent itself, as it turned out. The initial formulation did not blow well, building up in the tower and the feeder valves, forcing frequent shutdowns to clean the equipment. Reformulation, and specifically the addition of a small dose of silicate, made for crisper granules that were more blowable and less mastic. "It took a lot of cutting and trying to get that just right. In the meantime, we made a lot of mastic material that wasn't suitable for putting into cartons," related Charles "Chuck" Fullgraf, who took over as plant manager from James Ewell in 1946 and thus was the first man to granulate Tide.<sup>18</sup>

Fullgraf was working under intense pressure. Everybody at St. Bernard felt it. "Any time the tower went down we had to call the plant manager—Chuck Fullgraf—immediately so he in turn could alert the Division Manager—Forrester Reid," remembered Robert Lake, one of the three foremen working in shifts on the start-up. "One time Mr. Reid called Chuck and asked why the tower was down. Chuck was in the process of saying that he did not think it was down when there was a loud bang over the phone and then it was dead. Only later did Chuck find out from the secretary that Mr. Reid had fallen out of his chair in Ivorydale straining to look out his window for the plume from the tower."<sup>19</sup>

Rollout proceeded in a flurry of activity. St. Bernard went on-line in early August 1946, followed shortly by new towers in Port Ivory, Chicago, and Dallas; by October 1, all four were on-line and Tide was going into its first pair of test markets. Within the first three weeks in October, Tide had entered six test markets: Springfield, Massachusetts; Albany, New York; Evansville, Indiana; Lima, Ohio; Wichita, Kansas; and Sioux Falls, South Dakota. Even as the company ran the detergent through blind testing in several other locations, it plunged in deeper on the capital end, commissioning an additional four towers. "There were four towers on the first wave, and then even before they got going, another four were authorized, which was absolutely amazing for a company the size of Procter at that time," marveled Ewell. "The investment that this required, the organizational strain that it imposed [in] getting people to handle it, was tremendous. But, we just had to move. McElroy said, 'We've got to get out there and get ahead of the other people.'"<sup>20</sup>

Excerpted with permission from *Rising Tide: Lessons from 165 Years of Brand Building at Procter & Gamble*, Harvard Business School Press, July 2004.

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