

THE
ART
OF
**BUSINESS
WARS**

BATTLE-TESTED LESSONS FOR
LEADERS AND ENTREPRENEURS FROM
HISTORY'S GREATEST RIVALRIES



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BUSINESS

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Dedication

*To our loyal podcast listeners. And to the entrepreneurs,
executives,
and employees featured in these stories. They are the true
business warriors.*

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Introduction

Move not unless you see an advantage; use not your troops unless there is something to be gained; fight not unless the position is critical.

—Sun Tzu, *The Art of War*

Business is battle. Regardless of how you make your profits, there's somebody else out there willing to do the same thing faster or cheaper or better than you can. Your rival is hungry, determined, scrappy as hell. How are you going to beat them?

The stakes are high. Sure, a business rivalry, unlike a war, is civilized—in theory, at least. But lives are still on the line. You and your employees and all your families need to eat. If the business fails, how are you all gonna pay the rent? Your nation still stands after you lose a business war, but if you're on the bread line, you're still a casualty. Survival of the fittest is as true in the boardroom—or the coworking space—as it is on the battlefield. If the source of your livelihood is on the line, the war is very real to *you*. Do you want to win or not?

For well over two thousand years, warriors looking for an edge have turned to a slim treatise of military advice and philosophy by the Chinese general Sun Tzu. Sun Tzu lived during the Warring States period, an era of brutal, unceasing conflict. What better parallel for the American business landscape of the last century and more? Though the English translation of the title of his book is *The Art of War*, Sun Tzu was primarily concerned with *avoiding* a fight. As a veteran of fierce battles, he knew firsthand that war was expensive, wasteful, and insanely risky. It was for this last reason above all that war was always the last resort. “He will win,” Sun Tzu

wrote, “who knows when to fight and when not to fight.” Instead, he focused on alternatives: avoidance, alliance, intimidation, deception. If, and only if, every other strategy failed did it make sense to start swinging swords. Even then, you waited until the odds were in your favor, when a decisive victory could be claimed. To Sun Tzu, there was no greater waste of precious resources than a stalemate.

Though the book is slightly dated by its chariot-fighting tips, most of *The Art of War* feels as timely and relevant as it must have two and a half millennia ago. Much of its guidance applies to any high-stakes conflict. Whether writing on the subject of cultivating patience, planning ahead, or exploiting your opponents’ vulnerabilities, Sun Tzu gives the average McKinsey consultant or Harvard Business School professor a run for their money. That’s why, when we decided to write a book based on *Business Wars*, one of the world’s most popular podcasts, we turned to this immortal classic for inspiration.

The conceit of our podcast is simple. Each series relates a pitched battle between two iconic companies: Uber vs. Lyft. FedEx vs. UPS. Starbucks vs. Dunkin’ Donuts. By looking closely at past entrepreneurial battles, we hope to get inside the minds of the leaders who fought them and better understand what it takes to win. As Sun Tzu knew, experience is the greatest teacher. When we can’t call on our own experience, we can turn to history for our lessons. As Winston Churchill said, “The longer you can look back, the farther you can look forward.” Our goal with this book is not only to tell a series of extraordinary stories but to delve even deeper than the format of the podcast allows, to get to the very heart of each conflict and unearth all the valuable lessons to be found there.

* * *

The stories of business successes and failures are personal to the participants but also to those touched by the work those businesses do. The brands in this book are touchstones in our lives. Personally, I can take a break from work to mess around on my Les Paul guitar and feel an immediate sense of comfort in the fact that I’m a Gibson guy (though, of course, Fenders

have their place). I'll debate with family members at dinner over the merits of being a "Mac" person, not a "PC." Harley riders rolling past me on my Triumph will even refuse to give me the motorcyclists' wave.

That's okay: We all have our loyalties.

Growing up in a small southern town where Coca-Cola was king and popping open a Pepsi was almost an act of disloyalty, I remember seeing my first Pizza Hut and thinking it was somehow exotic. (The world was smaller then.) As a journalist, I ordered Domino's on the night election returns crashed at the Georgia State Capitol and that was all we reporters could get at midnight in the rotunda. Today, I can't pass by a Domino's sign without thinking of how much has changed in such a short time. And who among us doesn't recall taking that first Uber trip and thinking about how travel in an unfamiliar city would never be the same?

The world of business is so woven into the fabric of society that it's almost invisible. That's why it excites my curiosity—it's a hidden world with extraordinary impact on every aspect of our daily lives. As a journalist, I live and die by my curiosity. I wanted to understand this hidden world. That's how I ended up as an anchor of the public radio business show *Marketplace* before going on to host *Business Wars*.

Even before I became a business journalist, I had an abiding interest in commerce. I have vivid memories of pulling the Childcraft encyclopedia off the shelf and turning to the section that challenged young readers like me to match logos with the businesses they represented. My brother thought I was nuts for bragging about distinguishing between Allstate and Westinghouse, but for me these icons were really just springboards into stories. Even as a boy, I'd happily spend hours reading about anything from television networks to real estate development to the Sears catalog. These were the stories behind the stories, a map that explained the ad-strewn, brand-dotted American landscape of my childhood.

At the end of the day, business battles aren't cold, bloodless affairs. They are human stories about people with

ideas, ideas which sometimes have the potential to change the world. Each war recounted in this book offers lessons about facing down opposition to the new, fending off upstarts, taking charge, pushing back, making big changes, and, quite often, biting off more than you can chew. As such, they are lessons on triumph and defeat made utterly compelling by out-of-the-blue reversals and Shakespearean-scale tragedies. In *The Art of Business Wars*, leaders of all stripes match wits in pursuit of opposing outcomes. They devise strategies and marshal resources. Victory turns on the smallest of details; a single tactical blunder can topple an empire. Winners and losers alike walk away with valuable lessons. Now, readers can do the same without the slightest risk of bankruptcy or public humiliation.

Aren't books great?

* * *

Considering the extraordinary degree of competition for our attention today, it humbles me to know that our podcast is downloaded by 4 million people a month. Even more astounding for the world of podcasting, 95 percent of our listeners finish each episode. Why do all these people—including hordes of leaders, managers, business academics, and entrepreneurs all over the world—listen to *Business Wars*? They turn to the podcast for the same reason that generations of leaders have turned to Sun Tzu: some lessons are timeless.

I love telling the stories of business wars on our podcast, but here in this book, we've had the opportunity to go even deeper. Though some of the companies we discuss have been featured on the podcast, many are entirely new, and all of the material presents a fresh perspective. For the first time, we've had the opportunity to draw parallels and connections between different stories and across different industries and eras.

Each chapter in this book was thematically inspired by one chapter of *The Art of War*. For example, where Sun Tzu offers advice on the use of spies and military intelligence, a chapter in this book discusses the use of dirty tricks in business: misdirection, lies, even sabotage. The correspondence between the two works isn't perfect—there are nine chapters here to

Sun Tzu's thirteen—but we are grateful for the inspiration provided by that timeless classic.

A good business war feels less like a case study than an adventure, an epic narrative where a plucky hero triumphs over adversity—or succumbs to a tragic flaw like anger or hubris. For me, sharing these stories, first as a podcast and now as a book, has been the adventure of a lifetime.

1

Entering the Battlefield

The general who wins a battle makes many calculations in his mind before that battle is fought.

—Sun Tzu, *The Art of War*

Every great business begins in the same place: nowhere. There is never anything more than the sketch of an idea, a vision for what *might* be. It doesn't matter whether it's laid out in a blueprint, scribbled on a cocktail napkin, or, in some cases, inspired by a competitor. Sparked by sudden insight or developed through years of research, a new business idea is just an objective, an X on the map. You still have to fight to capture that piece of ground—and win. The war begins when an entrepreneur takes the seed of an idea and makes it a reality. In the marketplace, no ground is ever surrendered willingly. No matter how remarkable the innovation, a business can never triumph without toppling the status quo—and those competitors perched comfortably on top of it.

Be skeptical when you read the myth-making autobiographies of famous entrepreneurs. It's too easy to downplay the role that luck and timing play when recounting your own origin story. To identify universal truths, it's better to compare and contrast different examples from throughout history. What are the common elements of a successful launch, the ones that appear time and time again? Just as important are the lessons of great ideas that failed to take root—at least, until the timing was better, or a more skilled entrepreneur carried them into the field of battle.

The struggle to break through with the new is, in fact, nothing new. Even coffee, that life-giving elixir, had a rough introduction. When the Venetian botanist Prospero Alpini introduced the use of coffee to Europe from Egypt, the Vatican advocated against its infernal influence. That is, until Pope Clement VIII tried the foreign brew, loved it, and gave coffee his blessing. (In the end, the Italians turned out to be pretty big fans.)

If you have a wild idea and a burning desire to make it a reality, never expect a warm welcome. Change of any kind threatens the establishment, and the greater the change, the greater the resistance. So think ahead: Who are the key players? Who stands to lose if you gain? The impact of a new product can be hard to predict. It can lead to unexpected, far-reaching consequences. Before you take a single step, map the battlefield thoroughly. Make sure you really understand the size of the fight you're about to start.

Henry Ford Thinks Bigger: The Model T

It's 1:30 a.m. on June 4, 1896. Yawning, Henry Ford sits back from the contraption in front of him and stretches to get a kink out of his neck. Looking around the small brick shed he's been using as a workroom, he realizes with satisfaction that he's *done*. After two years of tinkering and experimentation, he's finally finished the job he set out to do as best he could, just as his mother always insisted. Ford can't say he's tired exactly, but he certainly should be. Once again, he's spent all evening putting the last touches on his new invention after a long day on the job as an engineer at the Edison Illuminating Company. Ford's wife, Clara, and their son, Edsel, must be fast asleep by now. Did they come in to say good night? He can't remember. The man who's been assisting him on this project, James Bishop, is clearly just as tired. Bishop is sitting on a nearby stool, nodding off. It's been a long night.

In front of Ford in that quiet shed sits a five-hundred-pound mechanical vehicle he's decided to call the Quadricycle. It sits on four bicycle tires, so the name makes sense. No frills,

all function—the way everything should be. Easier to repair and easier to replicate that way.

For all the mechanical complexity of its two-cylinder internal combustion engine, Ford sees the two-seat vehicle in front of him as a straightforward thing: more of a prototype than a product. When you're trying to get a new idea out, it makes sense to keep every element as simple as you possibly can. And he's been trying to get this particular idea out since he was a boy, when he first saw a steam engine pulling a farmer's cart down the road. A "horseless carriage." Now he's built one of his own. Sort of.

Ford's friend Charles King recently toiled around Detroit in his own wooden, four-cylinder-engine vehicle. He made it up to five miles an hour—could the Quadricycle beat that? Other, similar projects are under way around town. Ford has been hearing interesting noises coming from Europe, too. No one can guess what these machines are going to look like in their final form, or exactly how they'll fit into everyday life. Right now, they remain strictly the province of hobbyists. But Ford knows, deep in his gut, that they won't stay that way for long. Right now, there's camaraderie among the tinkerers. King even helped Ford out with his Quadricycle. But this open and collaborative spirit won't last. There's business to be done. The Quadricycle isn't going to replace horse-drawn carriages. But some future iteration will, and the entrepreneur who builds *that* model will change the world—and leave a generation of competitors floundering in his wake.

Ford looks around the shed. It's awfully late. And the machine will be awfully noisy. But he really ought to take it out for a test drive . . .

* * *

Henry Ford was born in Michigan on July 30, 1863. His father, William, immigrated from Ireland in search of cheap farmland. He and his wife, Mary, had found more than a hundred acres of it just outside Detroit. Growing up, Henry and his seven younger siblings helped work the farm, but Henry had no appetite for agriculture. He struggled academically, too, though math came easily enough. Even as a child, mechanical

devices consumed Henry's attention. He tinkered constantly, disassembling his siblings' windup toys and scrutinizing the workings of any mechanical object he could get his hands on.

On Saturdays, the Fords would go into Detroit to do their weekly shopping. Henry was mesmerized by the paddle steamers on the river and the other steam-powered marvels appearing with increasing frequency around the city. Change was in the air in Detroit, which had already become an epicenter of American innovation. But eventually his parents would finish their shopping and they would all return to the farm, which must have felt like a form of time travel for Henry—backward into the distant past.

Knowing Henry's consuming interest with mechanical devices, a family friend gave the boy an old, broken watch as a plaything. Henry ground a metal nail into a makeshift screwdriver, disassembled the mechanism to understand how each piece functioned, and then reassembled it in working order. This feat drew the attention of the neighbors, who began bringing their own broken timepieces to the Ford house for repair. Henry improvised an entire toolkit for himself out of knitting needles and other household items and started earning extra money that way. Maybe he could avoid the drudgery of farm work after all.

Ford's obsession with mechanical devices only deepened at the age of thirteen when his mother, always proud of her "born mechanic," died after another childbirth. Mary Ford had always encouraged Henry to find something he was good at doing and then devote himself to doing it as best he could. After her death, Ford made this his mission moving forward. It was around this time that Henry first witnessed a farmer using a steam engine to pull a cart of produce into Detroit. That noisy, coal-burning contraption was the first vehicle other than a horse-drawn carriage that he'd ever seen. Steam was already being used to power farm tools, but this engine-driven cart suggested the possibility of being tirelessly conveyed from one place to another with no fundamental limit on speed or distance. It captured his imagination. "It was that engine," he later said, "which took me into automotive transportation." The farmer was friendly enough to let Henry ask questions and

inspect the engine itself. Disassembling it out on the road, of course, was a nonstarter.

At sixteen, Ford went into the city to find work as a mechanic. He got a job in a machine shop, supplementing his small income by repairing watches in the evening. Less than a year later, Ford left the machine shop for an apprenticeship at a shipbuilding company, where he had the opportunity to work on different kinds of power plants. Ford lived and breathed engines and other machines nearly every minute of the day for three years. Eventually, he returned to the family farm, where a neighbor hired him to run a steam engine that cut corn, sawed wood, and performed other labor-intensive farming tasks. When the Westinghouse Engine Company learned about Ford's aptitude with engines, it hired the nineteen-year-old mechanic to service its products around southern Michigan.

In 1891, now married and ready to settle down, Ford and his wife, Clara, moved into an apartment in Detroit, where he went to work as an engineer for George Westinghouse's rival, Thomas Edison, at the Edison Illuminating Company. Just after their son, Edsel, was born in 1893, the company promoted Henry to chief engineer. Even as his duties at work and in the home pressed in on him, however, Ford found the necessary drive to continue tinkering on his own projects long into the night. Like many of his contemporaries, including Ransom Olds, David Dunbar Buick, and the Dodge brothers, John and Horace, Henry Ford wanted to build a self-powered carriage using an internal combustion engine, one that he could manufacture at scale.

The Quadricycle was Ford's first vehicle to run on an internal combustion engine. Soon after he completed a successful test drive, at four in the morning—his assistant Bishop bicycling ahead to warn any early-morning pedestrians as Ford got the flimsy machine up to a whopping twenty miles an hour—he decided to build a second model. Bigger and tougher, this iteration successfully drove the thirty miles to Pontiac, Michigan, and back. That demonstration got Ford the financial backing to form a manufacturing company, but it went bust in 1900. He got a second operation off the ground, but left after a dispute with his investors. (Those investors

salvaged what was left of the company, its engine design and factory, and formed Cadillac, naming it after the French founder of Detroit.) Finally, on June 16, 1903, Ford formed the Ford Motor Company.

In 1903, there were fewer than eight thousand cars on the road. The automobile was still just a rich man's hobby. Expensive and finicky, the first cars were each built by hand. In fact, Ford's factory didn't even make any of the component parts. His twelve employees simply assembled components, including engines, purchased from other machinists around town. When it came to repairs, the lack of consistency meant that replacing a part often required making a new one for the purpose. Ford believed that cars would become essential for nearly everyone, but that would only happen if they could be built quickly and consistently. The first entrepreneur to achieve that would amass an extraordinary, perhaps unassailable, lead. Ford had a vision, but he was up against both the horse-drawn carriage industry *and* other early car manufacturers. At stake: the future of America's roads.

Ford's chief backer in his new company, the coal dealer Alexander Malcomson, was stuck in a horseless-carriage mindset. Malcomson believed that cars would simply replace horse-drawn carriages as a luxurious and expensive conveyance for the rich. Ford disagreed. He wanted to scale production beyond anything his competitors could imagine. He envisioned a light and reliable car that nearly anyone could afford. At the time, this was a shocking notion—*everyone* owning a car?—but by 1906, Ford had made strides. That year, he produced the Model N. The cost? Six hundred dollars. The Model N was both lighter and sturdier than cars that cost more thanks to Ford's use of durable and easy-to-machine vanadium steel and his insistence on stripping the design to its essentials. As much car as a person needed and no more.

“I believe that I have solved the problem of cheap as well as simple automobile construction,” Ford told the press.

But even as Ford was getting closer to realizing his vision, Malcomson kept trying to steer the company along a different road. Nor was Ford going to succeed as long as he had to rely

on others for his parts. In 1905, Ford used a new strategy to solve both problems at once: vertical integration. To dominate automobile manufacturing, Ford needed to be able to act decisively and unilaterally, with total control over every aspect of production. Toward this goal, he formed the Ford Manufacturing Company, a separate entity, to make his own engines. This move also had the benefit of diverting to Ford Model N profits that would otherwise have gone to Malcomson, allowing Ford to buy the coal dealer out. With full control of his company, Ford absorbed his engine-manufacturing company, and then acquired a steel mill to boot, allowing him to make other key components like axles and crankcases. The move was a masterstroke. Now Ford could manufacture every component of his automobiles to his exacting specifications and in the manner he saw fit.

* * *

The concept of the assembly line might seem obvious in retrospect. So do most great innovations—with the benefit of hindsight. When entering the battlefield, however, a leader is presented with an enormously complicated and nuanced picture where even so-called obvious solutions can be hard to identify. It takes an extraordinarily deft mind to look at what every competitor is doing, identify the flaws, and forge ahead in a better direction.

The problem Ford faced was complexity itself: car companies expended enormous effort in training workers to make the whole vehicle, which involved locating and fitting together hundreds of parts by hand to assemble a single automobile. The task required a great deal of mechanical aptitude. Some employees took to the challenge, but they were hard to find. Most struggled, and therefore assembly was slow and inconsistent. Even the smallest mistake—say, misjudging the tightness of a nut—could lead to malfunctions and even accidents. The only thing manufacturers could do about any of this was throw more people at the problem, or urge everyone to work harder than they already did.

Ford knew that something fundamental would need to change about how cars were assembled. But what? As

inventors often do when seeking a new paradigm, Ford turned to analogy. For all its extraordinary complexity, a mechanical timepiece operates with startling efficiency, hundreds of tiny pieces smoothly interacting in specific ways to produce a single outcome—the tick of a second—over and over with near-perfect regularity. Ford found himself wondering: What if an automobile factory operated like a clock, with each step in the production process feeding into the next like a series of interconnected cogs? With the factory floor organized like a watch, a worker would only be responsible for performing a single step of the manufacturing process. With minimal training, anyone could learn a single action and then perform it the same way over and over. If a step in the manufacturing process needed to be modified—and just about every step needed tweaking over time—it would only require retraining a single worker instead of an entire workforce. A factory designed like a watch would be precise, consistent, and fast. Potentially *very* fast; once the process was “automated,” it would be easier to accelerate it. Just like a car.

Ford’s efforts to create what he eventually dubbed the “integrated moving assembly line” were not linear. He didn’t begin with a blueprint. If he’d waited until he’d dreamed up something perfect, he would never have started. Instead, he made a practice of studying his production line, looking for ways to shave even a second off the process of turning raw materials into a fully functioning Ford motorcar. These “time-and-motion studies” helped optimize the flow of production, though Ford was still hamstrung by the limitations of the factory space.

Ford’s obsession with minute details must have frustrated his employees, but that was nothing new for him. Even before he started test-driving his Quadricycle around town in the middle of the night, Ford had been dismissed as a crazy tinkerer by the neighbors. He’d come to accept that no one would understand, let alone praise, what he was trying to accomplish with his factory. He knew he was creating something that had never before existed. A century later, Jeff Bezos would famously say that Amazon is “willing to be

misunderstood for long periods of time.” Henry Ford was equally willing.

On October 1, 1908, Ford released his follow-up to the successful Model N: the Model T, the car that made automobiles affordable for millions of Americans and changed transportation forever. The Model T represented a leap forward in efficient and reliable car design. But Ford’s extraordinary feat had as much to do with his engineering of the production process as it did with his engineering of the car itself. His continual honing of the assembly line caused the Model T’s price, which started at the equivalent of under \$24,000 today, to steadily drop during its years of production, reaching the equivalent of less than \$4,000 by the end of its run in 1927. Each time the price dropped, more people could afford one, until an extraordinary 15 million Model T cars had been sold, making them a ubiquitous sight on America’s roads.

In 1910, Ford opened a sixty-two-acre manufacturing plant in Highland Park. Now he would have the freedom to design the operation from the ground up for maximum efficiency. Modern mass production as we know it took shape in the Highland Park factory, although for many years the approach was known simply as Fordism. As Fordism evolved, production time of a single car dropped from over twelve hours to only ninety-three minutes, all the while requiring less manpower.

“The man who places a part does not fasten it,” Ford explained to a factory visitor. “The man who puts in a bolt does not put on the nut; the man who puts on the nut doesn’t tighten it. Every piece of work in the shop moves.” The watch was finally ticking—in fact, with the addition of a continuous conveyor belt in 1912, the factory really did “move” like a watch. All of Ford’s countless small improvements to the assembly line became a form of compound interest: the value of a single saved second was multiplied every time a new car rolled out the factory doors. Small iterations led to massive gains over the long run. Production capacity grew not linearly like that of Ford’s competitors but almost exponentially. By 1914, Ford outpaced the rest of the industry combined.

For Ford's employees, the work was almost unbearably monotonous compared to skilled assembly work, and to endure this they were paid twice the going rate for industrial workers. They also enjoyed a host of other, industry-leading benefits, and worked two fewer hours a day than their peers. Ford knew that mass production meant "the reduction of the necessity for thought on the part of the worker and the reduction of his thoughts to a minimum." That was the point. In a sense, Ford's factory was a tool to scale his own ideas, his own hands. How else to build his cars exactly the way he intended in the vast quantities his vision demanded?

What won the battle for Henry Ford was his capacity to imagine a world very different from the one he actually lived in, and then marry that vision with successful execution. That was his real, and rare, genius. At a time when eight thousand cars were on the road, only Ford saw that one *could* sell as many as a million cars in a year, if only one could build that many. In 1922, Ford reached that milestone, not by continually branching out into new designs as other manufacturers did but by making the same car faster and more efficiently than ever. More than any single tactic, vision and focus distinguish a great leader from a good one.

Building the Dream House: Barbie and Mattel

It's a fine summer's day in 1956 and the Handler family is enjoying their vacation in Switzerland. The kids, Barbara and Ken, seem to be enjoying themselves anyway. Their mother, Ruth Handler, is distracted. As usual, she's thinking about the business: Mattel. She and her husband, Elliot, planned this trip ages ago, but now she can't recall why she ever thought a trip to Europe with two teenage children would be in any way relaxing.

Certainly, she and Elliot have earned the break. Mattel has had some very good years thanks to a handful of hit products. But you can never rest in the toy business—you're always looking ahead to next season. Ruth's thoughts are racing. How are the holiday preparations progressing back home? And why

didn't they take their summer vacation a little *earlier* in the year? Like, say, January?

Consumed with such worries as the family makes its way down a charming European street, Ruth glances into a small shop and stops dead in her tracks. Lined up in the store window are a row of small, plastic figures: the same beautiful, blond woman in an array of stylish ski outfits.

Growing up, Ruth's daughter Barbara had never had much interest in playing with baby dolls. She'd always preferred playing with grown-up figures, imagining adult scenarios like parties or even business meetings like the ones her mother was always holding at the office. Since toy manufacturers didn't make adult dolls, this meant cutting out the paper dolls that often appeared in magazines like *Good Housekeeping* and *McCall's*, printed in beautiful colors and accompanied by dresses you could also cut out.

For years, Ruth has tried to convince the other executives at Mattel that young girls aren't solely interested in pretending to be mothers, that there might be a market for dolls of grown women. Paper dolls are beautiful, but they're flimsy. And the dresses don't stay on properly. But she's had no luck convincing the rest of Mattel. As far as they're concerned, girls want to play at motherhood. Clearly, to Ruth anyway, the men are more unsettled by the connotations of a plastic woman than they're willing to admit. Now it seems that the Europeans have gotten the jump on them. Or have they? This store doesn't *look* like a toy shop.

Ruth doesn't know it yet, but those are Lilli dolls in the window. Lilli is a risqué comic strip character, a racier Betty Boop that appears in *Bild*, a West German newspaper. The doll in the shop window is, in fact, a gag gift intended for Lilli's many "admirers"—the male readers of *Bild*. Nonetheless, German girls are already playing with Lilli dolls just as Barbara liked to play with paper women back home. Ruth knows the opportunity is there. Now she has a successful example to share with the dubious men at Mattel.

Entering the shop, Ruth purchases three Lilli dolls. Now that she's got her example, all she needs is a name. Maybe

Barbara will have some good suggestions . . .

* * *

Toy makers have to win over each new generation of consumers simply in order to survive. Last season's must-have Christmas sensation is ignored on shelves by the following fall. Yet despite the rapid pace of change, a toy company can be as resistant to innovation as any other manufacturer. Toys that surprise and delight children succeed, but the adults who design and market toys often play it as safe as their counterparts in other, more pragmatic industries.

Though the toy business caters to children, it has always been brutally competitive, even cutthroat. Manufacturers use any means necessary to win the holidays, up to and including shameless imitation and ruthless sabotage. Perhaps this is because the marketplace rewards novelty so dramatically—and so unpredictably. The “it” toy sweeps the nation like a tidal wave, inspiring desperate parents to balletic feats of tactical consumerism. Consumers will comb the aisles—and now incessantly refresh their browsers—to seize the last remaining gizmo-of-the-moment. Thus, the toy business has always held a special allure for visionary entrepreneurs with a thousand ideas and two sharp elbows.

Entering the battlefield with a truly new idea will always generate opposition. Most people don't have the stomach for it. For a newcomer, in toys or elsewhere, it takes grit to persist in the face of resistance from those with more experience, whether the doubts come from your competitors or your own skeptical allies. Ironically, it's experience that blinds the veterans in the toy business. It can take fresh eyes to see the potential of a new kind of toy, one that can change the industry—and the way children play—forever.

Ruth Handler was born Ruth Mosko on November 4, 1916, in Denver, Colorado, the tenth child of Jewish immigrants who had fled anti-Semitism in Poland. Her mother was in poor health, so Ruth spent much of her childhood being raised by her oldest sister and her husband, often helping out in their drugstore, learning the ropes of running a business along the way. As a teenager, Ruth met Elliot Handler at a dance and the

two fell in love. At nineteen, Ruth decided to move to Los Angeles, and Elliot followed her there. Ruth went to work in the stenography pool at Paramount Pictures, and Elliot started attending the Art Center College of Design. The two were married in 1938.

Money was tight, so Elliot began making lighting fixtures and other knickknacks for their small apartment out of newly available plastics like Lucite. At Ruth's encouragement, Elliot ramped this hobby up into a business. She began taking her lunch hour at Paramount to sell his creations at high-end stores around Los Angeles. "I found that I loved the challenge of selling," she later recalled. "Adrenaline surged through me whenever I walked into a store with samples and walked out with an order." Eventually, Ruth landed Elliot a large contract with Douglas Aircraft to make die-cast models of airplanes as a corporate gift. Elliot hired Harold "Matt" Matson, another industrial designer, to help with the work. Next, Ruth suggested the two start making picture frames, and she very quickly lined up orders from photography stores. When the start of World War II limited the use of plastics to military needs only, they switched to using wood for the frames and their orders doubled. In 1942, they decided to call the new company Mattel, a combination of "Matt" and "Elliot." It never occurred to them to incorporate Ruth's name.

Mattel branched out into dollhouse furniture, which Elliot made using plastic scraps from the picture frames. The success of the furniture eventually led to other toys. Mattel's first hit was the Uke-A-Doodle, a tiny ukulele. At that point, Matson's poor health led the couple to buy him out of the business. By 1951, the company had six hundred employees and was selling millions of units of a hand-cranked music box. Mattel thrived in large part due to Ruth's deft handling of the business side as its executive vice president in charge of marketing and operations. At a time when American men were returning to the home front and women were returning, however reluctantly, to the home, Ruth was an anomaly, a hard-driving executive who thrived in the aggressive, male-dominated toy business.

None of this is to say that she accepted the status quo. Ruth Handler was always an advocate for inclusion. “She and Elliot had an open hiring policy,” said her biographer, Robin Gerber, author of *Barbie and Ruth*. “She hired for talent.” Mattel’s factory employed many more women and people of color than average, and the company earned an Urban League Award for its hiring practices in 1951.

In 1955, Ruth propelled Mattel into the big leagues by taking a swing on *The Mickey Mouse Club*. At the time, toys were solely marketed to parents, mostly through ads in magazines like *Look*, *Life*, and the *Saturday Evening Post*. The grown-ups were the ones who would go to the toy store to find something that seemed appropriate for their children. Ruth decided to skip the middleman and appeal directly to kids instead. With its revolutionary twelve-month sponsorship of Disney’s new TV show, Mattel became the first company to broadcast a television ad intended for children.

Ruth’s risky decision to sponsor *The Mickey Mouse Club* for half a million dollars—an amount almost equivalent to Mattel’s entire net worth—paid off when Mattel’s Burp Gun became the must-have Christmas toy that year. The success of this campaign marked a crucial shift not just for Mattel but for the toy industry as a whole: from now on, children would have a greater say over which toys their parents bought for them. Toy companies would have to start thinking like kids instead of like the adults who purchased on their behalf.

An inveterate gambler who spent her free time chain-smoking at the poker table, Ruth had the stomach for risk, but she also had vision—a killer combo for an entrepreneur. Though Elliot was the company’s primary inventor, it was Ruth who had the era-defining insight that transformed Mattel. As the men running the industry continued to assume that young girls were only interested in playing at motherhood, Ruth recognized a classic consumer pain point: millions of girls like her own daughter Barbara were reduced to scissors and origami to create realistic simulations of adult life for their play, to “dream dreams of the future.” Why not use the new vinyl production methods to make a poseable and lifelike adult figure for the purpose? Instead of tucking a baby into a crib or

pretending to feed it from a bottle, a girl could dress a woman up in various outfits and role-play situations from her own imagined future, whether that meant going to a glamorous party, traveling to an exotic locale, or, yes, facing down a boardroom of skeptical male executives who think they understand girls better than you do, even though they've never been one.

Ruth had no luck convincing Elliot or any of Mattel's other male executives of the potential of her idea. They told her that a realistic female doll would be too expensive to produce. She suspected, however, that their resistance "stemmed mostly from the fact that the doll would have breasts," as she later wrote. She wasn't wrong. "Nobody had ever had an adult toy for children," an executive at Mattel's ad agency admitted in a documentary years later. "And it just didn't seem right. The whole concept of the long legs, the breasts, the beautiful-looking girl. That wasn't—that wasn't a doll for children to play with."

Handler, rarely cowed, found herself at a loss as to how she might convince her colleagues that she was onto something. That is, until she discovered Lilli in a Swiss store window. Now she had a concrete example of an adult doll that girls were actually playing with, despite the fact that it had only been marketed to adults. With actual Lilli dolls in hand, Handler was able to sway the rest of the leadership team to give her idea a shot. She got to work on making her vision a reality, directing Mattel's enormous R&D department to modify the Swiss doll for the market of American girls. The plastic of the skin would have to be softer. The hair sturdier. The face pretty but not quite so exotic.

It's easy to look back on an incubation period like this with the benefit of hindsight and see it as a direct trajectory toward success. In reality, the battle was just beginning. While the concept of an adult doll for girls was new, the territory of girls' imaginative play was firmly held by the manufacturers of traditional dolls representing babies and toddlers. Ruth faced stiff resistance first inside and then outside Mattel at every stage of the doll's journey from idea to execution. It was only

her boundless enthusiasm and commitment that carried her idea through.

Mattel took pains to anticipate any parental concerns about this new kind of toy. After market research revealed that mothers were worried about its adult proportions, the company brought in a psychologist to reassure them that a doll with breasts—something nearly everyone in the (mostly male) toy industry found shocking—would provide a helpful educational model for growing girls. In fact, after interviewing girls and their mothers with a prototype, the psychologist urged the company to make the doll's breasts even larger. In the end, what was originally perceived as the doll's biggest liability became its greatest strength and selling point. Its feminine figure let girls imagine their way into adult scenarios.

After three years of development, Handler brought Barbie—named after her daughter—to New York City's Toy Fair, the most important industry event of the year. By this point, Mattel had innovated beyond the original Lilli design, even adding joint mechanisms that allowed the eleven-and-a-half-inch vinyl doll to strike glamorous poses. Quality and realism were paramount to Ruth; she wanted girls to fully simulate the glamorous and exciting lives they imagined for themselves one day. Barbie's hair was hand-sewn, her nails hand-painted. The company even hired a designer to create her lavish wardrobe. (Initially, Barbie would be marketed as a teenage fashion model.) On the business side, producing the dolls in Japan kept costs to a fraction of what they might have been in America. The doll would retail for three dollars to keep it accessible to as many children as possible. Additional runway fashions, some based on the latest designs from Paris, could be purchased for a dollar or more each.

Despite all of the work and every possible precaution, however, Barbie's debut on March 9, 1959, was an unmitigated disaster. Booth after booth of hopeful toy inventors lined the aisles at the International Toy Center in New York City's Flatiron District. Ruth sat at Mattel's booth with increasing dismay as it became clear that retailers didn't want Barbie. The buyers, all men, took one look and kept on walking. They simply didn't understand the doll's appeal.

Girls wanted to play at being mothers, nothing more. Besides, the fashion model doll in Mattel's booth just made them uncomfortable. Something with curves like that couldn't be wholesome. Girls needed to prepare for a life managing a home like their own mothers did, not the fashion runway.

By the time Sears, the biggest player at the Toy Fair, outright refused to stock the toy, Ruth Handler was close to despair. Japan was making twenty thousand Barbies a week in anticipation of huge demand even as every major player was turning its back on the product. She had no other choice. If stores weren't going to stock Barbie, she'd have to get children to demand the doll, just as they had done with the Burp Gun.

Mattel shifted its attention to getting Barbie directly in front of girls in as many ways as possible, for example by sending promotional View-Master toys preloaded with photos of the doll to toy stores. Mattel's first TV ad for Barbie, airing only weeks after the Toy Fair, got to the heart of the toy's appeal:

Someday I'm gonna be exactly like you. Till then, I know just what I'll do. Barbie, beautiful Barbie. I'll make believe that I am you.

Ruth felt certain that girls would understand Barbie as soon as they saw her, even though all the highly paid and experienced professionals paid to understand their preferences could not. Once again, she was right. Television brought Barbie directly to American girls, and the doll's popularity soared. By Christmas, the factory in Japan couldn't keep up. Mattel sold more than 350,000 Barbies in the product's first year and took three full years to catch up to demand. "The minute that doll hit the counter, she walked right off," Handler later said. Unlike most toys, Barbie's popularity only grew from there. Unlike gimmicky toys like the Burp Gun, the Barbie line of toys opened an endlessly flexible world where young girls and boys could safely imagine nearly any kind of life for themselves as they played.

In 1960, one year after Barbie's debut, the Handlers took Mattel public, with a \$10 million valuation, and the company

continued climbing toward the Fortune 500. The company began marketing Barbie around the world in 1963, and Barbie soon became an American icon, despite her German origins. By the end of that decade, sales would exceed \$200 million. In addition to the thousands of workers in Japan who made Barbie dolls and the hundreds of employees in California handling marketing and distribution, Barbie had her own secretary to respond to the twenty thousand fan letters the doll received each week. By 1968, the Barbie Fan Club had 1.5 million members in the United States alone.

If Barbie's adult figure was its greatest asset in appealing to young girls, a male figure would clearly be a helpful complement to complete that picture of adulthood. In 1961, Mattel introduced Barbie's boyfriend, Ken, named after the Handlers' son. Over the years, more dolls followed, from friends, including dolls representing women of color by 1968, to countless variations on Barbie herself, whether pilot, doctor, athlete, or politician. A Black Barbie appeared in 1980. Crucially, in all of these variations, Ruth never gave Barbie children of her own to raise. The closest the toy ever came to child-rearing was in a Barbie Baby-Sits playset.

In later years, Barbie became an object of feminist concern, even scorn. For one thing, the doll was seen by some as implicitly encouraging an unrealistic body image for young women. Ruth Handler's intention from the beginning, however, was to give girls a much closer approximation of a real woman's figure than they could find anywhere else. For all the doll's detractors, millions more were grateful for Barbie in retrospect. "Over and over I've had it said to me by women," Handler later told a reporter. "She was much more than a doll for them. She was part of them."

Ruth Handler was diagnosed with breast cancer in 1970, just as Mattel was facing down a recession, a factory fire, and a dockworkers' strike. It would have been a tough combination for any leader to overcome, let alone one recovering from a radical mastectomy. It was at this point that Mattel turned to illegal accounting practices to maintain its stock price. In 1972, Mattel's shareholders sued the company, and she and Elliott were forced to resign. In Elliot's words to

Ruth's biographer, her ambition got the best of her—she simply “couldn't turn it off.” In 1978, Ruth was convicted on federal charges of conspiracy. She pled no contest and was sentenced to a fine and community service. To satisfy this requirement, she started a foundation that gave job training to disadvantaged young men.

Characteristically undaunted, Ruth Handler turned her attention to a new company, one that manufactured comfortable and realistic prosthetic breasts. Again, she had taken a consumer pain point from her own life and turned it into a product. Ruth Handler ran that company for more than a decade until selling it, along the way becoming an advocate for early detection of breast cancer at a time when the disease itself was a taboo subject. She even fit Betty Ford for a prosthetic after the first lady's own mastectomy.

In 1989, Ruth and Elliot were inducted into the Toy Industry Hall of Fame. Ruth Handler died in Los Angeles in 2002 and Elliot passed away nine years later, in 2011. Today, Barbie is both a cultural icon and a business legend, with over a billion dolls sold worldwide since 1959. Thanks in large part to Barbie and her friends, Mattel is the second-largest toy company in the world, behind Denmark's Lego, with sales in nearly every country in the world and annual revenue over \$4 billion.

“My whole philosophy of Barbie was that through the doll, the little girl could be anything she wanted to be,” Handler wrote in her autobiography. “Barbie always represented the fact that a woman has choices.” Luckily for Mattel, Ruth Handler had the necessary mettle to convince a group of stubborn—and profoundly uncomfortable—men that a doll representing an adult female figure could succeed in the marketplace. Often, the potential of an idea exists in proportion to the amount of resistance it encounters from the establishment.

Serial entrepreneurs learn to see resistance as a sign of encouragement: the greater the fight against an idea, the greater its potential. If something new doesn't strike sparks, how will it ever start a fire?

Late Fee: Blockbuster vs. Netflix

It's a fine summer's morning in 1997. As they've been doing every weekday for months, Reed Hastings and Marc Randolph meet up in a parking lot in Scotts Valley, just outside their hometown of Santa Cruz, California, for their daily carpool over Highway 17 into Silicon Valley. It's a period of enormous excitement and opportunity in the tech world. Everyone they know wants to get in on the dot-com boom, a bona fide gold rush. Silicon Valley spans the coast between Santa Cruz and San Francisco, with Sand Hill Road—home of the Valley's top venture capitalist firms—sandwiched in between. Yet these tech-savvy early adopters find themselves doing something positively archaic: opening the mail.

Randolph has worked at the Sunnyvale headquarters of Pure Atria, Hastings's software development company, since Pure Atria acquired his own start-up last year. Hastings himself is in the middle of completing what will become the biggest merger in Silicon Valley history, between Pure Atria and another company. He and Randolph will both be redundant at the newly merged company, so the two have spent their morning drives plotting something new. At first, they could agree on only one thing: joining the dot-com boom while it was still booming. But figuring out what to actually build has proven to be a challenge. Neither Hastings nor Randolph wants to pour his heart and soul into an idea with limited potential.

“We need to build the Amazon.com of . . . something,” Hastings said.

Every morning in the car, Randolph would out his latest website idea: home-delivered shampoo, personalized dog food, custom-built surfboards. Each time, Hastings replied in the same way: “That'll never work.” Each time, Randolph goes back to the drawing board.

After combing through hundreds of possibilities this way, Randolph pitched Hastings on something promising: renting movies through the mail. Though intrigued, Hastings nixed the idea after a little research—shipping and handling both ways makes mailing VHS tapes prohibitively expensive. Then they

heard rumblings out of Japan about a cutting-edge new format for watching movies at home: the digital video disc. DVDs are the size of a compact disc but can contain an entire movie at high resolution. They are promising to supplant both VHS and Laserdisc to become the standard home movie format.

If DVDs win out, are people going to keep schlepping to Blockbuster to retrieve a four-ounce piece of plastic? In theory, you could mail one easily and cheaply. You would no longer need to lease a thousand stores—let the postal system do the work of distribution. A few big warehouses would suffice to store all the inventory. Just like Amazon has. And, like Amazon, you could use sales data to figure out what your customers want next.

Hastings was excited, but Randolph was skeptical. He didn't believe a five-inch plastic disc could survive the trip. He spent two decades in direct marketing, which involved sending millions of pieces of mail. He's even been behind the scenes at the San Jose central post office.

“Those machines shoot those letters through at sixteen gazillion miles an hour and bend them around corners, and all that,” he pointed out. A DVD would arrive in pieces—wouldn't it? There was only one way to find out.

Randolph and Hastings couldn't get their hands on a DVD—the format was still only available in a handful of test markets around the United States—but they know it is physically identical to a compact disc. A couple of days earlier, they'd walked over to Logos Books & Records on Pacific Avenue, just a few blocks from Hastings's place, and purchased a CD of Patsy Cline's greatest hits. Removing the disc from its jewel case, they popped it into an envelope with Hastings's address and a thirty-two-cent stamp on the front and dropped it into a nearby mailbox.

This morning, Hastings has arrived for their daily commute with that now-postmarked envelope in hand. Tearing it open eagerly, the men examine the disc for scratches.

To Randolph's surprise and both men's delight, the disc is perfect. Pristine.

Standing there in that parking lot, Hastings and Randolph look at each other. It's almost too easy. But will a customer eager to watch the latest cinematic release be willing to wait a day or more to get the movie they had in mind?

It depends: How much do they hate going to Blockbuster?

* * *

One of the most protracted and grueling business wars of modern times, the battle for the American couch, continues. Today, behemoths like Apple, Netflix, and Disney are making colossal wagers on the future of streaming—and reshaping every corner of the entertainment industry in the process. When the future is cloudy, an astute leader looks to the past for useful parallels.

At a time when the typical internet connection struggled to deliver a thirty-second video the size of a postage stamp, Friday night meant driving to one of the thousands of blue-and-yellow Blockbuster Video locations around the world and then wandering the aisles at length in search of the perfect movie. Today, only one Blockbuster remains: an independent store in Bend, Oregon, with no connection to the now-defunct corporation that once dominated the video rental market.

In its heyday, Blockbuster used the big-box retailer playbook to drive out small, local competitors. These mom-and-pop video rental stores had served as a nexus of film community in an era before Facebook and Reddit. Their movie-obsessed employees had been a resource of film knowledge in an era before Wikipedia and the Internet Movie Database. As businesses, however, they couldn't compete with Blockbuster's efficiency and consistency. Blockbuster's blue-and-yellow-shirted workers may not have known much about Martin Scorsese. The cheerless, fluorescent-lit stores may have discouraged socializing. But a number of smart innovations helped the new chain dominate the market. Blockbuster's founder, David Cook, used sophisticated computer databases to ensure adequate inventory of the most popular titles across all locations. Computers also allowed the company to customize the selection in individual stores to suit local tastes. By dispensing with a deep catalog of niche films—and

avoiding pornography, a rental-store staple, altogether—in favor of shelf after shelf of the latest big releases on VHS, Blockbuster created a family-friendly environment where almost any combination of people could go home with something they could all agree on, if not love.

Much of Blockbuster's financial success lay in its savvy exploitation of human nature. It offered cheap video rentals to lure customers away from its competitors, but when customers inevitably needed another day or two to finish a film, it hit them with hefty late fees. This shrewd strategy paid off. Blockbuster grew rapidly, eventually opening locations around the world. In 2004, at the peak of its expansion, it employed a whopping 84,300 people, including 58,500 in the United States, across more than nine thousand stores. The writing, at that point, was already on the wall, however. Blockbuster was at war with an even more disruptive competitor than itself, a foe armed with shiny, metallic discs sharp enough to cleave through its overwhelming market dominance.

On August 29, 1997, Reed Hastings and Marc Randolph cofounded Netflix. At the beginning, the business model that would drive the company's success had yet to be formed. When the site itself launched in April of the following year, customers could buy DVDs or rent them one at a time for a fee, just as they did at Blockbuster. The primary difference was Netflix's selection, unlimited by the constraints of a physical store. Even though the DVD format was quickly gaining acceptance, however, the site failed to gain traction. Then Randolph decided on a little publicity stunt: Netflix offered a DVD of Bill Clinton's grand jury testimony about the Monica Lewinsky scandal for only two cents. That move won the start-up some much-needed media attention and more people started trying the service. But the business model still needed work.

One night in 1999, Randolph found himself in the company's San Jose warehouse surrounded by hundreds of thousands of DVDs. "Why are we storing these here?" he wondered out loud to Hastings.

“Let’s let them keep the DVDs as long as they want,” Hastings replied. “When they’re done with one, we’ll send them another one.” No more late fees—talk about a selling point. This innovation was quickly complemented by two more: a flat monthly subscription fee for unlimited rentals, one or more at a time depending on the pricing tier, and a convenient queue where customers could indicate the movie they’d like to watch next and have it sent out as soon as they returned the last one.

Though small, Netflix began to pose a serious threat to Blockbuster. Sure, customers had to wait a day or two for their movies to arrive, but in return they could draw from a much larger library of films than the average store location and, even better, keep each movie as long as they wanted, watching and even rewatching each film at their own pace. When they were done, they’d just mail it back in the same envelope and be sent another one, all for a reasonable monthly price. No more worrying about late fees or staying up late to finish a movie in one sitting. No more driving to Blockbuster with the whole family and spending an hour arguing over which movie to watch. In return for those juicy late fees, Netflix enjoyed the stable and predictable revenue that subscriptions provided, all without those expensive big-box retail locations. All it needed was a bunch of cheap but strategically placed warehouses.

In 2000, the site started offering customized recommendations based on viewers’ ratings of films they’d watched, just like film-savvy employees at mom-and-pop rental stores used to do. This addressed another enormous pain point in the Blockbuster experience: the endless wandering of the aisles in search of something to watch. But that’s when Netflix hit a snag that had nothing to do with Blockbuster. The dot-com bubble burst. Suddenly the days of sky-high acquisitions and market-busting IPOs for anything with “.com” in its name were over.

Blockbuster agreed to a meeting with Randolph and Hastings. It was a true David-meets-Goliath moment: Netflix was on track for \$5 million in revenue. Blockbuster’s revenue that year was \$6 *billion*. Unfortunately, the two tech founders had just returned from a hard-partying company retreat the

night before. They showed up for the hastily scheduled meeting slightly hungover, Randolph in a tie-dyed shirt, shorts, and flip-flops. At that point, an acquisition by the dominant player in the industry would have felt like a miracle. But when the bedraggled pair suggested that Blockbuster acquire Netflix for “only” \$50 million, CEO John Antioco visibly struggled to contain his laughter. Humiliated, Hastings and Randolph left the meeting and turned their attention back to surviving the crash on their own. As it would turn out, Blockbuster buying Netflix for \$50 million at that moment would have been one of the best bargains in business history.

As Harvard Business School professor Clayton Christensen explains in his now-classic book *The Innovator's Dilemma*, a disruptive innovation shakes up an existing category by leapfrogging the status quo offering in one or more key areas. Typically, this innovation is dismissed by incumbent players at first because it isn't on par in some aspects—think of camera and film manufacturers dismissing the potential of digital cameras because of their image quality. Unlike a start-up, an established incumbent faces the prospect of cannibalizing its existing business by pursuing the new technology. Paralyzed by this dilemma, the incumbent can only watch as the innovation—in Blockbuster's case, the idea of mailing DVDs with no late fees and allowing customers to choose their next film on the internet—poses a larger and larger threat. Eventually, the success of the new business model or technology makes it impossible for the established company to continue doing business as they have in the past. By then, however, it's often too late to adapt.

Blockbuster could now either keep doing business as usual, holding on as tightly as possible to its still-profitable business model and hoping for the best, or it could try to compete on the new playing field, risking everything it had built. Offering its own DVD-by-mail service to compete with the one offered by Netflix would have put Blockbuster at a serious disadvantage. It held long leases on millions of square feet of expensive retail space around the world and employed tens of thousands of employees who were trained to operate in a physical retail environment. Spending marketing money to

move its own customer base away from the brick-and-mortar model—and the profitable late fees that entailed—would only accelerate the damage Netflix was doing to its bottom line. Would Blockbuster have time to successfully bridge the gap between business models, eventually shuttering some or all of its retail locations, before Netflix achieved market dominance in the new category, where it already had a head start?

Sun Tzu understood the very problem facing Blockbuster back in the sixth century BC. Netflix was attacking Blockbuster on its own ground. “Forage on the enemy,” the Chinese strategist advises in *The Art of War*. “One cartload of the enemy’s provisions is equivalent to twenty of one’s own.” Simply getting a cartload of food sent from home used up enormous resources. Likewise, pillaging an existing customer base with a superior offering is much easier than winning people over to a brand-new product or service.

This is exactly what Netflix was doing: foraging in enemy territory. Blockbuster had spent almost two decades getting Americans hooked on the practice of renting movies. Randolph and Hastings were simply convincing people to switch to a model that would deliver a better overall experience in nearly every way. With this approach, Netflix captured more and more of the market at no real risk to themselves.

Blockbuster, on the other hand, faced a much greater challenge. Switching its own customers to the new model was, in a way, foraging on itself, starving its existing business, a practice Sun Tzu strongly warns against but one that any established company hoping to innovate inevitably faces. Time and again, leaders need to cannibalize their existing business to adapt to big changes, and time and again they prove reluctant to do so. By the time Blockbuster’s leadership realized their strategic blunder, Blockbuster’s chance to buy Netflix for \$50 million was long gone. In 2002, with 600,000 paying subscribers, Randolph and Hastings took Netflix public. The company soon became one of the best-performing stocks in the S&P 500.

It's easy to blame CEO John Antioco and the rest of Blockbuster's leadership team for missing its opportunity, but they were also hamstrung by Viacom, their parent company at the time. Viacom strongly resisted any experimentation with online rentals. In 2004, however, Viacom decided to spin Blockbuster off, leaving the now-stalling company free to launch its own DVD subscription service. By that point, however, the damage was done. Netflix was now a well-funded public company with 2 million subscribers and an established brand and service. There would be no catching up. Even so, Blockbuster would spend far more than \$50 million trying to build its own offering from scratch. They had Netflix's own offering to imitate, but they were operating without the bench of tech talent its competitor had patiently built over the years, particularly experts on the "back-end" software used to route DVDs and anticipate customers' preferences. On the defensive, Blockbuster made stumble after stumble, including a "No More Late Fees" campaign, targeted at Netflix, that drew false-advertising lawsuits in forty states. (While late fees were waived, Blockbuster quietly charged customers the full price of an unreturned movie after eight days.)

Blockbuster held tremendous advantages in this battle, even as it made one mistake after another. In fact, Hastings acknowledged that, had the playing field been level, Blockbuster's Total Access plan, which offered subscribers unlimited access to rentals both in stores and, for a larger selection, through the mail, might have beaten Netflix. Except the field wasn't level. Blockbuster was saddled with a billion dollars in debt by that point. "If it hadn't been for their debt," Hastings told a journalist in 2009, "they could have killed us." Worse than that, however, Blockbuster failed to create a vision for its own future in a timely manner, an unforgivable lapse of leadership.

In 2007, John Antioco got into a dispute with Blockbuster's board over compensation and left the company. Replacing him at the helm was Jim Keyes, who had just completed a successful five-year tenure as president and CEO of 7-Eleven. Even though Total Access struck those inside

Blockbuster as a step in the right direction, Keyes decided to wipe the slate clean. Instead, he had the company acquire MovieLink, a streaming video start-up. At the time, Apple had just debuted the Apple TV device for watching downloaded movies on home television sets. Wal-Mart was seeking out its own video-streaming service to acquire. Streaming was the future, and Keyes wanted in on the ground floor. At the time, Netflix was still focused on DVDs by mail, as was its kiosk-based competitor, Redbox. “Neither Redbox nor Netflix are even on the radar screen in terms of competition,” Keyes said. “It’s more Wal-Mart and Apple.” Blockbuster’s enormous debt load, however, made it impossible to drive forward with Keyes’s undeniably forward-thinking vision in the face of the 2008 financial market collapse.

To survive requires more than fending off any one adversary. Ultimately, Blockbuster couldn’t decide on the role it wanted to play when video rental stores became a thing of the past. It waited so long to accept the undeniable truth of its own fading relevance that its efforts to pivot were rushed and reactive. Thus, though Blockbuster’s demise was protracted—it was only delisted from the New York Stock Exchange in 2010—it was also inevitable.

After its DVD-by-mail service helped topple Blockbuster, Netflix faced the innovator’s dilemma itself. As Jim Keyes had seen, online video threatened to disrupt Netflix’s business by offering customers instantaneous access to movies. It would have been easy to dismiss the threat. Video quality, bandwidth limitations, and the library of available films all made DVDs and newer Blu-ray discs a superior option—except for that one- or two-day delay. As experienced technologists, however, Hastings and Rudolph understood how quickly each of those factors holding streaming back could quietly, gradually reach parity before “suddenly” upending their business model. It would only be a matter of time.

“Movies over the internet are coming, and at some point it will become big business,” Hastings told *Inc.* magazine in 2005, the same year YouTube launched. “We started investing 1 percent to 2 percent of revenue every year in downloading, and I think it’s tremendously exciting because it will

fundamentally lower our mailing costs. We want to be ready when video-on-demand happens. That's why the company is called Netflix, not DVD-by-Mail."

In launching its own streaming service—shortly after Keyes dismissed them as a digital threat—Netflix executed the rare leap of the innovation chasm, capturing a dominant position in a new battleground even as it continued to offer customers access to its original DVD subscription service. In its aggressive response to technological disruption, Netflix proved that the innovator's dilemma is not impossible to overcome. Merely difficult. It requires visionary leadership and a willingness to take the necessary risks early, before a more nimble upstart robs you of the chance.

* * *

Henry Ford lapped his competitors at the turn of the last century. Ruth Handler vinyl-molded an icon decades ago. Hastings and Randolph busted the blue-and-yellow giant at the turn of this century, and are already fighting the next campaign. In each case, the disruptive technologies at the heart of the battle couldn't have been more different, but the successful strategies were surprisingly similar. These leaders each plucked a clear vulnerability from the confusion of war: expensive cars, flimsy paper dolls, limited movie selection and late fees. They each had a vision for striking at that vulnerability with something better. And they each overcame the tremendous resistance that always seems to spring up against new ideas that threaten the status quo, no matter how obvious their potential.

Entering the battlefield is all about creating and then sticking to a bold vision. Great leaders dream bigger than others, and they hold fast to those dreams, tirelessly molding external circumstances to their will no matter how loudly or often they are told to give up. And when these leaders do capture a square on the map, they aren't satisfied. They simply double down on their efforts to expand their territory. As Sun Tzu writes in *The Art of War*, "Opportunities multiply as they are seized."

Of course, entering the battlefield is only the beginning of a war. Destabilizing the competition with a new idea doesn't guarantee victory. To ensure a decisive triumph, the leader must hold that new territory and build on it. In the [following chapter](#), we look at the next phase in any business war: making the new concern viable over the long term. This is the toughest transition for any leader. Often, the attributes that make for a successful entrepreneur can undermine the CEO of a successful enterprise. Established businesses with shareholders and millions of customers can't keep making sudden pivots based on one person's gut instinct. They need to move deliberately. Their leaders need to build consensus, broker alliances, and align vast numbers of people toward one, overarching goal. To move from the first job to the second calls for a profound transformation. Not every entrepreneur can pull it off.

2

Waging War

In war, let your great object be victory, not lengthy campaigns.

—Sun Tzu, *The Art of War*

In business, slow and steady won't win the race. The marketplace rewards boldness and aggression. Many of the car manufacturers that dominated the twentieth century were founded by the automobile's earliest innovators, like Ford, Ransom Olds, and the Dodge brothers. They got in fast and held on tight. When Ruth Handler saw Lilli in that Swiss store window, she didn't hesitate to stuff three dolls in her luggage. Hastings and Randolph got Netflix off the ground within months of conceiving and testing the idea behind it. But a *company* can't be bold—only a leader can. Leaders are the ones who spot opportunities, conceive of audacious strategies, and rally others to the fight.

The idea of a “first-mover advantage” is simple: a company can capture an insurmountable lead by offering something new and valuable first. When you're first, your brand becomes synonymous with the product. You can even lock customers in by making it hard to switch to alternatives as they become available.

The promise of the first-mover advantage is certainly appealing, but it comes with major risks. Many companies rush their product to market in the hopes of achieving a knockout blow only to learn—the hard way—that it isn't ready

yet. Take Book Stacks Unlimited. You may never have heard of it, but it was the first true online bookstore. It launched in 1992, three years before Jeff Bezos introduced Amazon.com. But Book Stacks Unlimited was too early. There weren't enough people comfortable with using the Web to provide a critical mass of potential customers. When Bezos founded Amazon, the market was larger and the business model finally clicked. Today, people attribute Amazon's success to first-mover advantage in online retail, but the real story is more complicated. It always is.

In this chapter, we look at the stories behind three major product breakthroughs: solid-body electric guitars, dating apps, and commercial computers. It isn't always the first company to harness a new technology that succeeds but the one that strikes at the *right* moment, the moment when it can leverage the opportunity to the fullest—and not a second later. The history of business wars reveals that *early but excellent* execution wins the day.

Speed isn't everything.

The Feedback Loop: Gibson vs. Fender

Les Paul can't believe his eyes, or his ears. The glossy electric guitar in his hands plays like a dream and looks like one, too—stylish, curvy. Too good to be true.

Paul has played guitar professionally since he was a kid back in Waukesha, Wisconsin. And he's tried to make his guitar louder for much of that time: he's practiced damn hard to get as good as he's gotten, and he wants to be heard! For years, he's tinkered with makeshift ways to amplify his instrument. As a teenager, Paul strung a wire between a phonograph needle on his guitar and a radio speaker. Luckily, that hacked-together contraption didn't electrocute him. (He would manage that feat during *another* ill-fated experiment.) But the hookup didn't make his guitar sound very good, either, between the feedback and the distortion. Even now, in 1951, the big manufacturers can't make a decent electric guitar. At least, that's what Paul had thought, right up until Ted McCarty showed up at his door this evening.

McCarty, president of Gibson Guitars, stands nearby while Paul noodles around on the prototype he's brought. By this point, Les Paul is a well-known, chart-topping jazz, blues, and country guitarist. McCarty is here to show Paul Gibson's first solid-body electric guitar, its attempt to take on Fender's already-popular model.

What is Les thinking? McCarty wonders as he watches the man strum. Paul is mercurial. He's been advocating for solid-body guitars for years, but that's no guarantee he'll like this one—Paul puts enormous emphasis not only on the sound of his instruments but also on their aesthetics. *Did we get the styling right?* A lot is riding on this tryout. Unable to wait another minute, McCarty broaches the question of the evening: Will Paul endorse this thing?

After a moment of thought, Paul agrees. But then he adds two conditions. One: Gibson must credit *him* with the design of the guitar. After all, its solid-body construction draws on a design he'd shown the company years earlier. Also, his reputation as a performer and an instrument maker will carry more weight with players.

Not a problem, says McCarty.

Good, Paul replies. Two: Does this thing come in gold?

* * *

Musicians have been experimenting with electrical amplification for as long as there's been electricity. The first commercial electric guitars arrived in the 1930s, at a time when only 70 percent of American homes even had electricity. Demand drives innovation, and demand for electric guitars was high from the start. The big bands of the era were always getting larger and louder, increasingly drowning guitarists out. The potential in amplification was too great for instrument makers to ignore. Adapt or die.

But there was a persistent problem with electrical amplification: feedback. When the sound pickup in a guitar amplifies its own amplified sound, it creates a feedback loop resulting in an earsplitting screech. As amps got louder, the problem of feedback only got worse.

To an entrepreneur, seeing the right idea with the wrong execution represents an ideal business opportunity. When someone else does you the favor of showing you a path forward and then stumbling along it themselves, you have an incredible opportunity to follow their lead (while picking your steps more carefully). The foundational innovation—electrical amplification—had been established. The potential market was proven. Now it was simply a matter of making it work properly. Crucially, however, the first company to solve the feedback problem wouldn't walk away with the prize. To both enter the battlefield and hold on to the captured territory, the winner would have to address that pain point *and* deliver an otherwise excellent product, one that worked for professional musicians going onstage in front of huge audiences. Audiences hear guitars *and* see them—form and function both mattered. This was about more than engineering. To win this war, you'd need to electrify not only the instrument but the connection between the performer and their audience.

That's where Les Paul came in. He was one of the most famous musicians to tackle the feedback problem. A guitarist and a talented luthier, or maker of stringed instruments, he often experimented with electrical amplification methods for the guitars he built. He wanted the audience to hear him play—but without the squeals. Paul understood enough about acoustics to realize that the vibration of the guitar's body was contributing to the problem. Since the hollow cavity inside a guitar isn't actually necessary once you add an electrical sound pickup, he tried building an electric guitar that didn't have a cavity in the first place. In 1940 he created "the Log," named for its spartan looks. Essentially a hunk of wood with guitar strings, the Log played loud and clear without feedback.

When Paul brought the Log to Gibson, however, the execs laughed him out of the room. While it solved the feedback problem, the Log was just too *strange* to have mass appeal. The company had only begun selling electric guitars three years earlier. The solid-body Log was simply too far ahead of the curve. Gibson's leaders couldn't imagine customers buying a guitar that, well, didn't look anything like a guitar! One exec compared the Log to a broomstick with strings.

People remember Paul's Log as the first solid-body electric guitar, but other upstarts came (and went) even earlier: for example, Vivo-Tone, a company cofounded by a former Gibson designer, offered a solid-body guitar in 1934. It also failed. One of the obstacles these early solid-body models faced was their unfamiliar appearance. Paul's Log looked like a broomstick. Vivo-Tone's guitar resembled a plywood boat paddle. But looks didn't have to be a stumbling block. A "skeuomorph" is a vestigial design element carried over from an earlier product. We see skeuomorphs all the time: "buttons" on our digital screens that click when pressed. Front grilles on electric cars that have no need for airflow to cool a combustion engine. Rivets on jeans from an era when stitching wasn't sufficiently durable. The familiar cues of skeuomorphs help customers adapt to unfamiliar new technologies. If Vivo-Tone had made a solid-body guitar that looked just like a regular guitar, they might have won the market. Even a black circle painted where the cavity should have been might have helped players accept the change. It was the same problem Paul faced when he brought his Log to Gibson—in the end, it didn't match expectations.

Incorporating a new technology into a mass-market product takes time and effort. Iteration—prototypes, testing, user feedback—is crucial to iron out the kinks. In an arena like computer software, it's relatively easy to introduce a minimum viable product, or MVP, that can be improved on even as actual consumers use it. But in the relatively slow and expensive world of manufacturing, you usually don't get a second chance to make a first impression. You have to enter the battlefield strategically. The first products brought to market are often earliest only because their makers were too impatient to iterate. Therefore, the ground they capture is easily taken from them by those with the patience to sweat the details. Likewise, charging into the marketplace before customers are really ready for what you have to offer leaves you vulnerable. Smart—or lucky—leaders enter the battlefield with a major new product when the product *and* its market are ready.

Even after Gibson rejected the Log, Les Paul continued to tinker. But then World War II diverted the production capacity of companies like Gibson and Paul was sent off to serve in the Armed Forces Radio Service. Innovation would have to wait.

After the war was over, Paul resettled in Los Angeles. As civilian life resumed, his star continued to rise both as a musician and an instrumental innovator. In the evenings, he'd hold jam sessions in his garage-turned-recording-studio, an unusual idea at the time that drew musicians from all over town. It was during one of these sessions that Paul met Clarence "Leo" Fender. Fender ran a radio repair shop where, as a side business, he also built and repaired electric guitars. When Fender saw Paul's Log for the first time, it opened his eyes to the potential of a solid-body design.

Fender and Paul became friendly, spending many hours in the studio talking shop. Other early electric guitar innovators joined them, like Paul Bigsby. When Fender learned that Bigsby had built a custom solid-body guitar for the musician Merle Travis, Fender went to see Travis play. The tone and clarity of Bigsby's design, free of even a hint of feedback, amazed Fender. After Travis's set was over, Fender brazenly asked to borrow the guitar and Travis kindly agreed. Fender set to work reverse-engineering Bigsby's design.

By 1949, sales of electric guitars were higher than ever despite the problems with feedback—guitarists needed to be heard. While no one could predict the looming rise of rock and roll, savvy entrepreneurs like Fender saw the opportunity for growth that lay ahead, in large part because he was an experienced and active luthier who spent plenty of time among musicians. As we'll see over and over again, *domain knowledge* is an entrepreneur's most valuable resource. To innovate, you need to know your category inside and out.

This was a pivotal moment for the guitar industry. A new technology is a game of musical chairs. There would be room for only so many companies to thrive, and Fender wanted a chair for himself. He set to work not only replicating Bigsby's design but making it simpler and cheaper, something he could manufacture at scale. In the end, Fender's iteration, the

Esquire, was just an enameled plank of wood with a bolted-on neck, but it had the clear and piercing tone of a Hawaiian steel guitar, Fender's signature instrument. Sensing the urgency, he decided that his solid-body guitar was ready for the public.

Fender debuted the Esquire, the first mass-produced, solid-body electric guitar, at an industry trade show. And, for the most part, the industry insiders still weren't ready, a full decade after Les Paul had brought his Log to the execs at Gibson. But there was one man at the show who wasn't put off by the Esquire's unusual looks: Ted McCarty, the new president of Gibson. McCarty had an advantage over his competitors. He wasn't all that familiar with guitars. Before getting the job at Gibson, McCarty had worked for Wurlitzer, a manufacturer of organs and player pianos. He was the head of a major guitar manufacturer with no fiercely held notions of what an electric guitar ought to look like. What he saw in Fender's Esquire was a potential solution to the feedback problem. Gibson's customers had told McCarty that feedback was their number-one pain point. While Fender's design was weird, a refined version might win the entire category.

While McCarty put Gibson's R&D department to work on a solid-body design of their own, Fender faced a slew of unhappy users of his new product. To cut costs, he'd dispensed with a reinforcing rod in the Esquire. Now the necks were bending. Once again, an entrepreneur's rush to market had botched an otherwise-promising new idea. Fender quickly released a reinforced model, the Broadcaster. When he learned that this name infringed on a rival's trademark, he renamed it the Telecaster. (At the time, "television" was synonymous with the cutting edge.)

Fender's Telecaster hit the market in 1951 and began gaining traction, but the product's stuttered launch gave Gibson a window of opportunity. Gibson had another lucky advantage as well: when Fender asked his old friend Les Paul to put his name on the Telecaster, Paul refused. He was already endorsing Gibson's hollow-body electric guitars, playing them in every public appearance, and he wasn't going to switch to something as utilitarian as the Telecaster. Paul and his wife, Mary Ford, were a major double act. They performed at jazz

bars and concert halls around the country. The Telecaster's looks simply weren't up to the standard of venues like those. Paul wanted a guitar combining the panache of a Gibson with the solid-body design of a Telecaster.

That's when Ted McCarty came to Paul's house and presented him with Gibson's elegant solid-body prototype. Once McCarty agreed to credit Paul with the design and create a version with a gold finish, the Gibson Les Paul was born. The dazzling new instrument overshadowed Fender's offering at the following year's trade show. The business war between Gibson and Fender had begun in earnest.

What is now remembered as Gibson's "first-mover advantage"—the now-legendary Gibson Les Paul—was actually years in the making, with many previous entrants in its wake. Yes, the market had to become ready, but without excellent execution on both the technology and the design side, it most likely would have floundered. To win, a solid-body guitar had to sound great and look good doing it.

Holding your ground is a process, not a destination. In 1957, Fender wrested the dominant position back from Gibson when Buddy Holly played a Stratocaster—Fender's response to the Gibson Les Paul—on *The Ed Sullivan Show*. Holly was at the forefront of a rising tide: rock and roll. The Stratocaster's futuristic looks, out of place in the big band era, better suited this new sound. In fact, Ted McCarty's market research revealed that some Stratocaster buyers thought Chuck Berry played a Stratocaster, even though Berry actually played a Gibson. The Stratocaster just screamed rock and roll.

Sensing Gibson's lead slipping, McCarty fell into the same trap as Fender had. Afraid of missing the boat, McCarty rushed out a redesign of the Les Paul guitar without Paul's direct involvement. This last-ditch effort to capture the zeitgeist flopped. It also alienated Paul, who rescinded his endorsement. The Gibson Les Paul line went out of production.

Then, in the 1960s, musicians like Keith Richards, Eric Clapton, and Jimmy Page began to favor vintage Les Pauls over new Fenders. This was because Leo Fender had left

himself open to attack. An introverted man uncomfortable in a leadership role, Fender had been spending too much of his time tinkering alone in his shop instead of running what was now a sizable business. As a result, product quality had been slipping. McCarty, watching the market explode for vintage Les Pauls, seized the opportunity. With renewed approval from Paul himself, he brought the Gibson Les Paul line back into production.

In the end, both Gibson and Fender played pivotal roles in the rise of rock and roll. To this day, guitar players lean toward one or the other of these two iconic brands. Astute listeners gravitate to one sound over the other, too. Regardless of which manufacturer was dominant at any one point, however, the decades-long war between Gibson and Fender disproves the idea of first-mover advantage. To hold their ground, a leader must get *both* the timing and the execution of a product right, not just once but over and over again. Each time one rival took the lead, it did so by giving customers what they wanted, when they wanted it.

Customers reward companies that solve their problems. Simple as that. They don't care how you do it or who did something similar first. If you understand customers better than the first mover does, they'll switch to your product. If you keep solving their problems better than the competition, they'll stick with you. When you think like your customers, when you really understand what they want, you will capture your slice of the market. Just ask the entrepreneur who cofounded one successful dating app and ended up founding its most fearsome rival.

Swipe Right: Bumble vs. Tinder

Whitney Wolfe can't believe what she's hearing. She spent two grueling years traveling the country to promote Tinder—the app that has transformed online dating—to college students and twenty-somethings. Now that it's become one of the hottest start-ups around, her colleagues say she can no longer refer to herself as a cofounder.

Most romantic breakups are messy, but one that takes place in the high-pressure, close-quarters environment of a tech start-up can achieve epic proportions. Behind the cofounder kerfuffle is the fact that one of Wolfe's fellow cofounders, Justin Mateen, is also her ex-boyfriend. As she later alleges in a lawsuit, Mateen tells Wolfe that a twenty-four-year-old female cofounder "makes the company look like a joke" and "devalues" it. In contrast, at the ripe old age of twenty-eight, Mateen's cofounder status only adds legitimacy to the operation. "Facebook and Snapchat don't have girl founders," Wolfe says Mateen told her. "It just makes it look like Tinder was some accident." (Wolfe will go on to disprove this particular possibility in the most dramatic way possible.)

Justin Mateen and Whitney Wolfe dated only briefly, but after their breakup Mateen's attempts to rewrite Tinder's history take a personal turn. According to Wolfe's subsequent legal complaint, Mateen says and texts an array of sexist, racist, and otherwise abusive things to Wolfe. He even lobs epithets her way in front of other employees, including Tinder's CEO, Sean Rad.

It's at this point that Rad offers a response typical of the "bro" culture at many tech start-ups in Silicon Valley: according to Wolfe, Rad tells her to forget it, that she's being "dramatic" and "annoying." In Rad's view, any action against Mateen will only hurt the company's brand and spook its investors.

Having exhausted official channels, Wolfe offers to resign from Tinder in return for a severance package and vesting of her stock in the company. In response, Rad fires her. His decision to permit Mateen's behavior and punish his victim instead will prove to be a colossal strategic error, both personally and for the company he runs.

Months later, Wolfe is staying at her new boyfriend's family home in Austin. With time to think away from the personal and legal maelstrom in Los Angeles, she sees a parallel between her own experience inside the company and the experience of Tinder's female users. Many women using the app have to cope with toxic behavior from men, ranging

from unsolicited sexual messages to unwanted nude photos. (A 2017 Pew survey found that 53 percent of women have received nonconsensual sexual images online.) Wolfe has identified a true entrepreneurial pain point: “This pervasive dark culture . . . is going to destroy the mental well-being and self-esteem of all of these women across the world.”

She decides to address this opportunity with a new company, a social media network for girls and women designed solely for compliments and mutual support, not tearing others down, as other social media platforms seem designed to encourage. Then a potential investor suggests a spin on that: What about a new, positive *dating* site that puts women first? Wolfe is perfectly positioned to address the category’s misogyny with a new product. This new venture—Bumble—won’t just be a competitor to Tinder. It will be its antidote.

Wolfe agrees to give the idea a shot. She later insists that revenge isn’t her prime motivation: “We were trying to solve a real-world problem.” There is no denying, however, that this will be an opportunity to refute the narrative in the media that she’s claimed credit for something she hasn’t really built. “After I left Tinder,” she later tells *Elle* magazine, “a lot of articles came out saying I knew nothing. What better way to prove the naysayers wrong than to do it again?”

* * *

While dating websites had been used by millions of people to find a match before apps like Tinder and Bumble came along, they had always carried a stigma. From the beginning, most users were reluctant to even admit to using them with their real-life friends and family. Using technology to facilitate dating was seen as strictly for the desperate and the awkward. With the arrival and explosive growth of dating apps among a new generation of users, however, that stigma all but vanished. Today, it’s socially acceptable, even necessary, to “swipe right” to find a date—or a casual hookup.

Computer-assisted matchmaking is almost as old as computers themselves. Even at a time when computers were as large as refrigerators, software algorithms were being written

to take lists of single people and predict romantic matches among them. For example, in 1959, two Stanford students created Happy Families Planning Services. It used answers from a questionnaire to match forty-nine men and forty-nine women according to their preferences and interests. This shouldn't be surprising: How long would it take for a couple of young programmers toiling away at a lonely terminal to wonder whether thinking machines might solve the messy problems of human interaction? If a computer could calculate a lunar launch trajectory, perhaps it could also calculate an "ideal" pairing by combing through a vast number of options in moments.

Those lonely Stanford students weren't the only ones to see the potential of computerized matchmaking. Other programmers around the world were toying with algorithms to optimize for finding love, happiness, and fulfillment. But computer dating remained a niche business until the World Wide Web came along. As a medium, the Web was perfectly suited to capturing and sharing the necessary data—including, crucially, photographs—and then helping matches connect with each other.

The first dating website, Kiss.com, appeared in 1994, only a year after the Web's inception. A year later, serial entrepreneur Gary Kremens founded Match.com, still a powerhouse today. Pretty soon, dating websites were popping up left and right, often differentiating themselves by appealing to a specific niche or group: from religious affiliation (JDate, 1997) to extramarital relationships (Ashley Madison, 2002).

Although the technology had come a long way from the refrigerator-sized computers and punch cards used early on—for one thing, you could now see users' photos—the computer dating experience was fundamentally the same as it had been in the 1960s. After you filled out a questionnaire, the software matched your answers to those of other singles in your area. The only real difference between any of the sites was which questions they asked and how the answers were used to calculate a match.

Then Tinder exploited a simple vulnerability in the way online dating had run for decades. Even when relying on cutting-edge technology to find a date, we still fall back on that most human of habits: first impressions.

* * *

Whitney Wolfe was a classic serial entrepreneur. She started her first venture while majoring in global studies at Southern Methodist University in Dallas, partnering with a friend to sell bamboo bags to raise money for those affected by the 2010 Deepwater Horizon oil spill. Soon fashion icons like Kate Bosworth, Rachel Zoe, and Nicole Richie were spotted carrying Help Us bags, attracting national attention to the project. The success of that venture led to a second: Tender Heart, a tie-dyed clothing line intended to raise awareness around human trafficking. After graduation, Wolfe volunteered in orphanages around Southeast Asia before returning to America.

Through her philanthropic efforts, Wolfe had seen the power of commerce when applied to a higher purpose. She decided that the tech industry offered the most potential to magnify positive social impact and got a marketing job at Hatch Labs, a Los Angeles tech incubator owned by IAC, the parent company of Match.com. There Wolfe worked on a customer loyalty program for small businesses called Cardify. Her job was to convince merchants to give the new service a try. That project floundered in 2012, but along the way Wolfe demonstrated a knack for meeting new people and building relationships—a skill in short supply in tech. The head of that team, Sean Rad, asked Wolfe to help out with another project under development: a new approach to online dating.

Unlike the founders of earlier dating sites, Rad and his collaborators were part of the generation that had grown up dating in the era of social media. They understood how to send flirty texts and pose for just the right selfie. They had domain knowledge. Just as Les Paul knew guitars, Rad and the others working on the new dating app were Millennials who understood twenty-first-century dating and hookup culture.

With this knowledge, they realized that the vulnerability in the online dating model was the computer itself.

What was the use of writing a computer program to guess at human preferences when people could tell right away whether they were interested in dating someone? All it really took was a photo. What people wanted to know was: Who's cute *and* available? And are they interested in me, too? The new app—inspired by Grindr, an earlier app first targeted exclusively at gay men—allowed users to quickly review photos of single people in the vicinity. The interface is now well known to millions of daters around the world: When presented with a potential match, users swipe right if interested, left if not. If two people swipe right on each other's photos, they can message each other. Instant gratification and no potential for embarrassment over unrequited interest—yet another example of a successful product derived from a pain point through the power of domain knowledge.

The team's initial goal was to create a free, youth-friendly dating app as “a lure to get millennials to pay later in life for IAC's profitable dating service Match.com,” according to Bloomberg News. One of Wolfe's early contributions to the mix was the name: Tinder. “We were playing with tons of words,” she said. “Tinder is brushwood that ignites a flame.” With that name, Wolfe nailed the promise: Tinder would light fires between people. Though she had no formal marketing experience, Wolfe had launched products successfully and had proved her mettle by convincing reluctant small business owners to adopt Cardify. Rad tasked her with growing Tinder's user base.

As the company's vice president of marketing, Wolfe traveled from one college campus to another to spread the Tinder gospel, relying on her national sorority connections to jump-start adoption among young women. “I went back to my alma mater and went to different sororities [in] the country,” she said. “I just jumped in there and basically forced everybody to download [Tinder] . . . and kind of just made it happen.” Just as with Cardify, Wolfe was an aggressive promoter, one who understood the market because she *was* the market. For an image-driven app like Tinder, recruiting young,

beautiful people would be key. “Wolfe might stand on a table in a fraternity and announce that there were 200 hot sorority girls on the app waiting for the men to sign up, then run to the sorority and tell them the reverse,” a journalist wrote in *GQ*. “They left a trail of stickers behind them—in the best campus bars, in the most exclusive nightclubs.”

Free of charge, easy to use, and offering instant gratification, Tinder spread like wildfire. “Swipe right” became a cultural catch-phrase. And, as with previous leaps forward in dating technology, some portion of users abused the service. Almost from its launch, concerns began to simmer. “Detractors contended that the app reduces the search for love to a surface-deep video game,” according to the *Telegraph*, “with female users increasingly disparaged by the barrage of nude images and aggressive, crude come-ons they would receive each time they logged on.” Despite the backlash, however, Tinder became a runaway success.

In April 2013, Tinder graduated from the Hatch Labs incubator, incorporating and splitting equity among its small team. Then Wolfe’s short relationship with her direct supervisor, Justin Mateen, ended messily and, according to her, Mateen became controlling and abusive, even insisting that she not date other men for six months. (Wolfe had no intention of agreeing with Mateen’s demand and met her now-husband, oil-and-gas heir Michael Herd, soon after.)

In July 2014, after Rad fired her from the company, Wolfe filed a lawsuit against both Tinder and its parent company for sexual harassment, alleging that both Mateen and Rad subjected her to “horrendously sexist, racist, and otherwise inappropriate comments, emails and text messages.” As the *Wall Street Journal* summarized from the suit:

Justin Mateen repeatedly called [Wolfe] a “whore” and says he removed her “co-founder” title because she was a “young female.” The suit goes on to describe a “frat-like” atmosphere, where it was common for male executives to use racist and sexist terms. The suit also accuses Tinder’s CEO, Sean Rad, of using such language and ignoring her complaints.

Mateen was suspended by Tinder’s parent company pending an internal investigation. That investigation found, among other things, that Mateen had “sent private messages to

Ms. Wolfe containing inappropriate content.” (Later, Mateen resigned, and shortly thereafter Rad was asked to step down as well.) As part of a September 2014 out-of-court settlement, Wolfe reportedly received more than \$1 million plus stock in the company. “The lawsuit was not about money, that is not what motivates me and it is not how I find fulfilment,” she told the *Guardian*. “But I felt I had played an important role at Tinder and they tried to erase me from the company’s history. It was about being recognized for my work.”

Leaving the company she’d helped build into a juggernaut was devastating for Wolfe. “Two years of around-the-clock, undying passion, work, stress, everything, [the] excitement, all of it . . . and then to just not be there anymore,” she told a journalist. “[That] was definitely hard.” Meanwhile, like other prominent women in tech who have spoken up against sexist behavior, Wolfe was scrutinized and criticized by detractors both in the media and outside of it. Her character and credibility were attacked. Many with little knowledge of the situation downplayed her role in Tinder’s success. Wolfe also experienced online harassment, including death threats. “I was being told the ugliest things by complete strangers, and they were having full debates about me,” Wolfe said. “I wasn’t running for office. I wasn’t trying to be on a reality show. I was just a girl who left somewhere.”

Wolfe was developing her new positive social network concept, Merci, when she met with Andrey Andreev, a London-based entrepreneur to whom she had first been introduced while working at Tinder. “I immediately fell in love with Whitney’s passion and energy,” he later said. Andreev had cofounded the dating-focused social network Badoo, which had 250 million users around the world. Since their first meeting, he had watched Wolfe’s career carefully, and now that she was a free agent, he wanted to recruit her as Badoo’s CMO. But Wolfe turned down Andreev’s offer and pitched him Merci instead. Andreev proposed a compromise: pivot the concept into a female-centered dating app. This made sense to Wolfe. She knew that many women on Tinder found the experience less than satisfying, even downright unpleasant. Why not build a dating app that put them first?

In December 2014, Wolfe founded Bumble. Andreev made a \$10 million investment in return for a 79 percent stake. Bumble would also have access to Badoo's infrastructure and technical know-how. As founder, CEO, and co-owner, Wolfe would now be free to build a different kind of company, one with a healthier, more positive culture both inside the organization and among its users.

Major tech companies commonly feature gender ratios as lopsided as 70 percent male, 30 percent female. From her experience at Tinder, Wolfe knew how this kind of imbalance could foment a toxic workplace culture. So she placed an emphasis on hiring as many women as she could. For all the industry's insistence that it was doing everything it could to fight gender inequality in its ranks, Wolfe found an abundance of female tech talent when she actually sought it out. As for the app itself, Wolfe studied Tinder's failings. The app was dominant thanks to its early execution of a major innovation, but she knew it wasn't doing nearly enough to hold its ground with users.

"On platforms like Tinder, you get like 50 matches but nothing happens," Wolfe said. "They just sit there looming. Or you get an awkward amount of messages that are in some cases unwanted, hurtful, discouraging, maybe just too persuasive, aggressive, or just fall flat." With Bumble, she tried to establish a different atmosphere from the start. The experience of using Tinder and the behavior among its users were driven by the choices its (mostly male) creators had made in designing the app. If she wanted to change user behavior for the better, she needed to make better rules. "I always wanted to have a scenario where the guy didn't have my number but I had his," Wolfe told Andreev. "What if women make the first move, send the first message? And if they don't, the match disappears after 24 hours, like in *Cinderella*, the pumpkin and the carriage?" (This limitation would only apply to those seeking a heterosexual relationship, of course.) This spin on the concept of online dating got to the heart of what many female users didn't like about using Tinder.

“I’m a strong, independent girl,” Wolfe said. “But when it came to dating, that was the one facet of life where I felt I wasn’t allowed to go after what I wanted.” Wolfe spotted this opportunity because she was squarely in the target demographic herself. While she wasn’t first with the swipe-right concept, her domain knowledge helped her create a service that proved superior for millions of single women. And, as it turned out, it was better for millions of heterosexual men, too. “If you change the rules, post a barrier on the match or create an ephemeral feeling with time expiring, then you’ll engage with someone better,” Wolfe said. “By making the female talk first, it takes the pressure off the guy, which they love.” Requiring women to speak first also staved off unsolicited sexual photos from male users, an endemic problem on Tinder as well as other dating sites.

“Women were ready for this,” according to Dave Evans, an industry consultant. “Women got scared years ago. This goes way back.” Meanwhile, a poll by *Esquire* found that only 4 percent of men believe they should be the ones to make the first move. “Men love Bumble because for the first time they’re being chased rather than the other way around,” Wolfe said. “And women love it because they are not being bombarded with messages.”

Bumble took off like a rocket, helped in no small part by its positioning as a feminist alternative to Tinder, echoing the media narrative of Tinder’s mistreatment of Wolfe. Bumble was downloaded 100,000 times in its first month, beating the pace of Tinder’s own early rise. By the end of its first year of operation, Bumble had attracted 3 million registered users and facilitated 80 million matches.

Bumble continually modifies its rules to create a safer, friendlier environment for both genders. For example, it banned shirtless mirror selfies, an all-too-common sight for female users on Tinder and the most left-swiped type of photo across the board. It also introduced photo verification to prevent catfishing and the watermarking of every photo with the user’s name to further discourage unwanted sexually explicit photos. “With other dating products, they’re like being

in a nightclub at 2 a.m., where there's an expectation men will be sexually aggressive," she said. "Bumble is less predatory."

In 2016, the company began monetizing its service with a premium option offering features like additional time for women to decide whether to initiate a conversation with matches. In 2017, with \$100 million in revenue to date, Wolfe must have felt some satisfaction at turning down a \$450 million buyout offer from Match Group, the division of IAC that houses Tinder as well as Match.com, OkCupid, and a number of other dating sites. When the buyout play failed, IAC filed a lawsuit alleging theft of trade secrets. Bumble countersued.

To Wolfe, none of this wrangling was personal. "I just don't harbor resentment toward anything or anywhere or anyone," she told *Forbes*. "I'm too busy." Busy catching up to Tinder's lead: with 22 million registered users to Tinder's 46 million and 70 percent year-over-year growth to Tinder's 10, she was making excellent headway. (She wasn't too busy to marry her boyfriend, Michael Herd, in 2017.)

By 2019, Bumble had reached 75 million registered users in 150 countries, adding special modes for friend finding and professional networking along the way. In November of that year, Bumble's parent company, MagicLab, which also owns Badoo, was sold to a private equity firm. Andreev relinquished his entire stake in the business, and Wolfe Herd was named CEO of MagicLab and awarded 19 percent of the entire \$3 billion company. Around the same time, she gave birth to a son.

Wolfe Herd credits Bumble's culture of positivity with her success. "Once a week someone tells me to toughen up, get a sharper edge," she said. "I don't do that." Wolfe Herd has received numerous accolades as an entrepreneur. She has been named to both the Forbes 30 Under 30 list and the Time 100. According to *Forbes*, she ranks 72 out of the 80 "richest self-made women."

Tinder is still the number-one dating app, proof that first-mover advantage does count for something. But it's losing ground each year. The dating app that's right behind it and

growing steadily? Bumble, which, on February 11, 2021, raised \$2.2 billion in an initial public offering that valued the company at over \$7 billion, exceeding expectations and making Wolfe Herd a billionaire.

What's more, Tinder and Bumble are both ahead of the earlier generation of dating sites like Match and OkCupid, which were far too slow in realizing that questionnaire-based matching algorithms had been rendered obsolete. By the time they accepted their own irrelevance, they were forced to play catch-up. As the battle for commercial computing will show next, it's crucial to know when to abandon the ground you're holding in order to capture new territory.

The Electronic Brain: IBM vs. UNIVAC

“Good evening everyone, this is Walter Cronkite speaking to you from CBS Television election headquarters here in New York City.” It's November 4, 1952, and Cronkite, the legendary news anchor, sits at his desk in the middle of the bustling newsroom. Dwight Eisenhower, a revered war hero, is the Republican candidate for president. His Democratic opponent is Adlai Stevenson, governor of Illinois. Pundits and pollsters, for their part, predict a very close race.

After Cronkite welcomes the audience, he introduces a technological marvel that most of his viewers have never seen before—and, as it turns out, technically still haven't. It's a contraption he refers to as “that miracle of the modern age, the electronic brain UNIVAC.” The camera switches to reporter Charles Collingwood sitting in front of a large panel covered in blinking lights. On top of the panel is a sign that says “Univac Electronic Computer.” In fact, the real UNIVAC is hundreds of miles away, in the Philadelphia headquarters of the Remington Rand company. This facade has been created for the studio. It's lined with Christmas lights set to blink randomly. If UNIVAC actually had been brought to the newsroom, there wouldn't have been room for anything else. Yes, “the most trusted man in America” is pulling one over on the American public.

While the facade is false, the demonstration to come is very real. “UNIVAC is going to try to predict the winner for us just as early as we can possibly get the returns in,” Collingwood explains. He wants to make one thing very clear to the audience at home: “This is not a joke or a trick. It’s an experiment. We think it’s going to work. We don’t know. We hope it’ll work.” This is also a facade. Cronkite and his producer, at least, think the whole idea is baloney. But they figure the computer will spice up the usual Election Night coverage.

UNIVAC has been given an extraordinary task: predicting the outcome of the presidential election based on early voting returns. In Philadelphia, Grace Hopper, UNIVAC’s chief programmer, is leading the team responsible for relaying its predictions to the newsroom and, by extension, all of America. She’s justifiably concerned: right before CBS’s coverage went on the air, UNIVAC predicted an Eisenhower landslide, 438 electoral votes to Stevenson’s 93, with only 5 percent of the vote in. Hopper is busy having her team rerun the numbers. Something must be wrong with the algorithm.

In the meantime, Collingwood pretends to ask UNIVAC for its prediction by talking into a microphone, only to learn from off-camera that Remington Rand is unwilling to share its first result with the millions of people watching at home. “I don’t know,” Collingwood says after a long pause. “I think that UNIVAC is probably an honest machine, a good deal more honest than a lot of commentators who are working, and he doesn’t think he has enough to tell us about yet, but we’ll be back with him later in the evening.”

After some tweaks, UNIVAC produces a more modest prediction of an Eisenhower victory, and the result is finally announced. By the end of the evening, however, it’s become clear that Eisenhower is, in fact, headed for a historic landslide, 442 to 89, just a hair away from what UNIVAC had originally predicted based on only a tiny fraction of the vote. The human brains have wrongly doubted the electronic one.

After midnight, a representative of Remington Rand appears on the air to personally apologize for withholding

UNIVAC's initial prediction. "As more votes came in," he says, "the odds came back and it was obviously evident that we should have had nerve enough to believe the machine in the first place." It almost looks like he's apologizing to UNIVAC, not the audience: "It was right. We were wrong. Next year, we'll believe it."

While some viewers remain uncertain about what an "electronic brain" is supposed to do—aside from predict elections—one man knows exactly what has taken place that night, and just how vicious a blow his company's rival, Remington Rand, has struck. Thomas Watson Sr. is the president and CEO of IBM, the leading manufacturer of mechanical tabulating machines. For years, Watson has dismissed the relevance of electronic computers to IBM's core business: storing and processing data mechanically using paper "punch cards." It was only recently that his son, Thomas Watson Jr., finally convinced him of the inevitable. Now IBM is hard at work on its response to UNIVAC, the IBM 701, but its electronic computer won't start rolling off the production line until next month. In the meantime, UNIVAC has scored a one-in-a-million PR coup, demonstrating its extraordinary power on live television to nearly the entire country in one night. In the morning, "UNIVAC" will equal "computer" in the minds of the American people.

Remington Rand moved first. Watson can't help but wonder if IBM will ever catch up.

* * *

The Computer Age began in earnest at the University of Pennsylvania more than seven decades ago. There, two electrical engineering professors, John Mauchly and J. Presper Eckert, realized that vacuum tubes could be used as electrical switches. As switches, vacuum tubes could turn off and on again much faster than the electromechanical switches then used in tabulating machines to crunch data. This meant they could make calculations thousands of times faster. They called the computer they built the "Electronic Numerical Integrator and Computer." ENIAC, for short. When the thirty-ton electronic computer made its debut in 1945, *Time* magazine

said that ENIAC's "nimble electrons" would make it possible to perform extraordinary feats of calculation beyond the capability of any existing technology.

At the time, International Business Machines Corporation—IBM—was the dominant player in computation. Its mechanical marvels performed many key business functions far faster than humans could, including the tabulation of data stored as holes in paper punch cards. With punch cards, IBM machines could process and sort relatively huge amounts of information in short order. At the time, others had built giant electromechanical calculators, like Harvard's Mark I, that could do certain mathematical tasks much faster than a person could, but the potential of these machines was limited by their moving parts. A machine of nuts, gears, and bolts, siphoning up and spitting out rectangles of cardboard, could only do so much and go so fast. While the vacuum tubes in ENIAC took a long time to warm up, were prone to failure, and required frequent maintenance, ENIAC could calculate the trajectory of an artillery shell before that shell arrived at its target. And ENIAC was only the first iteration. Once the kinks were worked out, the sky was the limit.

At IBM, Thomas Watson Jr. saw the potential in ENIAC to completely disrupt the company's business. As he wrote in his autobiography, ENIAC "had no moving parts, except for the electrons flying at close to the speed of light inside its vacuum tubes." Free of mechanical constraints, the computer's potential was unfathomable:

All these circuits really did was add one and one, but that's all they needed to do. The most complicated problems of science and business often break down into simple steps of arithmetic and logic such as adding, subtracting, comparing, and making lists. But to amount to anything, these steps have to be repeated millions of times, and until the computer, no machine was fast enough. The quickest relay mechanism in our punch-card machines could only do four additions per second. Even the primitive electronic circuits of the ENIAC could do five thousand.

Unfortunately, Watson's conservative father disagreed. Thomas Watson Sr. saw his company's punch-card machines as existing in a completely separate category from electronic computers. ENIAC and the like might prove useful in the

sciences, but ordinary businesses would always turn to IBM to handle the books or manage their inventories.

In this, Watson Sr. made the error characteristic of many leaders before a fall. He fell into the delusion that, since his approach had made IBM dominant, that same approach would keep it on top. But new terrain calls for new tactics. “IBM was in the classic position of the company that gets tunnel vision because of its success,” Watson Jr. later wrote. “In that same period the movie industry was about to miss out on television because it thought it was the movie industry instead of the entertainment industry. The railroad industry was about to miss out on trucking and air freight because it thought it was in trains instead of transportation. Our business was data processing and not just punch cards—but nobody at IBM was smart enough to figure that out yet.”

Watson Sr. didn’t completely dismiss electronic computers—he simply, though incorrectly, saw them as belonging to an entirely different domain than IBM’s core businesses in accounting and other administrative tasks. In 1947, he hired the engineers who had worked on Harvard’s Mark I to build a scientific computer: the Selective Sequence Electronic Calculator (SSEC). Since it was intended for use in the sciences, they could even use those pesky vacuum tubes if they insisted. But the SSEC had to run on punch cards. This was IBM, after all.

The million-dollar, 120-foot-long behemoth, half true electronic computer and half mechanical punch-card machine, was born a “technological dinosaur,” according to Watson Jr. But it certainly looked futuristic, all consoles and panels and blinking lights. Watson Sr. had it installed in full view of the sidewalk on the ground floor of IBM’s Manhattan headquarters on Fifty-Seventh Street. Then he offered its use for free to anyone with “pure science” applications. Even though the machine was successfully used to calculate navigation tables that helped the United States fight German submarines during the war, its hybrid nature led a generation of young electronics engineers to dismiss the company that made it as out of touch. IBM was quickly becoming a relic.

After the war, Eckert and Mauchly left the University of Pennsylvania to open their own computer business out of a storefront in Philadelphia. Watson Sr. was skeptical, but when the young engineers convinced two of IBM's biggest customers, the Census Bureau and Prudential Insurance, to back them, he was furious. Not only because two young academics were effectively poaching IBM's customers, but because their proposed product—the Universal Automatic Computer, or UNIVAC—would use magnetic tape, not punch cards, to store data. In Watson Sr.'s eyes, punch cards were central to IBM's identity. The notion that magnetic tape could supplant punch cards was terrifying. That said, the case for tape was hard to beat: it could get data in and out of a computer much faster than punch cards, and a single reel could hold the equivalent of ten thousand cards. Yet if cards were obsolete, in Watson Sr.'s view, so was IBM. As a result, Watson's distrust of magnetic tape hardened. In his view, a punch card was “a piece of information that was permanent,” as his son later wrote. “You could see it and hold it in your hand. Even the enormous files the insurance companies kept could always be sampled and hand-checked by clerks. But with magnetic tape, your data were stored invisibly on a medium that was designed to be erased and reused.” His dad simply couldn't see past the current paradigm. He considered knocking Eckert and Mauchly out of the running with his own electronic offering, but the idea that he'd have to use tape to do it was too abhorrent.

Even as Watson Sr. dragged his feet, Watson Jr. heard more and more rumblings of the coming electronic revolution. In 1948, he learned from a friend that at least nineteen significant electronic computer projects were under way across the country, most relying on magnetic tape. Customers, meanwhile, were finding their vast and constantly growing stockpiles of punch cards increasingly cumbersome to store and manage. Magnetic tape was becoming too attractive to resist, for all its flaws. The president of Time Inc. approached Watson Jr. and begged him to make the switch. Using IBM machines to manage the mailing list for *Time* and *Life* magazines required three punch cards per subscriber. With millions of subscribers and thousands more signing up each

month, the machines—and the space they consumed—were at their limits. “We have a whole building full of your gear,” he said. “We’re swamped. If you can’t promise us something new, we’re going to have to start moving some other way.” Managing a mailing list was anything but the kind of scientific function Watson Sr. saw as the natural province of electronic computers. In fact, it was exactly the kind of business operation that lay at the heart of IBM’s value proposition.

Watson Jr. knew that anecdotes alone wouldn’t convince his father that punch cards were a thing of the past, so in 1949 he created a company task force to tackle the issue of magnetic tape. To his chagrin, the task force concluded that punch cards were there to stay. IBM’s salesforce gave Watson Jr. the same conservative, CEO-pleasing answer. “I was beginning to learn that the majority, even the majority of top performers, are never the ones to ask when you need to make a move,” Watson Jr. wrote. “You’ve got to feel what’s going on in the world and then make the move yourself. It’s purely visceral. I didn’t trust myself enough yet to insist, but I knew in my gut that we had to get into computers and magnetic tape.” IBM’s engineering culture was a mechanical one from top to bottom—the company made everything from punch clocks to typewriters. Its people had no interest in switching over to an entirely new paradigm. “IBM had so much built-in resistance to exploring electronic computing that we might have been better off simply buying out Eckert and Mauchly,” Watson Jr. concluded.

That’s when IBM got the chance. Just as IBM’s best people were assuring Watson Jr. that punch cards were the future, UNIVAC’s creators lost their principal backer in a plane crash and suddenly needed funds. Desperate, the two men turned to IBM. Unfortunately, Mauchly, unlike his neat and highly conventional partner, was a rebel. Arriving at the meeting sloppily dressed, he threw his feet up on Watson Sr.’s coffee table. The engineer wanted to make it clear from the start that he wouldn’t straighten up just to impress the famously prim business titan. Not even to save his own company. Watson Sr., who insisted on a rigid and uniform dress code for his salesmen all the way down to sock garters,

took an instant dislike to the young innovators. He blamed potential antitrust implications for turning down the opportunity to invest, but his personal feelings undeniably played a role in his decision to let UNIVAC walk out of his office.

A few months later, Eckert and Mauchly were bought out by IBM's competitor, Remington Rand. With the gamble on UNIVAC, its CEO, James Rand Jr., saw a real opportunity to overtake IBM, the longtime juggernaut in the market for business machines. Thanks to Watson Sr.'s reluctance, Remington Rand now had a head start on the modern Computer Age. But there was more than just business on the line. This business war, like so many others, was personal. Jim Rand had experienced IBM's monopolistic power firsthand. Years ago, Watson Sr. had used his company's market leverage and patents to destroy one of Rand's companies. Therefore, UNIVAC was both a sound investment in the future and an opportunity for revenge. Instead of chasing IBM's unassailable lead in mechanical tabulation, Rand would leapfrog it.

Finally, however, Watson Jr. had a lucky break in his efforts to forestall disaster. A study by IBM's finance department revealed that IBM was spending substantially less on research and development than comparable firms like RCA and General Electric. This finding touched a nerve: Watson Sr.'s competitive streak. He ordered a major expansion in R&D. This would mean getting into electronics to an unprecedented degree. In fact, over the next six years IBM would grow from five hundred engineers to more than four thousand. The timing of this shift proved fortuitous—the Korean War broke out in June 1950 and the government asked IBM to develop a general-purpose electronic computer for defense applications. The Defense Calculator promised to be the most expensive project in the company's history by an order of magnitude, but it helped kick-start the company's computing efforts. Once Watson Jr. lined up sales of the computer to defense laboratories around the country to offset that cost, Watson Sr. agreed to the project. "The Defense Calculator was the first big risk he let me take as an executive," Watson Jr. wrote.

Then came a second lucky break, this time in disguise. On January 21, 1952, the Justice Department filed antitrust charges against IBM. In the government's view, the company's virtual monopoly on punch-card-tabulation machines—it held a 90 percent market share—had become anticompetitive. At the time, IBM's legendary army of salesmen in navy blue suits and wingtips were ubiquitous. You could spot them in every office and government building around the world. For Thomas Watson Sr., the government's action was a tremendous blow. He'd worked for decades to secure IBM's dominance, ever since the company had named him its general manager back in 1915. The idea of IBM being pried from its painstakingly acquired position devastated him. For him, IBM *was* its punch card business. From Watson Jr.'s perspective, however, the antitrust suit left his father no option but to double down on electronics. They would have to innovate and win in this new arena or go the way of horse-and-buggy manufacturers. While first-mover advantage may be exaggerated, no-mover disadvantage is undeniable.

Watson Sr. was conservative, but he wasn't blind. It was time to pivot. In April 1952, he publicly announced that IBM had an electronic computer designed for commercial use, one that was twenty-five times faster than the SSEC. The Defense Calculator, now rebranded and made a part of the company's standard product line as the IBM 701, would be rented and serviced just like any other IBM machine.

The announcement of the 701 was a huge step, but meanwhile the Census Bureau—where punch cards had first gotten their start back in the 1880s—had its own UNIVAC. There was a growing sense inside IBM that it had arrived late to the party and that it wasn't moving quickly enough to catch up. When the company realized that it had underpriced the 701 by a full half based on its manufacturing costs, it found to its amazement that all of its customers kept their orders at twice the price. The demand for electronic computation was through the roof, and IBM had yet to bring a product to market.

UNIVAC was the first computer designed for general administrative use. By storing its data on magnetic tape instead of punch cards, it could ingest data, make calculations

electronically, and spit out answers far faster than any IBM machine, even the upcoming 701, which still got its data off of punch cards. But the question remained: How would Remington Rand promote UNIVAC to IBM's mainstream business customers, especially now that the 701 was on the way? An electronic computer was an abstract concept. How could the company communicate its potential benefits to America's business leaders? That's how the company came to partner with CBS News on its Election Night coverage in November 1952.

That summer, Remington Rand approached CBS News chief Sig Mickelson about UNIVAC predicting the election on the air. Mickelson and anchor Walter Cronkite were beyond skeptical that a machine could predict much of anything, let alone who would become the next president of the United States, but they figured it would make for good TV. Now all the company needed was an algorithm to combine early return data with voting patterns from previous elections to extrapolate the winner. By this point, however, Mauchly had been blacklisted as a communist and wasn't allowed into Remington Rand's offices anymore. The company hired a statistician from the University of Pennsylvania, Max Woodbury, and sent Woodbury to Mauchly's house in secret to work on the prediction algorithm with him there.

Using Mauchly and Woodbury's algorithm, UNIVAC would guess the winner in real time, on live television. It was a brilliant stunt, though incredibly risky. The success of a leap rests on its landing. Rand had everything on the line on Election Night 1952. The wrong prediction wouldn't have derailed the electronic computing revolution to come, but UNIVAC's reputation would never have recovered with the business community it hoped to impress. By the end of the night, however, UNIVAC's first prediction proved correct within a few percentage points. Collingwood admitted to the audience that they'd suppressed the original, correct prediction and, once a Remington Rand representative apologized to the computer on-air, an epic publicity stunt had been pulled off. Overnight, "UNIVAC" became synonymous with "computer."

Risking a live demo in front of the whole country delivered an unparalleled PR coup. In one stroke, Remington Rand had taken an unfamiliar new technology and made at least some of its extraordinary potential easy to grasp. If first-mover advantage were real, a UNIVAC logo would now be on every laptop and smartphone. But this rising tide raised all ships. Thanks to Remington Rand's demonstration, *any* manufacturer could easily point to what electronic computers could do. In December, when the IBM 701 finally started rolling off the production line, it was quickly redubbed IBM's UNIVAC by the press. Though humiliating for IBM, this meant customers immediately understood the 701's potential.

The 701 calculated faster than UNIVAC, but Watson Sr.'s insistence on using punch cards instead of magnetic tape meant that getting data in and out of the computer ate up all the time saved and then some. But even with its late start and hamstrung by obsolete punch cards, the 701 remained a competitive offering. IBM knew its customers like no one else. While electronic computing was a quantum leap forward, the customers and their problems hadn't changed. IBM had the same crucial domain knowledge that gave Tinder and Bumble their edge. It used that advantage as it iterated to adapt to the market it knew so well.

For all its technological sophistication, UNIVAC, designed by academics with no real understanding of the modern workplace, was incredibly impractical for business use. It shipped in many pieces and had to be assembled with great care over the course of a week or more in the customer's offices. The 701, by comparison, was designed with the realities of the office in mind. It was made up of discrete, fridge-sized modules that could each fit inside a freight elevator. IBM's engineers could take the modules out of their crates, connect them, and have the customer up and running in a few days.

In July 1953, IBM introduced the more modest 650. Easier for companies to integrate into their existing operations, the 650 changed the company from a producer of "IBM UNIVACs," as it was known, to an industry leader. In September, IBM announced the 702, another, more

commercial spin on the 701, and in the space of only eight months an astounding fifty orders came in. Even though UNIVAC's magnetic tape still gave it a technological advantage over IBM's offerings, its purpose-built, one-at-a-time approach to building computers had become obsolete. It simply didn't scale. With better domain knowledge, a customer-friendly approach, and a vastly superior sales force, IBM overcame Remington Rand's head start and decisively took the lead.

IBM didn't dive first. It didn't make the loudest splash when it entered the pool, either. But it knew its domain and kept its focus on the needs of its customers. In the end, this meant victory. Having missed its shot, Remington Rand was acquired by another company in 1955. Meanwhile, IBM, led by Thomas Watson Jr. beginning in 1956, would become even more dominant in electronic computation for business, government, and scientific purposes than it had ever been in the arena of punch card machines. *Fortune* would later call the prescient Watson Jr. "the greatest capitalist who ever lived."

* * *

The introduction of a new technology follows a pattern. First hobbyists experiment with applying a new idea to an existing problem. Then entrepreneurs catch on to the potential and rush to scale up an offering for the mass market. Some try to capture the territory before they face any competition—the first-mover advantage. When this effort fails, as it often does, an arms race ensues. Often the company that understands the customer best takes the lead. Then a newer technology arrives, and the cycle starts all over again.

Again and again, Sun Tzu tells us to act fast. "Even if you are winning," Sun Tzu wrote, "if you continue for a long time it will dull your forces and blunt your edge." Go after each opportunity aggressively, but not until you're truly ready to seize it. If you strike before you're ready, you will forfeit your opportunity.

In the [next chapter](#), we'll look at companies that, having seized a commanding lead, used the right strategy to maintain it.

3

The Winning Strategy

To fight and conquer in all your battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting.

—Sun Tzu, *The Art of War*

The success of an army rests on the strategy it chooses to follow, not any single tactic, no matter how brilliant. Sometimes a great idea—a sweet-sounding electric guitar, or an addictive new dating app—creates an opening for a business to storm the battlefield. But maintaining and even building on that lead requires a coherent, long-term strategy.

Sun Tzu prioritized humble logistics over any other factor. He believed an army's strength rests on its supply lines more than its skill with swords and arrows. A rousing speech or a powerful siege weapon might offer a temporary advantage, but sustaining a fighting force over the long term requires food, water, medicine, and, most important, sound planning. Leaders need vision if they're going to lead the way. Companies don't stumble blindly to victory.

Weaving a Tangled Web, Part 1: Making Mosaic

It's 7 a.m. on a Sunday in 1994, and twenty-two-year-old computer programmer Marc Andreessen is awake. Sort of. Being up at this hour isn't unusual for him—he pulls all-night coding sessions regularly. But today, he's actually starting his day with a breakfast meeting at Il Fornaio in Palo Alto, a

popular restaurant in the heart of Silicon Valley. Andreessen has prepared in advance for this very important meeting/job interview incrementally by going to bed earlier and earlier for several nights in a row.

Across the table from the recent college graduate is forty-nine-year-old Jim Clark, a legendary tech leader who has only recently departed the company he founded, Silicon Graphics. Clark wants to build a new company even bigger than the very successful one he's leaving behind. That's why he's here to meet with Andreessen.

Andreessen comes highly recommended. While still in college, he and a friend built a revolutionary "browser," a new kind of software application for accessing the rapidly growing World Wide Web. When the institution where he worked, the National Center for Supercomputing Applications (NCSA), failed to give him credit for the software, known as Mosaic, he left. So both men are on the rebound as they sit across from each other for this awkward first meeting. Right off the bat, Clark wants to know: Is there commercial potential in a Web browser? Not in Andreessen's view. Still bitter over losing control of his creation, Andreessen declares he wants nothing to do with the World Wide Web. If Clark wants to build a company, he should make video games. People love video games.

But NCSA is an academic institution, Clark argues. It has no instinct for the mass market. They have the top browser in their hands, but they're going to whiff the opportunity. Perhaps, Andreessen concedes. But he has no interest in seizing it.

Clark likes the blunt and brilliant young man. They decide to build something together, but leave the restaurant that day without deciding what it will be. The idea Clark planted, however, stays with Andreessen. After strategically reimagining how the World Wide Web should look and feel, breathing life into this exciting but nascent medium, is he really going to give up his chance to fulfill the promise of what he built? NCSA is filled with bureaucrats. They don't understand what they have. If Andreessen joins forces with

someone like Jim Clark, they might be the ones to bring the World Wide Web to the masses.

* * *

In our tech-obsessed economy, we idealize bright young inventors toiling in their garages to build the Next Big Thing. But in reality the lone inventor is often crushed by large companies with plenty of cash and few scruples. Andreessen's quest to bring the internet browser to market is a true David-and-Goliath business tale, pitting Andreessen against some of the most powerful, and ruthless, people in tech. All too often, business wars are won by leaders who see laws and regulations not as moral commandments but as rules to a game that can be bent, even broken, in pursuit of victory. Sure, they may get penalized by regulators, but the benefits are often worth the halfhearted punishment. The American government hates to spoil the story of a local business made good.

Born in 1971 in Iowa and raised in Wisconsin, Marc Andreessen taught himself to code from a library book when he was ten years old, writing a calculator program using a school computer to help with his math homework. When a janitor shut off power to the system unexpectedly, Marc lost his program. In light of this crushing loss, his parents agreed to buy him a Commodore 64 computer. Andreessen went on to pursue a degree in computer science at the University of Illinois Urbana-Champaign. There he got a part-time job designing computer graphics for the university's computer research center, the National Center for Supercomputing Applications (NCSA).

It was a good time to be at NCSA. A new era in computing was just beginning. The internet was evolving quickly from its origin as the 1960s computer network ARPANET, built in part to maintain military communications after a nuclear attack. Over time, the network expanded beyond military applications to academia and, from there, to a small subset of the general public, primarily academics and scientists sharing files and using electronic mail to communicate. By the late 1980s, early adopters were using computer modems to dial directly into closed, proprietary, but user-friendly online services like

Prodigy and CompuServe. These “information portals” provided basic information like weather forecasts and stock prices and made it possible to send emails and chat with like-minded people in forums. The open internet was exciting for those with the tech knowledge to access it, but it remained too cumbersome and technical for the average person to use.

In 1990, Tim Berners-Lee, a researcher at the European Organization for Nuclear Research (CERN), created software and a set of standards for what he dubbed the World Wide Web. Using Berners-Lee’s Hypertext Markup Language, or HTML, you could publish documents on the internet with “hyperlinks” that took you to documents or other kinds of files elsewhere on the internet. Navigated in this way, you didn’t need to be a computer expert to access resources on the internet. The Web was designed to be open and free for anyone with an internet connection—you could use it to share pretty much any digital information whatsoever. It involved no fees, no licenses, and no middlemen getting between you and the internet itself. The possibilities were endless, though few had the imagination to see them at the time.

Andreessen was one of the few who did. He was twenty-one when Berners-Lee released the basic tools and protocols of the World Wide Web. Right away, Andreessen saw the tremendous potential in the Web—once someone built a more user-friendly tool to navigate it than the very rudimentary browsers Berners-Lee and a few others had hacked together. Andreessen suspected that the Web might even displace the paid, proprietary portals like AOL and Prodigy. HTML was a simple set of common rules for creating websites that anybody could learn and use. Just as standardized weights and measures had been essential to the rise of industrialization a century earlier, Andreessen saw how a standardized *information protocol* outside of the control of any one company could bring the internet to its own tipping point. Even usher in an Information Age.

Andreessen approached his friend Eric Bina, a full-time programmer at NCSA, and pitched his idea for developing a World Wide Web browser. Intrigued, Bina agreed to collaborate. Andreessen would design the user interface while

Bina programmed the underlying functionality. With funding from a congressional bill championed by Senator Al Gore (the reason Gore famously said he “took the initiative in creating the Internet”), the university approved the project.

Andreessen and Bina approached their browser project with one overarching goal: make the Web easy to use for both users and creators. (On the user-created Web, of course, that line would be blurry indeed.) Their browser would be navigable by a mouse as well as a keyboard. It would allow for the placement of images right alongside text, just like in a magazine, instead of requiring the user to select and open images one at a time. Most crucially, and something that is often overlooked, Andreessen and Bina allowed their browser to load Web pages even when they contained mistakes. Traditionally, computers stopped running a program when encountering an error. But they knew that a Web page written in HTML wasn't really a program, even if it looked a bit like code when you wrote it. It was actually just a document intended for humans to read with a few added “tags” wrapped around the text for structure and formatting. Just as you can still read a book with typos in it, Andreessen and Bina wanted Web pages to work even when their creators had made mistakes in building them. This strategic decision removed a crucial bottleneck to the adoption of this new form of publishing. Taken together, their strategy meant that the World Wide Web became a visually appealing, clickable patchwork of text, images, and icons. Though the origin stories differ, it was probably for these reasons that the two dubbed it Mosaic.

For weeks, the two cloistered themselves in the basement of the university's Oil Chemistry Building to code, subsisting on Pepperidge Farm cookies and milk (Andreessen) and Mountain Dew and Skittles (Bina). They completed the first version of Mosaic for UNIX computers in January 1993, made it available as a free download, and announced it on a few online bulletin boards. People started downloading the software and kicking the tires.

The appeal of Mosaic was clear from the start. “Before Mosaic,” John Markoff wrote in the *New York Times* later that year, “finding information on computer data bases [*sic*]

scattered around the world required knowing—and accurately typing—arcane addresses and commands like ‘Telnet 192.100.81.100.’ Mosaic lets computer users simply click a mouse on words or images on their computer screens to summon text, sound and images from many of the hundreds of data bases on the Internet that have been configured to work with Mosaic.” Of course, nothing had been “configured to work with Mosaic.” Mosaic was taking advantage of a free and open ecosystem created by Tim Berners-Lee—but that notion was hard to grasp for many at first, even tech journalists.

Downloads of Mosaic began to snowball. As feedback rolled in, Andreessen and Bina fixed bugs and added features at a furious pace. This responsiveness to the needs of users won their loyalty and led to even greater adoption of the software. Soon thousands of people were downloading Mosaic every month. With the support of NCSA, Andreessen and Bina put together a team of their own and were soon able to offer versions of Mosaic for Windows machines and Macs. Once the software worked on the kinds of computers most people had at home, use of Mosaic exploded.

This is where the positive feedback loop of “network effects” came into play for the nascent Web. As more people enter a network, the network’s value to each person grows. Just as the telephone became exponentially more valuable as more people got one—you need people to call in order to make a phone worthwhile—more people who could build websites with Mosaic meant more websites for other Mosaic users to find. With Mosaic driving its growth, the World Wide Web started to crowd out alternative protocols, like Gopher, that had already been created to share information over the internet. Berners-Lee’s standard was on its way to becoming *the* standard.

Though Andreessen hadn’t graduated yet, his browser, according to the *New York Times*, was “causing data traffic jams on the Internet.” In hindsight, the article, on the front page of the business section in December 1993, painted an extraordinary portrait of a tool that in only a few months had

become “a map to the buried treasures of the Information Age”:

Click the mouse: there’s a NASA weather movie taken from a satellite high over the Pacific Ocean. A few more clicks, and one is reading a speech by President Clinton, as digitally stored at the University of Missouri. Click-click: a sampler of digital music recordings as compiled by MTV. Click again, et voila: a small digital snapshot reveals whether a certain coffee pot in a computer science laboratory at Cambridge University in England is empty or full.

Other data bases searchable with Mosaic include the card catalogues of the Library of Congress and hundreds of American and foreign university libraries, Federal Government archives, various NASA computers and the University of California at Berkeley paleontology museum.

There was just one problem with the glowing coverage: the article quoted only NCSA’s director, Larry Smarr. Andreessen and Bina weren’t even mentioned.

When Andreessen angrily confronted Smarr about being excluded from the piece, he learned that NCSA planned to license the software commercially without giving a royalty to its creators. As a consolation prize, Smarr offered Andreessen a management job at NCSA after graduation, though oddly not one that would involve working on Mosaic. Furious, the young programmer quit his job on the spot and left the University of Illinois for the Bay Area without bothering to pick up his diploma.

Not long after, Andreessen connected with Jim Clark on a Sunday morning at an Italian restaurant in Silicon Valley. Still getting over his frustrating experience at NCSA, Andreessen told Clark he was through with the World Wide Web. But just a few months later, in March 1994, Andreessen had already had a change of heart. He told Clark they should poach the original, increasingly disgruntled, Mosaic team from NCSA and build their own browser.

Clark agreed immediately, incorporating Mosaic Communications in Mountain View, California, and committing \$3 million to the new venture. Throughout the summer, three teams—Windows, Mac, and UNIX—raced to build their “Mosaic killer.” By fall, they’d succeeded: the new browser was more reliable, better at building Web pages, and, most important, ran ten times faster than Mosaic in their tests.

It even made it possible to encrypt credit card information for online purchases. Who knew? Someone might even want to sell something over the internet one day.

Speaking of selling, they would need to decide how much to charge for the software. As an academic, Berners-Lee could afford to give HTML to the world, but Mosaic Communications was a for-profit corporation. The company's head of marketing suggested \$99. But setting a price went counter to Andreessen's strategy of encouraging widespread adoption. A business needs a business model, however; Andreessen wasn't in academia anymore. As a compromise, he suggested making the browser "free but not free": no cost to students and educators, \$39 to everyone else, and a ninety-day trial that would never be enforced. Thus only businesses would really end up paying for the software. Would that be enough?

On October 13, 1994, the beta went live. Superior in every way to Mosaic, the new browser hit ten thousand downloads in hours and skyrocketed from there. Soon NCSA accused Andreessen of stealing its intellectual property and demanded a fifty-cent royalty on every download. With most people using Mosaic's software for free, this arrangement wouldn't have been tenable, so Clark hired a forensic software expert to confirm that, while the functionality was similar, the code for the new software was entirely new. Emboldened, he offered to change the name of the company from Mosaic and to pay \$3 million in cash—or fifty thousand shares in the new company. NCSA took the cash—an extraordinarily unfortunate decision in hindsight—and Clark and Andreessen's company was renamed Netscape Communications Corporation. The browser became Netscape Navigator. By March 1995, Navigator had reached 6 million users and \$7 million in revenue, all without ads or marketing of any kind, and with most users not even paying for the product.

Eight hundred miles north, in Seattle, Washington, another ambitious tech visionary was watching Navigator's rise with increasing trepidation. Bill Gates, cofounder and CEO of Microsoft and already a billionaire—within a year he'd be the world's richest man—saw the Web's potential, too. Its

potential to hurt Microsoft. The millions of people avidly using Navigator were only a fraction of Microsoft's user base, but as the browser's functionality and power continued to grow, he imagined that it might somehow replace desktop software like Microsoft Word. In fact, as far as Word went, the Web might one day obviate the need for traditional documents altogether.

In an internal memo titled "The Internet Tidal Wave," Gates wrote that, while Microsoft had successfully spent its first two decades building software to take advantage of "exponential improvements in computer capabilities," the game had now changed: "In the next 20 years," he wrote, "the improvement in computer power will be outpaced by the exponential improvements in communications networks." This meant Microsoft's strategy would need to change. "Browsing the Web, you find almost no Microsoft file formats," Gates wrote. "After 10 hours of browsing, I had not seen a single [one]." This was the heart of the problem as he saw it.

The Web was a threat to Microsoft, but it was also an opportunity. While Andreessen's team in Mountain View was building what became Netscape Navigator, NCSA had taken steps to monetize Mosaic by contracting with a company called Spyglass to license its code commercially. To do that, Spyglass built its own version of Mosaic with brand-new code. Spyglass licensed its Mosaic copy to Microsoft, and Microsoft used that code to jump-start a browser of its own: Internet Explorer.

Weaving a Tangled Web, Part 2: Netscape vs. Microsoft

A new battlefield means new rules of engagement. In his "Internet Tidal Wave" memo, Gates said he was most concerned about competition from one particular browser that had been "'born' on the Internet":

[Netscape Navigator] is dominant, with 70% usage share, allowing them to determine which network extensions will catch on. . . . One scary possibility being discussed by Internet fans is whether they should get together and create something far less expensive than a PC which is powerful enough for Web browsing.

Gates wasn't just worried about missing out on the internet. Presciently, he suspected this primitive new technology could one day supplant all of Microsoft's flagship products, even the Windows operating system itself.

To beat Netscape, Internet Explorer would need priority attention: "We have to match and beat their offerings." This wasn't going to be easy—by the summer of 1995, Netscape had become synonymous with Web browsing. It had 10 million users, a fifth or more of everyone online around the world at the time. All this when fewer than half of Americans had even heard of the World Wide Web. Gates could only imagine what Netscape's numbers would look like when the Web became ubiquitous.

Gates's first plan was to swallow Netscape whole. In a four-hour meeting at Netscape's headquarters on June 21, Microsoft proposed investing in Netscape and making Navigator the default browser on all previous versions of Windows. In return, Netscape would cede the upcoming Windows 95 operating system and all subsequent versions of Windows to Internet Explorer. True, there were far more computers running earlier versions of Windows *then*, but anyone could see that Windows 95 represented the future of the company. By agreeing to the deal, Netscape would be forfeiting its future.

When Netscape refused this offer, the meeting took a surprising turn. In his notes from the meeting, later provided as courtroom evidence, Andreessen wrote:

If NS does want to, then we can have our special relationship. THREAT THAT MS WILL OWN THE WIN95 CLIENT MARKET AND THAT NETSCAPE SHOULD STAY AWAY.

Later, Andreessen compared the behavior of Microsoft's representatives to "a visit by Don Corleone" of *The Godfather*. Of course, Andreessen was only twenty-three. But even those at the table with more experience were shocked by the brazen threat. "I have never been in a meeting in my 35-year business career in which a competitor had so blatantly implied that we would either stop competing with it or the competitor would kill us," Netscape's new CEO, Jim Barksdale, said. "In all my

years in business, I have never heard nor experienced such an explicit proposal to divide markets.”

Microsoft’s promise to destroy Netscape if it didn’t back down would come back to haunt Gates in court. But that didn’t solve Netscape’s money problem in the near term. Their refusal of an alliance meant they would need a war chest to compete with the Goliath in Redmond. At an emergency board meeting, Barksdale made the case for taking venture capital investment. Andreessen, on the other hand, wanted to take Netscape public—a highly unorthodox strategy for a fifteen-month-old start-up that had yet to make a profit. Investor John Doerr was bullish on the idea: “Put the puck on the ice.” In the end, the board was at a stalemate, leaving Jim Clark to break the tie. Clark had tangled with venture capitalists before at Silicon Graphics; he had no intention of going down that road again if he could help it. In an unprecedented move, Netscape would go public.

When word of Netscape’s initial public offering (IPO) hit Wall Street, interest from investors ran so high that banks like Charles Schwab and Morgan Stanley had to add phone lines to handle the call volume. Netscape’s IPO, on August 9, 1995, came before Google’s, before eBay’s, before Amazon’s. It was truly, as *Fortune* would later call it, “the spark that touched off the Internet boom.” The stock price shot up from \$28 to \$75 a share on the first day before closing at \$58. Dozens of Netscape employees became paper millionaires. Andreessen’s stake alone came to \$59 million.

Netscape now had the money to fight back against Microsoft. The “browser wars” had begun.

* * *

Few business leaders in history have been as aggressive on the battlefield as William Henry Gates III. The son of William H. Gates II, a lawyer, and Mary Ann Gates, a prominent business leader, the Seattle-raised Gates—in stark contrast to many of his tech contemporaries—had been born into privilege. His no-holds-barred approach to business had cut a swath of destruction through the early personal computing industry,

making Gates plenty of enemies and leaving him the wealthiest person on Earth.

The computer industry had deep roots in academia and 1960s counterculture. Most avid computer tinkerers in the 1970s and '80s, like Apple cofounder Steve Wozniak, held utopian, share-and-share-alike attitudes toward technology that required an adjustment once their hobbies became successful commercial enterprises. Not Gates. From the beginning, he understood that the business of personal computers would operate by the same cutthroat rules as any other industry. He played for keeps from the start, displaying a callous disregard for others, including business partners and vendors. His Microsoft cofounder, Paul Allen, found himself pushed out of the company after a cancer diagnosis. (At one point, Gates asked Allen for some of his Microsoft shares to compensate for the fact that Gates was now carrying a heavier share of the load.)

Gates would need all his aggression to triumph in this new conflict, however. As a consequence of Andreessen's strategy of widespread adoption, Netscape had captured a huge lead. The vast majority of Web users already relied on Navigator, and the word itself was in danger of becoming a generic term for "Web browser." In 1996, Netscape's revenues hit \$346 million and Andreessen appeared on the cover of *Time*, seated on a throne.

Even so, Gates knew he held a key advantage: Microsoft's dominant Windows operating system, which came preinstalled on virtually every personal computer made by companies other than Apple. Sure, millions of people used Netscape Navigator, but that was only a tiny fraction of the Web's potential user base. The *future* of internet browsing still lay ahead. If Gates could make sure that every new PC came with Internet Explorer preinstalled, users would have no need for Netscape Navigator.

Gates had scoffed at Netscape's "free but not free" strategy internally—those people were "communists," he'd declared. In his zeal to crush Navigator, however, Gates now issued an ultimatum to all the computer manufacturers who preinstalled

the Microsoft Windows operating system on their machines: bundle Internet Explorer as the default browser on each new system or lose your license to offer Windows altogether.

Next, Gates turned his attention—and his incredible market leverage—to the major internet service providers, who typically provided software to help their users get online and access basic information. At one point, he asked an AOL executive: “How much do we need to pay you to screw Netscape?” Whatever the answer was, AOL went on to make Internet Explorer its default browser. Others followed.

In the beginning, Microsoft’s browser was inferior to Navigator in every respect: slower, buggier, and worse at rendering Web pages properly. But Microsoft had unlimited resources to throw at improving it. Unlike its competitor, it already enjoyed vast and steady profits from its flagship business products. Microsoft didn’t need to make a penny from Internet Explorer to keep improving it until the quality gap closed. Or, at least, narrowed enough that most consumers wouldn’t care enough to switch from the default option. As the war dragged on, more and more people brought home new PCs for the first time, driven in large part by the allure of a graphically rich, immersive, hypertext-driven World Wide Web. Each new user inevitably clicked on the bright blue Internet Explorer icon to access the Web for the first time, and just like that, Netscape lost another potential customer. Andreessen, Clark, and Barksdale were fighting a losing battle—in the face of Microsoft’s scale and Gates’s ruthlessness, they held no defensible advantage.

Yes, Gates had flagrantly broken antitrust rules, but he’d been extraordinarily successful in doing so. Throughout history, government regulators have been slow to rein in successful entrepreneurs, the American government especially so. It wasn’t until three years later, in May 1998, that Attorney General Janet Reno, spurred by media attention, announced an antitrust suit against the company.

During the trial, Gates treated the courtroom like any other battlefield. Called “evasive and nonresponsive” during depositions, Gates argued that Internet Explorer was so tightly

integrated with Windows that it simply couldn't be removed from the operating system, something easily disproven even by those in the courtroom without tech know-how. As was demonstrated during the trial, you could simply delete the browser and your computer continued to work just fine. In late 1999, the court ruled against Microsoft: its dominance of PCs constituted a monopoly, and Microsoft had used this monopoly to unfairly quash its competitors, most recently Netscape. In June 2000, the judge ordered a breakup of the company. But Microsoft successfully appealed the breakup—helped in no small part by the fact that the ruling judge had compared Microsoft's leadership to “drug traffickers” and “gangland killers” in improper discussions with journalists during the trial. The company settled the case with no substantive changes to its business practices required.

In the end, all Gates really suffered as a consequence of his aggressive tactics was the hit to his reputation—and, of course, legal fees, which barely made a dent in Microsoft's profits. In return, Microsoft won the war against an existential threat. Goliath had vanquished David. Netscape was on the ropes and Internet Explorer had become the world's most popular browser.

Though Marc Andreessen's early, game-changing browsers—Mosaic and Netscape Navigator—no longer exist, his vision for the Web was ultimately realized. A person browsing the Web today experiences it much the way he originally imagined it: a mosaic of text, images, and other media navigated intuitively. When AOL bought Netscape in 1998 for \$4.2 billion in the hopes of preventing its own disintermediation by the Web, Andreessen walked away with nearly \$100 million, using the money to cofound Andreessen Horowitz, a now-fabled venture capital company that would make early investments in everything from Skype to Facebook to Airbnb. He continues to pursue his vision for the internet, profiting from the efforts of aggressive, idealistic founders riding the wave he helped start more than two decades ago.

Secret Sauce: Ray Kroc vs. McDonald's

Ray Kroc has a prospect on the line. This time, however, he doesn't have to do any selling. Once more, a *prospect* has called *him*. Odd. Usually, Kroc is the one making the call: to drive-in restaurants, drugstore soda fountains, Dairy Queens. For years now, he's been the exclusive sales agent of the Multimixer, a gleaming, stainless-steel device capable of mixing five milk shakes at once. Kroc has loved the product ever since he first laid eyes on it. The fast and efficient Multimixer is transformative for any busy restaurant's kitchen, a miracle of modern convenience in action. It sells itself—but only once customers see it in action, which involves Kroc driving all around the country with a demo unit in his trunk.

Except now those customers are calling him. What's more, they're all saying the same thing: they want a mixer just like the one they've got in San Bernardino. After Kroc takes yet another such unsolicited order, he hangs up and, curiosity piqued, opens his records for that sleepy California town. As it turns out, there's just one customer in San Bernardino. As he reviews the restaurant's order history, his eyes widen.

This can't be right, he thinks. He double-checks the ledger. *Eight* multimixers? They go for a hundred and fifty bucks a piece! Who in the world needs to make forty milk shakes at a time? Kroc double-checks the name of the joint and then calls his travel agent to book a flight out west the next day. He doesn't know if the McDonald brothers are crazy or just foolish, but he'll have to see their hamburger restaurant with his own eyes.

* * *

There are many competing claims to where the franchise concept first developed. In the eighteenth and nineteenth centuries, pubs in England and Germany could agree to purchase all their beer from a specific brewery in exchange for a kickback. In America, Coca-Cola turned to a similar concept to solve a dilemma. Coke's inventor, John S. Pemberton, had developed a morphine substitute that became a popular beverage: sugar, molasses, spices, kola nuts, and cocaine. (Pemberton, formerly a Confederate colonel, had become addicted to morphine after being injured in the Civil War and

created the recipe to help kick the habit.) Transporting full glass bottles over long distances by rail was prohibitively expensive and difficult, however. Since Pemberton didn't have the resources to build factories all over the country, he started shipping concentrated syrup to other companies that would prepare and bottle Coca-Cola on his behalf according to strict instructions. This system allowed Pemberton to expand nationally while giving franchisees a simple and reliable way to generate profits, no innovation or risk required. Coca-Cola advertised everywhere; local bottlers just had to make enough product to meet the growing demand.

Piece by piece, the modern approach to franchising took shape in the early decades of the twentieth century. Today, a franchisor gives each franchisee the right to replicate every aspect of its business, from its brand and trademarks to its methods and recipes. In return, the franchisee pays certain fees and agrees to stick to that strategy. No improvisation. A franchise wins through consistency—and relentless growth.

When a business's formula really *works*, few strategies offer the same rewards as the franchise model. In America, fully one in seven businesses are part of a franchise. When capital and geographical distance limit the pace of growth for a truly successful and exciting new offering, franchising removes those limits. With minimum on-the-ground investment, the parent company can grow to enormous size through franchising and then use that size to crush its competitors. Just ask Ray Kroc.

* * *

McDonald's is a global fast-food empire with an extraordinarily consistent brand. Its offerings are prepared and served in the exact same way whether you're eating in the heart of an American suburb, on board a Norwegian cruise ship, or in Kazakhstan, the former Soviet Republic, which finally opened a McDonald's franchise location in 2016—the first in Central Asia. Of course, small modifications are permitted to suit local palates. One such change became famous from the 1994 film *Pulp Fiction*: mayonnaise is served with McDonald's French fries in the Netherlands. But

considering the size and scope of the franchise, the company's overall consistency sets a world standard even as McDonald's continually improves its methods and experiments with new recipes.

The foundational McDonald's recipe is, of course, its hamburger. The hamburger itself is a perfect example of a successful "tactic" that succeeded and then spread. In fact, it was in and around Kazakhstan that the riders of Genghis Khan's Golden Horde first stuffed morsels of horse meat under their saddles, letting the heat and friction crush and lightly cook their food. When invasion brought this style of minced meat patty to Moscow, the Russians added capers and onions to make steak tartare. (The Tatars were allies of the Mongols.) Russian ships brought steak tartare to the port of Hamburg in the seventeenth century, where ground meat caught on and became a local staple. Two centuries later, German political unrest drove immigrants from Hamburg to New York City. Before long, city restaurateurs were offering minced meat dishes like *Hamburg-style American filet* to win over this new clientele. Thanks in part to the invention of the meat grinder, ground beef patties—"Hamburger steak"—became popular across the United States. As for making hamburger steaks portable by serving them on bread, all we can do is be grateful for that anonymous contribution.

The hamburger arrived in America at the perfect time. More and more people were driving, taking advantage of better roads and more affordable cars. On longer drives, they wanted roadside food that was fast, cheap, and filling. In 1937, Patrick McDonald and his sons, Maurice and Richard, opened the Airdrome food stand to serve hot dogs to travelers driving to and from the nearby airport in Monrovia, California. (Hamburgers were added to the menu later.) In 1940, Richard and Maurice—"Dick" and "Mac"—moved the operation east on Route 66 to San Bernardino and renamed it McDonald's Bar-B-Que. Drive-in restaurants like this one, featuring barbecue beef, pork, and chicken, had become popular in Southern California in the 1930s. Carhops—mostly aspiring actors trying to pay the bills between auditions—hustled to bring food out to customers, who ate in their cars.

By 1948, the brothers realized that hamburgers were driving most of their revenue, not the BBQ. Dick and Mac decided to close temporarily and streamline the entire operation around making and selling hamburgers as efficiently as possible. First they dispensed with the carhops—customers would have to enter the restaurant to get their food. Then they cut the menu down to its essentials: burgers, potato chips, coffee, and apple pie. (French fries and Coca-Cola were added the following year.) The kitchen became a factory assembly line, but instead of cars or toasters it churned out identical McDonald's burgers, one after the other after the other.

Now simply called "McDonald's," the restaurant thrived. But the brothers weren't done. With the correlation they saw between efficiency and profits, why stop there? In 1952, they hired an architect to help them design a new, purpose-built restaurant, sketching out the kitchen blueprint at scale using chalk on a tennis court to make sure it was arranged for maximum efficiency. (After the brothers spent a day on the court pretending to cook hamburgers, unexpected rain washed the sketch away. Undeterred, they repeated the process the following day.) When construction of this ultimate burger factory was complete, the brothers flicked on the neon illuminating a twenty-five-foot yellow *M* in front of the new restaurant. There would be no missing those Golden Arches from the road.

The burgers, the clean and efficient kitchen, the gleaming stainless steel, the red-and-white ceramic tile, the Golden Arches: taken together, this was the over-golden-arching strategy that Dick and Mac created at the dawn of the postwar era. People loved the food, the consistency, and the speed. A McDonald's hamburger was well worth the effort of getting out of your car. Word spread quickly.

Other hamburger restaurants, like Burger King and White Castle, adopted what tactics they could from this "fast food" model. But no one could walk away with the whole winning formula. Not only couldn't they legally open their own McDonald's restaurants, but many of the materials and methods employed were known only to the brothers. Successful imitation would stymie even the most determined

copycats over the years. The brothers had created something both valuable and distinctive. If they acted quickly, they could capitalize on their success while they still retained a first-mover advantage.

The following year, the brothers began to franchise the operation. Neil Fox, a wealthy petroleum executive, was the first to receive guidance from the McDonald brothers in replicating what they had created. In return for a flat fee of one thousand dollars, he was permitted to open a restaurant in Phoenix, Arizona, using the same recipes, design, and assembly-line food production methods that had made the original restaurant so successful. When Fox's location opened, the brothers were surprised to learn that he'd even taken their name—another franchisee in North Hollywood operated as “Peak's”—but that practice soon became standard. Since people were driving farther and farther, word about McDonald's was spreading beyond San Bernardino. There was value in calling the restaurant McDonald's instead of Fox's. In a virtuous circle, the McDonald's name would become even more valuable as more successful franchises opened, thereby making franchises more valuable to open.

One man who would hear the buzz about McDonald's—and grasp its true significance—was Raymond Kroc. Born in 1902 just outside Chicago, Ray earned the nickname “Danny Dreamer” as a child, often coming home from school fired up about some new entrepreneurial scheme: a lemonade stand, a small music store. He loved starting new things and he loved to work. “There is an old saying that *all work and no play makes Jack a dull boy*,” he wrote. “I never believed it because, for me, work was play.” Crucially, Kroc wasn't an innovator—he was a worker. He knew how to execute. What he needed was a winning strategy he could get behind completely. A surefire recipe.

Kroc dropped out of high school and got a job selling paper cups for the Lily Tulip Cup Company. At the time, paper cups were an exciting new innovation, a hygienic and convenient alternative to glasses—and the enormous time and effort involved in washing them all day. Kroc loved being on the cutting edge: “I sensed from the outset that paper cups

were part of the way America was headed.” Even as he climbed the sales ladder, however, “Danny Dreamer” kept his eyes open for new opportunities. A winning formula.

Long-established restaurants were a tough sell for paper cups, but trendier dining establishments saw the potential. Drugstore soda fountains in particular liked them because the hot water required to clean glasses melted the ice cream. Thus, selling paper cups kept Kroc abreast of the cutting edge of the restaurant industry. When one of Kroc’s customers, Earl Prince, cofounder of the Prince Castle ice cream chain, invented a machine that could make multiple milk shakes at once, Kroc saw a new opportunity worth seizing. He quit his sales job with Lily Tulip to become exclusive sales agent for the Multimixer.

Striking out on his own, Kroc sold the mixers to drugstore soda fountains and restaurants all around the country. After World War II, soft-serve ice cream stores like Dairy Queen sprang up everywhere, creating more business for Kroc than ever before. Soon he was selling thousands of Multimixers a year. As with paper cups, the work gave Kroc an invaluable insider’s glimpse of the restaurant industry. “I considered myself a connoisseur of kitchens,” he wrote. “After all, selling Multimixers took me into thousands of them.”

As the 1950s began, it became clear to Kroc from his vantage point that the days of drugstore soda fountains were coming to an end. Postwar America was ready for something new. Whatever it was, Kroc wanted to be the one selling it. It was at this point that prospects around the country started telling Kroc the same thing: “I want one of those mixers of yours like the McDonald brothers have in San Bernardino, California.” This puzzled him. There were Multimixers across the United States; why were all these customers so taken with the one at a single restaurant in a small city in California? When Kroc realized the brothers had purchased eight Multimixers from him, he decided to investigate. “The mental picture of eight Multimixers churning out forty shakes at one time was just too much to be believed,” he wrote. In 1954, at the age of fifty-two, Kroc flew out to Los Angeles and drove the sixty miles from there to San Bernardino.

At first, Kroc wasn't particularly impressed by what he saw. As he sat in his car outside the restaurant at ten in the morning, McDonald's looked like any other drive-in restaurant of the era—aside from a strikingly litter-free parking lot, anyway. Then the workers began to arrive. Instead of the usual work clothes and grease-stained aprons, they were all dressed in identical clean, white uniforms with white paper hats. Kroc perked up. Industriously, the men loaded carts with potatoes, meat, milk, and other supplies from a storage shed and rolled them into the restaurant. Soon the parking lot was full. Packed. Customers were actually getting out of their cars instead of waiting to be served by carhops. A line of them made their way into the restaurant, each person returning to their car with a bag full of hamburgers. In light of this steady procession of business, Kroc wrote, "eight Multimixers churning away at one time began to seem a lot less far-fetched." Getting out of his car, he asked one passing customer why he ate there: "You'll get the best hamburger you ever ate for fifteen cents," the man replied. "And you don't have to wait and mess around tipping waitresses."

Kroc's positive impression of the operation only improved when he entered the restaurant. Right off the bat, he was struck by the absence of flies on a hot day. In a world transformed by McDonald's, it's easy to forget that cleanliness, let alone consistent yet cheap food, was unusual in the 1950s. Customers flocked to McDonald's not only because they liked convenient fifteen-cent burgers but also because it offered a pleasant and reliable experience. The company's diligent attention to customer service didn't just give rise to modern fast food, it raised the game for restaurants in general, as well as every other service-based retail environment. Thanks to McDonald's, people learned to expect more.

Later, Kroc couldn't recall whether he even tried the burgers that day. Burning with excitement, he waited impatiently for the lunch rush to end before introducing himself to the McDonald brothers. Over dinner with "Mr. Multimixer," as they called him, Mac and Dick described the simple and efficient system they'd devised for making and serving food. "Each step in producing the limited menu was

stripped down to its essence and accomplished with a minimum of effort,” Kroc recalled. Going to bed that night in his motel room, Kroc found an alternative to counting sheep: “McDonald’s restaurants dotting crossroads all over the country paraded through my brain.” He didn’t imagine owning these restaurants, but each one would have “eight Multimixers whirring away and paddling a steady flow of cash” to him.

The next day, Kroc was back at the restaurant, observing more closely in light of what the brothers had told him about its operations. Technically, he was only there to figure out how to sell more Multimixers, but “Danny Dreamer” couldn’t help but think bigger. He tried to memorize the way the cook prepared those extraordinarily crisp and delicious french fries. “I was convinced that I had it down pat in my head, and that anybody could do it if he followed those individual steps to the letter,” Kroc wrote. “This was just one of the many mistakes I would make in my dealings with the McDonald brothers.”

Those french fries are a perfect example of the kind of innovative tactic that any competitor can theoretically adopt without bothering with a franchise. Many competing chains would certainly try. Imitating McDonald’s fries successfully, however, proved to be an insurmountable challenge. They were just one part of a whole that the McDonald brothers had painstakingly created. Without adopting the entire, holistic strategy—the management structure, the company culture, the logistics of ordering and storing food, the optimized kitchen design, the scrupulous attention to detail—the fries wouldn’t hold up, if not in a single batch then certainly not over time and across multiple restaurants.

Relying on his natural salesmanship, Kroc convinced the McDonald brothers to let him expand the franchise beyond the ten they’d already established. Those would remain in operation, but Kroc would take things from there. In negotiating the deal, the brothers insisted on consistency: every location would have to use the same architectural plan, signage, menus, and, of course, recipes. Kroc was all for it—he saw the value in the holistic whole—but he later regretted the headache-inducing requirement that any changes to the formula be requested in writing and signed by both brothers.

By this point, however, Dick and Mac had experienced a number of disappointments with their franchisees and they wanted to retain control. When Kroc gave it to them, they signed off on the agreement. According to the deal, Kroc would charge a \$950 fee to each new franchisee to cover his expenses and then retain 1.9 percent of its gross sales, passing along a quarter of that revenue to the brothers.

After McDonald's became a juggernaut, Kroc was often asked why he didn't simply copy McDonald's after learning how it worked from the inside. As Kroc would discover simply trying to replicate the french fries, imitating a successful operation is extraordinarily difficult, even under the auspices of a franchise. As he sought to replicate the McDonald's strategy with the full support of the brothers, he kept discovering new aspects of the formula, from the specially fabricated aluminum griddles to the precise, step-saving pattern of the kitchen equipment. Getting each piece right without their advice and experience would have been incredibly difficult, especially alongside the normal challenges involved in starting any new restaurant. Then there was the name: "I had a strong intuitive sense that the name McDonald's was exactly right," he wrote. "I couldn't have taken the name."

Kroc intuited that the McDonald's gestalt was ideal for its time and place. Trying to reverse-engineer it would have been just as likely to fail as to succeed. Franchising, though the arrangement created headaches from the start, left Kroc free to focus on what "Danny Dreamer" did best: think big. He began by building a model restaurant in Des Plaines, Illinois, to work the kinks out before seeking franchisees.

Though the initial meeting between Kroc and the McDonald brothers had gone well, the relationship soured quickly. When Kroc wanted to add a basement to the model restaurant—an outdoor shed for potatoes worked fine in dry San Bernardino but wouldn't fly in a steamy Illinois summer—the brothers approved the change verbally but steadfastly refused to put that agreement in writing. Since this step was required by the contract, it left Kroc vulnerable. It seemed to him as though the brothers wanted the option of taking legal

action against him down the road. Deciding to roll the dice anyway, Kroc opened his first McDonald's restaurant on April 15, 1955.

Kroc spent a year fine-tuning the Des Plaines model store. There were many kinks to work out in adapting a California restaurant to the climate of the Midwest. For example, after painstakingly re-creating the brothers' method for making french fries, Kroc's came out as bland and mushy as those at any other restaurant. The brothers, for their part, were stumped. It took months of detective work for Kroc to figure out that storing the potatoes in chicken-wire bins in an outdoor shed had been air-curing them. Keeping his basement-stored potatoes under a continuous flow of air from an electric fan solved the problem, and people soon noticed the difference. "You aren't in the hamburger business at all," one supplier later told him. "[You're] in the french-fry business . . . [you've] got the best french fries in town, and that's what's selling folks on your place." This was just one of many adjustments Kroc made to create a template that franchisees anywhere in the country could adopt.

Then Kroc hit a new snag, and a new low in his relationship with the McDonald's brothers. To his chagrin, Kroc learned that, in addition to the franchises already established in California and Arizona, the brothers had inexplicably sold the rights to franchise McDonald's in Cook County, Illinois—the same county as Kroc's model restaurant. Kroc was forced to pay a whopping \$25,000 to buy back that license from the other entrepreneur. This snafu, whether deliberate or not, erased any remaining goodwill Kroc had felt toward Dick and Mac McDonald.

After working out the kinks with the model restaurant, Kroc was ready to franchise. In California and now Illinois, the sales pitch was easier—he could just show potential franchisees a bustling restaurant to get them hooked. Elsewhere, he made his pitch with a set of blueprints and a smile. Nevertheless, by the end of 1956, he'd opened eight new stores. In 1957, he opened twenty-five more. As the momentum built, a virtuous cycle began to play out. The brand began to generate "repeat business based on the system's

reputation rather than on the quality of a single store or operator,” as Kroc put it.

At this point, Kroc hired Harry Sonneborn, formerly vice president of finance at the ice cream chain Tastee-Freez, to handle the money side of the operation. It was Sonneborn who suggested what became the linchpin of McDonald’s success: own the land. Under the “Sonneborn model,” the company created a separate entity, Franchise Realty Corporation, to hold McDonald’s real estate. Then they leased vacant lots around the country and built McDonald’s restaurants on them, taking out mortgages on the land and the buildings. These costs were passed along to the franchisees with a markup. Under this system, a McDonald’s franchise became much more appealing to potential operators. Each restaurant was completely turnkey. Kroc’s company found the lot and built the restaurant before handing it over to the owner to run. In return, the owner made monthly payments to the company, either a fixed minimum or a percentage of volume. These payments would cover the mortgage and any expenses along with a profit for McDonald’s.

Kroc had created a model that could scale almost limitlessly, only getting stronger as it went. And, as the chain grew, so did its purchasing power with suppliers. Individual restaurants could count on rock-bottom costs for ingredients. These lower costs made operating a McDonald’s more profitable for franchisees than the alternatives.

Kroc never stopped refining every aspect of the model to maximize efficiency and lower costs even further. His grand vision for McDonald’s was rapidly becoming a reality, thanks in part to the new Interstate Highway System. Kroc began the 1960s by opening his two hundredth store. Despite the ever-increasing amounts of money funneling back to the brothers in San Bernardino, however, the relationship continued to worsen. At one point, Kroc sent an employee to California to check on the status of the franchise operations the brothers had established outside his purview. The other owners had refused to cooperate in advertising or purchasing with Kroc’s stores even though they were all tied together by the brand. Kroc’s employee discovered that these other restaurants were freely

diluting the formula, selling items like pizza and enchiladas and operating at levels of quality far below the standard set by Kroc, and by the brothers before him. Despite their earlier insistence on complete control to ensure consistency across the board, the McDonald brothers had proven lax in exerting that control.

The situation in California frustrated Kroc to no end. If the brothers weren't going to hold up their end of the bargain, he wanted full control of every restaurant bearing the name he was working so hard to make famous. But would they sell? Kroc knew the brothers wanted to retire; Mac's health had been on the decline in recent years. Calling them up, he cut to the chase and asked them to name their price. A day later, they did: a jaw-dropping \$2.7 million. (To put this sum into perspective, Kroc had just traded more than a fifth of the company in stock for a crucial loan of \$1.5 million.) To the brothers, the amount was only fair: "We've been in business over thirty years, working seven days a week, week in and week out." But where would Kroc get that kind of money? In the end, he worked out an extraordinarily complicated financing scheme that would do the trick. At their current volume, it would only take until 1991 or so to pay back the loan.

Kroc bought the brothers out completely: their brand and their methods. At long last, he would be free to run McDonald's as he saw fit. Except, as always seemed to be the case with the brothers, there was one final snag: they reneged on their handshake agreement to hand over the original store. Whether their motivation was nostalgia or sheer puckishness, Kroc responded aggressively: he opened another McDonald's right across the street and drove the original right out of business.

The bestselling author and futurist John Naisbitt once said that "franchising is the single most successful marketing concept ever." Few businesses have proven this statement as thoroughly as McDonald's. Under Kroc's leadership, McDonald's thrived. In 1963, scoreboards above the golden arches at all its locations advertised the fact that more than a billion McDonald's hamburgers had been sold. In 1965, Kroc

took the company public, only ten years after opening his first location. The following year, the company opened its first store with inside seating, a feature that soon became standard. Customers didn't want to have to eat in their cars anymore. By 1972, the loan to buy out the McDonald brothers had been paid off, two decades ahead of schedule. Four years later, McDonald's surpassed \$1 billion in revenue. "Danny Dreamer" had turned his dream into a reality.

* * *

Even big companies need a winning strategy if they want to stay on top. And they need to execute on that strategy ruthlessly. Tactics come and go, but a sound strategy must dictate the day-to-day approach.

In the words of author and Harvard Business School professor David Maister, "strategy means saying 'no.'" A good strategy guides decision making by winnowing all the available options down to a manageable few. "Does this fit our strategy?" becomes a leader's very first consideration when considering any new tactic. Saying no to what doesn't fit builds quality and ensures consistency. As the actions of Microsoft against Netscape and McDonald's against its imitators make clear, that focus can give an established competitor the edge against flexible and dynamic upstarts.

Strategy requires hard choices. Making those choices is the job of any leader, but not every leader has the stomach for it. As we'll see in the [next chapter](#), you sometimes have to sacrifice one part of your business in order to succeed in another. It isn't an easy decision, but growth always comes at a price.

4

Positioning

The skillful fighter puts himself into a position which makes defeat impossible.

—Sun Tzu, *The Art of War*

“When you try to be everything,” Al Ries and Jack Trout write in their now-classic business book *Positioning*, “you wind up being nothing.” To position a business, understand its market. Where is your competitor’s value proposition hazy? Where are its existing customers dissatisfied? Where does a need remain unaddressed? Instead of taking on a rival where it dominates and winding up in second place, Ries and Trout argue, differentiate yourself by carving out a spot where your adversary is weak—or absent. Find an advantageous position and stake your claim there.

Taking two positions is equivalent to taking none. You can only carve out one at a time. And taking one position decisively usually requires giving up another. So choose wisely. As we’ll see in this chapter, successful positioning comes down to a leader’s willingness to make sacrifices, to relinquish valuable territory in order to hold more firmly to the spot that matters most.

Pocket Position: iPhone vs. BlackBerry

Apple CEO Steve Jobs stands backstage at Macworld Expo, the annual conference in San Francisco. It’s January 9, 2007, and in the ten years since he returned to lead the company he

cofounded, Jobs has become more famous than ever, both for his dramatic product unveilings and the astonishing success of the products he unveils. The iMac. The iPod. The MacBook Pro. Over the course of a decade, Jobs has turned Apple around and made it one of the hottest—and most profitable—companies in the world.

Still, this year's expo feels different to him. Even more special. As he waits in the wings, he is acutely aware of the small, black, rectangular device in his pocket.

“Every once in a while,” Jobs tells the expectant crowd after he walks onstage, “a revolutionary product comes along that changes everything.” He pulls out the device: it's the first iPhone. And Jobs is right. It really will change the world. With the iPhone, Apple has invented a product and reinvented a category. The iPhone represents a new paradigm of personal computing and mobile communication that will profoundly change humanity's relationship with technology. It will also start a war.

* * *

Though it has roots in innovations spanning the twentieth century, the story of the iPhone begins in 1992, during the years Steve Jobs spent in exile from the company he cofounded. In that year, Apple released the Newton MessagePad, the first personal digital assistant. With a Newton, users wielded a plastic pen to manage their calendars, address books, and other personal information while they were away from their desktop computers. Though the product got off to a rocky start due to finicky handwriting recognition, the Newton improved with each iteration. It never became ubiquitous, but it gained a devoted following. When Jobs returned as Apple's CEO in 1997, he canceled the promising product to the chagrin of fans inside and outside the company. Painful as this decision must have been, Jobs knew that Apple needed to sacrifice the smaller position the Newton represented to recapture the company's key position: as a leader in personal computers.

From the beginning, Apple successfully positioned itself in contrast to the then-dominant computer maker, IBM, by

emphasizing that it made *personal* computers, not business machines. Apple computers earned a reputation for being both affordable and easy to use. But this distinctive positioning was lost during Jobs's absence from the company. Under new leadership, Apple spread itself thin, putting out one new product after another until it wasn't clear what the company stood for. As a result, it lost ground to innovative, hungry, and focused PC manufacturers like Gateway and Dell.

Back at the helm, Jobs decided it was time to regroup. Every Apple product that was not a personal computer, no matter how promising, would have to be sacrificed, including the Newton. Jobs slashed the company's product line down to just four offerings: two desktops and two laptops. The first consumer digital camera and one of the first laser printers were among the other casualties, but Jobs's sacrifice served its purpose. As the decade came to a close, Apple began to deliver the kinds of innovative personal computers that had made it great in the first place.

This is the sacrifice at the heart of positioning: You have to be known for one thing before you can try for two. Thanks to this brutal winnowing—something few CEOs in history would have been willing to risk—Apple returned to its position as a product powerhouse, setting trends while the rest of the industry played catch-up.

By 2001, Jobs decided the company was in a better position to take new risks. The company introduced the iPod, a digital music player that, while not the first of its kind, became a household name thanks to its storage capacity, elegant design, and user-friendly interface.

A few years later, with iPods in hundreds of millions of pockets across the globe, Jobs was ready to lead his armies of designers, coders, and engineers to the next key position. In 2007, in a now-legendary presentation, Jobs told the audience at Macworld Expo that he had not one but three new products to introduce, each one as revolutionary as the original Macintosh computer had been: "An iPod, a phone, and an Internet communicator," he said, and then repeated. "An iPod, a phone . . . are you getting it? There are not three separate

devices. This is one device. And we are calling it iPhone.” The response to Jobs’s presentation was thunderous. According to the *New York Times*, the phone was “so beautiful and elegant it could have been designed by the gods.” While not perfect, the iPhone did things no phone had ever done before, including offering a complete desktop Web browsing experience instead of the simplified one existing smartphones delivered. When it went on sale, customers lined up for days to get their hands on one. It was a bona fide cultural phenomenon, one that is still with us.

Today we take it for granted that our “phones” can tackle any task we once required a computer to accomplish, from browsing the Web fluidly all the way to editing high-quality video. In 2007, however, even so-called smartphones were incredibly limited. Jobs elegantly positioned the iPhone against the rest of the marketplace in his presentation: “The most advanced phones are called smartphones,” he said, “so they say. And they typically combine a phone, plus some email capability, plus they say it’s the internet, sort of the baby internet in the one device, and they all have these plastic little keyboards on them. And the problem is, they’re not so smart, and they’re not so easy to use.” The iPhone, through a “multitouch” interface that allowed users to intuitively manipulate a solid glass screen with just their fingers, made true Web browsing possible on a phone-sized device.

As part of his presentation, Jobs highlighted several existing smartphones already on the market that offered email, limited internet functionality, and “plastic little keyboards.” Jobs casually mentioned the BlackBerry as one of “the usual suspects.”

Before the iPhone came along, the Research In Motion (RIM) BlackBerry was the leading smartphone, a darling of enterprise users and, increasingly, of consumers as well. It had a full keyboard, robust email capabilities, and BlackBerry Messenger (BBM), which, unlike SMS text messaging at the time, allowed for group chats.

The lack of a keyboard on the original iPhone was controversial at the time. But Jobs dismissed the critics by

taking a swipe at the BlackBerry and similar devices: “They all have these keyboards that are there whether you need them or not,” he said. As he framed it, the iPhone’s lack of a keyboard was an advantage. “If you think of a great idea six months from now, you can’t run around and add a button to these things,” he explained. “They’re already shipped.” The glass touchscreen on an iPhone meant that the device could present a customized interface for every application.

Watching Jobs’s presentation from home, RIM’s founder and co-CEO Mike Lazaridis wasn’t too worried at first. Veteran BlackBerry users—many of them businesspeople—were devoted to RIM’s products. They could type on those tiny keyboards with remarkable speed and precision. Unlike consumer-obsessed Apple, RIM had staked its future on the enterprise market, positioning the BlackBerry as the only smartphone secure enough and reliable enough for corporate and government use. That savvy positioning, distinguishing the BlackBerry from the waves of flimsy flip phones that flooded the market, had made BlackBerry dominant in large organizations. With the enterprise market locked in, RIM felt it didn’t have to worry about fickle consumer preferences. Ordinary people would want BlackBerrys because they were status symbols, the pagers of the modern day. The brand’s future was secure.

Then the CEO of AT&T-owned carrier Cingular appeared onstage to announce an exclusive partnership with Apple. Surely, Lazaridis scoffed, no cell phone network would be able to offer a data plan big or fast enough for full-scale Web browsing on a phone!

Positioning is a brutal sport. It leaves no room for half-truths and denials. RIM’s unwillingness to admit to the threat posed by the iPhone was the greatest threat it faced.

* * *

Few business wars have displayed such a profound polarity between the combatants as the one between Apple and its Canadian opponent, Research In Motion. Founded in Waterloo, Canada, in 1984 by Lazaridis and fellow engineering grad Douglas Fregin, RIM got its start developing

an array of products: communication devices like phone handsets and pagers, but also LED lighting systems, computer networking devices, even a system for editing film. At first, it was a company in search of a position.

In 1992, six-year-old RIM had fourteen employees and desperately needed cash. It was at this point that Lazaridis met James Balsillie. Balsillie, a driven entrepreneur and natural salesman, grew up in Ontario and graduated from the University of Toronto before earning his MBA from Harvard. Balsillie saw the potential in RIM and expressed an interest in buying the company. Instead, Lazaridis brought him in as co-CEO to run the business side of the operation. (Balsillie also invested \$125,000 in RIM, mortgaging his own house to do so.) Though aggressive and even tyrannical, Balsillie would prove essential to RIM when it came to forging alliances with mobile carriers around the world.

Lazaridis was a *Star Trek* fan growing up, and the characters' pocket-sized communication devices sparked his imagination. In college, his engineering professor had the foresight to suggest that sending text back and forth wirelessly might be the next real communication breakthrough. When a phone company contracted with RIM to do some work on its paging network, Lazaridis seized the opportunity to study paging technology and develop that breakthrough himself.

Pagers were first patented in 1949, but they had been one-way from the start. One of the very first, the Telanswerphone, wirelessly alerted doctors of new messages—as long as they were within twenty-five miles of a transmitter tower. Over the years, transistors made smaller, more sophisticated pagers possible. Eventually, the devices could display incoming phone numbers. As the small black boxes became ubiquitous on the belts of doctors, CEOs, and other high-level professionals, they became a status symbol. Wearing one meant you were important enough to be on-call.

On September 18, 1996, RIM introduced the revolutionary Inter@ctive Pager, the first such device to offer two-way messaging. Users could send and receive messages on one using a thumb keyboard. Within a year, hundreds of thousands

were using the device. RIM gradually added features to subsequent iterations. In 2000, it introduced the RIM 957, which allowed users to send and receive email over the internet. For the first time, busy professionals could count on seeing their emails the moment they arrived on their desktop computers and even respond to them on the go. The device couldn't handle attachments or browse the Web, but for corporate and government users, the 957 was a game-changer.

Then, in 2002—around the same time Apple was expanding into the pocket electronics market from another angle, with the iPod—RIM introduced the first BlackBerry. The BlackBerry 5810 was a two-way messenger, an email device, *and* a phone. The company was now, tentatively, in the cell phone business. Users would no longer need to carry two devices, though they would need a headset to make calls since the 5810 didn't have a built-in microphone. The following year, RIM introduced its first true smartphone. It featured a color screen, an integrated microphone, a speaker, even a Web browser. The product now checked every box as a phone as well as a two-way messenger.

In the tech sector, any new product or service is usually positioned for consumers or enterprise. The BlackBerry was an enterprise device from the start, just as pagers had always been. A B2B sales approach, targeting organizations like corporations and governments, makes it possible to land huge accounts with one call. If you close the deal with a big company, your new customer is likely to build its systems and procedures around your product. Retraining and other switching costs can be huge, so as long as you continue to meet the organization's basic needs, you can get away with a less user-friendly approach than a consumer-oriented brand. As a result, efforts at enterprise-oriented companies tend to focus more on the sales pitch than on what they're actually selling. And Jim Balsillie was a master of the sales pitch.

RIM didn't just capture its position as the dominant smartphone maker for enterprise customers; it invented it. Balsillie worked directly with key players in the finance industry and government, as well as with part vendors like Intel, to address the specific needs of enterprise users. As large

organizations started to roll out vast numbers of phones to their employees, momentum behind the device grew. By 2005, BlackBerry was synonymous with “smartphone.” It faced no real threat in the marketplace. By 2007, RIM hit \$3 billion in revenue. As for its users, they found the device—and the instant gratification it provided—so compelling, they gave it a nickname: CrackBerry.

* * *

The initial reviews of the iPhone were not all positive. The software was slow and buggy, which, though typical of any first-generation device, still drew ire from critics. Inside Apple, however, confidence was high. In fact, leaders at both Apple and RIM were famously, notoriously arrogant. Each company was accustomed to being on top. By this point, Jobs was a veteran of campaigns against IBM, Microsoft, and Adobe, among others. As a leader, however, Jobs held a crucial advantage over RIM: his opponent had two CEOs, Lazaridis and Balsillie. While this two-headed leadership model had served the company in peacetime, the fight against Apple brought out the setup’s inherent flaw.

In the Roman Republic, two consuls would share power and act in concert. In times of crisis, however, the Senate granted a single dictator absolute power to deal with threats quickly and decisively. RIM’s corporate bylaws made no such allowance. As the iPhone gained traction, the relationship between Lazaridis and Balsillie grew fractured and tense. They went from sharing an office to barely speaking. One person close to RIM’s board saw this tension up close:

Part of the challenge was RIM started to develop arrogance, and that arrogance came from success—and I’m going to say that impacted Jim a lot more than Mike. . . . In time, he stopped listening. Because you’re a billionaire, and you know more than everybody else, so you like to hear yourself speak but not like to listen or take any feedback. And the way to deal with any competitive pressure or suggestion is just to say “You don’t know what the hell you’re talking about. We’re BlackBerry. We’re RIM. Do you not know who we are?” . . . That arrogance, I think, really, really hurt the company.

Worse, RIM’s board proved powerless to stand up to either co-CEO when necessary. As famously domineering as Jobs was, he was known for listening to the people on his board and often taking their advice.

While RIM squabbled internally, Apple steadily improved the iPhone. One feature notably absent at launch was the ability to run third-party software. When Jobs announced a kit allowing developers to create native applications for the iPhone, the floodgates opened. A slew of creative and useful apps were created by software developers eager to take advantage of the iPhone's unique features and large user base.

In July 2008, Apple took a direct shot at BlackBerry's position in the enterprise market by introducing Microsoft Exchange support. Exchange enabled "push" email, meaning users would receive notifications on their phones as soon as new messages arrived, instead of being required to open their email application to check manually. Exchange was the standard for corporate email servers, allowing companies to securely route emails to and from every employee's phone. Now that the iPhone supported Exchange, the equation had suddenly changed. There was now no concrete obstacle preventing leaders from switching an entire enterprise over to iPhone. Research even showed that RIM could no longer claim the lead in reliability and security, once its key selling points in the enterprise space.

By November 2008, RIM had to grudgingly accept that it was losing its position. With great internal reluctance, it lurched to match the iPhone by introducing the BlackBerry Storm, its first touchscreen device. By this point, the BlackBerry keyboard had become its last defensive moat with the millions of users who still considered it essential and hated the idea of a phone without physical buttons. By dispensing with a keyboard on the Storm, BlackBerry moved the fight to Apple's turf. And that's where it simply couldn't compete. In the *New York Times*, tech reviewer David Pogue called the glitchy and user-unfriendly device "head-bangingly frustrating." The Storm was a disaster for the company. "How did this thing ever reach the market?" Pogue asked. "Was everyone involved just too terrified to pull the emergency brake on this train?" The answer to this rhetorical question was yes. Though Balsillie's aggression had been valuable when, for example, he was making lucrative deals with phone carriers and large companies, RIM's employees had learned

the hard way that challenging his views internally was a risky proposition. As Balsillie and Lazaridis continued to publicly dismiss their rival's product, employees remained too scared to speak truth to oblivious power.

When RIM's board finally took action, bringing in an outside consultant to advise the company on how to fend off Apple, Balsillie flew into a rage in front of both the consultants and the board. "Did I respond with aggression?" he later said. "Yes. But you know what? It is better than folding." The board, which had tolerated Balsillie's behavior when RIM was on top, decided it was time to take action. "I was losing the board," Balsillie said. "I knew it." Bill Gates staved off Netscape by acknowledging the threat early and mustering an aggressive response. RIM's unwillingness to admit that Apple had captured crucial territory doomed it to irrelevance.

Even when one company is winning battle after battle, the tide of the war can be slow to turn. Two years after the first iPhone's release, the BlackBerry Curve was *still* the number one selling smartphone in the United States, ahead of the new iPhone 3GS. Three more BlackBerry offerings were in the top ten. RIM still had a dominant 55 percent share of the U.S. smartphone market. The company reported a 53 percent jump in sales in the first quarter, shipping 7.8 million devices, with 28.5 million active users around the world. Its adjusted earnings topped Wall Street expectations by four cents. With these numbers, it's easy to see how Lazaridis and Balsillie could allow themselves to believe that Apple wasn't an existential threat. But Apple was catching up fast with only one device, reporting its best quarter ever that fall thanks to a record 7.4 million iPhone sales.

The world was changing, and it was becoming increasingly clear to people both inside and outside the industry that the distinction between work phone and personal phone was disappearing. People would soon carry one device and use it for everything. RIM was trapped in the old model, trying to hold multiple positions at once and dividing its efforts.

While the success of the iPhone over the BlackBerry could be pinned to many factors, perhaps the most important was RIM's failure to adapt to rising mobile data speed. BlackBerry retained an easy lead in email—many users preferred its keyboard and software for the purpose of reading and sending messages. The problem was, as faster mobile data speeds made it less painful to use the Web on a phone, the iPhone touchscreen and its many apps made it a much better device to browse the Web, whether you were uploading a new profile photo to Facebook, consulting an article on Wikipedia, or finding a hotel on Google Maps. In a March 2008 survey of smartphone owners, BlackBerry owners were satisfied almost exclusively with email and messaging, dinging the device consistently for the speed and quality of its internet experience. For iPhone users, in contrast, satisfaction was driven by the seamless integration of every function: music, email, maps, weather, messaging, phone calls. Owning an iPhone meant you had access to it all in the palm of your hand.

By 2010, RIM was on the ropes. It had failed to grow in the consumer market, and now Apple was encroaching on its own turf by pushing the iPhone—and its new tablet device, the iPad—in the enterprise market.

On an October call announcing Apple's quarterly results, analysts learned that the iPhone had outsold the BlackBerry 14.1 million units to 12.1 million. And RIM's figure, unlike Apple's, reflected devices shipped to distribution channels, not necessarily sold to consumers, meaning the difference in actual sales was even more significant. Jobs was blunt: "I don't see them catching up with us in the foreseeable future." As he saw it, RIM's major obstacle was the iPhone's now-enormous software ecosystem. "With 300,000 apps on Apple's App Store," he said, "RIM has a high mountain ahead of them to climb." Apple's numbers climbed each remaining quarter of that year and, in the end, the company sold 5 million more phones than RIM shipped.

Of course, even as the war with RIM was winding down, Jobs knew that Apple faced fresh hostilities. In 2008, the first commercial device featuring Google's new Android operating system appeared. Unlike Apple's mobile operating system,

Android was free and open source: any manufacturer was free to use and even modify it. Once the kinks were worked out, Android would start to challenge Apple's dominance of the smartphone market, particularly on lower-end phones where much future growth depended internationally. Unfortunately, Steven Paul Jobs would not be the one to lead this particular war to its conclusion. A year later, cancer cut his life short, robbing the world of an extraordinary innovator and leader.

In 2012, Thorsten Heins, head of the hardware division at RIM, which had changed its name to BlackBerry, was named the company's new CEO, replacing both Lazaridis and Balsillie. That year, the company reported a stunning 21 percent drop in sales relative to the previous quarter and a \$125 million loss. Five years earlier, when Jobs walked out on that stage at MacWorld to announce the first iPhone, RIM had controlled half the world's smartphone market and earned a profit of \$1.9 billion. Now it faced a \$5.8 billion deficit. BlackBerry announced that it would focus exclusively on the enterprise market again, relinquishing its attempt to position itself for consumers. Though it later walked that statement back, pointing out that it would license its operating system to other manufacturers, the writing was on the wall. Winoing—sacrifice—had driven Jobs's positioning strategy at Apple from the moment he slashed its portfolio of computers down to four machines. Through sacrifice, Apple had captured the position of best phone for everyone.

The Winning Brew: Biocon

It's 1978 in Bangalore, India, and twenty-five-year-old Kiran Mazumdar is hot. She's standing inside the dilapidated, three-thousand-square-foot storage shed she's rented with the help of a business loan. All day long, she's been interviewing candidates for her new company. To her chagrin—but not surprise—she's been getting the same answer all day: I won't work for a woman.

Mazumdar expected as much. After all, she left India for a graduate program in Australia precisely because of her country's attitudes toward women in the workforce. Back

home as an entrepreneur, however, she'd hoped that the prospect of a good job would overcome any such bias. But even the Indian women she's interviewed today have given her the same answer. She can feel her spirits sinking.

Regardless of her disappointment, however, Mazumdar keeps interviewing with single-minded determination. She has never been one to give up easily, and hiring employees will be only the first of many obstacles involved in getting her new company, Biocon, off the ground in India. She still needs reliable electricity, clean water, state-of-the-art equipment . . .

When a candidate finally shows interest in a job, she tries not to look shocked. Sure, he doesn't have a background in chemistry. In fact, he's a mechanic. A retired mechanic. But he must be handy. More important, he's willing to work for her. So she'll work with what she's got.

* * *

For a woman in India, any position outside the home is hard won. Although progress is slowly being made, gender roles are still fixed in the world's second-most populous country. As recently as 2016, a Procter & Gamble ad campaign touched a major nerve in India by acknowledging the growing presence of women in India's professional workforce. In one ad for P&G's #ShareTheLoad campaign for its Ariel detergent, an elderly grandfather watches his grown daughter take a business call while tidying the home and managing the children. Meanwhile, her husband watches TV. In a voice-over, the grandfather expresses profound regret that he didn't teach his daughter that her husband should do his part of the housework. He resolves to help his own wife with the laundry back home. The tagline: "Why is laundry only a mother's job?"

If suggesting that men and women share domestic chores equally raises eyebrows in India today, you can imagine the climate forty years ago, when Kiran Mazumdar started her own company there. Mazumdar would have to position it, and herself, with extraordinary boldness to break the glass ceiling over an entire subcontinent.

Born in 1953 in Pune, in the state of Maharashtra, to Bengali parents, Mazumdar could be forgiven for thinking anything was possible. Her parents instilled that belief in her from the start. Her father, Rasendra, was head brewmaster at United Breweries, the Indian conglomerate behind brands like Kingfisher and London Pilsner. Rasendra saw a bright future for his daughter. As she later said, “[he] made me believe that as a woman I could achieve just as much, if not more, than any man.” Though not affluent, her parents insisted on a top-notch education, sending their daughter to a private all-girls school in Bangalore, where she received more encouragement: “My teachers . . . taught me how to think for myself and to excel in everything I do.” College also bolstered Mazumdar for the fight ahead: “A few of my professors . . . taught me to focus on doing things differently and creatively.” Her first interest was medicine, but when she didn’t receive a scholarship, her father suggested she follow in his footsteps and become a brewmaster. This was an ambitious notion. Brewing was a male-dominated field at the time, and not just in India. But Mazumdar decided to pursue the field anyway. “[My father] prodded me to persevere and never give up in the face of adversity, but rather learn from failure and seek new ways of doing things,” Mazumdar said. “In a sense, I learned my lesson on differentiation from my father, which then became my business hallmark.”

Doing things differently from others would become Mazumdar’s greatest strength. In a way, the idea of becoming a brewer as a woman was a form of positioning, of exploiting an opening in the marketplace.

In 1975, Mazumdar went to Australia to earn the degree of master brewer from Melbourne University, where she graduated at the top of her class. Even in relatively progressive Melbourne, Mazumdar was the only woman in the program. For the next couple of years, she worked as a trainee brewer and maltster at various breweries, but when she tried to bring her skill set home, she experienced a rude awakening. Despite her top-notch education and her father’s status at a top brewery, her gender closed all doors. “It’s a man’s work,” employers told her. “I was unprepared for the hostility and

gender bias I faced from the brewing industry in India,” she remembered.

With no remaining options at home, Mazumdar secured a job at a brewery in Scotland. Before she left, however, she received a call from Leslie Auchincloss, founder of a biochemical company called Biocon. Based in Cork, Ireland, Biocon produced enzymes, proteins that catalyze chemical reactions. Enzymes have countless industrial applications. They are also a brewer’s stock in trade. But Auchincloss wasn’t looking to hire Mazumdar. He wanted to partner with her instead. He saw enormous untapped potential in India: a huge market combined with cheaper labor costs. Auchincloss had been sourcing raw materials from the country, but now he wanted to establish a local presence. Since Indian law restricted foreign ownership of any business to 30 percent, Auchincloss would need an Indian partner, one with deep knowledge of fermentation and an appetite for risk to boot.

“I told him, I am the last person he should ask because I had no business experience, and I had no money to invest,” she recalled. She even introduced Auchincloss to a leader in the Indian malting industry to deflect his attention. But Auchincloss persisted. “I don’t really want a business partnership with him,” he told her. “I want an entrepreneur and I want you to be that entrepreneur.” Mazumdar, who all her life had been told she could tackle any challenge, finally agreed. Mazumdar learned the ins and outs of Biocon’s business in Cork and then returned to Bangalore with a simple mission: go build a biotech company.

In 1978, twenty-five-year-old Kiran Mazumdar founded Biocon India, setting up shop in the garage of a rented house with ten thousand rupees in seed capital, an amount equivalent to three thousand dollars today. Mazumdar embraced the challenge: “I have been single-minded in my determination to see my venture succeed,” she said. “I have never been the one to give up easily. So, when I faced the initial hiccups that any start-up in India faced during the pre-liberalization period [before progressive economic reforms made in 1991], I simply became more determined to make it work.”

In her years abroad, Mazumdar had grown accustomed to factors that entrepreneurs in developed nations take for granted: uninterrupted power, clean water, state-of-the-art equipment, a highly trained workforce. None of these things would be easy to find in India. On the other hand, labor and other costs would be substantially lower, giving the company a distinct competitive advantage, if only it could begin production. That would be hard without a factory, however. Since venture capital wasn't an option, that meant a bank loan, and no Indian bank would lend a woman money. By sheer luck, however, Mazumdar cornered a banker at a social function and managed to win him over face-to-face. With this initial funding, she was able to set up a very basic factory in a three-thousand-square-foot storage shed.

Recruiting employees represented another challenge particular to India. Men with the necessary brewing experience refused to work for a woman, particularly one with an untested business model: the kind of enzyme manufacturing Biocon did was still new in the country. But Mazumdar persisted and eventually assembled a small workforce.

To start, Biocon India manufactured isinglass, used in brewing, and papain, used to tenderize meat. Isinglass was made from certain marine fish and papain from papaya, both in ready supply in India. Within a year, the company was exporting its products to Europe and the United States and Mazumdar had secured a twenty-acre property for expansion. It was at this stage that she could easily have doubled down on enzyme production, but she asked herself: Would that position be defensible over the long run? As profitable as enzymes were, the fact that it had taken only a year to get off the ground with a small business loan suggested how easy it would be for other manufacturers to imitate her model and siphon away her business.

In school, Mazumdar had been taught that "science is about curiosity-driven learning." She realized that if she didn't bake scientific curiosity into her company's culture from the start, it wouldn't innovate. Stagnation would follow, and then disruption. If Biocon stood still, other Indian companies would inevitably offer the same enzymes even more cheaply and

undercut her business. Since India's intellectual property rules were lax and loosely enforced, she would only have a limited window to exploit each successful idea.

Mazumdar's fearlessness had helped her stake out a distinct and valuable position: an Indian woman founding a biochemical manufacturer in her home country. But how long could she hold that position? A leader has to understand the company's unique strengths and leverage them to the fullest, paring away anything—even a successful product—that doesn't play to those strengths. She knew she needed to keep innovating or else lose ground.

In 1984, only six years into the life of the company, she formed a dedicated research-and-development team and tasked it with discovering novel enzymes and developing new fermentation techniques. "We could make Biocon work if we followed a strategy of differentiation by leveraging our early-mover advantage," Mazumdar said. "Instead of being hampered by what we did not have, we tried to use what we did have to our advantage and, through homegrown innovations, maximize results."

In short order, Mazumdar pivoted Biocon India from enzyme manufacturer to full-fledged biopharmaceutical company. Through steady investment in its research program, Biocon developed an array of viable treatments for cancer, diabetes, and autoimmune disorders like psoriasis and rheumatoid arthritis. Since it couldn't go head-to-head with Big Pharma in the West, Mazumdar found a highly defensible position by focusing on "biologics," drugs made from living cells and proteins. Though they offer vast potential to treat an array of diseases, biologics are expensive and risky to develop. That's where Mazumdar's location became a crucial advantage. "Affordable innovation" became her motto. With its relatively low costs, an Indian company could afford to take many more risks than its competitors in the West.

"[Innovation] is not about taking wild risks that might bankrupt you," Mazumdar said. "It is about managing risk and mitigating the cost of risk-taking. India can afford to take larger risks simply because our cost base is lower than the

West. In the West, it would cost a company ten times more and failure would dent the bottom line in a way that would be difficult to recover from.”

Biologics can be manufactured through fermentation, so developing them leveraged Biocon’s strengths and Mazumdar’s own domain knowledge. Once a biologic has been successfully developed, it can sometimes perform the same function as a traditional drug at an extraordinarily low cost. For example, India once depended on expensive imported insulin. When Biocon developed a new insulin process, the company was able to address the country’s needs for the drug affordably—and export additional insulin to the global market. Mazumdar understood that the perfect drug is useless if the patient can’t afford it—and enormously profitable if billions of people in developing countries suddenly can: “A significant proportion of the world’s population does not have access to essential medicines and, where health care does exist, it is unaffordable.” Today Biocon is the world’s lowest-price producer of insulin—in 2019, Biocon cut the price even further, to ten cents a day in low- and middle-cost countries.

In their book *Blue Ocean Strategy*, W. Chan Kim and Renée Mauborgne assert that you don’t need to succeed by descending into an area of intense competition. They contrast “red oceans full of sharks . . . [or] cutthroat markets with bloody competition,” with “wide-open blue oceans, or new markets devoid of competition.” To thrive, Kim and Mauborgne offer a simple principle: “Create. Don’t Compete.” Her whole life, Mazumdar has sought out “blue oceans”—areas where she can think differently and stake out a new position. With Biocon India, she knew she wasn’t going to beat well-funded Western pharmaceutical giants like Pfizer or Merck at their own game. Affordable biologics for developing countries were her “blue ocean.”

Biocon was one of India’s first technology start-ups, and over time Mazumdar became “a brand ambassador, not just of a fledgling industry but of innovation-led business [in India],” according to a biographer. Mazumdar’s emphatic and sustained investment in research turned the company into a

destination for science and engineering talent in the country, in sharp contrast to its early days. “All those who understood biotech in those days gravitated towards me,” she said. Biocon’s first major expansion occurred in 1987, when Mazumdar secured a quarter-million-dollar venture capital investment. She used the money to expand R&D even further, building a new, state-of-the-art fermentation facility. Two years later, Unilever, the British-Dutch multinational conglomerate, purchased the Biocon parent company from Leslie Auchincloss. Biocon India spent the next ten years co-owned by one of Unilever’s divisions.

In the early 1990s, Mazumdar met a Scottish businessman named John Shaw at a party and the two eventually became engaged. When Unilever sold the division containing Biocon to another company shortly thereafter, they saw an opportunity to gain full control of the company Mazumdar had started. There was only one problem: “I had no money to . . . buy back those shares,” Mazumdar recalled. “But John had some property in the UK.” Shortly after the two bought out the remaining shares in Biocon for \$2 million, Mazumdar officially became Kiran Mazumdar-Shaw. Subsequently, Shaw left his job to become Biocon’s vice chairman. “He always says that was true love,” Mazumdar-Shaw said, “and he felt that that was the best investment he made.”

In 2004, Mazumdar-Shaw took Biocon public, seeking capital to expand the research program even further. In sharp contrast to the lack of interest from investors back in 1978, the Biocon IPO was oversubscribed thirty-three times and closed the day with a market value of \$1.11 billion, only the second Indian company to exceed \$1 billion on its first day of trading.

With a net worth of \$3 billion herself, Mazumdar-Shaw is one of India’s only female billionaires, as well as the first woman and the second Indian to take the Gates Foundation’s “Giving Pledge”: she will give the majority of her wealth to philanthropic causes. “I am particularly concerned about the unbearable financial burden that debilitating diseases like cancer impose on patients in poor countries,” she explained. “I am also conscious of the fact that two-thirds of the world’s population [has] little or no access to an acceptable quality of

health care. When they do, the financial challenge pushes them into poverty.” Mazumdar-Shaw has donated telemedicine facilities to many Indian health care clinics to bring state-of-the-art care to those who could never have afforded it on their own. She also directs funds to cancer research and care, including the construction of a 1,400-bed cancer center.

Ultimately, Mazumdar-Shaw sees her greatest contribution as the work Biocon does to make vital medicines economical for billions. “I would like to be remembered as someone who made a difference to global health care through affordable innovation,” she said. In 2010, *Time* named Mazumdar-Shaw one of the world’s hundred most influential people. The following year, the *Financial Times* called her one of the top women in business. None of these achievements would have been possible if Mazumdar-Shaw had been unwilling to make the necessary sacrifices to capture and hold a winning position, from giving up a secure brewmaster position to start Biocon in 1978 all the way to her insistence today on pouring every extra cent into research, the necessary risks of “affordable innovation.”

Kiran Mazumdar-Shaw continues to leverage scientific curiosity as her company’s core strength, constantly positioning Biocon to succeed through aggressive research and development as well as acquisitions and partnerships. The company holds nearly a thousand patents and directs 10 percent of its revenue to R&D, a substantially higher proportion than any other Indian pharmacological company. The best position is always one step ahead.

Command of the Air: Beech Aircraft vs. the Headwinds

June 1940: war rages across Europe, but America remains out of the fight, divided internally between the isolationists who want to stay out of the conflict and those, like President Franklin Delano Roosevelt, who feel obligated to aid America’s allies against the Axis threat. America has taken some steps—renouncing a trade treaty with Japan, supplying arms to the Allies—but by and large the American public

views these as half measures. Entering the war seems inevitable. Barring a miracle, the United States will join the second global conflict of the twentieth century.

As the situation worsens that summer, every American business leader busily prepares for the massive implications of war. Except one. The chairman and president of America's most innovative airplane manufacturer, Walter Herschel Beech, has been hospitalized with encephalitis. In fact, he's in a coma.

Everyone knows this war will be fought in the skies to an unprecedented extent. Beech Aircraft is already struggling to meet demand as orders pour in from American allies around the world. The Chinese, for example, are using repurposed Beech airplanes as bombers and flying ambulances as they fight off the Japanese invaders. If Beech is going to be prepared for the coming conflict, major action needs to be taken.

As Walter Beech fights to live in one hospital bed, his wife, Olive Ann Mellor Beech, is down the hall in another. By sheer coincidence, she is about to deliver their second child. Olive Ann is counting contractions while the world hurtles toward war. She's also counting money. As secretary-treasurer of the company, she is hard at work preparing Beech Aircraft for war.

Mainly, that means securing the necessary funding. The company needs to rapidly retool for high-volume military production: expanding its factory, hiring workers, buying new machinery. To make the necessary calls, she's had a direct phone line to the company plant installed at her bedside. Now, at her order, Beech's directors have come to her room to discuss next steps. Olive Ann is undaunted by the fact that she's lying in a hospital bed surrounded by male executives in suits and ties, none of whom are happy about where they are—this is at a time when a father is expected to sit in the waiting room during his wife's labor—or who is calling the shots. Not only is Olive Ann Beech a woman, she doesn't even know how to fly an airplane like every man there. For Beech, none of that matters. Only the money does. As the executives

grumble, throwing up one roadblock after another, Beech steamrolls them: “I like to have around me people who find ways to do things,” she says, “not tell me why they can’t be done.”

As soon as the baby is born, Olive Ann boards a plane to Washington, D.C., where she secures a \$13 million Reconstruction Finance Corporation revolving credit line. She goes on to assemble another \$70 million in loans while her husband recovers in the hospital. Beech Aircraft will need every penny to meet the challenge ahead.

Walter Beech survives his ordeal and returns to the company. Olive Ann Beech won’t officially take the helm of Beech Aircraft for another ten years. But there is no denying she will play an instrumental role at Beech, from the company’s founding at the height of the Great Depression through its launch into the Space Age under her leadership. Critical to the company’s success as it transitions into and out of wartime production over and over will be Olive Ann Beech’s savvy use of positioning to ensure its dominance in the minds of the government and industry officials whose opinions will decide its fate.

Though she never learns to fly, Olive Ann Beech knows exactly where she stands.

* * *

Olive Ann Mellor was born in a rural farmhouse in Waverly, Kansas, in 1903, the youngest of four girls. Her father was a contractor and her mother kept pigs, geese, chickens, and a cow, selling eggs and pigs for extra money. Her mother also ran the household: all the property was in her name and she made the family decisions. From the beginning, Olive Ann displayed a head—and a passion—for numbers, something both parents encouraged. At the age of seven, Olive opened her first bank account. By eleven, she was helping with the family’s books, writing checks and overseeing expenses. When she was fourteen, the family moved to Wichita. Instead of attending high school, Olive Ann studied at the American Secretarial and Business College.

At the age of twenty-one, Mellor was hired as a secretary and bookkeeper at a small, Wichita-based aviation company, Travel Air Manufacturing. Travel Air had been cofounded by Walter Beech and his partners, Clyde Cessna and Lloyd Stearman, all three skilled pilots and aeronautical engineers. The only woman in the twelve-person firm, Mellor stood out for her business skills and Beech soon put her in charge of managing the growing office. The only person on staff without a pilot's license, Mellor grew tired of being teased for her lack of knowledge about airplanes, so she asked the company's chief engineer to give her a schematic with every part labeled. She memorized it and, from that point forward, required every new employee to do the same no matter their role in the company. In Mellor's eyes, not being a pilot was no excuse not to know the company's products inside and out.

When asked in later years why she never actually learned to fly, even once she was the president of a major aviation manufacturer, she pointed to the men who tried to teach her: "Their idea of instruction was to take me up and stunt the plane," she said. "In those days, an airplane was supposedly no good unless it could fly upside down."

From the beginning, Walter Beech was the salesman of the bunch, naturally gregarious and a terrific pilot. At the time, the best way to sell a plane was to win races with it. Travel Air first made a name for itself in 1927 when a Travel Air 5000 won the ill-fated Dole Derby, a disastrous air race in which ten people died and six planes were lost or destroyed. Travel Air's reputation for speed and reliability grew when its "Mystery Ship" beat the fastest military fighters of the time in the first Thompson Trophy Race. Despite the company's success, Beech's partners moved on, Stearman to build airplanes for the movie industry in California and Cessna to found what would eventually become Cessna Aircraft.

On the cusp of the Great Depression, Olive Ann convinced Walter that it would be safer to sell Travel Air to the company that made its engines, Curtiss-Wright, descendant of the Wright Brothers' company. He agreed, and the merger netted him \$1 million in Curtiss-Wright stock. Beech was named president of a division of Curtiss-Wright and VP of sales.

Soon after, Walter and Olive Ann married and moved to New York City, location of the company's headquarters.

In business, the two soared. On the romance side, however, there was often turbulence. After one heated argument, Olive Ann became so angry with Walter that she went to Grand Central Terminal and got on a train back to Wichita. Along the way, the train came to an unexpected stop: "Some fool has his airplane on the tracks," passengers were told. Walter boarded the train and, apologizing profusely, coaxed Olive Ann out of her seat and back to New York.

Walter Beech was a flyer and a tinkerer, and was never very happy when he couldn't do both. At Curtis-Wright, he soon grew frustrated at how far removed he'd become from day-to-day airplane production. In 1932, he quit his high-flying job despite the dire economic climate. (Walter Beech was also a gambler.) Digging deep into their savings and with the backing of some original Travel Air investors, Walter and Olive Ann founded Beech Aircraft, bringing in several former Travel Air employees and eventually operating out of the original Travel Air factory in Wichita. Walter became president and Olive Ann secretary-treasurer, where she was "particularly close to the financial side of the company and played a key role in major company decisions," in the words of the National Aviation Hall of Fame. Even so, Walter didn't even acknowledge Olive Ann's contribution by name in his early accounts of the company's founding. She would even have to fight for recognition from her own husband. As it turned out, Olive Ann liked a good fight. "I made him pay me a salary or I wouldn't work," she said. "I wasn't willing to give my life's blood and not have it properly evaluated." She knew that recognition equaled power. If she wanted to get things done, she'd need a strong position.

At Beech, Walter was back in his element. He became a familiar sight on the factory floor, out of place in his blue suit and smoking a pipe in defiance of his own "No Smoking" signs. Often, he'd pitch in to help a mechanic with a job, getting engine grease all over his suit. Undeterred by Olive Ann's disapproval, Walter continued to fraternize with his fellow mechanics and engineers, drinking and occasionally

gambling for small sums in between working on planes. “He was a Hemingwayesque figure, the real thing,” his nephew, Robert Price, recalled.

Walter’s initial aim was to build no less than the finest airplane in the world. He defined this as a craft with a top speed of two hundred miles per hour and a nonstop range of one thousand miles, all with five seats and a luxury interior. This seemed impossible to Beech’s engineers, but thanks to Olive Ann’s careful stewardship of the business side, Walter was able to drive innovation forward at an extraordinary pace. By November of that year, the first “Beechcraft” met his exacting standards. That plane, the Model 17 Staggerwing, soon won the Texaco Trophy Race.

From the start, Beech Aircraft established itself as a leading manufacturer of high-comfort, high-performance airplanes, the limousines of the skies. But Olive Ann felt there was an essential element of the Beechcraft that wasn’t getting the attention it deserved: sure, it was fast and comfortable, but, more important, it was easy to fly. After Walter’s experience as a U.S. Army Air Corps flight instructor during the Great War, he placed great emphasis on building a true pilot’s plane. He knew how crucial certain elements, like cockpit visibility, could be during a commercial flight, let alone in the heat of battle. Therefore, every aspect of the Beechcraft was designed to make it easy to handle under all conditions.

To highlight this, Olive Ann suggested a PR stunt: entering a female pilot in the 1936 transcontinental Bendix Trophy Race. In her opinion, this would emphasize the plane’s extraordinary flyability, at least in the eyes of the men who bought airplanes. Walter agreed and, that September, Louise Thaden, with Blanche Noyes as her navigator, flew the Staggerwing across the country in record time, arriving in Los Angeles more than thirty minutes before the next-fastest plane. (Thaden was already famous for having won the first Women’s Air Derby, also known as the “Powder Puff Derby,” in 1929, flying a Travel Air airplane. This time around, she wasn’t forced to use a slower engine “appropriate for a woman.”)

The following year, Beech Aircraft unveiled the legendary Twin Beech, an immediate success around the world that would be produced continuously for a record thirty-two years. In the end, more than nine thousand would be manufactured, making the Twin Beech one of the most popular light aircraft in the world.

By 1938, however, Beech Aircraft was struggling despite the success of its planes. The Depression was relentless in the toll it took on all American businesses. Beech broke even that year thanks to Olive Ann's prudent management of the numbers, but in 1939 they were forced to lay off workers. By 1940, however, the nation's new wartime footing started to turn things around. That's also when Walter Beech went into a coma, leaving his very pregnant, thirty-six-year-old wife at the reins of the 750-person company.

Alone at the yoke, Olive Ann had more to contend with than contracts and contractions. With Walter's prognosis up in the air, some Beech executives maneuvered to wrest away day-to-day management of the company. She started working twelve-hour days in her hospital bed both to maintain control of Beech Aircraft and to prepare it for war. In the end, Olive Ann was forced to dismiss fourteen employees to end the coup, all while caring for two daughters alone, one a newborn.

When Walter finally did recuperate, almost a year after falling ill, he found that Olive Ann wasn't all that willing to stop making the decisions. Where he had once neglected to even mention her contribution by name, he was now more than willing to let his wife run the show. Though back to full health, Walter started leaving the office frequently to hunt, fish, or simply get a haircut, sometimes in the middle of a directors' meeting: "Annie can handle this," he'd say, sauntering out of the room.

Once America officially entered the war, Beech's workforce scaled rapidly, to 4,000 in 1941 and eventually peaking at 17,200. The U.S. Army Air Corps, predecessor of the Air Force, relied on the Twin Beech as a transport plane. Beech also designed a plywood trainer plane, the AT-10, to cope with wartime metal shortages. Thanks to the AT-10,

almost every U.S. navigator and bombardier learned to fly aboard a Beechcraft, positioning the brand as the true pilot's plane, a position it would hold long after the war ended. By war's end, Beech had built more than 7,400 military aircraft and won five Army-Navy "E" awards for excellence in production, an honor that went to only 5 percent of the more than 85,000 companies involved in producing materials for the war effort.

Scaling Beech Aircraft for war had been an extraordinary logistical feat. Even before it was over, however, Olive Ann foresaw a bigger one: the transition back to peacetime. Beech's revenue in the war's final year was \$123 million, up from only \$1.3 million in 1939. How would Beech—and its many thousands of employees—keep stride with the sudden drop in military demand? Clearly, the company would have to reposition itself for the commercial market again, but could it come back to Earth without crashing?

Olive Ann Beech adopted a personal motto that would guide her leadership style in the decades to come: "Slowly We Go." This was in stark contrast to Walter's daredevil approach, but it served the company well. Before the war had even ended, Beech Aircraft was hard at work on a new model suited for the postwar market: the four-seat, single-engine, all-metal "Bonanza," which featured a distinctive V-shaped tail. The Bonanza, introduced in 1946, made headlines three years later when former Army Air Force captain William Paul Odom, in a publicity stunt for Beech, flew nonstop from Hawaii to New Jersey. The thirty-six-hour flight set a world record for distance, with Odom landing at Teterboro Airport with only twelve gallons of gas left in the tank. Today the Beech Bonanza holds the record for the longest continuous production of any plane in history, with more than seventeen thousand built from its debut to the present.

When Walter died of a heart attack in 1950, Olive Ann pushed through her grief and took over as the company's president, becoming the first woman to lead a major aircraft company. Walter's own brother tried to unseat her, but just as she had done during the previous coup attempt, Olive firmly repelled the effort, eventually forcing his resignation.

Beech, who took to signing her name “O. A. Beech” to mask her gender in correspondence, developed a unique leadership style to compensate for the sexist culture of the time, particularly in aviation. Unwilling to put up with male executives talking over her in group meetings, she had individual employees sent to her office for one-on-one discussions instead. She also used a simple system to keep everyone apprised of conditions at the company: A smiling sun on the flag outside her door meant clear skies. A flag with a storm on it, however, meant trouble.

As a leader, Beech was strict, formal, exacting. “Grown men would flinch when they were summoned to stand on her blue carpet,” a biographer wrote. “There, only rarely raising her voice, she would tell them precisely what she wanted done or where they had erred.” Detractors and admirers alike took to calling her the Queen. Eventually the crew of her private plane began rolling out an actual red carpet whenever she stepped onto the tarmac.

Over time, the ranks of Beech’s admirers both inside and outside the company grew. Under her leadership, Beech Aircraft grew steadily. But Beech knew that her company’s position was vulnerable—the company made great planes, flyable and reliable, but excellence alone wasn’t defensible. To cement the company’s position as the pilot’s plane, she created the Beech Acceptance Corporation, a financing entity that made the planes much easier for individuals to afford.

In the decade after her husband’s passing, Olive Ann Beech more than proved her mettle as the CEO of a major corporation. She navigated the company through the Korean War and headlong into new areas like the development of unmanned military drones and pressurization systems for the Apollo space missions. Olive Ann always captured a new position by finding an intersection between unmet market demand and Beech’s core strengths. Since the company had extensive expertise in cabin pressurization as well as excellent government relationships, spacecraft pressurization systems represented a perfect area to stake a new claim.

The company's success could no longer be attributed solely to Walter Beech's brilliance as an engineer and designer. If you'd invested in Beech Aircraft when Olive Ann took the reins in 1950 and sold your stock when Olive Ann sold the company to Raytheon for \$800 million in 1980, you would have seen an average annual return of 18 percent. Investing \$10,000 would have returned \$1.23 million, in addition to generous dividends. (The same amount invested in the S&P 500 would have returned \$159,400.) At one point, the *Christian Science Monitor* dubbed Olive Ann Beech "the First Lady of Aviation."

Still, Americans remained deeply uncomfortable with the notion of a female CEO, and this discomfort expressed itself in unfortunate ways. In 1959, Beech's PR manager convinced Olive Ann to forgo her usual reticence and sit down for an interview with the *Saturday Evening Post*. Beech's trust turned out to be misplaced: the in-depth profile became a savage hit piece entitled "Danger: Boss Lady at Work." She would maintain her distrust of reporters for the rest of her life.

On July 6, 1993, Olive Ann Beech died at eighty-nine of heart failure in her home in Wichita, Kansas. In her time, she had been a leader of several aviation organizations, including the Women's International Association of Aeronautics, and had been appointed to numerous national boards by Presidents Eisenhower, Johnson, and Nixon. As for Beech Aircraft, it would change hands several times, eventually being merged with Cessna in 2013, an irony both Olive Ann and Walter would have appreciated: Beech and Cessna were back together again after nearly a century.

* * *

Positioning is any leader's most important job. If you don't know exactly who you're for and, crucially, *why they should choose what you're offering*, your leadership will be muddled, indistinct, and ineffective.

Saying yes to the right business opportunities means saying no to the wrong ones, even when that means sacrificing a measure of success with one group of customers to secure greater success with another. This is the courageous choice at

the heart of positioning. Often, the greater the sacrifice, the stronger the position. That kind of focus is hard to beat. Leaders who are willing to give up a good position to capture a great one can steer their companies through even the most turbulent times.

A second position can be claimed—as Apple did when it expanded from computers to mobile devices—but only once the strength of the first position has been established through disciplined focus. No position, however, is permanent. The best leaders continually seek out new, more defensible ones, abandoning the positions they can no longer hold against determined new competitors. This vigilant maneuvering is necessary because the battlefield is always changing. The high ground won't stay high for long.

5

In with the New

Take advantage of the enemy's unreadiness, make your way by unexpected routes, and attack unguarded spots.

—Sun Tzu, *The Art of War*

A company can dominate for so long that its reign starts to feel inevitable: to competitors, to consumers, and to itself. But a smart leader knows that nothing lasts forever. In business, the only inevitability is disruption.

Sometimes change arrives with a new generation of consumers: a demographic wave brings new values and preferences to the marketplace. Sometimes it arrives with a leap forward in technology: One innovation leads to a cascade of others that shake up the status quo. Steam power. Electricity. The transistor. The internet. In short order, a slew of products and services we couldn't live without become obsolete while new ones become indispensable. Sometimes there is no change at all, and a company dooms itself through complacency. All that winning makes it soft, smug, easy prey for a hungry upstart.

In this chapter, we look at drastic shifts and sudden upheavals, and how leading companies either weather the changes or founder on the rocks. Sometimes the upstart becomes the new heavy. Sometimes the established player crushes the upstart, or absorbs it, neutering the threat. The roles are never fixed. Disruptors can end up getting disrupted

themselves. Wherever they stand at the moment, great leaders stay nimble and never lower their guard.

A Lite Goes Off: Anheuser-Busch vs. Miller

It's the summer of 1972 and Bill Backer is on a roll. After getting his start in the mailroom of the legendary advertising agency McCann-Erickson, the South Carolina native has worked his way up through the ranks thanks to an extraordinary gift for crafting copy that sells. Backer is fresh off his latest victory, the groundbreaking "Buy the World a Coke" campaign. The idea came to him during a forced layover on a plane trip. Exhausted from a poor night's sleep at the motel and impatient to reach his destination, he'd been startled to see his fellow delayed passengers laughing with each other and enjoying Cokes as though they didn't have a care in the world. Though they hailed from many different countries and were forced to communicate with each other in stilted English, the camaraderie was undeniable. Coca-Cola offered "ten or twelve ounces of commonality between diverse peoples," Backer realized. Inspired, he quickly jotted the phrase "I'd like to buy the world a Coke" on a napkin. That slogan became a jingle for a wildly successful Coke campaign. The jingle was adapted into a song, and against all odds, the song has become a huge hit: "I'd Like to Teach the World to Sing (in Perfect Harmony)." Two hits, actually. Two separate versions of the song by two different groups are topping charts around the world.

For an ad man, however, the only thing that really matters is the next pitch. Which is why McCann's new creative director finds himself in Milwaukee. Tucking a reel of film under his arm, Backer makes his way into a conference room, where Miller Brewing's CEO, John A. Murphy, and his team of executives are waiting to screen Backer's new ad. The Bronx-born Murphy was installed by Philip Morris after its recent acquisition of the brewery. He made a name for himself running the company's international operations. Now he's tasked with applying to Miller's fifth-place beer the marketing

strategy that made Marlboro the world's most popular cigarette.

Murphy has decided exactly who Miller is for: blue-collar drinkers. While that demographic represents only a third of beer drinkers, it accounts for a whopping 80 percent of all beer sales in America. What better position could a brewery hold? Unfortunately, Miller's High Life brew has always been positioned as a premium product: "the Champagne of bottled beers." It even comes in a pseudo-champagne bottle.

Blue-collar guys don't drink champagne and they aren't much for metaphor, either. To win them, Miller will need a new approach. "Miller High Life has to come out of the champagne bucket and into the lunch bucket," Murphy declares, "without spilling a drop." To do this, he'll need to peel those blue-collar drinkers away from the industry heavyweight, Budweiser. No easy task. But Murphy has deep pockets filled with Marlboro money. If you need a killer campaign in 1972 and price is no object, you hire Bill Backer.

The lights dim and the film begins to roll. In Backer's ad, construction workers wrap up after a hard day's work: "It's quitting time. Let's go get a beer." In the next scene, they're enjoying Miller High Life at a bar, still in their hard hats. The jingle may not be a future gold record, but it's simple and catchy: "If you've got the time, we've got the beer." The ad is direct and unambiguous, positioning Miller High Life for the blue-collar demographic the company wants to reach. Murphy is thrilled.

Backer, for his part, likes the basic idea, but thinks it needs to be pruned to something that can "live on billboards." He "[begins] to write little essays about blue-collar workers drinking beer after work." In one of these essays, he finds the perfect term to encapsulate "those golden hours between 'quittin' time and bedtime" when blue-collar workers can relax with a beer: "Millertime."

The Millertime campaign runs. Murphy—and Backer—wait expectantly. But despite millions spent on airplay, even during prime-time sporting events, sales of High Life stay put. Backer can't help but feel disappointed. Sure, not every

campaign can be a winner, but this is a rocky start to his reign as creative director. Maybe it's already the beginning of the end? Creatives in the ad business tend not to live the high life for long.

When Backer talks to Murphy next, he's ready with more ideas—and a gracious response in case Miller announces he's switching agencies. To Backer's surprise, however, Murphy explains that he'll keep running the Millertime ads despite their lack of traction. In his view, Miller is battling long-held beliefs about what the High Life brand represents. It's also trying to unseat Budweiser, which is practically the national beverage. Change like that won't happen overnight.

It's your money, Backer thinks. But he's curious to see what happens. The ad felt like a winner when he was writing it. Maybe it just needs more time.

* * *

Months and millions later, John Murphy's unusual patience pays off as Backer's campaign finally starts moving the needle. High Life sales jump 30 percent thanks to gains in the blue-collar market. Now it's time for the second phase of Murphy's strategy. The market leaders—Anheuser-Busch and its own archrival, Schlitz—hold the keys to the kingdom. He won't catch up to the big boys by playing the same game. He needs to shake up the market to create an opening.

Murphy sees a potential battering ram in a low-calorie beer, appropriately called Lite, which he acquired from a small Chicago brewer. Lite wasn't popular. Internally, Murphy's people questioned the appeal of a "diet" beer to the blue-collar workers they've been working so hard to win over. But Murphy has a hunch that Lite might be more than a gimmick. In fact, it might represent an entirely new category of beer. To launch any new product at a Philip Morris-owned company, however, requires more than mere intuition.

At first, market research confirms the doubts—construction workers definitely don't want to be seen as dieting—but one focus group in Anderson, Indiana, has a

different reaction. They like Lite. A lot. Why? It's less filling than regular beer. Which means they can drink more.

This is the eureka moment for Murphy. He's found a value proposition that will resonate with blue-collar workers. Instead of pitching Lite as a healthy alternative to regular beer, Miller will position it as the beer you can drink more of. Gleeful, Murphy gets on the phone with Backer at McCann-Erickson. It's time for a new campaign.

By early 1974, Miller perfects its recipe for Lite and begins production of its new "less filling" beer. As the product slowly rolls out to select markets, Backer's new ads begin to appear. In one, New York Jets running back Matt Snell sits at a table with a lengthy row of empty Miller Lite bottles: "Imagine, a great-tasting beer that's less filling. And at 6' 3", 230, there's a lot of me to fill." Pretty unambiguous. Another TV spot features former NBA referee Mendy Rudolph and Boston Celtics coach Tom Heinsohn sitting on a couple of bar stools. The two men, who once argued over Rudolph's calls on the court, now debate the merits of Miller Lite:

RUDOLPH: *The best part is that it tastes so great.*

HEINSOHN: *The best part is it's less filling.*

RUDOLPH: *Nah, it tastes great.*

HEINSOHN: *Less filling!*

RUDOLPH: *Tastes great!*

HEINSOHN: *Less filling! Less filling! You know even less about beer than basketball!*

RUDOLPH: *That's it, Heinsohn!* [blowing a whistle] *You're outta the bar!*

Sensing the potential, Murphy cuts the rollout short and takes the campaign nationwide immediately, pumping an unprecedented \$10 million into airplay.

Sales of Miller Lite take off like a rocket—aimed right at Budweiser.

* * *

In the Japanese martial arts, practitioners cultivate *zanshin*, or “remaining mind,” a relaxed but continuous awareness of the surroundings. Even in the moment a strike connects, the fighter remains aware and alert to new threats. *Zanshin* is just as important in the marketplace as it is on the dojo floor. That’s because the new comes out of nowhere. A business leader can never afford to focus entirely on a single adversary, no matter how threatening they might seem. An attack can come from any direction and at any time.

At the start of the 1970s, only two American brewers mattered: Anheuser-Busch and Schlitz. At least, that was the opinion of August Anheuser “Gussie” Busch Jr. Anheuser-Busch had been cofounded by Gussie’s grandfather and great-grandfather in St. Louis a century earlier. Now it was the number-one brewer in the country thanks to Gussie’s extraordinary leadership. His father may have dubbed the company’s pale lager “the King of Beers,” but it was Gussie who’d won Budweiser its throne.

As the new decade dawned, fifth-place Miller Brewing was barely on Gussie’s radar. It was a puny operation with just 4 percent market share to Anheuser-Busch’s 18. The fact that Philip Morris had just paid \$220 million for Miller was irrelevant—what did Big Tobacco know about beer? In Gussie’s view, it was Schlitz, his longtime rival, that represented the clear and present danger to Budweiser. Schlitz, also based in Milwaukee, was cutting corners—replacing malted barley with corn syrup, using high-temperature fermentation, even adding silica gel to its recipe—and then using the savings to underprice Bud and run wall-to-wall advertising. Gussie had worked hard to capture the lead from Schlitz when their beer still tasted good. He had no intention of losing it to swill.

The one person at Anheuser-Busch who saw things differently was Gussie’s son, August Busch III. Sure, Schlitz might make gains with its shortsighted tactic, but the cost-cutting would kill it once drinkers caught on. August saw energetic and ambitious Miller as a larger threat to Budweiser’s crown. Granted, Philip Morris didn’t know much about brewing, but it knew consumer marketing and it had

deep pockets. Schlitz might be today's enemy, but tomorrow's was clearly Miller. Gussie Busch, however, ignored his son's warnings—he'd never trusted August's instincts.

Anheuser-Busch was running new ads of its own. Rather than extolling Bud's virtues, however, they mocked Schlitz for its cost-cutting brewing methods. In one, Schlitz's secret ingredient turns out to be a pile of dirty laundry. Internally, the attack ads got a few laughs, but they worried people. Tearing down Schlitz wouldn't raise Budweiser up. If Schlitz were really all that bad, people would stop drinking it. That didn't mean they'd reach for a Bud over a High Life when "Millertime" rolled around. The real question Anheuser-Busch needed to address was why consumers should drink Bud. Did the company have an answer? That's when Miller introduced Lite.

Business is all about how you respond to the unexpected, whether you act or simply react. Gussie Busch, entirely focused on Schlitz, ignored his son's warnings about the threat posed by well-funded and aggressive Miller Brewing. Now everything August predicted came to pass—not that he expected his dad to acknowledge that fact. Miller had gotten the jump on Anheuser-Busch, and the rest of the industry, with an entirely new kind of beer that customers loved. At the rate the Milwaukee brewer was growing, it would soon surpass Coors and Pabst to take the third spot in American brewing, placing it within striking distance of the king. How would Anheuser-Busch respond?

Before seventy-six-year-old Gussie Busch could marshal his forces, however, a family tragedy incapacitated him. August's eight-year-old half sister, Tina, died in a car accident in December 1974. Devastated by the loss of his favorite child, Gussie began drinking heavily and avoiding the office. August had already been preparing for his father's eventual retirement, but this latest blow meant moving up the timetable. For some time, he and a select group of trusted executives had been meeting off-site every Saturday morning to plan for August's rise to the top. At the next meeting of the "Dawn Patrol," August announced his intention to stage a coup.

As Gussie drowned his suffering in gin, August and his allies strategized a takeover. The Teamsters were their top concern. They knew the union would pounce at the slightest sign of weakness to initiate a strike. A new and inexperienced leader at Anheuser-Busch would be just the opening they'd been waiting for. The decision was made to start stockpiling beer in order to ride a strike out.

In May 1975, with Miller Lite making waves across the country, August Busch III assembled the board of directors and asked them to name him CEO. Gussie hobbled into the meeting, a cane in each hand, annoyed but confident. The members of the board had been loyal to him for years—they'd watched him single-handedly make Anheuser-Busch the world's biggest brewer, expanding from a single site to nine breweries nationwide and growing sales to more than 26 million barrels a year. If he'd never believed in his own son's leadership capacity, why should they? So it was with a deep sense of betrayal that Gussie watched each hand around the table go up in favor of August's bid. Gussie Busch's three-decade reign as leader of the company was finally at an end. Out with the old, in with the new.

August Busch III had what he wanted. But weathering the storm ahead would require more than just regime change. His choices in the coming years would determine whether Anheuser-Busch remained on top or ceded its place to a usurper. Busch had always been outspoken about his views when they didn't matter. What would he do now that they did?

As the Dawn Patrol had predicted, the Teamsters took advantage of the leadership transition to strike against automation at bottling plants. By March 1976, eight thousand workers were idle and all the company's breweries were offline. For years, Busch had railed against his father's softness with the union. (Gussie was terrified of upsetting the Teamsters—a 1953 strike at Schlitz had allowed Anheuser-Busch to overtake its rival.) Now, a month into the strike, Busch decided to deal with them as he saw fit. Eight hundred Anheuser-Busch employees—middle managers, accountants, typists—crossed the picket line to boos and calls of “scab” and “traitor.” Shortly thereafter, the factory started operating—at

much-reduced speed, of course, but Busch's point had been made. Furious, the Teamsters picketed the railroad tracks, held sit-ins to prevent trucks from leaving, and called for a national boycott of Budweiser. Busch wasn't rattled; his decision to stockpile beer in advance of a strike had proven to be a wise one. He had beer while the union's members had bills to pay.

Busch's judgment proved accurate in another key area. Schlitz's new, cost-cutting manufacturing methods were catching up to it. Not only had the brand's taste gone downhill, but clumps had started forming in the beer. Now Schlitz looked hazy or speckled in customer's mugs. When an internal investigation pointed to a cheap new stabilizing agent, Schlitz changed the recipe. The clumps went away, but so did the carbonation. Flat beer was a bridge too far, even for loyal Schlitz drinkers. They abandoned the brew in droves. August's only problem with that was they were switching to Miller Lite.

A single crisis will test any leader's mettle. August Busch III was facing both an energetic and ingenious new enemy in Miller as well as a powerful, determined, and increasingly desperate labor union—all less than a year into his tenure as CEO. But he hadn't dethroned his father just to cave in to the first challenges to come his way. Thanks to his beer reserves, Busch knew he could outlast his workers no matter how determined the union claimed to be. His preparation and steely resolve proved crucial. In May, workers at the New Jersey plant accepted the terms they'd been offered before the strike. By the following month, the strike had collapsed and all Anheuser-Busch plants were back to business as usual. Busch had gambled and won.

The company's victory didn't come without a cost. Beyond tens of millions in lost earnings, Anheuser-Busch sacrificed 4 percent of its market share over the course of the ninety-five-day strike, doing some of Miller's work for it. And, as might be expected, company morale after the strike was nonexistent. The union workers had been deeply alienated by Busch's brusque treatment of them during the strike, and they felt betrayed by the other employees who had crossed the picket line. Busch, who had gone to great lengths to get his union workers back on the job, didn't want to lose them now. To

reunify his workforce under one banner, he did what savvy leaders throughout history have done when internal disagreements threaten unity: rally the troops against a common enemy.

Weeks after the strike ended, every Anheuser-Busch employee was handed a white T-shirt that read, "I am a Miller Killer." The strategy was simple, obvious—and highly effective. Morale recovered and productivity rose, only just in time. In November 1976, Schlitz president Robert Uihlein passed away suddenly from acute leukemia, leaving the struggling company with a damaged brand, massive debt, and no succession plan. As Schlitz sank, Miller floated to the number-two spot. At this point, the only thing holding Miller back was its production capacity. Anheuser-Busch produced a monstrous quantity of beer every year. It would take Miller time to build enough new plants to match it. But the brewer was catching up at an alarming rate.

August Busch III favored simple and direct solutions. If Miller was going to threaten Anheuser-Busch with a light beer, Anheuser-Busch would produce one of its own. In 1976, it debuted Natural Light, a mediocre Lite copycat. The company even hired the same athletes from the Miller Lite ads for its own campaign. Simple and direct. Now it was time to get those ads on the air where the right drinkers were watching. Years earlier, Miller had invested heavily in sports advertising, snapping up sponsorships for everything from the World Series to the Stanley Cup. While Anheuser-Busch had long steered clear of sports as too expensive to be cost-effective, Busch now saw the strategic error the company had made. Sports ads were clearly the most direct way to reach blue-collar beer drinkers. Mobilizing the entire marketing operation, he gave the team one new and overarching goal: recapture as much of that lost ground as possible, and fast, by snapping up every available sports sponsorship and wresting Miller's away as soon as their terms ended.

As Miller spent hundreds of millions of dollars on building new plants, its climb to the number-one spot began to feel inevitable. John Murphy bragged to reporters that he had privately calculated the exact day it would happen. That

confidence, however, was misplaced. Murphy had initiated an extraordinary disruption, but he had underestimated the mettle of his opponent. August Busch III hadn't betrayed his own father just to sit on his hands while Miller clawed away at his inheritance. Since customers hadn't minded Natural Light's lack of originality, why not copy . . . Miller? Simple and direct. Beyond specific trademarked images and phrases, Miller couldn't protect Backer's ideas in any legally meaningful way. So Anheuser-Busch would simply take them.

In 1979, with Miller nipping at Bud's heels, a new series of TV ads debuted. Seven years after Miller's own aggressive bid for blue-collar workers first hit the airwaves, Bud's new ads began in the same way, with construction workers wrapping up after a long day, now followed by a slew of other masculine, blue-collar archetypes: a truck driver, a farmer, a boat captain. The only real difference from Miller's original campaign was the tagline: "This Bud's for you." It wasn't "Budweisertime," but it was pretty close.

By muddying the waters with its copycat product—Natural Light—and now this copycat ad campaign, Anheuser-Busch essentially robbed its disruptive competitor of its edge. To customers, the similarity of "This Bud's for you" to "Millertime" made it nearly impossible to distinguish between disruptor and incumbent. Miller had no moat around "blue-collar beer" but acted like it did, getting complacent instead of taking advantage of its agility by capturing new ground. All it took was shameless imitation for Anheuser-Busch to wrest the momentum away from the upstart and retain its number-one spot.

Fast Fashion: H&M vs. Zara

It's early on a Friday morning in Manhattan but, despite the wintry November weather, a line of customers already stretches down the block, waiting patiently in the cold and rain. Like tens of thousands of other fashion lovers, they are willing to do whatever it takes to seize a once-in-a-lifetime opportunity. When the doors of H&M on Thirty-Fourth Street and Seventh Avenue open at 9 a.m., these eager shoppers flood

the store. By 9:02 a.m., employees start restocking the merchandise. By 9:20 a.m., the iconic fashion designer Karl Lagerfeld's limited-edition collection is completely out of stock.

It's the same story at H&M's Fifth Avenue flagship store, but that location starts with more inventory. Three hundred shoppers stream in at its opening, and within an hour, 1,500 pieces have been sold. As many as 2,000 more sell every hour of the morning until that store's inventory is gone, too.

In a scene later described by *Women's Wear Daily* as "mass hysteria," Lagerfeld's exclusive line sells out of most H&M locations around the world just as quickly. "One woman grabbed a sweater out of my hands!" a thirty-year-old lawyer reports. "They weren't even looking; they were just grabbing," a pastry chef says. "Some of them looked like they were bartering, like a size 44 dress for another size shirt. Nothing was lying around, except for a couple of jeans. Everything was gone instantly, so I just left." A German receptionist likens the experience to the fall of the Berlin Wall. In fact, the phenomenon repeats itself in major cities across the globe as more and more H&M stores open their doors that morning in 2004.

Meanwhile, in Hong Kong, H&M's key competitor, Zara, is opening its two thousandth store. The Spanish company sells in fifty-six markets across five continents. At Zara, customers can buy today's hottest fashions everywhere from Panama to Latvia to Morocco. Where H&M's focus is on flashy fads for younger consumers, Zara peddles fashionable basics that work for most women. Each company's approach may be different, but their shared penchant for delivering "fast fashion" has turned the industry on its head. Since they can't outpace each other—each delivers the latest fashions much more rapidly than traditional retailers—they will have to compete along other lines.

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In fashion, there is no "right" outfit, only the outfit for "right now." Fashion-forward customers have always wanted the latest looks from the catwalk or the red carpet. Garment

manufacturers, however, could only ever play catch-up to consumer tastes. A typical ready-to-wear fashion company would design a new collection six months in advance, sending those designs to factories in countries where cheap labor was available. Then, each spring and fall, its stores would receive large shipments of long-awaited new clothes. Customers simply accepted this stately progression, season after season, of new looks making their way from haute couture all the way down to the mass market. Then H&M and Zara shrank this cycle from months to weeks, changing fashion forever.

On New Year's Eve 1989, fast fashion arrived in Manhattan, heralded by the *New York Times* as an entirely new fashion "language":

It's a language understood by young fashion followers on a budget who nonetheless change their clothes as often as the color of their lipstick . . . the emphasis is on fast fashion, merchandised in a coordinated style.

The "fast" in fast fashion is relative, but what the new Spanish import, Zara, brought to New York City with its new Lexington Avenue location was an unprecedented speed-to-market that democratized fashion. New trends no longer had to trickle their way down to more affordable manufacturers and used-clothing boutiques a season or two after the elite had tired of them. Nearly anyone could afford to adopt the latest styles almost immediately.

"Every week there's a new shipment from Spain," said Juan Lopez, who came to New York in February to head Zara's United States operation. "The stock in the store changes every three weeks. The latest trend is what we're after. It takes 15 days between a new idea and getting it into the stores."

Zara's notoriously reclusive founder, Amancio Ortega Gaona, was born on March 28, 1936, in La Coruña, a city in Spain's Galicia region. Ortega got his start in the garment industry at the age of fourteen by making deliveries for a local shirt maker. Eventually, Ortega worked his way up to shop manager, learning how to tailor along the way. To earn extra money, he began making women's clothing at his sister's kitchen table. Cutting patterns to match popular fashions, he made dresses using less expensive materials and then sold his look-alikes to stores at low prices. By 1963, he and his wife,

Rosalía Mera, had saved enough money to open a small factory. It grew to five hundred employees over the next ten years.

In 1975, Ortega and Mera opened their first retail store in La Coruña, naming it “Zorba” after the Greek peasant portrayed by Anthony Quinn in the 1964 film *Zorba the Greek*. Unfortunately, there happened to be a bar of the same name nearby. Since they’d already made the molds for the letters in the sign, they just rearranged them to find a word that worked: Zara. The model of selling low-priced copies of the latest fashions proved just as successful on the retail side as it had wholesale. To supply his popular new store, Ortega built a new garment factory in the nearby industrial area of Arteixo and began opening more stores around Spain.

With both the factories and the stores under his control, Ortega knew that speed-to-market could be his competitive advantage. Ortega had a vision for “instant fashion,” a leaner and more responsive approach. With full control of the supply chain and by producing small batches quickly, he could respond to trends with new garments much more rapidly than his competitors could. Executing on this vision remained a logistical hurdle, however, until Ortega met José María Castellano. Castellano, a computer expert, helped Ortega design a new, tech-driven approach to the design, manufacturing, and distribution of clothes. By tracking inventory and demand digitally across the entire supply chain from factory to store, the company could bring out small batches to address shifting consumer tastes in a matter of weeks. To customers accustomed to waiting months for the latest looks, this must have seemed like a magic trick.

By 1983, Zara had nine stores across Spain’s major cities, all located in posh shopping districts, and a 100,000-square-foot logistics and distribution center in Arteixo. In 1985, Inditex was created as Zara’s holding company. In 1988, Inditex began international expansion with a store in Portugal and, by the time America’s first Zara location made its splash in the *New York Times* in 1989, the company had “instant fashion” down to a science. The company was growing at an unprecedented rate, having doubled sales to \$380 million over

the previous two years alone. The giants of textile manufacturing simply couldn't compete with Zara's vertically integrated speed. It had achieved a paradigm shift large enough to transform the industry around it. But it wasn't alone in doing this. Zara had serious competition in a Swedish company known as H&M, founded by an equally savvy and driven entrepreneur.

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After the end of World War II, thirty-year-old Erling Persson left Sweden to visit the United States. Persson wanted to go on a classic American road trip, curious to see how this dynamic and rapidly growing economy did things differently than the war-ravaged Old World. America was a nation of ambitious innovators; Persson knew the future of business would be visible there first.

Touring America's towns and cities, Persson was astonished by the size and efficiency of the retail stores he saw. They were large, bright, brimming with popular products that moved off the shelves quickly. Every aspect of the retail experience in America screamed abundance, affordability, and speed. Inspired by this glimpse of new possibilities, Persson returned to Sweden and, in 1947, founded a discount women's clothing store in the small city of Västerås. Hennes, Swedish for "Hers," thrived. A few years later, Persson opened another location in Stockholm. In 1954, Persson bet big on a full-page color ad for Hennes in Sweden's largest daily newspaper, and the company grew even further. It was time to expand beyond women's clothing. Stockholm's Mauritz Widforss had long been the brand of choice for outdoorsy Swedish men who liked to hunt and fish. In 1968, Hennes acquired Mauritz, combining the name with Hennes, and used the acquisition to expand into menswear.

The 1960s were a period of growth for the company, with forty-two Hennes & Mauritz stores opening in Sweden followed by international expansion: Norway, Denmark, the United Kingdom, Switzerland. In 1974, Hennes & Mauritz went public, rebranding itself H&M.

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H&M and Zara both succeeded by copying the successful designs of other companies. But these weren't sloppy knockoffs. Both companies got the details right. Their prices were low and the quality was more than good enough for a customer who would be returning in a few weeks to buy the next look coming down the line. Though the companies carefully modified their imitations to avoid legal trouble, they weren't always successful. In 2011 the designer Christian Louboutin unsuccessfully sued Zara for selling red-soled shoes, a concept he'd previously trademarked. Fashion designs, however, have always proven hard to protect from a legal standpoint. The court sided with Zara against the designer even though, at a distance, Zara's shoe could very easily be mistaken for a far more expensive Louboutin.

In the 1980s, H&M and Zara were on a retail crash course, each expanding rapidly. From their beginnings, they had prioritized speed-to-market to keep pace with fashion, but otherwise the two companies approached growth in very different ways. H&M liked to experiment: acquiring a mail-order catalog to bring its fashions into customers' homes, for example, and later coming early to e-commerce. Ortega, in contrast, retained his single-minded focus on speed, continually refining Zara's systems just as the McDonald brothers had methodically designed their restaurant around making a hamburger as efficiently as possible. His goal remained "instant fashion"—or as close to instant as physically possible. For this, every aspect of the company's operations would have to be purpose-built.

From his experience in retail, Ortega knew that a trend could come and go in as little as a month. For maximum flexibility, he decided that Zara would ship only a few garments in each style to stores, with minimal extra stock going in the back room. To compensate, it would ship clothes so frequently that it could quickly adapt to changing demand for each item.

To keep abreast of constantly evolving tastes, store employees were trained to elicit customer feedback—complaints, preferences, requests for particular items—and systematically report these findings to headquarters. Using

Castellano's computerized inventory system and eventually new technology like RFID tags, comprehensive data on each garment could be combined with that feedback to create an up-to-the-minute picture of what was selling, what wasn't, and why. Zara's in-house design team would then quickly revise the existing designs and send them to the factory. Two weeks later, a new shipment would arrive in stores containing batches of clothing reflecting the latest data. Simultaneous requests for a scarf in a particular shade of pink across three cities might translate into a wave of pink scarfs appearing at thousands of locations around the world. All in only fourteen days.

Consistent speed in the face of such unpredictable demand required tremendous flexibility. To address this, Inditex factories would only operate four and a half days out of the week, leaving room for extra shifts to meet the occasional surge in demand. While Inditex outsourced products with a longer shelf life, like T-shirts, to factories in Asia to take advantage of lower labor costs, more than half the garments were made in its own factories or in proximity to its headquarters. For short-lived styles, speed-to-market trumped cost—what good is a higher profit margin on clothing no one wants anymore? In any case, the higher costs involved in using its own workers or relying on factories outside of Asia were usually offset by faster turnaround times and the lack of warehouses brimming with surplus inventory.

To stay abreast of the latest fashions, Zara sent teams of analysts around the world to visit university campuses, nightclubs, concerts—wherever a new trend might be on the verge of going global. Again, their findings were routed back to headquarters in Arteixo, where designers would get to work on matching those new styles immediately. Two weeks later, a new garment only appearing in one or two trendy cities would suddenly be on Zara's racks everywhere else.

As Zara's influence grew, consumer behavior changed to match. People became addicted to the constant flow of new fashions. "When you went to Gucci or Chanel in October, you knew the chances were good that clothes would still be there in February," fashion magazine editor Masoud Golsorkhi explained. "With Zara, you know that if you don't buy it, right

then and there, within 11 days the entire stock will change. You buy it now or never. And because the prices are so low, you buy it now.”

* * *

Unlike Zara, H&M achieved its speed and flexibility by dispensing with factories and instead collaborating with hundreds of outside suppliers representing thousands of factories. Also unlike its competitor, H&M has always embraced the power of marketing and advertising to position itself, from its first full-color newspaper ad in 1954.

In the late 1980s, the supermodel emerged. A short list of top models became bona fide celebrities: appearing on talk shows and in gossip magazines, even acting in major films, all while earning unprecedented sums of money for their modeling work. In 1990, H&M launched a Christmas underwear campaign featuring Elle Macpherson, one of the so-called original supermodels. Over the course of the decade, Macpherson and many of the other originals—like Cindy Crawford, Claudia Schiffer, Christy Turlington, Linda Evangelista, Naomi Campbell—would appear regularly in H&M campaigns.

In stark contrast, Zara, like its media-shy founder, had a “no marketing, no communication” policy. “The company does not talk about itself,” an Inditex spokesperson explained. “The idea was that the client was to talk about the company.” The company fought back against H&M’s aggressive advertising and flashy designer partnerships through real estate, putting the capital that would normally go toward TV spots and celebrity endorsements into securing prime locations on premier shopping thoroughfares around the world. Unlike H&M, Zara’s brand positioning was physical—it elevated its clothes by opening stores next door to luxury brands like Prada and Gucci. Inditex sought out unusual or iconic buildings that would stand out: a convent in Salamanca, an eighteenth-century hotel in Athens (three ancient Roman grave markers still visible from the entrance), even a store in 666 Fifth Avenue in Manhattan, the most expensive building ever sold in New York City.

H&M had always been flashy, but in 2004, the world of fashion experienced a seismic shock when it announced its limited-edition collection designed by Karl Lagerfeld himself. Sixty-five-year-old Lagerfeld was widely considered the most iconic fashion designer alive. He had created one legendary collection after another for Chanel and Fendi. Now he would have thirty styles with H&M at a fraction of the price of any similar garment he'd ever designed. A T-shirt with Lagerfeld's face on it for twenty dollars, a blouse for forty-nine, a sequin jacket for a hundred and twenty-nine—for fashion lovers, it seemed too good to be true.

“I was always quite fascinated by H&M,” Lagerfeld explained, “because people who buy Chanel and other expensive things buy there, too. For me, this is fashion today.” Lagerfeld, who'd hoped the effort would grant a broader demographic access to his designs, was deeply disappointed by H&M's decision to produce his clothing in limited editions. “This was supposed to last two weeks and it's over in 25 minutes,” he said. “I'm sorry for the clients because I like the idea that everyone could wear Lagerfeld.” H&M, however, was thrilled with the outcome. “We've been operating this business for some 60 years and we've never seen anything like it,” H&M's marketing director said. “We are as surprised as the customer.” By the following month, the company's sales had gone up 24 percent. This was an experiment worth repeating.

In retrospect, 2004 marked the triumph of the “fast fashion” model that Zara and H&M had co-created. Between H&M's Lagerfeld collaboration and Zara's two thousandth store, the new approach to satisfying consumer desires as quickly as they could be formed had become the industry's dominant mode. Fast fashion was now, simply, fashion. Versace, Roberto Cavalli, Alexander Wang, Stella McCartney, and other fashion luminaries created their own collections for H&M. Zara's influence, meanwhile, could be felt in the radically altered pace of the rest of the industry. “They broke up a century-old biannual cycle of fashion,” the magazine editor Masoud Golsorkhi said. “Now, pretty much half of the

high-end fashion companies make four to six collections instead of two each year. That's absolutely because of Zara."

While the coronavirus pandemic forced the closings of thousands of locations for both H&M and Zara, both companies have responded with characteristic speed, shifting rapidly to emphasize online retail, a change that may end up becoming permanent. Time will tell.

Regardless of the future of their physical stores, H&M and Zara have fundamentally changed global attitudes toward clothing. Rather than being treasured, garments are now considered disposable. People buy and discard clothing far more rapidly than they did in the past. Considering the large amount of waste and pollution involved in the manufacture of a single garment, the environmental toll of fast fashion has been colossal. While both companies have vowed to reduce the discharge of hazardous chemicals and rely more on renewable resources, their true commitment to these efforts remains to be proven. In the meantime, one thing is for certain: sustainability is now in fashion. How quickly will H&M and Zara respond to changing tastes?

Waking the Giant: Mary Barra and General Motors

It's September 2014. General Motors CEO Mary Barra is speaking in front of three hundred global GM executives in a warehouse in the gritty Eastern Market neighborhood of Detroit. This off-site is an opportunity for Barra to get key leaders from across the organization on the same page at a turning point in GM's history.

Barra's tenure as the automotive industry's first female CEO has been rocky from the start thanks to an ugly ignition switch scandal involving at least dozens of fatalities. Though Barra wasn't at the helm when it happened, she is now, and it was she who had to face both Congress and the victims' families. Now Barra has a message for GM's top people: It's time for General Motors to hold itself accountable and start facing its problems head-on. The days when the Big Three automakers could bury their heads in the sand are long over.

She learned this the hard way when she played an instrumental role in GM's bankruptcy process a few years earlier.

“What I learned from the bankruptcy is when you have a problem, you'd better solve it, because if you don't, generally six months from now it will be worse,” she said. “Two or three years from now it may be gone—because you might be, too.”

This morning, Barra doesn't want to talk about culture. In her opinion, culture is a buzzword, an abstract concept to which previous CEOs have only paid lip service. She knows this from personal experience, having worked at the company since she was a teenager and having grown up in a GM household. To turn massive new threats—electric cars, autonomous driving, ride-sharing—into opportunities, GM's people will need to change their *behavior*. “Behaviors,” she says to the crowd, “are something we can change right now, today.” The behavior she wants to change in herself? Being “too nice.”

There is unintentional irony in Barra's statement. In her long career at GM, she has proven herself to be an empathetic but unsentimental leader. “I never observed her having any difficulty making people decisions, no matter how tough,” one former boss says. In the words of another, Barra rules with “the velvet glove and the iron fist.” Over the years, Barra has presided over waves of firings and layoffs in her various roles, and she rarely hesitates in demoting or axing anyone who fails to perform. Before its bankruptcy, GM always tried to find new positions for people who underperformed. In the words of GM's head of global HR, “Mary realized you're not doing their careers any good and you're not helping the company.” Barra declares her intention to hold herself to an even higher standard now, and she demands that her people do the same.

To adapt to the changes ahead, she tells the crowd, the entire company will have to learn true accountability. As leaders, they will need to make sure their people do what they say they're going to do: “You made your plan; now hit your plan.” When GM faced the ignition switch scandal, its lack of accountability was epitomized in the hearings on Capitol Hill by the so-called “GM nod”—the common practice of agreeing

on a course of action in a meeting and then failing to take any action. Now, Barra says, a failure to follow up simply means you don't care. And if you don't care, you're out.

Barra reads out a piece of feedback written by a Brazilian manager sitting in the audience: "I'm new to GM, but it seems like the company doesn't understand that one person's problem needs to be everyone's problem, especially at this level."

"That," she says, to the manager and to the rest of those in attendance, "is exactly what we need."

"If you think the system we have in place is the best one," she adds, "you're part of the problem." These are bold words from someone who has been instrumental in restructuring and reorganizing GM over the years. But Mary Barra isn't interested in relative improvement.

She wants to win.

* * *

Navigating the new is all about agility. For an incumbent to weather a major shift, it has to be able to react to change in a timely way. This isn't always possible. Bureaucracy and culture become shackles that prevent established companies from taking the necessary steps to ensure their own survival. RIM struggled even to acknowledge, let alone respond to, the threat posed by the iPhone. Often this kind of institutional malaise ends in destruction.

Agility begins at a company's front lines. Sometimes a leader can shake an organization loose of its lethargy by pushing power down through the hierarchy and cutting out flabby layers of middle management. In GM's case, it would need all the agility it could get. After the company navigated its 2009 bankruptcy, it faced not one but three major headwinds: self-driving cars, ride-sharing services, and electric vehicles. Vigorous new entrants were pursuing each opportunity with none of GM's baggage—but none of its vast resources, either. What kind of a leader would it take to help the automaker leverage those resources and outflank the upstarts?

Born in 1961, Mary Barra, née Makela, grew up in Waterford, a suburb of Detroit, car capital of the world. She had gasoline in her veins: her father, Ray, worked at General Motors for thirty-nine years as a die maker in the Pontiac plant. This was during an era when American automakers provided some of the best blue-collar jobs in the country: good pay, great benefits, rock-solid stability. The “Big Three” American car companies—GM, Ford, and Chrysler—competed with each other, but relatively lightly, enjoying an otherwise uncontested marketplace. It was far too comfortable across the board, and GM in particular developed a “closed, inwardly focused culture that discouraged risk-taking,” in the words of the *New York Times*. “Big Three” car quality sank throughout the 1970s and 1980s, giving international competitors, primarily in Asia, plenty of time to catch up to—and surpass—the once-dominant American brands.

When she was growing up, Barra’s parents instilled a work ethic: “Working hard was important,” Barra said. “You worked before you played. It was instrumental.” Though they divided household chores along traditional gender lines, they never put limits on Mary’s interests. “I liked math and science,” she said, “and they encouraged me to pursue that.” She was allowed to watch her dad tinker with cars in the workshop and eventually learn to do it herself. “I got to do what I wanted,” she said. At GM, Barra would often test-drive cars, tearing around the company track at high speeds.

A National Honor Society member with a 4.0 GPA, Barra enrolled at the General Motors Institute of Technology (now known as Kettering), a private university in Flint, Michigan, that operated on a cooperative education model. Students were required to work with GM or one of the school’s other corporate partners as part of their graduation requirement. At school, Mary spent half the year studying and half working for GM, inspecting hoods and fender panels on new Pontiacs. Graduating in 1985 with a bachelor’s degree in electrical engineering, Barra went to work full-time as a GM plant engineer.

GM management had begun to recruit more women by this point, but it increased its efforts after the 1983 settlement of a

landmark employment discrimination lawsuit. Under the deal, GM set goals for the promotion of women and minorities. Managers were encouraged to deliberately seek out diverse talent. GM would eventually have twice the average number of women on its board and in management positions for a company in the S&P 500. Barra wasn't coddled, however. "They weren't used to seeing a lot of women in the plant," she recalled. "Every time I turned this one corner in the Pontiac plant, this guy would kind of yell. . . . Finally, I walked over and asked him, 'Why do you do that?' He said, 'I don't know.'"

Baffled, Barra replied: "Well, can't we just say hi?"

In 1988, Barra won a GM fellowship to attend the Stanford Graduate School of Business, graduating in the top 10 percent of her class. She went on to hold a series of engineering and administrative positions at GM, which, like nearly every other large company at the time, was a tough place to get oneself heard as a woman. Female leaders at GM later recalled being under intense pressure to prove their qualifications relative to their male counterparts. "You spend so much of your career trying to demonstrate that you belong, that you deserve a seat at the table," a female plant manager said. It didn't get much easier even as one climbed the ladder. "One of my greatest frustrations at GM," said Marina Whitman, one of the first women to serve as a vice president at the company, "was we were never able to persuade top management that the world was changing rapidly and they needed to change to keep up with it." Despite these institutional challenges, Barra has downplayed the sexism she encountered along the way, although she also went out of her way to help other female employees, eventually setting up an internal networking group for women within the company.

At the office by 6 a.m. every day, Barra was soft-spoken, low-key, but firm, a natural communicator whose work ethic and ability to build consensus made an impression. Barra caught the attention of GM's leadership as manager of manufacturing planning for the midsized car division. The company had lost \$23.5 billion in 1992, a record for any American company, and Barra's boss had been tasked with

reducing costs by creating a common process to launch new products into the assembly plants. At the time, plant managers decided how to retool their own plants, and the results were hit-and-miss. A shared approach was needed to address the problem. Barra launched herself into the challenge, developing a standardized system for retooling and setting up a dedicated team that would drop in to help plants convert to new cars using the company's best practices.

These changes led to the remarkably successful launch of the Pontiac Grand Prix. After that victory, Barra's manager proposed promoting her to the executive level. In 1996, Barra was assigned as an executive assistant to CEO Jack Smith, where she also worked for the company's vice chairman, Harry Pearce. This was a fast-track role designed to help promising executives learn how the business was run at the highest levels and get exposure to senior management. "She stood out," Pearce later said. "Very easy to talk to, very engaging, not a big ego, real thirst for knowledge." In that role, Barra worked with Pearce to hone GM's recruiting process to bring in more high-potential women and minorities. For example, Barra and Pearce added Howard University, the historically black college in Washington, D.C., to GM's recruiting list for the first time. Three years later, Cary Cowger, GM's president of North American operations, decided to put Barra in charge of internal communications for North America. "I was impressed with how smart she was," Cowger said. "She's got terrific judgment and she's very consistent."

Cowger, who would go on to become a key champion for Barra within GM, wanted Barra in communications because he needed to repair GM's relationship with its union workers after their historic 1998 strike. The next round of UAW contract negotiations was on the way and, in the meantime, external conditions had changed. Many in the union, however, still believed that GM would eventually go back to its "natural" 50 percent market share. Cowger needed someone who could earn workers' trust and convince them that there was no going back. The company would need significant concessions in the next contract if it was going to stay competitive. Though her

background was in engineering, Barra had already demonstrated that she could communicate with plant workers as easily as with people in management. For GM, the role would also be an opportunity to rotate Barra through the organization, providing essential experience to someone on the leadership track.

Despite her lack of experience in communications, Barra took the role. She'd already demonstrated an engineer's knack for improving a malfunctioning process. As head of internal communications, Barra adapted her approach to creating better communication processes across the organization. "She applied an engineering mind-set to communications," one executive said. GM continued to use the improved system of employee communication Barra put in place after she left the role. In part due to Barra's improvements, there were no more strikes until 2007, and that was when the company was headed toward bankruptcy.

In 2001, after her success patching up union relations, Barra was tasked with helping institute Japan's lean manufacturing methods at GM. Simultaneously, the company invited her to take part in its training program for high-potential executives. In 2003, Barra took another crucial step in the career of any GM executive: Cowger put Barra in charge of the Hamtramck assembly plant, one of the company's largest and most complex. The cutting-edge facility manufactured six GM models with 3,400 employees working two shifts. The entire \$3.6 million facility was now under Barra's watch. At GM, the plant manager role is a proving ground for top talent.

"The thinking," according to Laura Colby, journalist and author of a book on Barra's career, "was that if you could handle the complexity of running an auto assembly plant the size of a small city, you could handle managing a division of the company." At Hamtramck, Barra demonstrated keen interpersonal skills. Her direct manager, Larry Zahner, noticed how Barra walked the factory floor frequently, greeting employees by name and asking after their families.

During Barra's tenure at Hamtramck, Cowger set ambitious new targets that would normally have led to hundreds of layoffs. Rather than ask her managers for a list of employees to furlough, however, Barra worked closely with each department head to reorganize every employee's job to use their time more effectively. Through this laborious process, Barra avoided layoffs altogether. "I learned a lot by watching her approach," a female engineer later said. "She's humble, which makes people want to work for her. At the same time, she's pushing you to do more."

It would be hard to imagine a more turbulent decade to be rising through the ranks at GM. The once-dominant company was in a tailspin, shackled by antiquated management practices and mired in bureaucracy. GM posted a loss of more than \$10 billion in 2005. Two years later, annual losses exceeded \$38 billion. Sales in 2008 dropped by 45 percent. Of course, GM wasn't the only American automaker struggling at the time—Ford and Chrysler were also on the ropes. The American auto industry as a whole was on the verge of collapse thanks to a perfect storm of internal malaise, international competition, and the Great Recession.

In 2008, after proving her mettle as a plant manager, Barra was put in charge of GM's engineering efforts around the world. Then, in June 2009, after multiple efforts by the Bush and then Obama administrations to help GM mitigate its colossal losses, the company filed Chapter 11. It was the fourth-largest bankruptcy filing in U.S. history. Afterward, GM received a \$49.5 billion bailout from the U.S. government, one in which the U.S. Treasury took near-complete ownership of the company's remaining assets. New, government-approved leaders were assigned to turn GM—"Government Motors" in the eyes of the deal's detractors—around.

GM's new leadership decided to put Barra in charge of HR for the company's 200,000 employees. It was an odd choice for an engineer, but Barra had excelled in corporate communications and had done wonders improving morale after a strike. To survive, the organization would need to be simplified and streamlined, and Barra had demonstrated a

knack for that kind of challenge. Still, Barra hesitated. Female executives in corporate America often end up in the “pink ghetto” of so-called staff positions that rarely lead to the C-suite. After considering her options carefully, however, Barra decided to take the job. At that crucial juncture, with GM’s survival on the line, the role would be an incredible opportunity to shape the future culture of the company. She would be in charge of GM’s workforce as thousands left the company and many more were recruited. It would be up to Barra to go to bat in Washington to ensure that GM’s top performers didn’t leave for better opportunities elsewhere.

As she later told the *New York Times*, “I became much more impatient about how we do things and how quickly we do things.” Clearly, GM would need to reduce its bureaucracy and flatten its hierarchy to be nimble enough to respond to a rapidly changing market. In some cases, this was as simple, and shocking, as slashing a ten-page dress code down to two words: “Dress appropriately.” Barra made this change to empower managers to decide what was appropriate for their own teams. Many GM managers, however, found the degree of latitude disturbing. “It really became a window into the change that we needed to make at General Motors,” Barra explained. When managers reached out to Barra for guidance, she’d use the policy as a teaching tool: “I’d take them through, and say, ‘What do you do?’ And they’d say, ‘I manage 20 people and a \$10 million budget.’ And I’d say, ‘I can trust you to manage 20 people and \$10 million but I can’t trust you to dress appropriately, to figure that out?’”

At the end of 2009, Dan Akerson became GM’s fourth CEO in only eighteen months. Barra, who demonstrated extraordinary expertise on nearly every aspect of the company’s operations in meetings, caught Akerson’s attention from the start. He couldn’t understand what someone like that was doing running HR. He later said it was “the worst application of talent I’ve ever seen in my life.” Akerson decided to do something about it. In 2011, he named Barra senior vice president of global product development, where she would be in charge of the design, manufacturing, and marketing of all GM’s cars. “Mary will bring a fresh

perspective to the critically important job of developing vehicles that delight global customers,” he said in a statement. “Her broad experience in engineering, manufacturing and staff functions, combined with the ability to collaborate and build strong relationships, will enhance the company’s ability to deliver the products today’s consumers demand.”

Now in charge of a hundred different vehicles, Barra held to one motto: “No more crappy cars.” As much as she adored classics like the Pontiac Firebird and the Chevy Camaro, she knew how far behind GM had slipped on quality, and she also knew why. The problem, as she explained to *Fortune*, was that “sometimes so many boundaries were put on [employees] that we didn’t give them a recipe for success.” Barra decided to set a new standard and then empower GM’s employees to meet it. “[No] excuses,” she said. “If it’s budget, if it’s resources, we have to do great cars, trucks, and crossovers and it’s our job to enable [employees] to do that.”

Efficiency is crucial to agility. Over the decades, GM had grown wildly inefficient—not only in its internal decision making but in its production methods. Part of the problem lay in the ever-expanding number of car platforms. Automakers develop cars for different markets using a shared set of components known as platforms. For example, a luxury car like the Lexus ES is built along the same lines and with many of the same components as a Toyota Camry before being modified. This is the same approach that IKEA uses to keep costs down: the same wooden panel might appear in a desk, a dresser, and a cabinet. It’s up to designers to figure out how to make the same part serve multiple purposes.

GM had gotten sloppy with its car platforms over the decades, literally reinventing the wheel—and the axle, and the suspension—when designing new cars. Barra wanted to streamline the number of platforms by breaking down silos between the company’s many purchasing and product development departments. She was so successful in doing this that, in 2013, she was elevated to executive vice president and tasked with handling GM’s supply chain as well. Now overseeing the efforts of 35,000 employees across 130 countries, Barra held the number-two spot at GM. In that role,

she championed fuel-efficient engines and lighter vehicles, two of the company's dire vulnerabilities.

In CEO Dan Akerson's view, Barra had "brought order to chaos" by clearing out the bureaucracy and flattening the organization by getting rid of unnecessary layers of middle management. If she could fix culture and fix cars, she clearly had the goods to run GM as a whole. In 2014, Barra beat out three male candidates by unanimous decision to become GM's next CEO, the first woman to head one of the Big Three automakers. Where Akerson had been given the top spot with no prior automotive experience, Barra was, in his words, a "car gal." She had GM in her DNA and the necessary will to drive big changes: "This is truly the next chapter in GM's recovery and turnaround history," she told employees.

In one sense, the timing was ideal. The announcement was made one day after the U.S. Treasury sold off the last of its GM stock. To the surprise of economists and pessimistic industry watchdogs alike, the government's bailout of "Government Motors" had been an unqualified success. The company now held an 18 percent market share and had been profitable for fifteen straight quarters.

In another sense, however, Barra was being handed a company in crisis. Just a few days into her tenure that January, a long-simmering scandal surfaced, one that would be dubbed "Switchgate." That was when the public learned that faulty ignition switches had been installed in several GM models over the years, including older Chevrolet Cobalts and Saturn Ions, leading to at least dozens of deaths and many more injuries. Faulty switches in 2.6 million GM vehicles could kill power to the engine while the car was still in motion and even prevent the airbags from inflating if it subsequently crashed. For years, the company had deliberately concealed the true cause of these crashes and done everything it could to avoid a recall. It took the extraordinary efforts of one victim's attorney, who obtained documents from GM and took depositions of its engineers, to bring the situation to light.

As a GM lifer, Barra, who says she had been unaware of the issue, recognized that the company's actions were right out

of its playbook: minimize the importance of the problem, fight it in court, drag its feet on a recall. She knew that this aspect of GM's culture would finally have to go, and go for good. Under Barra, GM took full responsibility for the faulty switches, creating a reparation fund for victims before any culpability had been legally established. To drive accountability within the organization, Barra conducted an internal probe that resulted in the firing of fifteen people, including a vice president and several other senior employees. She also established a global head of safety role for the first time. After an in-depth review of every pending safety recall, GM then issued eighty-four recalls involving an incredible 32 million cars, more vehicles than the company had sold in three years—all in Barra's first year as CEO. Appearing in front of a House committee, she faced the situation squarely: "Today's GM will do the right thing," she said. "That begins with my sincere apologies to everyone who has been affected by this recall, especially the families and friends [of those] who lost their lives or were injured. I am deeply sorry."

Apologizing seems like a simple thing, but it's all too rare in the business world. Barra handled the cards she'd been dealt with honesty and directness. For her, it wasn't a difficult decision to take the hit for the team. Barra felt tremendous loyalty to General Motors, for all its faults: "Cars put food on our table and put me through college," she said in an interview. "This industry gave me a career and has provided countless families with tremendous opportunities."

GM paid a \$900 million settlement to the U.S. government and spent another \$600 million to settle death and injury suits. Barra's decisive and transparent response to the crisis meant that the company could get out from under the cloud of the scandal much sooner than it would have if the company had turned to its usual deny-and-stall tactics. GM's response was "fairly extraordinary," in the words of U.S. prosecutor Preet Bharara. "It's the reason we're here after eighteen months rather than four years." But resolving GM's legal difficulties was only the beginning. With the recalls under way, it was time to right the ship moving forward. To do that, Barra would

turn to the same strategy she'd used to clean up GM's HR practices after the government bailout.

“If we think that cleaning up this problem and making a few process changes will be enough, we are badly mistaken,” Barra told hundreds of GM workers at a presentation. “I never want to put this behind us. I want to keep this painful experience permanently in our collective memories. I don't want to forget what happened because I never want this to happen again.” One retired GM executive said that Barra's remarks “were unlike anything any previous GM CEO has ever said.”

In Barra's view, the real culprit in the safety scandal wasn't deliberate wrongdoing as much as it was bureaucracy. GM's convoluted corporate structure made it difficult for employees to voice concerns about issues like the ignition switches—and easy for managers to ignore those concerns when they were voiced. To prevent a recurrence of Switchgate, she needed a direct line of communication from frontline employees to the C-suite. “Problems don't go away when you ignore them—they get bigger,” she said in a commencement address at her alma mater. “In my experience, it is much better to get the right people together, to make a plan, and to address every challenge head-on.” To open up this line of communication, she established “Speak Up for Safety,” a program making it possible for any employee to report concerns about GM vehicles directly to the top. Her slogan was simple: “If you're worried, I'm worried.” She also sent GM engineers to spend time at the dealerships to learn more about how actual customers thought and acted.

This feedback loop, from customers to frontline employees all the way to GM's top leadership, wouldn't just help prevent disasters like Switchgate. It would also give GM the agility to face electric vehicles, autonomous vehicles, and ride-sharing. The convergence of these three disruptive forces created an extraordinary degree of uncertainty for established carmakers. No one could predict how each factor might intersect with the others to alter global driving and car purchasing habits forever. GM needed to be nimble if it wanted to survive.

Barra's bold leadership invigorated the company. Though she sought consensus, holding "hall meetings" to get employee advice on the direction of every product, she didn't hesitate to make calls as she saw fit. Barra's combination of openness and decisiveness paid off. In 2016, GM broke sales records, with global volume cracking 10 million. That year, after Barra was elected chairman of the board, *Fortune* named her the most powerful woman in the world.

As chairman and CEO, Barra decisively brought GM into alignment with the new trends facing the industry. To catch up on the ride-sharing phenomenon, she allied with the ride-sharing service Lyft, investing \$500 million to help build a connected network of self-driving cars. To accelerate GM's efforts to develop self-driving vehicles, she acquired Cruise Automation, an autonomous vehicle start-up, for \$1 billion, as well as Strobe, maker of laser-imaging technology that helps autonomous vehicles "see" the road and evaluate driving conditions. (By 2018, GM's autonomous car unit was valued at \$14.6 billion.) To stake a claim in the electric vehicle space, she drove GM to beat Elon Musk's Tesla to market with the first affordable electric car with a range of two hundred miles, the Chevrolet Bolt EV.

Barra has never been interested in simply catching up to innovative upstarts like Tesla. In her eyes, GM is the dominant automaker. It should be in the pole position when it comes to electric cars and other new technologies. This has required strategic retrenchment. In 2019, the company underwent a massive, nearly \$4 billion restructuring, which involved cutting production at several factories and abandoning once-key markets from Western Europe to New Zealand. GM's workforce was reduced by 15 percent, with a 25 percent reduction in the executive ranks—14,000 jobs in all. Former GM vice chairman Bob Lutz was bullish on Barra's moves: "Nowadays GM looks at the hard reality. . . . I think what we are seeing is a fast-acting and reality-oriented GM management."

As painful as layoffs must have been to the daughter of a GM worker, Barra knew they were necessary to funnel sufficient funds into innovation and ensure the future of the

company. Under her leadership, GM is no longer putting all its efforts into selling cheap cars and trucks in emerging markets. Instead it's betting big on self-driving, electric vehicles. In 2019 the company partnered with LG Chem on a \$2.3 billion battery cell venture in Ohio. In 2020, its Cruise subsidiary unveiled a new electric, autonomous vehicle, and GM debuted eleven all-electric models, with plans for twenty more by 2023.

Barra put her intentions as CEO bluntly in a speech she gave in Detroit: "I want it understood that the day of GM being a polite competitor is over," she said. "We will be ethical, of course. But we will be tough, unrelenting competitors. . . . I have become impatient. I want to win. Not get by. Not hold on. Not be competitive. But win."

* * *

Throughout the history of warfare, battles have been won and lost based on a leader's ability to respond to the new: new territory, new tactics, new technology. If you simply try to beat the new back with the same old methods, you will eventually be defeated. To win, you need to harness the new yourself.

Over and over, we see that navigating the new demands boldness and agility. Leaders who can drag moribund companies out of their comfort zones can still emerge triumphant. We love to tell the story of the scrappy upstart who topples the incumbent. The truth is that established companies successfully fight back far more often than the mythmaking acknowledges. Sometimes all it takes is a single, strategic blow. As we'll see in the [next chapter](#), an entire war can be won by finding a weak spot—a competitor's narrow vulnerability—and striking without mercy.

6

Exploiting Vulnerabilities

In war, avoid what is strong and strike at what is weak.

—Sun Tzu, *The Art of War*

All's fair in love and business war. Seemingly invulnerable companies can hang by a thread, safe only as long as no one notices that thread. Some opponents, however, have a knack for spotting a vulnerability, whether it's a vital but disgruntled employee or a frustrated customer base ready to switch to something new. When looking for a weakness in your competitor, look first at its leaders. Their flaws represent your greatest opportunities.

Sometimes business wars are won through years of patience, effort, and strategy. And sometimes they're won with a single, timely strike.

The Emperor Has No Headphones: Beats by Dre vs. Monster Cable

It's 2008. Santa Monica, California. Four men are meeting at the headquarters of Interscope, the boundary-pushing record company behind artists ranging from Tupac Shakur to Nine Inch Nails. On one side of the table sit Jimmy Iovine, Interscope's cofounder, and Andre Young, the world-famous rapper and hip-hop producer better known as Dr. Dre. On the other side sit father-and-son duo Noel and Kevin Lee. Noel is CEO and founder of Monster, best known for its premium

speaker cables. Noel has already made a fortune exploiting a weakness: his customers' egos. In their quest to be seen as sophisticated listeners, customers pay a premium for Monster speaker cable wires that make no discernible difference to the sound.

But Noel has his own vulnerability: his son, Kevin, who, unlike his dad, is neither an engineer nor a natural entrepreneur. Kevin has been trying to make a mark within his father's company—and impress his high-achieving father—for nearly fifteen years. Now he's brokered an important meeting with two legendary titans of the music industry. This meeting represents Kevin's best chance to help the company—and win Noel's approval.

Six months earlier, Iovine and Dr. Dre approached Monster about a partnership to sell branded speakers. Noel convinced them to pursue headphones instead. But when that deal fell through, Iovine and Dr. Dre went to another manufacturer. Now Monster has been invited back to the table, and it's clear why. The sorry result of the other manufacturer's work is on the table in front of them: a pair of boxy headphones that look all wrong. Far from the premium fashion statement Iovine and Dre intended. As it turns out, they don't *sound* all that premium either. Not enough bass, for one thing.

Noel Lee knows better than to tell men like Iovine and Dre “I told you so,” but the words are clear on his face. To make an audiophile product with mass appeal, he believes, you need Monster and its invaluable domain knowledge.

While Iovine and Dre are mega-producers, they don't know much about consumer electronics. This is Monster's battlefield, which gives Noel a major advantage in the negotiation. What Noel doesn't realize is that Dre and Iovine see *his* vulnerability, too: Noel's misplaced confidence in his son. Kevin Lee's naivete and ignorance blew up the deal the first time around. If Noel insists on Kevin handling the deal once more, they'll have no option but to negotiate with him. After all, they're from the music industry. They may not know electronics, but they can certainly write a one-sided contract.

* * *

Noel Lee's parents, Chein-San and Sara, immigrated to the United States from China in 1948. Chein-San had been a correspondent for China's Central News Agency, but the Chinese Communist Revolution sent that institution across the South China Sea to Taiwan. Only a few months after the two arrived in America, their son arrived. It was Christmas Day, so the right name seemed obvious.

Noel and his four sisters grew up in San Francisco in the 1950s and '60s. It was a time of tremendous social and cultural upheaval. As progressive as the city was, however, old problems remained. "During my childhood," Lee said, "it was tough because discrimination against Asians was quite strong." From a young age, Lee developed an unusually eclectic, genre-hopping taste in music. He also learned to play the drums, though he didn't let practice get in the way of academics. Lee was an exceptional student with an unbending work ethic: "24/7, sleep when you're dead." He earned a bachelor's degree in mechanical engineering from California Polytechnic State University and went to work on the lasers used in nuclear fusion at the Lawrence Livermore National Laboratory.

Cutting-edge engineering at a prestigious institution offered its own rewards, but to Lee it was just a gig. Married with a son, he welcomed the stability, but like many born entrepreneurs, Lee simply wasn't satisfied by the challenges of his day job. In the evenings and on weekends, he would play in an all-Asian folk-rock band called Asian Wood: "Crosby, Stills & Nash covers in matching Hawaiian shirts and white bell-bottoms," in the words of a journalist. And, like many tech-savvy music lovers at the time, when he wasn't firing lasers or playing drums, Lee would tinker with his high-fidelity stereo system.

Lee's engineering salary afforded him decent audiophile speaker components, but he came to believe that every stereo system shared a critical vulnerability: the *cables* between the components. At the time, speaker systems were wired with the same thin, cheap cable used for lamps and other common household devices. If the component didn't come with free wires, as most did, people could just buy ten-cent-per-foot

“lamp cord” off a spool at the hardware store and attach the necessary connectors themselves.

Both an engineer and a music lover, Lee suspected that cheap wire impaired the sound and started experimenting to find a better solution. Night after night, he would twist and braid wires of different width and composition, or wrap them in different types of insulation, to see if he could improve the fidelity of his sound system. Tchaikovsky’s *1812 Overture*, a piece familiar to him and one with wide dynamic range, served as Lee’s baseline for sonic comparison. Through patient experimentation, he found that thick, twelve-gauge cable with a higher percentage of copper, once properly braided and insulated, noticeably improved the sound. At least, *he* noticed a difference.

Before Lee could take this discovery further, however, a Hawaiian booker offered Asian Wood a world tour. Lee leaped at the opportunity. His impulsive decision to take a risk like this despite a family to support illustrates just how eager he was to escape the doldrums of his day job. Noel Lee simply had no intention of spending the rest of his life cloistered in a lab.

Quitting his job, Lee brought his wife and son to join the band at its first stop in Hawaii. Unfortunately, the “world tour” was canceled after only two weeks. Stranded and broke, it took Lee a full eighteen months in Hawaii playing local gigs to earn three plane fares back to San Francisco. While his dreams of stardom would have to wait, however, he didn’t regret the experience. “That’s where I learned about running a business,” he said, “the business of dealing with sleazy nightclub owners who didn’t pay.” For all the frustration of that lost opportunity, Lee had proven to himself that he could hack it on his own, outside a traditional career path. It wasn’t nearly as comfortable or secure as a day job, but he now knew he had the stomach for entrepreneurship. Back home, Lee started packaging up coils of “Monster Cable”—the wires were monstrously thick by comparison with lamp cord—and selling it door-to-door. To drum up interest in the new product, he ran demos at trade shows and retail stereo shops.

At first, Monster Cable was “a solution to a problem nobody knew they had,” as Lee later said. (Or, as his son, Kevin, put it, “a cure for no disease.”) In 1978, Lee rented part of another company’s table at the Consumer Electronics Show (CES) in Chicago, the most important trade show in the industry. To convince listeners of the value of his product, he would switch back and forth between a system wired with lamp cord and one wired with Monster Cable. Through these demos, Lee demonstrated his uncanny understanding of the psychology of audiophiles. If someone *couldn’t* tell the difference in the sound, they almost certainly wouldn’t admit it in front of their peers. What if the difference were obvious to everyone else?

The following year, Lee spent \$50,000 of his savings to secure his own booth at CES. It was a risky bet, but it paid off: Monster received an order for thirty thousand cables. Monster-sized order in hand, Lee took out a quarter-million-dollar business loan, leased a factory just outside San Francisco, and declared himself the new company’s “Head Monster.”

Lee knew that retailers would be key to getting his product into as many hands—and ears—as possible. Monster cables were a perfect impulse buy. Customers’ eyes were instantly drawn to those gold-plated jacks. He augmented the product’s appearance further with deluxe packaging and slick aisle displays for stores. Then he worked aggressively to place his cables everywhere from the usual hi-fi shops all the way to national electronics chains and discount superstores. In doing so, Lee democratized the rarified world of hi-fi—now anyone could afford overpriced audio gear.

The timing for Monster was ideal. High-fidelity sound was an aspirational goal for many in the late 1970s and 1980s. Yet most audiophile speaker components, like high-end turntables and receivers, were out of reach for the average consumer. Someone who might never assemble the thousands of dollars necessary for a top-of-the-line subwoofer, however, might be persuaded to buy a premium cable that went for an unheard-of sixty cents a foot. Compared to other cables, Monster cables were a luxury, but compared to a new speaker, they were a

bargain. And who knew? Maybe a fancy cable would elevate that run-of-the-mill stereo you couldn't afford to upgrade.

While a thirty-dollar cable wasn't a game-changer by itself, the gross profit margin on each one averaged 45 percent, compared to 30 percent for most audio products. That added up for retailers. They also loved Monster cables because they didn't eat into any existing business. If you didn't upsell a customer on premium cables, you'd only end up giving them complimentary lamp cord. In that sense, any Monster cables you sold were free money. For audiophiles, on the other hand, the cables were a natural complement to pricey new systems and, relative to the total bill, a rounding error. As technology analyst Martin Reynolds put it, if you're going to lay out a small fortune for a stereo, "do you really want to skimp on the cables?"

Did Lee's cables significantly improve the sound from a high-fidelity stereo system? At early trade shows, many listeners proudly insisted they could hear the distinction. With his training as a musician and an engineer's attention to detail, it's possible that Lee himself detected a significant difference. But most people, even professed audiophiles, can't. "Nobody has ever been able to identify the specialty cable from the junk box stuff," said Tom Nousaine, a contributing technical editor for *Sound & Vision* magazine who has done several comparisons over the years. "The best place to buy speaker cable is Home Depot." Increasingly, however, audiophiles thought otherwise. "We un-commoditized a commodity product," Lee later crowed.

Lee's motto from the beginning was "Hearing is believing." In the audiophile market, you often hear what you *expect* to hear. Looks amplify, even trump, actual performance. Monster Cable was visibly sturdier than the alternative and sported gold-plated jacks. They *looked* like they should improve the sound. And if you couldn't hear the difference, were you going to complain to the salesperson? What if *they* could? In fact, what if the difference were obvious to everyone but you? Complain about the cables and everyone might learn that your ears aren't as sharp as you'd like to think.

Having spent time in the trenches selling stereos, Lee knew what motivated salespeople. He established special training programs for them and offered juicy sales incentives like free vacations. Lee invested as much as 15 percent of the company's overall revenue in these efforts, far more than he put into direct-to-consumer advertising. He knew the exact point in the buying process where consumers were most vulnerable to the pitch and focused his efforts there.

Under Lee's leadership, Monster grew through the 1980s as he found more and more ways to extend the brand throughout the consumer electronics category, launching divisions like Monster Photo, Monster Game, and Monster Computer. To squeeze every last cent out of customers, he even created Monster Mints—one last item to toss in the cart at checkout. By 1997, annual revenue was \$50 million and the company had four hundred employees between its offices in California and Israel. The company had diversified into more than a thousand audio, video, and gaming products.

With Monster's name recognition among audiophiles, it only made sense to try making the components themselves. But Lee had waited too long to expand the brand from speaker wire to actual speakers. A shift in listening habits was already remaking the industry. The rise of the portable cassette player meant that the era of multi-component, high-fidelity stereo systems was coming to an end. A Sony Walkman couldn't replace listening on a proper stereo system completely—each tape could only play an hour of songs, and the audio quality couldn't compare to even the most basic turntable and speakers. But with the 2001 introduction of Apple's iPod, you could hold a thousand songs in your pocket and play them back with digital fidelity. Each new iteration of the iPod meant listeners could bring more and more of their music collections with them. People began to "rip" the music off their compact discs and even download pirated music from the internet. Did they really need that enormous speaker system and all those stacks of records and CDs taking up space in the living room? Mobile listening was rapidly replacing home listening.

As Monster's speakers failed to gain traction, Noel Lee could see the writing on the wall. "Big speakers are gone," he

said. “The way to romance the sale for big speakers is gone. [You] can’t bring that back with speakers because the physical size and where people listen are diametrically opposed. You can’t take the speaker with you to the gym or on the subway.” But this didn’t mean people no longer wanted high-quality audio. Lee took a close look at the iPod and, just as he had with speaker systems in the 1970s, identified a vulnerability: those iconic white earbuds. Just as speaker manufacturers had included free but low-quality “lamp cord” with their premium components, Apple was bundling cheap, lousy-sounding headphones with their cutting-edge digital music players. What was the point of crystal-clear audio if you listened through tinny headphones? This was a vulnerability Monster could exploit. As Lee put it, “The headphones are the new loudspeaker.” Monster began developing its own line of headphones. Once again, Noel Lee would sell people something they were already getting for free.

By this point, Lee was grooming his son, Kevin, for a leadership role. For a time, Noel put Kevin in charge of a Monster subsidiary making furniture designed to hide home theater equipment—tables that could hold subwoofers, couches with seat cushions that vibrated in sync with movie explosions. Then, in 2006, Noel sent Kevin to Los Angeles, tasking him with convincing pop stars to release music in Monster’s new audio format, a higher-definition alternative to MP3s. “You gotta go get Usher, Mary J. Blige, U2,” he told his son. No small ask, but Kevin did the leg work and, among other luminaries, managed to connect with Jimmy Iovine, the most renowned and influential music executive in the business. While Monster’s new audio format initiative failed, it led to something potentially more valuable: a sit-down with the Interscope chairman and his partner, Dr. Dre.

* * *

If the boom in music downloading was causing ripples in the consumer electronics market, it was causing a tsunami of disruption in the music industry. Piracy was rampant, and even legitimate online music sales were eating into overall profits—for the first time, consumers could buy only the songs they wanted from an entire album.

In addition to being a founding member of the rap group N.W.A and a platinum-selling solo artist, Dr. Dre had been one of the industry's most successful producers for two decades, breaking mega-stars like Eminem. With the economics of the music business changing so rapidly, however, Dre's lawyer advised him to endorse a pair of sneakers to generate extra cash. That's when the rapper ran into his old friend and business associate Jimmy Iovine on the beach in Santa Monica. Their discussion turned to endorsements, and Dre said the now-famous words: "Fuck sneakers, let's make speakers." It was a business epiphany. If Dre could get his name on some high-end consumer speakers with fat profit margins, he would make a lot more money than he ever would on a sneaker deal. But who would actually *make* those speakers? Who understood the market? Who knew the ins and outs of premium audio gear?

Not long after, the two connected with Kevin Lee, and it seemed like kismet. For years, Monster had used the power of celebrity to drive sales of its premium audio products, mounting glitzy, star-studded events at CES and even producing albums. They'd make the perfect partner to help two men with little knowledge of consumer electronics build a new audio brand from the ground up.

By the time Noel Lee met with Iovine and Dre, he'd already come to the conclusion that speakers were a dead end and headphones were the future. But the mogul and the musician needed persuading. "They had no idea why people wouldn't want to buy speakers," Lee said. "[They've] got big speakers, and always had them in the studio." Lee explained that premium headphones were like high-fidelity speakers you could put on your head and bring everywhere. Like sneakers, they could also be a fashion statement, which meant you could charge more than they were strictly worth—with the right design and, of course, plenty of celebrity endorsements. Always the salesman, Lee had them listen to Monster's prototype model. Dre was impressed by the bass-heavy sound. Convinced, Iovine and Dre agreed to this new direction.

Noel put Kevin in charge of the negotiation, throwing his son into the deep end of the pool. Like his dad, Kevin had

never gone to business school and had no real business experience outside of working at Monster. But he hadn't had to fend for himself the way Noel had, either. Now he was up against Jimmy Iovine, a savvy and hard-nosed entrepreneur. As eager as Kevin was to close the deal, however, he just couldn't make the manufacturing numbers work with Interscope's lowball offer. Monster had just lost \$50 million on its own failed speaker venture, forcing it to lay off 120 workers and move manufacturing to Mexico. Interscope's aggressive split simply wasn't feasible. Yet Iovine and Dre had all the leverage. In their view, Monster was one of several potential manufacturing partners. When Monster pressed for a better split, Iovine went silent. Then he called Kevin back: "We hate to do this to you, but we're going to do the deal with someone else."

Six months later, however, Iovine's second choice hadn't worked out and the four men found themselves back in his office. On Iovine's table lay the prototype created by Monster's competitor. Iovine and Dre had come up with a great brand name by this point: Beats by Dre. But that was all they had to show for their time. The product on the table was meant to be a fashion statement, but the design wasn't right at all. If the headphones weren't flattering on your head, celebrities wouldn't wear them and the whole effort would be for naught. Also, they didn't sound all that good, especially in Noel's expert opinion. Dre, an audiophile himself, must have agreed or he wouldn't have come crawling back to Monster.

Unsurprisingly, Noel had cooled on the collaboration in the interim. After being lowballed and then dropped for a competitor, he "wasn't as gung-ho." But Kevin remained starry-eyed about making a Beats-Monster partnership a reality. So, once again, Noel left Kevin in charge of the negotiation. This time, Kevin was determined not to let the effort stall out. He decided on a risky maneuver: to start developing the product line *before* he had a signed agreement in hand. "At the time, we didn't really know what we were going to make, at what price points, [and] at what cost," Kevin later said. Without Noel's knowledge or approval, Kevin plowed millions of dollars of Monster's money into

developing Beats by Dre before Dre and Iovine approved a deal. Kevin's team at Monster developed dozens of prototypes, incorporating Dre and Iovine's feedback into iteration after iteration. In Kevin's mind, nailing the product would make it impossible for them to walk away.

At a certain point, however, Kevin's blind determination to make the partnership work was replaced by panic. He suddenly realized how far in the hole Monster was—all those iterations on prototypes, even starting up mass production—without a signed contract. “It was beyond insubordination,” he said. “[I was going to] lose the trust of my father. I already had millions of dollars of inventory. He would have killed me.” Kevin knew he had to fess up, but he wanted to do so with a signed deal in hand. He went to Dre and Iovine and rushed through the negotiation of the contract. In his hurry to smooth over his initial lapse in judgment, Kevin negotiated solo against Iovine and his team of experienced corporate lawyers, who were more than willing to take full advantage of his haste and desperation. Before he knew it, Kevin had signed an extraordinarily complicated agreement with ramifications he didn't fully grasp.

For the moment, though, Kevin could breathe a sigh of relief. He was off the hook. The deal made the partnership between Monster and Beats official, so his dad would probably forgive his earlier impetuosity. Monster would make and distribute the headphones and Iovine and Dre would get a 19 percent fee in return for the Beats brand name and their celebrity access. Crucially, however, the deal gave Iovine and Dre ownership of all of Monster's work on Beats. It also included a “change of control” clause: if another entity took control of Beats, the manufacturing and distribution agreement between Beats and Monster would be severed. Beats would be free to go its own way without any further compensation to Monster.

Though most of the brand's fans don't realize it today, Beats by Dre headphones were announced in 2008 as a partnership with Monster, all the way down to a tiny Monster logo below the iconic red *B* on the earliest models. Big (but not too big), glossy, and colorful, the new headphones were a

hit with consumers, an instant status symbol even as critics derided them as overpriced and far too bass-heavy. Whether or not Beats were the best headphones in their price range—or anything like a good value for the money—was secondary. They were a new category: must-have headphones as a cultural status symbol. And this was largely because nobody in consumer electronics had the celebrity connections and cachet that Iovine and Dre did. “Beats was in every single music video,” Kevin said. The company even produced signature models for pop stars like Lady Gaga and Justin Bieber. Noel Lee knew exactly how valuable this was because he’d built Monster using the same principle: customers hear what their eyes and brains tell them they should hear. Simply telling them they were listening to the world’s best headphones would improve their subjective experience. And what says “world’s best headphones” like seeing every famous and wealthy musician wearing a pair?

The strategy worked. Beats became ubiquitous on city streets seemingly overnight. In its first year, Beats sold four hundred thousand headphones and generated \$200 million in revenue, and its success only grew from there. In 2011, driven by its strategy of celebrity saturation, Beats cracked half a billion in sales, capturing well over half of the premium headphone market. Partnerships with athletes like LeBron James drove sports fans to choose Beats, too. “If you don’t have a brand today,” Lee said, “you are done.”

As it turned out, Monster was done anyway, but for a different reason: the contract Kevin Lee agreed to without proper vetting. In August 2011, Iovine and Dre sold a 51 percent stake in Beats to HTC, the Taiwanese consumer electronic company, for \$309 million. According to that pesky “change of control” clause, this shift in ownership structure immediately ended the manufacturing and distribution agreement with Monster. When Beats walked away, it took Monster’s patents and designs with it. As galling as this was, however, things got worse. Beats went on to rewrite its history with Monster altogether. The company began to deny that Monster had played any role whatsoever in the design of its products, saying that Monster had merely sourced parts and

materials for Beats to use. (Monster went on to provide a journalist with documentation, including confidential design documents, that backed up its version of events.)

But Dre and Iovine weren't done with their gambit. Once the "change of control" clause had gone into effect, they swiftly bought back control of the company from HTC. Then came the endgame of their masterful stratagem. In 2014 they convinced Apple to purchase Beats for \$3.2 billion in cash and stock—the largest acquisition in Apple's history. Thanks to the HTC maneuver, all of that went to Jimmy Iovine and Dre. They had neatly excised Monster from one of the most lucrative deals in the history of consumer electronics.

At first, Noel Lee put a positive spin on the news. "The immediate reaction was, what a deal for Jimmy and Dre!" he said. "We're very happy that they received such a high valuation. And I'm thinking what that means for Monster's valuation." But eventually Lee decided he couldn't stand for it. Filing suit in California state court, he accused Dre and Iovine of stealing the design, manufacturing, and distribution rights to Beats by deliberately shuffling ownership of the company and triggering the provision that cut Monster out. According to Lee, a member of HTC's board of directors had admitted that the purchase of a stake in Beats was a "sham" deliberately performed to push Monster out before Apple's acquisition. Dre and Iovine had been angling for an acquisition by Apple as early as 2011, but they'd wanted full ownership of the company before that happened. In court, Beats made a different case: that Monster had agreed to that "change of control" clause in return for a better share of the revenue. Hurting from its failed speaker line and the decline of brick-and-mortar retail, it had prioritized short-term gains. Now it was paying the price. In the end, the court sided with Beats—ultimately, Kevin Lee had agreed to the terms, whether he understood their ramifications or not. Monster was ordered to pay \$17.5 million to cover attorney's fees and damages.

"We designed, built, and marketed the headphones, and we were getting none of the credit," Lee said. Beyond the nine-figure sum he felt Monster was owed, Lee was incensed at the continued assertion that Monster wasn't responsible for the

now-iconic headphones. “They’ve erased Monster from a great business story,” he said. “That’s not right.” Despite the setback, however, Noel Lee wasn’t done with headphones. “We can be the Apple of the headphone space, with or without Beats,” he declared. Monster continued to make headphones under the Pure Monster Sounds line, and Kevin even branched off to cofound his own headphone manufacturer, SOL Republic, which he sold before returning to his father’s company in 2017.

In the end, the exploiter had become the exploited. “I feel that we weren’t recognized,” Lee said. “We got erased from the history of Beats. We were the founders. Most of the public has only heard a one-sided story and they’re not even aware of Monster’s participation.” Monster itself is in a tailspin as the brick-and-mortar retailers it once depended on have shuttered. Sales of its products have subsequently plummeted, and it has laid off the majority of its workforce over the last decade. For Monster, the partnership with Beats represented a bridge to the future of premium audio. When that bridge collapsed, it found itself without any attractive options, turning to half-baked efforts like online gambling and cryptocurrencies to make ends meet. Undaunted, Noel Lee has plowed his own fortune back into Monster in the hopes of keeping it alive. “We should’ve gone out of business,” Kevin Lee said. “My dad, he only cares about Monster and the business. He’s basically put the profit he’s made on Monster in the past back into Monster.” Monster’s only hope is to find a new vulnerability to exploit. Time will tell if lightning can strike a third time.

Flying through a Loophole: Southwest Airlines vs. Everybody

The luxurious St. Anthony Hotel in San Antonio, Texas, has been host to many illustrious individuals over the years, including at least three presidents—FDR, Eisenhower, and Johnson. No heads of state are enjoying martinis tonight, however. This evening, in the spring of 1966, two men drink whiskey at the hotel bar, neither well known but each with an aspiration to achieve great heights.

Of the two, Rollin King has already reached for those heights. A couple of years earlier, the thirty-five-year-old investor bought Wild Goose Flying Service, a charter that flew San Antonio's movers and shakers around Texas, mostly for hunting trips. Rebranded as Southwest Airlines, that charter recently went bust. Now King has a better idea. Though skeptical, Herb Kelleher, enjoying a cigarette with his usual Wild Turkey bourbon, decides he might as well hear King out. Technically, it's his job; he's King's lawyer. A lawyer who wants to keep his client happy doesn't necessarily say what he really thinks, if what he really thinks is that his client's idea is "pretty stupid."

On paper, King's charter business had looked like a sure thing. Texas is the second-largest state after Alaska, spanning more than a quarter-million square miles. Like California, its major destinations are separated by vast distances. It should have been a natural fit for an intrastate air travel business. But Southwest had problems, King says. For one thing, it relied on slow, propeller-driven planes instead of jets like the big commercial airlines fly. The real reason the charter airline failed, however, was *because* it was a charter airline. King thinks he aimed too small by focusing on wealthy hunters. From personal experience, he knows how miserable it is to fly commercial between the major cities of Texas. Thanks to airline regulation, there's no competition whatsoever. As a result, flights get canceled, bags get lost, and worst of all, tickets are exorbitantly expensive. A businessman like him can afford to fly at those rates, but millions more Texans would be happy to zip from Dallas to Houston to visit family or from Houston to San Antonio to see the Alamo—if only the trip were both reliable and affordable. The potential demand will be enormous if a company can provide a viable alternative to all that driving.

What King wants to build, he explains, is a full-fledged commercial airline, but one that flies only the "Texas Triangle": Dallas, San Antonio, and Houston. (King later denied the often-repeated origin story that he drew this triangle on a cocktail napkin.) Kelleher scoffs and returns his attention to his bourbon, but King persists. If the other airlines' only

vulnerability were their unhappy customers, the scheme would never stand a chance. After all, what do King or Kelleher know about commercial air travel? But there is a larger vulnerability to exploit. It's a loophole in the American system of air travel itself: *federal regulations only apply to interstate travel*. If a company only flies between cities in Texas, it can operate however it likes, outside of federal jurisdiction. It can compete on price in a market where every other airline cannot.

Intrigued, Kelleher puts his bourbon down. A guy with almost no industry experience starting an airline seems crazy on the surface. But maybe it takes big thinking to exploit an equally big vulnerability.

The other airlines aren't going to take it lying down, that's for sure. It's going to be the legal fight of a lifetime. An experienced trial lawyer, Kelleher finds himself warming to the idea of a good battle, though that might also be the Wild Turkey talking. Either way, the two men decide to push forward and see whether this big idea will fly.

* * *

There's some irony in the fact that Southwest Airlines has one of the most-liked brands in the travel industry. Since its founding, it has been the industry's most ferocious competitor. Time and again, Southwest has ruthlessly exploited vulnerabilities in the commercial aviation market. Along the way, it has cultivated as kindhearted and generous an image as any major, highly profitable corporation could project. How did an airline that achieved its success so aggressively earn such a warm and fuzzy reputation for itself, not only with its customers but with its own hard-driven employees?

Like another famously aggressive giant with extraordinary brand appeal, Amazon, Southwest has done this by putting its customers above all. For example, as one major airline after another started charging fees for checked bags, Southwest continued to allow customers to check two free bags with every ticket. This apparent generosity wasn't entirely selfless, however. "Our competition handed us a gift," one Southwest executive said. "We were criticized by Wall Street for not charging bag fees. And we made a decision that rather than

take the bait and take \$300 or \$400 million in bag fees, we would leave that to the other guys so we could go out there and say Southwest is the best value.” Instead of caving into investor pressure, Southwest launched a new ad campaign: “Bags fly free.” The decision and the subsequent campaign drove \$1 billion in new revenue—more than twice what bag fees would have earned—and a few percentage points in market share to boot.

Today Southwest dominates its routes around the United States, flying more passengers than any other carrier. On hundreds of these routes, Southwest is the only available option. On its one hundred top routes, it flies two out of every three flights, a ratio far above the industry average. While Southwest has always framed itself as the underdog—David against the flying Goliaths—it has long been the most popular airline in America, and it didn’t get there by pulling punches. It didn’t stop with exploiting the vulnerability King found in federal airline regulations. It has exploited each and every vulnerability it could find in its competitors with nearly unparalleled decisiveness. As P. E. Moskowitz wrote in the industry magazine *Skift*, “Southwest finds markets, builds them out, and then ruthlessly excludes competition, whether it’s through price competition and customer benefits or via lawsuits.”

“Southwest has succeeded to an enormous degree because they were the first to enter secondary markets and then sprawled like kudzu,” said Henry Hartevelde, head of an airline industry research group. “They consume all the gates at the airports they fly to and effectively keep out other competition.”

But those tactics lay far in the future. Back in 1966, Herb Kelleher found himself intrigued by King’s notion. His law firm did respectable business, but Kelleher had greater ambitions, too. In fact, he’d come to Texas to fulfill them. Kelleher, like King, wasn’t from the Lone Star State originally. Growing up in New Jersey, he’d studied philosophy and literature at Wesleyan before graduating at the top of his class from the New York University School of Law. After clerking for a New Jersey Supreme Court justice, he and his wife, Joan

Negley Kelleher, moved to Texas in 1962. It was a momentous decision for them both. “[Joan] introduced me to Texas and I . . . fell in love with the state,” he later said. Joan’s family owned one of the biggest ranches in Texas. “Joan never urged me to leave New Jersey and go to Texas, but I came home one evening, and I’ve always had kind of an entrepreneurial bent, and I said to Joan, I think I want to move to Texas, because I think there’s more opportunity for an entrepreneur in Texas, and little tears started to course down her cheeks, and so we came to Texas.” Kelleher wanted to build something big, and this opportunity seemed full of potential. As Rollin King’s lawyer, however, he knew that this wasn’t his client’s first harebrained scheme. The plan would need careful vetting. A handful of planes does not an airline make.

King hadn’t come up with the notion out of thin air. His banker, John Parker, had brought King’s attention to a California airline that had succeeded with a similar model, flying between cities within that state to evade federal regulations. Those regulations had gone into effect in 1938 with the establishment of the Civil Aeronautics Board (CAB), which was empowered to regulate fares and routes. Under CAB jurisdiction, a commercial flight between New York and Chicago had to cost the same amount regardless of the airline you chose or how far in advance you purchased your ticket. Under these rules, there was no incentive for airlines to compete on anything other than comfort and service. The minority who could afford air travel—fewer than one in five Americans had ever been on a plane at the time—chose their carrier based on leg room or meal quality, not price.

The day after their whiskey-fueled conversation at the hotel bar, Kelleher made up his mind to help King with his project. The first order of business was funding. Kelleher turned his attention to finding backers for the new venture. In a matter of months, the gregarious and well-connected lawyer—Joan Negley Kelleher’s Texas roots ran deep—had raised more than half a million dollars from some of the biggest business owners and political leaders in Texas. Incorporating the company in 1967 as Air Southwest, King soon received certification from the Texas Aeronautics Commission to

operate planes within the state. So far, so good. But then the start-up ran into stiff headwinds. Three competitors—Braniff International, Continental Airlines, and Trans-Texas Airways—took Southwest to court, arguing that the Texas market couldn't possibly sustain another carrier.

For three years, Herb Kelleher fielded a whopping thirty-one court cases against the company, an onslaught that “enraged” him. The other airlines thought they were intimidating Southwest, but their disproportionate attack was only fueling the hardheaded lawyer from New Jersey. It was something out of Greek tragedy: in trying to squash Southwest before it could get off the ground, they were helping give birth to a future menace. “Anger can be a great motivator,” Kelleher said. “For me, this became a cause.”

As Southwest's starting capital was eaten up by legal expenses, the company's directors pushed King to abandon the business. “Gentlemen, let's go one more round with them,” Kelleher told everyone at a 1969 board meeting. “I will continue to represent the company in court, and I'll postpone any legal fees and pay every cent of the court costs out of my own pocket.” In 1970, the Texas Supreme Court ruled in Southwest's favor. When Southwest's opponents appealed, the U.S. Supreme Court refused to hear the case. Southwest had its victory. Through this trial by fire, Braniff and its allies had done Southwest an invaluable favor, helping forge the company's identity, both in the press and within its own ranks, as a scrappy and indomitable upstart. (Later, the Department of Justice would indict these other airlines on antitrust charges. In the government's view, their legal attacks on the nascent airline, combined with tactics like boycotting Southwest's vendors and blocking its planes from refueling stations, constituted anticompetitive behavior.)

Cleared to fly, Southwest raced to get an airline off the ground in only 120 days. It needed planes, airport gates, fuel, and, of course, people: mechanics, attendants, pilots. The most important position it needed to fill, of course, was CEO. King had always intended to lead the company, but he decided at the last minute that this wouldn't be fair to the company's investors. After all, he had no experience working at a large

airline in any capacity. The directors decided to hire Lamar Muse, an airline industry veteran. Bold and self-confident, Muse had worked for a number of airlines, including Trans-Texas, over the years, before retiring at fifty. Since his retirement, however, he'd grown restless. In fact, he was spoiling for a good fight. No surprise Herb Kelleher was a fan.

“He was exactly what we needed,” Kelleher said about Muse. “He was tough and he was iconoclastic in his thinking.” When Muse took over as CEO in January 1971, Southwest was running on fumes, with \$142 in the bank and \$80,000 in unpaid bills. Muse invested \$50,000 of his own money into the company and raised another \$2 million to buy planes. Boeing happened to be saddled with three surplus 737-200s thanks to overproduction during a recent industry slump. Muse bought the planes at a discount, and Boeing even financed 90 percent of the deal. The slump also meant that the job market was brimming with out-of-work pros. Southwest could hire some of the best in the industry. The company's luck was finally turning around.

Or not. Braniff and Texas International managed to obtain a last-minute restraining order to prevent Southwest from taking off. But Kelleher successfully convinced the Texas Supreme Court to order the lower court judge not to enforce that injunction. The following day, Muse arrived at Dallas's Love Field to oversee the inaugural flight. Kelleher gave Southwest's new CEO some characteristically sober legal advice in case the sheriff arrived despite the Supreme Court's order: “You roll right over the son of a bitch and leave our tire tracks on his uniform if you have to.” No rogue sheriffs appeared, however, and Southwest's first flight departed Dallas with the company's first two passengers on board. For the rest of its first day of operation, its three planes, mostly empty, shuttled from Dallas to San Antonio and from Dallas to Houston. (The San Antonio-Houston leg of the triangle opened up that November.)

The size of the resistance to the tiny upstart was an indication of the extraordinary value of the vulnerability King had found. Though passengers were sparse in the early days, Southwest and its competitors both knew the potential ahead

was enormous: Southwest was the only player in the game who didn't have to follow the same rules. Even though the plane landed without much in the way of paying passengers on board, Kelleher later said his greatest moment in business was "when the first Southwest airplane arrived after four years of litigation and I walked up to it and I kissed that baby on the lips and I cried."

Airlines at the time operated under the assumption that there were only so many people who would ever travel by plane and focused their efforts on capturing as large a slice of that small pie as possible. From the start, however, Southwest went after the uncontested part of the market: the millions who drove. "We were a bit of a disruptor," one executive said. "Travel was really reserved for the elite few; it was really expensive; it was something that was largely arranged by travel agents. We took that model and turned it upside down."

Getting customers to try a new brand of something they already use is straightforward. Getting them to try a product or service for the very first time, however, is one of the toughest slogs in business. The average person in Texas simply didn't consider air travel an option in the first place. Convincing people to fly, even at bargain rates, proved to be more difficult than King had ever anticipated. Only a few months after acquiring its fourth Boeing 737-200, Southwest was forced to sell it for cash.

Instead of reducing the number of flights, however, the company figured out how to keep its planes at the gate for only ten minutes at a time, as opposed to the usual half an hour or more. Using what would become a core strategy, Southwest did this by abandoning industry-standard procedures. If the company didn't have to obey the same legal regulations as its competitors, it certainly didn't have to follow the same boarding process. Southwest's planes started pulling up far enough from the gate that they could drive away without being pushed by a tug. Instead of using a bridge to board, customers would line up on the tarmac and take the stairs. In fact, passengers could even line up before the plane arrived and start boarding through one door as disembarking passengers descended another, all while bags were unloaded and reloaded,

systems were checked, and fuel was replenished. Southwest's boarding routine began to more closely resemble the work of a Formula 1 pit crew than the standard operation of a commercial flight.

Southwest knew in those early days that Braniff and Continental weren't their real adversaries: Ford and Chevy were. Effective positioning is all about understanding the full spectrum of customer options, and for relatively short hops like these, the real alternative for most people was a long but manageable drive. To position itself against that option, Southwest had to keep costs down and remove all the unnecessary friction from the process of flying. Taking a plane would never be as easy as climbing into your car, but they could get pretty close if they kept getting rid of everything unnecessary, from annoying fees and delays to nonessential services. Meals were replaced with bags of peanuts. Tickets were just cash register receipts that read "This Is A Ticket" on the back. Seats were first come, first served. One gate agent replaced the standard three.

Southwest struggled at Houston's Intercontinental Airport, so the company began to operate out of the smaller and older Hobby Airport instead. The other carriers had left Hobby for newer Intercontinental in 1969, but though empty and outdated, Hobby was much closer to downtown, making short interstate hops from there a much more competitive option. The move was a huge success and passenger load doubled. (JetBlue would exploit a similar vulnerability decades later by flying out of smaller, less-used airports that many travelers preferred to the giant, crowded hub airports that had sprung up in cities like Chicago and New York.) When Braniff and Texas International moved some of their flights back to Hobby in an attempt to recapture that business, they only succeeded in reminding passengers why they preferred Southwest. Not only were its fares lower, but its planes arrived on time and there were no waits at the ticket counter. It wasn't long before the other airlines had surrendered Hobby to Southwest. By 1973 the new company was profitable.

Though he wasn't on staff yet, Kelleher provided enormous value to Southwest thanks to his extraordinary gift

for spotting vulnerabilities. When the cities of Dallas and Fort Worth tried to force the airline to move to the new airport opening midway between the two cities, Kelleher took them to court. While Dallas/Fort Worth Regional Airport, as it was initially called, was enormous and modern, Love Field was only a few minutes out of downtown Dallas, just as Hobby was right outside Houston's downtown area. A move would have been disastrous for Southwest—the drive to the new airport would take longer than most of its flights did. In fact, if the airline were forced to operate out of DFW, it would almost certainly have gone bankrupt.

Kelleher found a loophole in the regulations allowing the company to remain. For three years, the two cities filed motion after motion in an attempt to force Southwest out of its convenient position. Eventually the case reached the U.S. Supreme Court, where Kelleher won the day. More important, the indomitable competitive spirit Kelleher displayed in fighting yet another asymmetrical battle against powerful enemies became an integral part of Southwest's culture, inspiring its employees and instilling tremendous pride and loyalty. "The warrior mentality, the very fight to survive," Kelleher's legal associate (and future president and COO) Colleen Barrett said, "is truly what created our culture." Southwest became the kind of company where employees would cheerfully do whatever needed doing to get the job done. If a ticket agent could move a piece of luggage to get the plane in the air on-time, it wasn't a problem.

In 1978, President Jimmy Carter deregulated the airlines, in no small part because of Southwest. The fact that the new airline had lowered fares for consumers and achieved profitability in an otherwise-struggling industry was held up as an example of the potential for deregulation to spur competition. In reality, however, the opposite occurred. The 1980s saw an enormous number of mergers, acquisitions, and bankruptcies in the deregulated airline industry. One hundred and sixty-nine carriers vanished or were absorbed into others and, by the time the dust settled, nine airlines shared 92 percent of domestic revenue.

While the predicted proliferation of competing carriers didn't happen, deregulation helped Southwest immensely. Now the company was free to expand beyond Texas. By 1981, the company was operating out of Chicago and several other cities. That year, Herb Kelleher became Southwest's CEO.

As Southwest's chief executive officer, Kelleher saw no need to rein in his colorful personality and sometimes outrageous behavior. He wanted the airline to stick out, and a maverick airline needed a maverick leader. He continued to chain-smoke five packs a day, drink Wild Turkey, and tell dirty jokes at work. He even appeared at company functions dressed as the likes of Elvis Presley and Roy Orbison to perform their hits for employees, however poorly. When Southwest coined a slogan that sounded too similar to that of a small, local carrier, Kelleher challenged the other airline's CEO to a public arm-wrestling match in lieu of going to court. The resulting spectacle, the "Malice in Dallas," saw Kelleher defeated. The other CEO agreed to let Southwest keep using the slogan anyway.

Kelleher's guiding principle, beyond abandoning decorum, was to "democratize the skies." Years of legal battles both before and after Southwest's first flight had hammered its corporate identity into shape: Southwest was an underdog that fought for passengers. Kelleher embraced that identity. He was going to take on the industry and challenge its conventions in ways large and small. Large: keeping prices low. No assigned seats. Small: wacky ads. Flight attendants in hot pants. Kelleher stopped at nothing to distinguish Southwest from its stiff-necked competitors. This free, trusting spirit applied inside the company as well. Employees could wear blue jeans to work and were free to call the boss "Herb."

For all his antics and freewheeling attitude, however, Herb was tireless in pursuit of success. He slept four hours a night and read copiously, often books of military history, from which he drew lessons on leadership. In the words of *Inc.* magazine, Kelleher compared Southwest's early battles against its rivals to "the ruinous trench warfare of World War I, an over-the-top frontal assault by massed forces against Southwest." When he wasn't reading up on strategy, he was

responding to hundreds of customer letters a week. He understood that leaders need to see the battle from the ground if they expect to exploit an enemy's vulnerabilities—or close up their own. To this end, Kelleher also spent a day each quarter working on the front line, whether serving drinks on a flight or loading bags onto a plane. He needed a firsthand view of the business.

Kelleher took a similarly unconventional approach to the company's internal operations. He kept the hierarchy relatively flat. Department leaders and even frontline employees like gate agents were empowered to make decisions they felt would benefit customers without running them up the flagpole for approval. And, to simplify training and maintenance, Southwest flew only one kind of plane: the Boeing 737.

The end result? In the words of a 1992 profile of Kelleher, “a passenger can simply go to the airport, buy a cheap ticket, and get on the next flight out, which he or she knows is often not more than an hour away. Each day Southwest flies 78 times between Dallas and Houston, 46 times between Phoenix and Los Angeles, 34 times between Las Vegas and Phoenix. At Southwest the average number of flights per gate each day is 10.5. The industry average is less than half of that—4.5.”

Though it didn't increase the number of competing carriers as intended, deregulation did lead to a huge increase in air travel in general. Vast numbers of people who had never flown before began taking to the skies regularly. By 1993, deregulation had led to an 87 percent increase in domestic plane passengers. Yet despite the reduced competition and the increased demand, the major airlines struggled mightily to stay profitable. Tough and turbulent markets are full of opportunities for upstarts and, as the majors retreated, Kelleher patiently advanced. The company would “search out markets that are overpriced and underserved,” in the words of one executive. A vulnerable market was typically a smaller city with an airport close to the downtown area and without much traffic congestion. Once airport gates became available, Southwest could have a new operation up in less than a week, often capturing a quarter of the market right away. As more people experienced Southwest, pent-up demand grew

everywhere it didn't yet operate. That demand was always there, just waiting to be unleashed when the time was right. When an airline retrenched, as when USAir abandoned its gates in Sacramento in 1991, Southwest would move right in and rapidly dominate the available routes. Through this strategy, Kelleher "literally brought air travel to the masses on a scale that was unimaginable," said Robert Mann, an industry analyst.

How much value is there in exploiting vulnerability? In 1989, Southwest hit \$1 billion in revenue. By 1992, the company employed 9,500 people and had expanded its fleet to 124 planes flying between 34 airports, mainly in the South, Southwest, and Midwest. In twenty-seven of those airports, Southwest was the leader in passenger boardings. It had been profitable for seventeen straight years despite the lowest fares—and the best salaries—in the industry.

"We deliberately formulated a policy of geographical distribution," Kelleher said. "Now you can't fight us like you would a war in Europe. This is more like a war in the Pacific. You have to take us pillbox by pillbox, palm tree by palm tree."

In 1993, the U.S. Department of Transportation identified what it dubbed the "Southwest Effect." Its data showed that when Southwest entered a market, several things happened. First, more passengers started flying that route. Second, if there was more than one airport in a city, the one that Southwest *didn't* serve lost business. And third, fares along the route went down across the board, sometimes by a hundred dollars or more, as the other airlines dropped their prices to stay competitive with Southwest. What was unusual about Southwest relative to those competitors, even other so-called low-cost carriers, was that its fares didn't just start low to lure passengers but stayed low over time.

In 1994, *Fortune* put Kelleher on its cover under the headline, "Is Herb Kelleher America's Best CEO?" Southwest had become "a phenomenon, an economic juggernaut that has shaken the domestic air travel business to its fanjets and that grows more powerful by the week." For the previous four

years, major carriers like Delta, United, and American had lost billions. In fact, the industry lost more money between 1990 and 1994 than it had made in the six decades prior. Yet Southwest, by striking at their vulnerabilities, had earned profits—if not always large ones. “We didn’t make much for a while there,” Kelleher admitted. “It was like being the tallest guy in a tribe of dwarfs.”

In 2001 Herb Kelleher stepped down as one of history’s most colorful, and most successful, CEOs after two decades in the position. Today Southwest continues to rely on its core strategy: frequent flights on short, busy routes between major cities to keep costs low. Though the other airlines have had decades to observe their nimble opponent, they have yet to spot a vulnerability that Southwest couldn’t turn into yet another advantage.

Shopping with a Vengeance: The Lillian Vernon Catalog

Though she is only five years old, Lilli Menasche senses that something is very wrong. It isn’t the injuries on her older brother, Fred. He’s nine. Boys get hurt. They’re wild and reckless. So Lilli reasons, anyway. No, the whole *household* feels different. Mother and father argue in harsh whispers and then peer nervously out the windows at the street below. Hermann frowns all the time. Erna keeps Fred in arm’s reach even though he’s healing up fine.

Young as she is, Lilli understands that her parents are afraid. Terrified. Something awful is about to happen, but she doesn’t know what. Or why. The family only just moved into this cramped apartment after leaving their spacious home for reasons that are unclear to her. Already, Lilli senses that this stability will be fleeting, too. The year is 1933, the place is Germany, and the Menasche family is Jewish.

* * *

When Adolf Hitler was appointed chancellor of Germany, the Nazis forced the prosperous Menasche family from their Leipzig villa and converted it into their local headquarters.

Hermann Menasche, a successful Jewish lingerie manufacturer, had always felt safe in cosmopolitan Leipzig, but times were changing. With Hitler at the reins, Hermann knew he would have no recourse with the German government. Nor could he expect reimbursement for the confiscation of his home. Yet he knew how lucky he was that his wife, Erna, and two children, Fred and Lilli, hadn't been hurt. Anti-Jewish violence was on the rise. The old rules of European civility were teetering on a precipice.

Hermann moved the family to a nearby apartment building. He hoped they would be able to keep their heads down until the current wave of anti-Semitism subsided. It was only a matter of time before this Nazi hysteria blew over, he believed. Then an anti-Semitic mob threw nine-year-old Fred down the staircase of their building. Things had gone too far. To protect Fred from further violence, Hermann brought the family to Amsterdam, leaving all his business assets behind. From there they managed to emigrate to the United States. In 1937 the Menasche family settled in New York City. On the Upper West Side, they were among thousands of other German and Austrian refugees, Jewish and Gentile alike.

Though she was only five at the time, Lilli Menasche would remember Fred's fall and its aftermath well. The experience taught her an indelible lesson about the necessity of action. In life, no one was going to rescue you. You had to face your own problems.

In the United States, Hermann started over. A savvy entrepreneur, he instilled a strong work ethic in Lillian (as she was called in America) and mentored her in business. On weekends, Lillian and Fred helped with Hermann's new business, which manufactured leather goods like purses, wallets, and belts. By fourteen, Lillian was scouting retail stores for premium leather handbags her father could copy and sell to department stores at a steep discount. This strategy only worked if people wanted them, of course. Scouting honed Lillian's natural talent for selecting the right products to imitate. She later referred to the knack she developed as her "Golden Gut." Scouting for her father taught her how to pick winners.

We've seen previously that domain knowledge is gold, whether the domain is music, dating, or toys. To seize an opportunity, you have to know your market, understand what it wants and how it chooses. Walking along Fifth Avenue and peering through shop windows was Lillian's MBA program.

"Despite my evident interest," she later wrote, "it was an unspoken assumption that I would not end up a full-fledged businesswoman." Lillian's mother worked alongside her father in the business, leaving Lillian to shop, cook, and clean for the family. But this was only out of necessity. While Hermann welcomed Lillian's participation, he never saw her as his successor. In his view, his son, Fred, would take over one day. Lillian would get married and raise a family.

Lillian married Sam Hochberg, a son of Polish immigrants, who ran a family undergarments store in Mount Vernon, New York. She continued to work part-time to supplement her husband's income, but when she became pregnant with their first child, she prepared to leave work behind for good. This was 1951, more than a decade before Betty Friedan would spark second-wave feminism with *The Feminine Mystique*. The handful of female entrepreneurs out there—including Olive Ann Beech and, as we'll see, Helena Rubinstein—were the exception that proved the rule. Lillian, like the other women of her generation, would stay home, raise children, and keep house while Sam brought in an income. Doing otherwise, she later wrote, would serve as "an embarrassing commentary on her husband's earning power." But something nagged at Lillian. She knew what society expected, but she also knew that her husband's salary wouldn't sustain a comfortable lifestyle. For her, this wasn't about politics. She was simply too pragmatic to let things stand as they were.

Sitting at her kitchen table while waiting for the baby to arrive, Lillian would flip through magazines like *Seventeen* and *Glamour* and fantasize about what she might buy, if only they could afford it. Finally she realized she wasn't content sitting around the house, not when she had the intelligence, skill, and discipline to make the additional money the family needed.

The ads in those magazines highlighted the problem, but they also suggested a possible solution. An office job wouldn't do for an expecting mother, but she could start a mail-order business right from her yellow Formica kitchen table. Buying leather goods in bulk at a good rate from her father, she could resell them to the young, female readers of *Seventeen*. Even fifty dollars more a week would make a real difference for the household. How many handbags would she have to sell to earn that? After a little back-of-the-envelope math, Lillian decided it was worth a shot.

Selling merchandise was the family business. In the Menasche home, there had been “nonstop talk of shipments, orders, invoices: the details of business,” she wrote. “I sat, listened, and absorbed. Every meal was like a class.” But she knew her most valuable asset was her Golden Gut. It told her with uncanny accuracy what women would buy. Putting herself in the mind of *Seventeen* readers like herself sparked an idea. Why not go further than simply reselling leather products? She had nothing but time on her hands waiting for the baby. She could add value—and justify higher prices—by monogramming each item. Personalization, Lillian's Golden Gut told her, would exploit a vulnerability in the big catalogs' offerings. Lillian would distinguish her own wares by adding a personal touch.

She didn't have market researchers, but Lillian conducted market research at her kitchen table every day. She knew a major shift had taken place. The 1950s were the dawn of mass consumerism. Workers had once spent the lion's share of their earnings on food, shelter, and other necessities. Now more and more middle-class Americans had discretionary income. At the same time, returning GIs had displaced a generation of women from the workforce. Thanks to the advent of dishwashers, vacuum cleaners, and other modern conveniences, keeping a home wasn't the exhausting but engaging job it used to be. Thanks to these factors, millions of bored American wives now had plenty of free time to think about how to spend their extra money. Monogrammed goods would help them feel special, unique. And bundling monogramming into the cost of each item would make the

personalized touch feel less self-indulgent. Monogramming was an *affordable* luxury. Lillian just knew that women like her, flipping through the ads at their own Formica tables, would love it.

The young couple had received two thousand dollars in wedding gifts. Now Lillian convinced Sam to agree to putting it toward the new venture, beginning with a five-hundred-dollar ad in *Seventeen*: “Be FIRST to sport that Personalized Look on your BAG and BELT.” Lillian had hoped to generate an extra \$50 a week. The offer—a handbag for \$2.99 and a matching belt for \$1.99, both monogrammed—generated \$16,000 in sales in the first six weeks, a figure which grew to \$32,000 by the end of 1951. Now she had to actually fulfill those orders: 6,450 bags and belts in all. Hermann sold her the matching bags and belts at \$3.00 a pair. Then she embossed and packed each order at her kitchen table. Vernon Specialties, named after their hometown, was born. Soon after, so was Lillian’s son Fred, named after her brother.

Just a few weeks after Fred was born, Lillian went right back to work, taking out more ads in more magazines. In 1954, sales hit \$41,000, surpassing Sam’s income at the store. In reluctant defiance of the status quo, he went home to work with his wife. After they saw the response to a small, four-page catalog included with orders, they created their first true catalog, mailing it to every customer on their 125,000-person list. Featuring hundreds of personalized accessories, knickknacks, and gifts, it succeeded beyond Lillian’s wildest expectations. The company soon expanded to a five-thousand-square-foot plant in New Rochelle, New York.

At the time, the space for personalized goods was almost uncontested. A billion-dollar catalog like the one put out by Sears, Roebuck & Company wouldn’t offer something so labor-intensive. The sheer size of that catalog was its vulnerability. It was too busy supplying mass-produced goods in a thriving postwar economy. Lillian exploited that vulnerability to carve out a comfortable niche for her company. In 1965 she appended her first name to the business, making it the Lillian Vernon Corporation. (In 1990, years after

she and Sam divorced, she appended Vernon to her own name and became Lillian Vernon, too.)

The Lillian Vernon catalog brimmed with leather goods as well as pins, locket, and other accessories. Customers could personalize all of it. The appeal was undeniable. Sales hit \$500,000 in 1958, \$1 million in 1970, and only grew from there. Then, in the 1980s, two crucial new technologies appeared. Lillian, with her sure understanding of her customers, saw their potential right away. Primed for immediate action by the dramatic events of her childhood, she seized the opening with a vengeance.

Stores had offered “charge coins” to keep track of their customers’ store credit as early as the nineteenth century. But Bank of America was the first to offer a true credit card, in 1958. This “BankAmericard” system took off, and B of A licensed the concept to other banks around the country. In 1976 all the licensees banded together under a single brand name: Visa. Then competing cards like American Express and MasterCard sprang up. For lenders, the profits from interest and late fees were too juicy to ignore. For catalogs, credit cards meant customers could now buy over the phone. Getting customers to call, however, was another story. At the time, even state-to-state calls could be relatively expensive, while mailing in an order form required only a stamp. Then, in 1982, AT&T rolled out a new, more affordable toll-free system for businesses. Now even a company the size of the Lillian Vernon Corporation could afford its own toll-free number.

Lillian saw her chance in the convergence of these two technologies. Credit cards made it possible to order over the phone. A toll-free phone number made it affordable to do so, even for a small, spur-of-the-moment purchase like a personalized bracelet. Just as the proximity of an airport made an outsized difference on Southwest’s short hops, removing friction from an impulse purchase was a game-changer for the Lillian Vernon catalog. Filling out a form, making out a check, finding an envelope and a stamp, and mailing the order in all gave customers additional moments to reconsider their impulse. A phone call was almost immediate and it shaved days off the fulfillment process. Now customers could go from

catalog page to purchase in a matter of minutes while getting their orders delivered faster than ever. Lillian wasn't the type to sit on her hands in the face of opportunity. Betting on cards and calls, she invested in credit card processing and a new number for the company: 1-800-LILLIAN.

As Lillian had predicted, this dynamite combination unlocked a new level of growth for the company. The 1980s were boom years for the Lillian Vernon Corporation as its mailing list grew to 27 million names. In 1987 it became the first woman-founded business to be listed on the New York Stock Exchange. By the end of that decade, revenue exceeded \$125 million. At its height, the Lillian Vernon Corporation had nine catalogs and fifteen retail stores generating revenue of \$300 million.

How did the Lillian Vernon catalog become a fixture of American shopping habits? Lillian Vernon's singular drive, for one. She only started a business to earn that extra fifty dollars a week—but once she got a taste of entrepreneurship, there was no stopping her. (Lillian's son, Fred, actually left the company when it became clear his mother had no interest in handing over the reins anytime soon.) While she had no formal business training, Vernon had the work ethic instilled by her father. She also had a pragmatic business sense developed by working in and around retail from a young age. She honed her Golden Gut over the years, frequenting trade fairs and jewelry shows, always on the lookout for something new to engrave, emboss, or embroider. And she constantly observed which store window displays drew the most attention from shoppers. Anything for a better look inside the minds of her customers.

The Lillian Vernon catalog also succeeded because Lillian Vernon spotted a vulnerability in the Goliath of catalogs: Sears, Roebuck & Company. At points in its history, you could buy anything from a pearl necklace to a prefabricated house out of its massive catalog. The Sears catalog dominated by being all things to all people. To carve out her niche in its shadow, Lillian Vernon focused her attention like a laser on a generation of American women, one she understood intimately thanks to her domain knowledge. She knew they wanted to feel special at a time when society wanted them seen but not

heard. What would make *her* feel special? What would make a catalog delightful for *her*? Innovations like seasonal catalogs for major holidays and free gifts with purchase arose from that intense focus on her customers. Vernon even offered a lifetime return policy for every item. A decade after buying a monogrammed makeup compact, a customer could still return it for a full refund. It was an offer like no other, from a catalog like no other. Vernon made this offer because it would have compelled her to buy, too.

Lillian Vernon recognized her own value to the brand. Her customers could relate to her because she was one of them. Long after she'd become the head of an enormous corporation, she made a point of personally selecting each item that appeared in her catalogs. She put her image on the covers of the catalogs and always included a personal letter to her customers. "I want customers to know and relate to me as an individual," she wrote, "and to understand that my company is a reflection of myself." The Lillian Vernon catalog *was* Lillian Vernon. It's no accident that she changed her last name to match.

* * *

Savvy leaders wait patiently (and sometimes impatiently) for an opening. Then they strike with all their might. As they develop their eye for vulnerabilities in others, they learn to close their own, becoming cautious, humble, and frugal lest they fall victim to the same gambits. As Sun Tzu wrote, "the skillful fighter puts himself into a position which makes defeat impossible, and does not miss the moment for defeating the enemy." The leaders in this chapter observed their competitors and their industries carefully, preparing their stratagems and marshaling their forces . . . until the right moment arrived.

It's possible, of course, to take it too far when trying to exploit a competitor's vulnerabilities. Some leaders seek advantage in ways that are unethical—or even illegal. In the [next chapter](#), we'll look at the consequences of stepping over the line in pursuit of profit and market share.

7

Dirty Tricks

There is a proper season for making attacks with fire, and special days for starting a conflagration.

—Sun Tzu, *The Art of War*

A business war in even the most mundane industry can feel like a life-and-death struggle to those involved. History shows that there is no line some leaders won't cross to give their company an advantage. In this chapter, we look at some of the more brazen tactics employed to topple hated rivals. Dirty tricks sometimes result in scandal and even legal consequences, but in the heat of battle, it's easy to lose sight of the big picture.

Sun Tzu advocated strongly for ruthless deception. The real sin in his eyes was the wastefulness of a protracted battle that left both sides weakened. Better to bring a close to hostilities quickly and decisively. A dirty trick beats mutually assured destruction. "If your opponent is of choleric temper, seek to irritate him," he wrote. "Pretend to be weak, that he may grow arrogant. If he is taking his ease, give him no rest. If his forces are united, separate them. Attack him where he is unprepared, appear where you are not expected." Whatever it took to win the day.

A business war is best won through sly maneuvering that stops short of criminal behavior—great leaders have an instinct for hitting hard but pulling their punches just shy of the line.

Reach for the Sky: The Chrysler Building vs. 40 Wall Street

H. Craig Severance is triumphant. After a fierce public battle, the noted architect has beaten his former partner, William Van Alen, to building the world's tallest structure. His seventy-one-story, neo-Gothic skyscraper now stands complete, right in the center of the financial heart of the world's greatest city. The one-upmanship between Severance and Van Alen has been unlike anything in the city's history, as each architect sought desperately to eke out a little more height than could his rival. At a whopping 927 feet, however, there is now no contest: 40 Wall Street stands second to none.

Smiling to himself, Severance gazes out a north-facing window. Then his jaw drops. What is that . . . thing rising from the dome of Van Alen's Chrysler Building? The way it glitters in the sun—it couldn't be . . .

* * *

The years between 1928 and 1933 marked a new era in American architecture. New York City, having just surpassed London as the world's most populous metropolitan area, transformed its entire skyline in that short time. Over a five-year span, the Big Apple became home to a slew of landmark buildings: the New York Life Building, 30 Rockefeller Plaza, 40 Wall Street, and the Chrysler Building, among others. Even as the country's fortunes cratered in the Great Depression, some of its most iconic edifices rose—as did the reputations of each building's architect.

Diligence is rewarded, but history shows that very few have reached the top—richest, most powerful, or, in this case, tallest—playing entirely fair. To conquer on the world's stage, rules must sometimes be bent, if not broken. The wisdom of a leader lies in knowing which rules can bend and by how much. Sun Tzu himself set great store by deception. “When able to attack, we must seem unable,” he wrote. “When using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.” Architecture itself is the

art of deception, of making a building—and, often, the business it represents—appear grander than it really is. When it comes to architectural deception, few have been savvier than William Van Alen, the visionary behind New York City’s famous Chrysler Building.

Nearly a century after it was built, the seventy-seven-story Art Deco skyscraper at Forty-Second Street and Lexington Avenue in Manhattan continues to stand apart, as iconic as the nearby Empire State Building. Though New York City’s skyline now features many taller buildings, only that one can compare to the Chrysler Building’s elegance and style.

Thanks to a booming economy, New York City had become a global center of industry and finance by the turn of the twentieth century. As a consequence, Manhattan brimmed with millionaires. These nouveau super-rich were buying up huge swaths of prime real estate and building ever-taller monuments to their companies—and their own egos. In 1908, the Singer building reached 612 feet. The following year, the Met Life Tower reached 700 feet. Then, for almost two decades beginning in 1913, the Woolworth Building at 233 Broadway reigned supreme at 792 feet. As the twenties began to roar, that cathedral-inspired building stood almost as a provocation to flush American entrepreneurs. Who would assemble the necessary talent and resources to best it?

* * *

William H. Reynolds was not only a New York state senator but also a highly successful real estate developer. Reynolds had developed hundreds of properties in the city, including the lion’s share of entire Brooklyn neighborhoods like Prospect Heights and Borough Park. Reynolds’s prize, however, was Dreamland, an opulent and elegant amusement park in Coney Island. In addition to the usual roller coasters, Dreamland featured a lion tamer, a realistic recreation of the Swiss Alps (with dry ice to simulate cool breezes), simulated Venetian canals with real gondolas, and a luxurious 25,000-square-foot ballroom. Capping it all off was a 375-foot-tall tower studded with thousands of electric lights. While it stood, Dreamland’s tower dominated the Coney Island landscape and offered

visitors who rode an elevator to the top spectacular views of the city. When Dreamland burned down in 1911, it was a great blow to Reynolds. The developer decided to build something even taller than his lost tower: a majestic Manhattan office building.

But where to put it? Reynolds knew that great height demanded an enormous lot. The larger the structure, the larger the space it stood on would have to be. The location would have to be selected carefully. Reynolds needed a Manhattan neighborhood not quite premium but on the up-and-up, for a building that would do the same. He settled on Midtown East. For years the area near Grand Central Terminal had been moribund, crisscrossed by elevated rail tracks and dotted with railyards. As demand for business and residential space on the island grew, all that unappealing infrastructure had begun to be relocated. By the time Reynolds began looking for a huge but affordable plot of land, Lexington Avenue was undergoing a “renaissance,” in the words of the *New York Times*. As the oppressive elevated railways were removed spur by spur, entire blocks were being opened up to the sun once more, inviting those with vision and resources to reinvent previously uninviting thoroughfares. Long dark and dormant, Midtown East was finally coming to life.

In 1921, Reynolds leased a plot on Lexington between Forty-Second and Forty-Third Streets. The Chanin Building and the Commodore Hotel were only some of the modern projects opening their doors in the area when Reynolds hired fellow Brooklynite William Van Alen, a rising young architect, to design his tower. At the time, “skyscrapers” were all the rage thanks to new all-steel construction techniques. Improved technology combined with a flourishing economy and rampant real estate speculation to create perfect conditions for a vertical building boom. In 1928 Van Alen submitted building plans for a sixty-five-story office building that, at eight hundred feet in height, would stand eight feet taller than the reigning champ, the Woolworth Building. According to the *New York Times*, the \$12 million project would anchor a “new and most interesting business centre” between the neighborhood of Murray Hill to the south and the Grand

Central Terminal zone to the north. A slew of other construction projects were getting under way as well. Lexington Avenue was about to become the “Broadway of the east side.”

Van Alen was part of a new wave of modernist architects. Previously, he and his more conservative partner, H. Craig Severance, had designed a number of buildings together. When credit for a successful project had gone to Van Alen alone in the architectural press, however, the two ended their partnership on less than amicable terms. Van Alen, for his part, was thrilled—he was finally free to indulge all his modernist tendencies. Like many of his peers, Van Alen was tired of the hoary conventions of traditional architecture. He prized simplified designs that took full advantage of the latest building techniques and materials. “In designing a skyscraper,” he said, “there is no precedent to follow for the reason that we are using a new structural material, steel, which has been developed in America and is different in every way from the masonry construction of the past.”

Van Alen was a brilliant architect, but Severance had always been the business-minded one of the pair. As the costs of Van Alen’s increasingly ambitious designs spiraled higher and higher, Reynolds decided he didn’t have the stomach for the skyscraper game. That’s when he learned that Walter P. Chrysler, owner of the third-largest American car manufacturer, wanted to build new headquarters in Midtown. Reynolds quickly sold Chrysler the lease on the lot, Van Alen’s services, and the design for the proposed tower for a paltry \$2 million.

If Van Alen had been frustrated by Reynolds’s lack of vision, he must have been delighted to meet Chrysler—at first. An engineer by training, the car magnate had a keen eye for detail, even in an area as far outside his own expertise as architecture. Chrysler began sending Van Alen hundreds of revisions, making it clear at each step that money was no object. The Chrysler Building had to be more than simply tall and functional. It would have to embody the distinctive style and engineering of Chrysler’s automobiles.

At last, Chrysler and Van Alen agreed upon a design: a tapering, seventy-seven-floor tower in the Art Deco style, with sweeping curves on its crown dotted with triangular sunbursts that evoked the diadem of the Statue of Liberty. Van Alen found ingenious ways to integrate Chrysler-inspired decorative elements into the structure, from hubcap friezes and stainless-steel gargoyles to eagles shaped like hood ornaments. Inside, the building would set a new standard for corporate opulence: red Moroccan marble, murals, thirty-two elevators lined with exotic woods. Also, the ultimate luxury: the Chrysler Building would be the first fully air-conditioned skyscraper. Offering far more room than any American corporation could use for its home office, the building would lease out a large portion of its nearly 1.2 million square feet to other corporations like Texaco and Time Inc. Between the sixty-sixth and sixty-eighth floors, Van Alen placed the Cloud Club, a private dining room and speakeasy intended for Texaco execs to host their lunch meetings. The club featured elegant wooden lockers for members and even a barbershop. Altogether, the Chrysler Building would be unlike any other.

On September 19, 1928, workers broke ground on what would become the world's tallest building. Manifesting Van Alen's ambitious design would have been impossible if New York hadn't become a global destination for skilled laborers looking for a better life. This constant flow of immigration supplied the thousands of riveters, scaffolders, and bricklayers required to erect a building of colossal scale without safety gear of any kind. Over the next few years, 400,000 rivets would be hammered and nearly 4 million bricks laid by hand, all without a harness in sight.

Meanwhile, on Wall Street between Nassau and William, Van Alen's former partner H. Craig Severance had a skyscraper of his own to build. The Manhattan Company, a century-old bank, had hired him to build its new headquarters at 40 Wall Street. In March 1929, it was announced that Severance would design a forty-seven-story office building on the site. This plan was quickly revised to sixty stories, which would still leave it shorter than the 792-foot Woolworth Building, let alone Van Alen's under-construction Chrysler

Building. But the bankers backing the building decided they had no intention of sinking a fortune into the city's *second*-tallest building. In April, Severance upped the ante by getting approval for a final height of 927 feet. The architect confidently declared victory.

Construction on 40 Wall Street began in May 1929. The "Race into the Sky," as the press dubbed it, was on. The war between Van Alen and Severance fired the imagination of an optimistic country on a seemingly limitless growth trajectory. Van Alen, for his part, had no intention of losing this race, particularly to his old partner. He watched with nervous anticipation as work on 40 Wall Street progressed at an extraordinary pace. Due to its tight schedule, the foundation was being built simultaneous with the clearing of smaller buildings on the lot. Three shifts of workers kept the site active morning and night.

To Severance's delight, the 927-foot skyscraper at 40 Wall Street was completed on May 1, 1930. It was a deeply rewarding triumph for him after years in Van Alen's shadow. With a roof rising only 925 feet above the sidewalk, the Chrysler Building simply couldn't compete. Those two feet meant everything.

Then, on May 27, 1930, William Van Alen unveiled one of the greatest deceptions in modern architecture, and in business warfare. In secret, he had designed and secured approval for a 185-foot stainless-steel spire to be hidden in the Chrysler Building's dome. The four parts of the spire were brought into the building in secret and then riveted together. Once 40 Wall Street's final height was irrevocably fixed, it was time for Van Alen's masterstroke. "The signal was given," Van Alen wrote in *Architectural Forum*, "and the spire gradually emerged from the top of the dome like a butterfly from its cocoon, and in about ninety minutes was securely riveted in position, the highest piece of stationary steel in the world." With its spire, the Chrysler Building topped 1,048 feet. In under two hours, it became the world's tallest building. More important, it rose 121 feet above its 927-foot-tall rival at 40 Wall Street. "Hold out baits to entice the enemy," Sun Tzu wrote. "Feign disorder, and crush him."

Van Alen had beaten Severance for good, but his larger triumph was short-lived. The newly completed Empire State Building surpassed the Chrysler Building's height only eleven months later. (In fact, the builders of the Empire State Building deliberately increased its height another two hundred feet after Van Alen's stunt. The building's backer, John J. Raskob, worried that Chrysler might "pull [another] trick, like hiding a rod in the spire and then sticking it up at the last minute.")

Regardless, Van Alen had handed Chrysler his victory. In another testament to his weakness as a businessperson, however, the architect had never actually entered into a formal contract with his client. Nor had the two men agreed upon a final fee for the work. At the completion of the building, Van Alen asked for a then-standard 6 percent of the building's final budget of \$14 million, or \$840,000. Chrysler, who had cheerfully spared no expense on the building itself, considered this request outrageous. When the magnate refused to pay, the two went to court. Though Van Alen won the battle, his litigiousness lost him the war, scaring off potential clients who were already few and far between thanks to the Great Depression. The victorious architect ended up teaching sculpture.

Though Walter Chrysler claimed the penthouse apartment for himself and installed a Chrysler showroom on the first floor, the Chrysler Corporation never actually moved its headquarters into the Chrysler Building. Walter had purchased the building out of his own pocket to ensure that his children could one day inherit it. Only ten years after the building's completion, that's exactly what happened. After Chrysler's heirs sold it in 1947, the building, dwarfed by the competition but peerless in elegance and beauty, passed through a number of hands as the fortunes of the city rose, fell, and rose again. Since being added to the National Register of Historic Places and declared a national historic landmark, the future of this deceptive contender has been secure. When New York's Skyscraper Museum asked architects, critics, engineers, and historians to choose their favorite New York towers, the Chrysler Building was second to none.

The Eye of the Beholder: Helena Rubinstein

It's been months since Helena Rubinstein arrived in the small, rural town of Coleraine, Australia. She isn't where she expected to find herself at twenty-four—but little has gone according to plan since fleeing an arranged marriage back in Poland.

Born Chaja Rubinstein, she is the oldest of eight sisters in an Orthodox Jewish household. Her parents own a hardware store in Krakow's Jewish ghetto. In their view, Chaja's future was settled at birth: having many children and managing her future husband's household.

But Chaja had no intention of marrying the significantly older man chosen by her parents. Rebelling not only against the marriage but against all the small and rigid expectations her parents had for her, she left home, first to an aunt in Vienna, and now to her uncle Bernard's home here in Coleraine. In Australia, Chaja became Helena. She barely speaks English, but she has a stable place to get herself settled while she builds a new life for herself.

Rubinstein doesn't fit in, nor does she want to. Next to the leathery-skinned locals, her flawless complexion immediately marks her as foreign in this dry, sunbaked country. Like her sisters, Rubinstein has always avoided the outdoors and taken exquisite care of her skin. She has another secret, too: a stash of jars in her luggage. They contain a lanolin-based cream made by a relative back in Poland. The waxy substance leaves her skin looking as smooth, hydrated, and soft as it did the day she left Krakow, even in these harsh conditions.

The local women ask Helena for her beauty secrets in voices tinged with curiosity and jealousy. That's gotten Rubinstein thinking. If she can persuade them to give her cream a try, there might be a lucrative sideline in producing skin care products. Maybe even an actual business. All she'd need to reproduce her relative's recipe is a steady supply of lanolin. Which should be pretty easy to find. As luck would have it, lanolin comes from sheep. And if there's one thing sleepy Coleraine has, it's sheep: 75 million merinos, to be precise. It's almost like this was meant to be.

With the right instructions, every farmer's wife in the country could make her very own batch of Rubinstein's "miracle" cream. But even at her young age, Rubinstein understands that beauty depends on glamour—and a hint of mystery.

What they don't know won't hurt them.

* * *

A good magician needs to understand human psychology. To mislead people, you must understand their blind spots and biases. When it came to understanding how people think, Helena Rubinstein wasn't just a magician—she was a bona fide sorceress.

The first female self-made millionaire in modern times, Rubinstein used her extraordinary, instinctive understanding of human foibles to build a vast cosmetics empire—and wage war against her all-too-similar nemesis, Elizabeth Arden. The rancorous, decade-spanning conflict between these two fierce immigrant-entrepreneurs would change the way the world saw beauty. "If you go back to the early 19th century," Harvard Business School professor Geoff Jones said, "what people thought was beautiful or good-looking varied enormously across the world. By the 20th century, what people consider as beautiful [had] been incredibly homogenized. People like Helena Rubinstein are central actors in that transformation of the concept of beauty."

After settling in Coleraine, Rubinstein opened a salon in 1902 to sell her beauty cream. Soon she developed more products: powders, lotions, even makeup. At the time, makeup was only worn by actresses and prostitutes. Rubinstein sought to remove that stigma, making it culturally acceptable for any woman to mask her flaws. She accomplished this by adding claims of secondary benefits. If a lipstick contained a skin protectant, any respectable woman could justify wearing some to prevent chapped lips. And if you were already wearing a little lipstick, why not try some rouge? Botox and collagen injections, let alone safe and effective cosmetic plastic surgery, wouldn't be available for decades to come. Balms, salves, and ointments of questionable effectiveness were the only options

for those who wanted healthier and more youthful-looking skin, and makeup was the only option for hiding flaws. Rubinstein saw no reason to limit these interventions to the stage. Or the brothel.

In pushing her products, however, the young Polish entrepreneur demonstrated a flair for exaggeration that verged on outright deception. While aging and skin damage are facts of life, Rubinstein understood that beauty is a game of perception. A little lanolin would soften and protect a customer's skin, but it couldn't actually work miracles. What a woman *believed* about her own appearance was what truly mattered—and that perception was highly malleable. No matter what Rubinstein was selling, her first goal was to make her customers *feel* beautiful.

Premium pricing is a deceptive business strategy that takes advantage of a common cognitive bias. In areas where results are subjective and difficult to measure—fashion, entertainment, art, or, yes, cosmetics—charging a higher price than the costs justify can raise the perceived value of the product. Helena Rubinstein was a master of this tactic. She understood that two jars of face cream might look the same and moisturize equally well, but if one cost five times as much as the other, consumers would assume that the pricier one was somehow five times better, even if the specific claims it made were vague or impossible to verify. When an Australian woman applied Rubinstein's cream to her sun-parched cheeks, the moisturizing effect was real, but the degree of its potency and the promise of its lasting impact were driven more by its high price than by anything visible in the mirror.

Of course, the women of Coleraine wouldn't have been happy to learn that the young immigrant was selling them jars of the pungent, waxy grease produced by their own sheep. So Rubinstein's first trick was to disguise lanolin's odor, using herbs and extracts like lavender and pine bark. Taking it one step further, she claimed these mundane herbs were sourced "from the Carpathian Mountains" by a "Dr. Lykuski, the celebrated skin specialist," a fictional character Rubinstein used and embellished on for decades. These and other touches lent her claims credibility and fired the imagination of

Rubinstein's rural customers. Rubinstein dubbed her product "Crème Valaze"—Valaze being the Hungarian word, she claimed, for "gift from heaven." (Apparently, there were no Hungarian-to-English dictionaries in Coleraine to reveal that the word was as fictional as Dr. Lykuski.) Rubinstein promised that the cream would "improve the worst skin in one month," eradicating "freckles, wrinkles, sallowness, sunburn, blackheads, acne, pimples, roughness, and all blemishes and eruptions of the skin." Today we take dubious claims and deceptive tactics for granted in luxury cosmetics—in fact, in luxury goods of nearly any kind—but at the time, Rubinstein was creating her own playbook. As she later told her personal secretary, "Good publicity doesn't need too many facts!"

After a disagreement with her uncle Bernard, Rubinstein moved to Melbourne, the capital of Victoria and the largest city in Australia at the time. She knew that the affluent city represented a much better market for premium products, but banks wouldn't loan a woman the necessary funds to scale a business. So Rubinstein got a job as a tearoom waitress to pay the bills as she strategized. It was there she met James Henry Thompson, manager of the Robur Tea Company, who likely provided Rubinstein with the seed capital to open a small shop, along with advice on setting up the business and help writing advertisements in English. (Rubinstein would later return the favor by including ads for Robur Tea in her booklets of beauty advice.)

Now the proprietor of her own salon, Rubinstein began presenting herself as a beauty expert who could "diagnose" skin and tailor an appropriate "treatment." It was Rubinstein who introduced the now-common notion that people have different "problem" skin types—oily, dry, and so on—each requiring a unique skin care regimen. Supposedly exotic ingredients and an air of medical expertise convinced women to pay six shillings (roughly \$30) for Rubinstein's ten-pence cream—an almost eight-fold markup. In reality, Rubinstein sourced her products from Felton, Grimwade & Company, a Melbourne wholesaler that produced them according to relatively standard recipes for the time. The story was what mattered, not the ingredients.

The following year, Rubinstein opened a larger and more elegant salon on Collins Street, Melbourne's destination for high-end shopping, kicking off a period of rapid expansion. In 1905, her sister Ceska and her cousin Lola—now, like Rubinstein, billing themselves as *Viennese* beauty experts—took over the Collins Street shop so Rubinstein could open one in Sydney and another in New Zealand. Around this time, Rubinstein met a fellow Jew, the Polish-American journalist Edward William Titus. In 1908 the two married, moved to London, and opened yet another shop.

Titus proved to be a gifted marketer, writing a series of behind-the-scenes “Beauty in the Making” booklets that solidified Rubinstein's image as an intrepid researcher using the scientific method to develop effective beauty treatments. In 1909 Rubinstein opened a salon in Paris and, after the arrival of their two sons, the couple moved there themselves, leaving another Rubinstein sister in charge of the London salon. Helena and Edward quickly established themselves in Parisian society, hosting glamorous parties and rubbing elbows with the elite.

Unlike the other cities where Helena had established her shops, Paris already had a bustling market for luxury cosmetics. To give herself and her products an air of refinement to match the market, Rubinstein insisted on being called “Madame” by her employees and even personal acquaintances. To further cement her status as an expert, she consulted with dermatologists and then freely adapted their findings, leaning on the phrase “beauty as science” to convey the notion that her claims were based on medical research. Promotional materials featured Rubinstein hard at work in a laboratory, wearing a white lab coat. You didn't have to be an actress to wear a costume.

Rubinstein's salons sold beauty products as well as an ever-expanding array of beauty treatments, from the relatively innocuous (electrolysis, facial massage, “oxylation” to help skin breathe) to the potentially dangerous (potent chemical depilatories, injections of paraffin wax to fill wrinkles, “electro-tonic” treatments that shocked facial muscles to strengthen them and thus improve appearance). Crucial to all

this pseudoscience was the idea that age wasn't really fixed. With science, the clock could be stopped, even reversed—at least where looks were concerned. (It helped if you lied about your age, as Rubinstein did starting in her early twenties.) Women would no longer have to resign themselves to losing their youthful appearance as they grew older, if only they were willing to put in the effort. And money.

“There are no ugly women,” Rubinstein said. “Only lazy ones.”

By 1914, Rubinstein's marriage was on the rocks due to Titus's serial womanizing. As World War I broke out, she put her sister Pauline in charge of the Paris salon and left Europe to establish a chain of beauty salons in New York City. (She and Titus would legally separate in 1916, though she would continue to rely on him for advice in later years.)

Each American salon was designed to establish the aspirational bona fides of the Helena Rubinstein brand: luxurious decor, avant-garde art by the likes of Joan Miró and Salvador Dalí, even restaurants and gymnasiums. To make her premium pricing strategy scale, Rubinstein needed to replicate all the elements that had made her European salons so successful. This meant consistent branding from store to store. Running low on relatives to run her salons, Rubinstein invested heavily in training salespeople to use the same terminology and selling techniques across all her locations. She understood that each of her employees was a brand ambassador. They even wore white uniforms to help establish their credibility as expert beauticians.

Beginning with the Maison de Beauté Valaze on East Forty-Ninth Street in Manhattan and followed in rapid succession by salons in San Francisco, Philadelphia, and New Orleans, Rubinstein built the foundation of an American empire. To avoid the need for importing, she established the Helena Rubinstein Beauty Products Manufacturing Company in 1916, producing products for sale in her salons as well as in pharmacies and department stores across the country. (In typical Rubinstein fashion, she continued to claim they came “direct from Paris.”) Helena Rubinstein was now presenting

herself as a Russian beauty expert—Vienna carried a negative connotation now that Austria was allied with Germany in the Great War.

In 1926, Rubinstein incorporated the American business and, two years later, sold a large portion of her stock to Lehman Brothers for \$7.3 million. In this her timing couldn't have been better. Nine months later the stock market crashed, wiping out much of the chain's value. Rubinstein bought back control of her company in 1931, making an enormous profit in the process.

As Rubinstein built the American business to even greater heights in the decades after the Depression, she realized that, at her age, she no longer possessed the instant credibility provided by flawless skin. Her publicity photos were carefully airbrushed to shave decades off her appearance—but this led to shocked customers during publicity tours. Eventually Rubinstein solved the problem by having younger women, like her niece, Mala, adopt her last name and take over face-to-face publicity for the brand.

It wasn't until the late 1930s that Rubinstein felt a hint of regulatory pushback against her exaggerated claims. In particular, the American Food, Drug & Cosmetic Act of 1938 forced Rubinstein to tone down her advertising. By that point, however, she had successfully established a brand trusted by millions of women around the world. Five factories were making products to be sold in six thousand outlets, including twenty-seven Helena Rubinstein salons in major cities from Melbourne to Milan. In the end, it didn't matter whether her products had removed wrinkles and blemishes as effectively as she had always claimed. Ultimately, Rubinstein's balms, salves, and lotions, let alone all her medically questionable spa treatments, provided something that couldn't be quantified by any research study.

Rubinstein would often cross the Atlantic by boat to manage both hemispheres of her empire. In 1938, on one such journey, the sixty-eight-year-old entrepreneur met Artchil Gourielli-Tchkonia, a professed Georgian prince twenty-three years her junior. The two married. Rubinstein didn't scrutinize

his papers; she knew from experience that an illusion could still make a person genuinely happy. She even created a line of men's skin care products and fragrances named after her beloved husband.

The two lived together for well over a decade until the prince's death of a heart attack in 1955. Rubinstein herself died in 1965 at the age of ninety-four. At the time, she had salons and factories in fifteen countries and an estate worth more than \$100 million. Today the global cosmetics industry she helped spawn is worth more than half a trillion dollars.

Raisin Hell: Sun-Maid vs. the Raisin Mafia

It's 2018 and Harry Overly is headed home, eager to see his wife after a long day at work. She's in her third trimester, so it's a very special time. Even so, though Overly finds himself wishing the new job was a little less stressful, he's still excited about the opportunity. More than a century after Sun-Maid was founded as a cooperative of raisin growers in and around Fresno, California, he's been named its CEO and, after a few months, he's finally starting to settle into the role. It hasn't been easy, though. Overly thought he knew the packaged food business inside and out. He's held roles everywhere from Kraft to Wrigley to the manufacturer of Bertolli olive oil. But at Sun-Maid, Overly has found that raisins, though small and brown, aren't anything like olives. Not even close.

Almost immediately after taking the top spot at Sun-Maid, with the mandate to bring chewy, kid-friendly raisins into the modern age, other raisin industry players pressured Overly to participate in illegal collusion. Far from a new tactic, this kind of backroom dealing has long been a part of California's raisin industry. At least, that's what Overly's beginning to figure out. In fact, though he originally scoffed, he's starting to believe all those whispers about a "raisin mafia." It's troubling, to say the least.

Either way, that's all food for tomorrow's thought. Tonight his wife deserves all the attention.

Overly pulls into his driveway, gets out of his car, and walks up to the stoop of his new house. There he finds a note stuffed into the crack of his front door. Filled with sudden trepidation, he plucks it out and opens it.

“You can’t run.”

Calmly, Overly folds the note back up again. Another man might take this opportunity to pack up his family and try his luck in another direction: oranges, maybe, or frozen foods. Not him. He’s here to save the raisin, and he’s not going to let a few cowardly threats stand in his way.

That said, he’s definitely going to install a security system.

* * *

Sometimes the most aggressive tactics are employed on the most unexpected battlefields. Take the raisin business. Few confections are more humble than the dried grape. Small, brown, and wrinkled, raisins add a touch of sweetness to cereal or yogurt, a pleasant chewiness to an oatmeal cookie or bowl of rum raisin ice cream. Yet bloody battles have been fought over them. Sometimes the war in “business war” is no metaphor. Historically, the raisin industry has been one of the most violent in the United States. Illegal tactics have been commonplace in it for more than a century.

Many immigrants came west in the nineteenth century looking for gold, but farmers, particularly those from the Mediterranean, knew where the real money in California would be. The long, dry summers of the Central Valley made it ideal for growing fruit that would never thrive in most of the country. With enough irrigation, the entire region could be made lush and fertile, potentially supplying the entire nation with its oranges, almonds, and grapes. The First Transcontinental Railroad, completed in 1869, brought vast numbers of immigrants from the East and made it possible for these new growers to quickly transport their produce across the country. In 1872 the Central Pacific Railroad was extended to the San Joaquin Valley, and farmers flooded the area, experimenting with different crops to see which ones could grow there as well as endure the hot train ride back east. In

1873 a farmer named Francis Eisen planted twenty-five acres of muscat grapes east of Fresno. He discovered the region was ideal not only for growing grapes but also for drying them in the sun. Within a few years he was shipping boxes of hardy, resilient raisins across the country by rail. By 1903 California was producing 120 million pounds annually.

The problem for all of California's growers was that getting their products to markets in the Midwest and on the East Coast was expensive. Innovations like refrigerated train cars and chemical preservatives made the trip feasible for more delicate crops, but setting up and maintaining the necessary infrastructure wasn't cheap. Even if farmers could afford the investment, fluctuations in crop prices made profits unpredictable. For these new farms to thrive, farmers would need to cooperate with each other to set prices and regulate supply.

Enter agricultural cooperatives like Sunkist, which represented citrus growers, and Blue Diamond, which represented almond growers. Under this model, individual farmers give the cooperative permission to negotiate prices for a given crop on their behalf. If enough growers participate, the cooperative has enough bargaining power to set higher prices. This approach gives each farmer a better return and justifies the risks and costs of growing fruit to sell throughout the country. The cooperative model would be crucial if California agriculture was going to be economically viable.

Of all these Californian cooperatives, the most aggressive and monopolistic was Sun-Maid. Incorporated in 1912 as the California Associated Raisin Company, the organization represented 85 percent of the state's raisin growers by the 1920s, when it changed its name to Sun-Maid Growers of California.

An agricultural cooperative works only when enough growers participate to establish negotiating power with buyers. But when there is such a cooperative in place, individual farmers can potentially make more money for themselves by going independent. Once the cooperative does the hard work of setting high prices for the product by controlling supply, the

rogue operator can capture a fat slice of the market by undercutting everyone else. In economics, this is known as the free-rider problem. In business, however, there is no legal recourse if a few bad apples don't join up. If individual raisin farmers refused to join the cooperative, Sun-Maid would have to rely on its power of persuasion to win them over. Unfortunately, if persuasion failed, there was no alternative. No good alternative, anyway.

At first Sun-Maid tried social pressure to swell its ranks: parades and publicity in towns across the Central Valley. April 30 became Raisin Day. The cooperative even started its own magazine. Whatever it took to create the impression of mass involvement. When this approach failed to earn full participation, however, growers used a new tactic: violent intimidation. The entire raisin industry was crammed into a few hundred square miles of a water-scarce valley. Before long, groups of so-called nightriders were invading their neighbors' farms under cover of darkness, destroying grapevines, firing bullets into buildings, even physically attacking farmers and forcing them to sign contracts under duress. One badly beaten farmer deliberately smeared his own blood onto the agreement he was being forced to sign, anticipating, correctly as it turned out, that it would render the contract invalid in court.

Sun-Maid never participated in these attacks directly. It merely encouraged partisans to band together against their uncooperative neighbors. When engaging in dirty tricks, plausible deniability is key. In 1915, the cooperative announced that "all contracts taken . . . at the end of a rope or by mob violence of any kind will be returned to the signer." The nightriders continued their work, however, tacitly encouraged by Sun-Maid even as it declared its noble intentions to the public. Local authorities, meanwhile, turned a blind eye. Many of the uncooperative farmers were Japanese, Armenian, or Mexican, while Sun-Maid was run by powerful and connected white men in the Central Valley. Fueled by violent aggression and abetted by racism, Sun-Maid became the biggest monopoly in the state.

In the early 1920s, with the distraction of the Great War behind it, the federal government finally intervened. The Justice Department investigated the raisin industry and found “unchecked mob rule” when it came time for farmers to sign participation contracts. In 1922 Congress passed legislation regulating farming cooperatives like Sun-Maid. The law steered clear of resolving pricing issues, however, mandating only that prices be “fair and reasonable.” Though the secretary of agriculture theoretically has the authority to decide on that standard, that power has never been used in the century since the law’s passage.

In the decades following the retreat of the nightriders, Sun-Maid became respectable in the public eye. The hugely popular and playful Claymation advertisements of the 1980s—the California Dancing Raisins singing “I Heard It through the Grapevine”—earned raisins a place in pop culture and reinvigorated slumping sales. But behind the scenes, little had been done to change the cutthroat culture of the industry itself. Sun-Maid refused to let other brands use the dancing raisins on their own packaging even though the ad campaign had been bankrolled by the industry as a whole. The Sun-Maid brand benefited disproportionately from the ads and eventually the industry voted to terminate the campaign, however wildly successful.

Today Sun-Maid is owned by 850 families that farm a total of 50,000 acres in central California. Together they represent about 40 percent of the American raisin industry, producing on average 200 million pounds of raisins a year. Meanwhile, the cooperative’s commitment to denial remains steadfast. While Sun-Maid has acknowledged the “many unfortunate events which took place in agriculture and other developing industries” in the early twentieth century, it insists it “neither condoned nor encouraged any of these coercive tactics and there is no record of the company’s involvement.” Yet according to insiders, the half-billion-dollar raisin industry remains both violent and coercive.

In 2017 Sun-Maid brought in thirty-eight-year-old Harry Overly, a veteran of consumer food brands, as its new CEO. The idea was to shake up a claustrophobic industry with fresh

blood. But Overly was shocked by the unusual culture he encountered. After he refused to agree to illegal collusion with other industry players, the mood turned immediately hostile. It became clear that raisin farmers played for keeps.

“What I figured out fast was that this was not an industry which was interested in figuring out how you grow the size of the pie,” Overly told the *New York Times*. “It is one where they figure out how they just steal different slices of the pie from each other.” Meanwhile, demand for raisins has continued to fall ever since the California Dancing Raisins went off the air. Acreage devoted to the Thompson seedless grape, the variety used to make most raisins, has halved between 2000 and the present.

To bring raisins back for a new generation of consumers, Overly looked to lower the price. But this plan brought him into direct conflict with the Raisin Bargaining Association, or RBA, which counts Sun-Maid as a core member. The RBA’s leaders wanted to *raise* prices in spite of decreasing demand—a counterintuitive move Overly considered a nonstarter. When negotiations went south, the new CEO pulled Sun-Maid out of the organization altogether. In short order, Overly and his family were threatened with violence. After the threatening note left at his front door, Overly implemented security measures, to protect both his home and Sun-Maid’s raisin supply. Threats were also made to burn the entire crop.

To this day, it isn’t known for certain who was behind the intimidation of Harry Overly, but there is no question that the so-called raisin mafia is alive and well in the Central Valley.

* * *

Tricks. Lies. Even violence. When the stakes are high enough, some leaders will turn to any weapon in their arsenal to defeat their enemies and secure their company’s future. Though public embarrassment or even legal consequences may follow, government doesn’t deal with corporate wrongdoing as severely as it punishes individual crimes—particularly when the dirty trickster is a successful American corporation. New, well-intentioned regulations may rule out a particularly nasty tactic in the future, but rarely is the offending party forced to

return the majority of their ill-gotten winnings. And so the culture of deception remains. Certain leaders are always on the lookout for new ploys. It should be no surprise that dirty tricks are used across industries and by leaders who would never consider unethical behavior in their personal lives. All's fair in business war.

There are some fights, however, that simply can't be won on the battlefield—at least not by traditional means. Such wars aren't waged in a day but over weeks, months, or years. They're won by companies that earn the affection and respect of their customers and, just as important, their own employees. Win hearts and minds, and you will have won the war without firing a single shot.

8

Winning Hearts and Minds

He will win whose army is animated by the same spirit throughout all its ranks.

—Sun Tzu, *The Art of War*

Marketing, advertising, PR. Companies that craft persuasive messages—and capture people’s attention long enough to hear them—wield an unmatched advantage in the marketplace.

Every business uses persuasion. Even forgoing conventional advertising, as Zara does, sends a powerful message. Consumers can’t help but assume that a company gutsy enough to bypass ads must be good enough to sell by word of mouth alone.

For that strategy to work over the long term, of course, you need a dynamite product.

In fact, excellent execution makes any messaging easier. As we’ve seen over and over, it doesn’t hurt to be first, but it’s better to be best. When it comes to communication, a familiar product with clear benefits also helps. The less you have to explain to the consumer, the easier it is to craft a simple message and spread it. Selling a product whose benefits are difficult to grasp requires a true mastery of persuasion. Like Helena Rubinstein, you have to be able to tell a hell of a story to imbue a mysterious new spa treatment with promise and mystique.

As we'll see in this chapter, the best marketing is giving your customers *and* your workforce a product they can believe in and then letting them do the work of sharing that belief with others.

Forging True Believers: Patagonia

It's a spectacular summer's day in 1970 high up on El Capitan, the vertical rock formation in Yosemite National Park. Despite the fine weather, however, rock climber Yvon Chouinard is disgusted. Furious, too.

Chouinard knows he should be on top of the world even as he approaches the top of El Capitan. His new company, Chouinard Equipment, has become the largest supplier of climbing hardware in the United States. The competition in the category is light, the work is satisfying, and the people are wonderful. In fact, most of his employees started out as climbing buddies. What's more, where else can the CEO get away with spending the day climbing and call it "work"?

Yet Chouinard feels terrible. As he hammers yet another of his company's steel pitons into a fragile crack in the rock face, he can't help but notice the many new holes and cracks everywhere. The small spikes that climbers drive into the rock to secure their rope lines have degraded the face of El Capitan in a fairly short time. Chouinard climbed this route only a few summers ago, before his company had really gotten off the ground, and the face was pristine. Now it's disfigured, and he knows exactly whom to blame. Himself.

Rock climbing was relatively new in the United States when Yvon founded Chouinard Equipment more than a decade ago. Part of the pastime's rapid growth has been driven by his own products. Chouinard only started the business to support his outdoor lifestyle and spread his love of nature to others. If nature is being damaged by his own capitalist activities, the irony couldn't be greater.

Hanging on by his fingertips hundreds of feet above the ground, Chouinard considers stopping piton production altogether, even though it's the company's most important

source of revenue. But he realizes that you can't unclimb a mountain once you've reached its summit. If he stops making pitons, climbers will just buy them from someone else.

But what if they didn't *need* them anymore?

Chouinard knows that some British climbers anchor their ropes by wedging chocks—slivers of aluminum in an array of sizes—into existing cracks, rather than hammering in pitons. Chocks can be removed and reused with no damage to the rock. Most climbers avoid chocks because they're seen as unsafe compared to pitons, but Chouinard is an ingenious blacksmith with deep domain knowledge. With a little effort, he's sure he can make chocks that are both sturdy and reliable. But how would he ever convince thousands of climbers around the world to trust their lives to a different technology, all to preserve some rocks? How could he ever get them to love a pile of granite as much as he does?

As his thoughts warm to the challenge, Chouinard continues his ascent. The company is going to put out a full-length catalog soon. If he wants his customers to try something new, perhaps he could use that to convince them.

* * *

Some of the most successful and resilient companies thrive by establishing an enduring bond with their customers, a connection built on the consistent value of their products as well as the consistent communication of their values. Gifted leaders and marketers begin inside their own organization: they win their employees to the mission first. Once the people who make your products become true believers, customers can't help but be swept along—in fact, they can become your best sales force.

Inspiring this kind of commitment in employees requires a leader whose values transcend profit-seeking. When the product is about more than just the product, when the work you do is in service of a larger vision, the right people will follow you anywhere.

For decades, Patagonia's iconoclastic founder Yvon Chouinard (ee-VON shoo-ee-NAHR) has set trends in the

outdoor apparel industry by repeatedly making the conscientious but inconvenient choice: in sourcing Patagonia's materials, producing its products, and communicating with its customers. This rigid insistence on not only signaling virtue but holding itself accountable has built a brand with unparalleled consumer trust.

Chouinard explained this philosophy in his now-classic book, *Let My People Go Surfing*, itself a masterpiece of corporate messaging:

Our branding efforts are simple: tell people who we are. We don't have to create a fictional character like the Marlboro Man or a fake responsible caring campaign like Chevron's "we agree" advertising. Writing fiction is so much more difficult than nonfiction. Fiction requires creativity and imagination. Nonfiction deals with simple truths. . . . Patagonia's image arises directly from the values, outdoor pursuits, and passions of its founders and employees. While it has practical and nameable aspects, it can't be made into a formula. In fact, because so much of the image relies on authenticity, a formula would destroy it. Ironically, part of Patagonia's authenticity lies in not being concerned about having an image in the first place.

* * *

Born November 9, 1938, in Lisbon, Maine, Yvon Chouinard grew up wanting to be a fur trapper. Anything to spend the day outdoors, ideally working with his hands. Chouinard's father, a tough and outdoorsy French Canadian from Quebec, plied several trades—carpentry, electrical, plumbing—and, in addition to teaching his son, gave Yvon a deep appreciation for hard work and quality craftsmanship.

The town of Lisbon had many French-Canadian families, and Chouinard went to a French-speaking Catholic school until the age of seven. Thus he spoke little English either at home or at school. This caused problems when his mother moved the family to California so that the dry air might improve his father's asthma. In Burbank, Yvon was placed in a public school, where he encountered constant bullying. His new peers considered "Yvon" a girl's name. Still learning English, Chouinard also struggled academically, except in shop class.

With an upbringing like this, it's no surprise Chouinard developed a fierce independent streak. He began riding his bike to the Los Angeles River and other natural oases in the

urban landscape to fish, trap crawdads, even hunt rabbits with a bow and arrow. He felt a burning desire to get out on his own. As his English improved, Chouinard connected with fellow “misfits.” He helped found the Southern California Falconry Club to train hawks and falcons for hunting. (In a preview of his interest in activism, he and the club helped enact the first falconry regulations in the state.) One of the other members taught Chouinard how to rappel down cliffs to reach falcon aeries and capture young hawks to train. Rappelling fascinated Chouinard immediately. At first, he did it very simply, wrapping a rope over his hips and shoulders to control the rate of descent. But hurtling down a cliff face without specialized gear was dangerous and led to at least one near-death experience for the teenager, so Chouinard applied his mechanical skills to the problem by making his own leather rappelling garments.

Rappelling led to climbing. At sixteen, Chouinard climbed Gannett Peak, the highest mountain in Wyoming, and spent the rest of that summer, and several subsequent summers, alone in the Tetons, developing his climbing skills. “Looking back now on those early attempts at climbing,” he later wrote, “I sometimes think it’s a miracle I survived.”

Chouinard met other climbing enthusiasts through the Sierra Club and soon found himself in Yosemite National Park, making his way up rock faces that had never previously been scaled. To be among the first to ascend these summits, Chouinard would need appropriate hardware. He bought a used coal-fired forge, an anvil, and the necessary tools, taught himself to blacksmith, and started forging his own steel rock-climbing pitons. Slowly, Chouinard developed a modest business that complemented his climbing lifestyle.

For years he made equipment in the winter and traveled between climbing spots the rest of the year, sleeping outdoors without a tent and making ends meet by selling his gear out of his car. Profits often amounted to a dollar or less a day, so he supplemented his diet by hunting squirrel, grouse, and porcupine. Meanwhile, Chouinard’s reading of Sierra Club cofounder John Muir, Ralph Waldo Emerson, and other American Transcendentalists shaped his thinking. He was

pleased that climbing served no useful purpose and generated no economic value. He grew to despise consumer culture. His plan was to spend the rest of his life living off the land. The blacksmithing was simply a means to an end. Chouinard made climbing hardware out of a shed in Burbank and even produced his first “catalog”: a single page of offerings with the important caveat not to expect prompt delivery during climbing season. In 1964, Chouinard and his new friends made the first ascent of the North America Wall of El Capitan.

Chouinard might have been ambivalent about consumption, but climbers weren't ambivalent about his products. He placed great weight on craftsmanship thanks to his father's influence. The gear was not only well made but thoughtfully designed by someone who had spent plenty of time making state-of-the-art climbs. The products were Chouinard's first and best ambassadors—they needed no advertising.

But as demand grew, hand-forging each piece became impossible to sustain. Chouinard hired employees and scaled up production through assembly-line techniques and more sophisticated machinery. In 1966 he moved the operation to Ventura, California, for better access to surfing, another favorite pastime, and spent the next decade refining his products to be stronger, lighter, and simpler. Chouinard and his employees relied on the products themselves, so quality control was a life-and-death matter for all of them.

Years of continuous, incremental innovation added up to a product line that was distinct and memorable at a glance. “At the base of a mountain wall,” Chouinard explained, “[it] was easy to spot the tools made by Chouinard Equipment. Ours stood out because they had the cleanest lines.” Climbers wanted the functional yet elegant gear they saw other climbers using, so they traveled to the factory to buy direct. Eventually wholesale orders started rolling in. With the popularity of Chouinard Equipment only growing, selling gear out of the back of the car would no longer cut it. The company opened a retail store and even began exporting to other countries. Sales doubled year after year, but Chouinard continued to dismiss

the operation as a way to cover living expenses so he could climb.

By 1970, Chouinard Equipment had become the largest supplier of climbing hardware in the United States. Despite the company's runaway growth, however, actual profits remained small. Chouinard's constant tinkering with his designs meant that expensive tools and dies meant to last three years or more would be discarded after one. But Chouinard had bigger concerns than his profit margins: all this rock climbing was pitting rock faces everywhere with new holes and cracks. When he saw how degraded a once-pristine route up El Capitan had become, his horror sparked a determination to fix the problem once and for all.

Some British climbers used chocks, slivers of aluminum they slid into existing cracks, instead of pitons. But these were unreliable—most climbers Chouinard knew wouldn't take the risk. So Chouinard developed an improved, safer chock and introduced it in his first full catalog. For chocks to gain widespread adoption, however, it would take more than the usual sales copy.

Molding public opinion is a craft, just like blacksmithing. As a blacksmith, Chouinard could have forged a weapon as easily as a piece of climbing hardware. Likewise, advertising conducted ethically could become a tool for good. As wary as he was of the capitalist practice, he knew that his catalog represented an ideal opportunity to win over the thousands of people who had come to love his products—and trust his craftsmanship. Shifting from pitons to chocks would benefit everyone, but it would require collective, unselfish behavior toward a greater good. Government regulation wouldn't make it happen. As Chouinard later said, "You've got to change the consumers first and then the corporations will follow and then government will follow the corporations." Though Chouinard's design addressed the safety issues with existing chocks, he knew most climbers would naturally steer toward the tool they were most familiar with. Why take the risk of switching? It would take a masterpiece of persuasion to make a dent in the long-established habit of hammering steel securely into rock.

Chouinard's first full-length catalog opened with an extraordinary fourteen-page essay by Doug Robinson, a well-known climber, introducing a new term: "clean climbing":

Clean because the rock is left unaltered by the passing climber. Clean because nothing is hammered into the rock and then hammered back out, leaving the rock scarred and the next climber's experience less natural. Clean because the climber's protection leaves little trace of his ascension. Clean is climbing the rock without changing it; a step closer to organic climbing for the natural man.

Though the essay wasn't his, it adhered to Chouinard's core philosophy. Rather than "write copy that appeals to vanity, greed, or guilt," his company would stick to "facts and philosophy." By soliciting the essay and placing it at the top of his catalog, Yvon Chouinard redefined the ethics of climbing for a generation of climbers—and went a long way toward preserving his beloved rock faces for generations of climbers to come. Within months, piton sales dropped off and demand for chocks went through the roof.

Of course, chocks would never have taken off if they weren't significant, relevant, and worthy of climbers' attention. "It's easy to promote a game-changing product because there is no competition and there are great stories to tell," Chouinard wrote. "If we come out with a product that is difficult to promote, it's probably because it's no different than anyone else's and we probably shouldn't be making it."

* * *

By 1972, Chouinard Equipment sold nearly every item a climber might need on an ascent: not only every kind of hardware but also purpose-built pants, shirts, hats, gloves, and backpacks. To keep up with production, the company expanded into a plant next door. As clothing became a larger part of the business, particularly in terms of profits, the question of a separate name for the line arose. Chouinard Equipment was an established brand with climbers, but Chouinard hoped to expand beyond mountain climbing to other outdoor activities. It didn't make sense to tie the clothing line so closely to the hardware side. Patagonia was chosen, in the words of a future catalog, because it conjured "romantic visions of glaciers tumbling into fjords, jagged windswept peaks, gauchos and condors."

In the 1980s, as the company continued to diversify its product line into new areas and innovate cutting-edge solutions to the basic problems of cold, heat, and damp, sales grew fivefold, from \$20 million to \$100 million. Relatively uninterested in the trappings of wealth, Chouinard kept plowing Patagonia's profits back into the company.

But as Patagonia grew at a fantastic pace, the company nearly ran aground. Seemingly endless demand led to reckless growth, and when recession struck in 1991, the company's sales grew "only" 20 percent, far below expectations. Chouinard was forced to lay off a fifth of the workforce—including many friends and relatives of the employees who remained. The crisis forced Chouinard to take stock of the business he'd built almost in spite of himself. He didn't like everything he saw:

Our own company had exceeded its resources and limitations; we had become dependent, like the world economy, on growth we could not sustain. But as a small company we couldn't ignore the problem and wish it away. We were forced to rethink our priorities and institute new practices. We had to start breaking the rules.

Patagonia took a number of practical steps to correct its financial course. But equally significant were the weeklong camping trips Chouinard began leading with his employees. He would gather one group after another in a circle and lecture them on Patagonia's philosophy, its ethics and values, which, since he was the sole owner, were his ethics and values:

I realize now that what I was trying to do was to instill in my company, at a critical time, lessons that I had already learned as an individual and as a climber, surfer, kayaker, and fly fisherman. I had always tried to live my own life fairly simply, and by 1991, knowing what I knew about the state of the environment, I had begun to eat lower on the food chain and reduce my consumption of material goods.

Persuasion can't always be directed outward, particularly at a large, rapidly growing company. It's inevitable that the culture of a company will shift as employees gradually depart and new ones arrive. Without ongoing effort, any organization will gradually fall out of sync with its original mission and ideals. Chouinard decided he couldn't allow that to continue. He didn't just want to run a business that could contribute money to environmental causes. He wanted to "create in Patagonia a model other businesses could look to in their own

searches for environmental stewardship and sustainability.” That couldn’t happen if his own employees weren’t in full alignment with the company’s purpose.

Getting Patagonia’s “highly individualistic” employees to work toward a common cause has always been a challenge for Chouinard. “Either they have to be convinced that what they are being asked to do is right, or they have to see for themselves it’s right,” he wrote. “Some independent people, until the point arrives that they ‘get it’ or it becomes ‘their idea,’ will outright refuse to do a job. Or worse, you get a passive-aggressive response so that you think the job will be done, but in the end the person just won’t do it—a more polite but more costly form of refusal.” The camping trip lectures were one way to address this problem.

With the layoffs behind it and a renewed focus on responsible growth, Patagonia turned its finances around. In the 1990s, the company thrived, but deliberately this time, no longer at a breakneck pace. Chouinard turned the company’s focus to cleaning up every inch of its supply chain: switching over completely to organic fibers and recycled synthetics, reducing the use of toxic chemicals, and ensuring that its suppliers adhered to humane labor practices. Each of these changes entailed substantial additional costs. If it weren’t for Chouinard’s patient and continuous efforts at internal persuasion, it would have been far more difficult to motivate and direct the necessary energy at a company as large as Patagonia toward tackling these challenges.

For example, cotton once played a major role in Patagonia’s overall greenhouse emissions and pesticide use. Switching to organic wouldn’t simply have been more expensive, however. Organic cotton came with a host of new problems. For one thing, brokers didn’t carry sufficient quantities of the material to supply Patagonia’s needs, which meant the company had to buy directly from individual farmers and then get all the individual batches certified as organic. For another, organic cotton, unlike the conventional kind, arrived sticky with honeydew from aphids. As a result, spinners objected to running it through their machines. (Eventually, one of Patagonia’s suppliers found a clever

solution: freezing the cotton first.) The company successfully switched all its cotton lines to organic in 1996.

At each further complication, employees at most companies would have thrown up roadblocks to save themselves headaches. To align an entire organization around pursuing multiple complex, difficult goals like this with no direct connection to the company's bottom line is an extraordinary feat of persuasion in and of itself. Yvon Chouinard is a good blacksmith, but his real talent has always been forging true believers.

Along the way, Patagonia's catalogs have served as a master class in persuasion, delivering Chouinard's environmental philosophy directly to consumers and cementing the brand's reputation for authenticity—which in turn drives sales. Crucial to the effectiveness of the catalogs are the photographs inside. The earliest catalogs featured candid shots of friends—there was no budget for professional models. But the photos didn't tell a story, and without a story your message is dead on arrival. Chouinard decided to use photos of actual customers using actual products. The realism proved compelling and provocative: "A photo of a real climber with a name on a real rock climb and showing a little skin can be a lot sexier than a half-naked nameless New York model posing as a climber. Plus, it's more honest, and honesty is what we strive for in our marketing and photography." Over the years, Patagonia's approach to using real customers in real situations has become a de facto standard in the outdoor apparel industry.

Through it all, the persuasive essays have never stopped. Ever since successfully convincing climbers to trade in their pitons for chocks, Patagonia catalogs have sought to educate consumers: by introducing the concept of layering to stay warm and dry without excess weight, or using synthetic materials to wick perspiration away from the body before it freezes. Though these essays often have the effect of driving sales of specific products, they also have positive benefits on the natural world. This has built enormous trust over the years, making subsequent messaging that much more resonant with customers.

That credibility has helped rally support for a number of environmental battles over the years, whether to campaign for river restoration or against GMOs. For the latter, Patagonia's ad contained a simple but powerful headline: "What does an outdoor clothing company know about genetically engineered food? Not enough, and neither do you." When an advocacy fight dovetails with Patagonia's offerings, the company doesn't hesitate to leverage that to drive sales. But the advocacy still makes an impact.

Public relations is an incredibly powerful tool for any business, but there has to be an angle beyond the company's own desire to sell products. When Patagonia developed a fleece made from recycled soda bottles, the company generated \$5 million in free press. "Our approach to public relations is aggressive: If we have a news angle, we play it," Chouinard wrote. "We work hard to bring our stories to reporters, whether about new products, our stands on environmental issues, or our child-care program. But we don't produce glossy PR kits or throw elaborate press parties at trade shows. We believe the best way to get press is to have something to say."

Unlike Zara, Patagonia does advertise, but it usually puts less than 1 percent of sales toward advertising—far less than most outdoor companies or clothing companies in general. But in 2011, the company tried an anti-advertising tack that even Zara never would: "It's Black Friday, the day in the year when retail turns from red to black and starts to make real money," the full-page ad in the *New York Times* began. "But Black Friday, and the culture of consumption it reflects, puts the economy of natural systems that support all life firmly in the red." Under the bold headline "Don't Buy This Jacket," above a black-and-white photo of a Patagonia zip-up fleece, Chouinard's copy was unequivocal. It urged consumers to reduce, repair, reuse, and recycle their existing clothes on the biggest retail day of the year.

Patagonia stood behind the campaign with concrete action. The company would take back any Patagonia product for recycling. When consumers didn't respond to that offer in sufficient quantities, it opened the largest garment repair

facility in North America. It trained retail employees to do basic repairs in-store and changed its policy to allow customers to attempt their own repairs without voiding the warranty. It also created a trade-in program that bought back, cleaned, and resold unwanted garments. “Because the price of these items is lower than our normal prices,” Chouinard wrote, “more people can afford them and we can displace the purchase of lesser-made, poorer-quality garments that would likely wind up in a landfill in no time.”

When the publicity generated by the campaign boosted sales 30 percent over the year before, Chouinard was untroubled. He assured employees that the increase was due to curious new customers who would have bought other, lower-quality clothing instead, not existing Patagonia customers ignoring the company’s urgent warning.

While most businesses use persuasion to maximize profits, the most successful do so with a larger ambition in mind. The sound of purpose-driven persuasion carries farther. Chouinard’s own communication efforts at Patagonia include not only his employee lectures but also books and videos. Anything to get the word out. Yet despite all his efforts to change public opinion, Chouinard acknowledges that there is only so much any company can do. “There is no such thing as sustainability,” he told the *Guardian*. “The best we can do is cause the least amount of harm.”

Yvon Chouinard has done a great deal to preserve natural beauty beyond communicating its importance. Since 1986, Patagonia has donated 1 percent of its sales or 10 percent of its pre-tax profit—whichever is greater—to environmental causes. In 2002, Chouinard cofounded 1percent for the Planet, an organization of individuals and companies committed to doing the same. So far the collective has donated \$250 million to grassroots environmental causes, \$90 million of which has come directly from Patagonia. In 2013, Chouinard founded Tin Shed Ventures, a VC firm offering seed funding to start-ups working on environmental and social problems. And, despite all Chouinard’s efforts to slow his company’s growth, Patagonia’s revenue hit \$800 million in 2019.

Party Propaganda: Brownie Wise vs. Tupperware

It's an unseasonably cool summer's day in 1948. World War II is over and the United States is just beginning to find its footing as a new global superpower. After years of wartime rationing, Americans finally have a little discretionary money to spend.

That's why the mood is bright in Westfield, Massachusetts. Stanley Home Products, a manufacturer of mops, brushes, detergents, and floor waxes, is holding its annual sales convention. Stanley dealers around the country are on their way into town for the occasion. One of them, a divorced single mother named Brownie Wise, is arriving on a train from Detroit. She can't contain her excitement. For Wise, this year's convention will be the culmination of a great deal of hard work and careful planning.

For Stanley itself, the pilgrimage to headquarters is an opportunity to motivate and inspire a sales force like no other. For one thing, Stanley's sellers are mostly women, which is highly unusual in itself. For another, they all work out of their homes. In fact, this convention is the only time most of them will see the inside of a Stanley facility. The company sells its products in a revolutionary new way: the home-party model.

A Stanley dealer gathers customers, mostly women, at a neighbor's home to demonstrate the effectiveness of each product at cleaning up stains and other messes. Punch is enjoyed, games are played, and, almost as an afterthought, products are purchased. Dealers sell mops, but they also sell dreams: If a dealer can persuade an attendee to become a dealer herself, the recruiter earns a percentage of the new recruit's sales as well.

For suburban housewives, these demonstration/parties are a welcome distraction from domestic responsibilities, an opportunity to get out of the house and socialize under the pretense of getting some shopping done. For the company, it's a powerful way to sell products that don't exactly sell themselves to a captive, and highly receptive, audience. For the dealers, the parties are hard work, demanding equal parts confidence, charm, empathy, and humor. And energy, plenty of

energy, to carry boxes of cleaning supplies in and out of houses and to put on a one-woman show night after night.

For those who master the home selling model, however, the job represents a rare opportunity to generate income at a time when women have been pressured to leave the workforce and make room for returning GIs. A dealer receives a gift for hosting the party and a percentage on every sale made. Successful dealers can scale up, recruiting and motivating teams of dealers to cover larger and larger swaths of territory in an ever-expanding pyramid that benefits those at the top the most.

Looking out the train window as it enters the Westfield station, Wise can't help but smile. Only a year earlier, she'd been toiling away as a secretary, struggling to make ends meet for herself and her son after divorcing her abusive, alcoholic husband. Now she's rising through the ranks at a company on the cutting edge. Wise firmly believes that home-based selling is the future. Its potential goes way beyond mops. Thanks in part to wartime technological innovations, genuinely new products are appearing on retail shelves everywhere. It will take a hands-on approach to demonstrate the utility of these new labor-saving devices and "miracle" products. Wise can feel it in her bones. Stanley is onto a gold mine with this concept. And within Stanley, she stands apart. A natural seller, gifted leader, and brilliant communicator, Wise has recruited and trained a crack team of dealers with her dynamite combination of motivation, inspiration, and smart incentives.

At heart, Brownie Wise is a preacher. Her flock: postwar wives dissatisfied with domestic life in suburbia. Her sermons: the liturgy of American ambition. Today's trip represents just one more step along the path to fame and glory Wise has envisioned for herself from a young age. In fact, she believes heart and soul in the power of wishes: visualize a thing hard enough and it's sure to come true. For months now, she has repeatedly visualized persuading Stanley's founder, Frank Stanley Beveridge, to give her a management role. Her numbers are terrific. Her people love her. Beveridge would be foolish not to bring her in on the corporate side. She has what it takes to make Stanley a phenomenon.

Unfortunately, while Beveridge is progressive when it comes to his marketing, his attitudes in other areas are typical of postwar American men. When Wise approaches him at the convention, she only gets a few words out before he cuts her off: “Don’t waste your time,” Beveridge snaps. “Management is no place for a woman.”

Deflated, Wise forces a smile. Making her way through the rest of the convention’s activities, the party games and demonstrations and motivational speeches, she slowly lets go of her vision for a future as a Stanley exec. On the long ride back to Detroit, she ponders in silence. It’s only when her mother and ten-year-old son greet her at the door of their home that she makes a solemn vow, to them and to herself. It’s a new goal, another wish, one with all the power of her ambition and drive behind it.

“I’ll show him.”

The lessons she has learned at Stanley—to persuade, inspire, and charm female consumers—will take Wise along the path to fame and glory. She just needs to find a product worthy of her persuasive powers. She doesn’t know it yet, but that product is already on shelves, mostly ignored, a miracle product in need of its prophet: Tupperware.

* * *

The woman who would become a tastemaker and influencer to millions of American women, long before TV gave rise to the likes of Martha Stewart and Oprah Winfrey, grew up with no shortage of strong female role models. Brownie Mae Humphrey was born on May 25, 1913, in rural Buford, Georgia. Her mother, Rose, made hats at a nearby factory, unusual at a time when southern mothers were expected to quit their jobs when they had children. Rose became an organizer for the hatmakers’ union, traveling the country to give speeches to workers. This entailed long absences from the home. When Brownie’s father, Jerome, a plumber, divorced Rose a couple of years into Rose’s tenure with the union, Brownie started spending months at a time living with her aunt, a dressmaker in nearby Atlanta, or her grandmother, an energetic woman who raised seven children alone after her

husband passed away. Brownie later credited her grandmother for teaching her “the gospel of gumption,” the willingness to take her fate into her own hands.

Charming, ambitious, and talented, Humphrey was a good student, but her interests lay elsewhere: writing, illustration, fashion, *people*. Dropping out of school after eighth grade, she joined her mother on the road, eventually giving speeches at union rallies herself. This was exciting work, but it was also dangerous: strikebreakers didn’t hesitate to use violence against union leaders. The experience taught Humphrey not only how to speak confidently in front of large groups of people but also how to persuade women. Joining and supporting the union was in their own best interests, after all, but the benefits weren’t obvious. She needed to explain the incentives and downplay the risks in just the right way to motivate her listeners. There was an art in convincing people to do what was right for them, and Humphrey soon mastered it. She “awed people,” Bob Kealing wrote in *Tupperware Unsealed*. “[They] were surprised that someone so young could deliver a speech like a pastor.”

In 1936, Humphrey met Robert Wise, a ruggedly handsome Ford executive, and sparks flew. The couple married later that year and settled in Detroit, close to Ford’s headquarters. Two years later they had a son, Jerry, and Brownie’s mother, Rose, moved to Michigan to help with the baby. Unfortunately, Robert revealed himself to be a heavy drinker, violent and abusive. In 1941 Brownie divorced him, keeping his last name. Brownie, her son, and her mother moved to nearby Dearborn to start over.

Wise’s urgent need for income closely coincided with the attack on Pearl Harbor. With America at war, women were suddenly needed in the workforce. Wise got a job as a secretary at a manufacturer of Navy bombers. When she wasn’t typing letters or taking dictation, she did her own writing, first in journals and then for the public. She began contributing to an advice column in the *Detroit News* under the pen name “Hibiscus.” Unlike Wise, Hibiscus had a loving husband and a beautiful home. In her columns, Hibiscus cheered on her petitioners while looking back fondly on her

own, perfect childhood. In stark contrast to Wise, Hibiscus grew up on a plantation in Mississippi without a care in the world, waited upon by servants. Rather than using “Hibiscus” as an escape from reality, Wise seemed to draw fresh inspiration from these fables. The column was her first foray into designing a more hopeful vision for the future right there in the present. In fact, she later advocated for this kind of creative visualization, what she called wishful thinking. This idea would become central to Wise’s sales philosophy, a tool she used to motivate both herself and others throughout her career. Ultimately, all that wishful thinking prepared Wise to seize the moment when it actually arrived.

In 1947, Wise ordered a Stanley Home Products kit in the hopes of supplementing her secretarial income by selling Stanley products in her spare time. A Stanley dealer at her door had so botched his sales pitch that she decided on the spot she could do the job better herself. While the kit contained advice on public speaking, Wise didn’t need it thanks to her days with her mother’s union. The job was a perfect fit for her skills.

Frank Stanley Beveridge, Stanley’s founder, had gotten his start as a door-to-door salesman for Fuller Brush before starting his own company. He was the first entrepreneur to build his business on the home-party plan, created when one of Beveridge’s salesmen got tired of bringing all his supplies from house to house to demonstrate his products for audiences of one. To scale his efforts, the intrepid salesman organized group demonstrations—home parties—and then recruited customers to act as hosts with free products and discounts. A host would invite her neighbors over for a demonstration—and some socializing—and then clean up with Stanley products, literally and figuratively. This simple switch from one-to-one to one-to-several selling dramatically boosted the salesman’s numbers. Social pressure proved to be a powerful lever for persuasion. As Wise would later write in a sales manual, “The buying spirit is contagious; it is a proven fact that you will sell more to a group of 15 women AS A GROUP than you will sell to them individually.”

Beveridge became convinced of the value of the new strategy and got the rest of his sales force to adopt it. The men enlisted their wives in the effort and, over time, more and more customers, mostly women, became dealers themselves. Stanley created a model where dealers could recruit their own teams, winning ever-larger discounts so that they could make a profit on what they bought and passed along down the pyramid. In this way, the company covered larger and larger swaths of territory without any need for an expensive management structure. From the company's perspective, the products almost sold themselves.

Stanley provided its dealers not only with discounted products to sell but also with a steady stream of motivation and sales education. Wise soaked up all the advice like a sponge, from "Make it a habit of being interested in other people" to "Treat every person you meet as though he is a messenger from heaven." By 1949, Wise had recruited her own team of nineteen dealers and proven herself a stellar leader. She even started writing a motivational weekly newsletter for them, a spin on her old advice column: "As a dealer you're out for more parties, bigger weeks, fatter profits . . . or you're part of the problem."

Wise knew she'd found her niche. She worked doggedly to recognize and incentivize her top sellers, praising them for their "sizzlemanship" while urging the laggards to become "go-getters." Anything it took to get the numbers up. Wise had all the domain knowledge she needed: As someone who had been in their position not long ago, she understood exactly how her dealers thought and what would best motivate them. She knew these women were looking for recognition, not just extra income. Domestic life wasn't only tedious, it was perennially undervalued by both spouses and society at large. Whether they really needed the cash or not, her dealers wanted to feel like they had a purpose, like they were good at doing something meaningful. To give them that purpose, Wise worked tirelessly to help them create a vision for a brighter future: "One half of knowing what you want is knowing what you must give up before you get it," she wrote to them. It didn't matter whether they wanted "a new fur coat, another

room added to your house, [or] a new car.” Just that they were actively wishing for something more, something Wise never stopped doing herself.

But all that wishing wasn't enough to persuade Beveridge to take a chance on Wise when the time came. That's when one dealer on Wise's team, Gary McDonald, the rare young man selling Stanley products, happened to witness a retail store employee demonstrate a new line of plastic storage containers called Tupperware. Watching the customer's enthusiasm grow as each feature of the product was revealed convinced McDonald that Tupperware would be a perfect fit for the home-party model. He brought a stack of the plastic bowls with lids to Wise for her take. Fresh from Beveridge's stinging dismissal at the annual sales convention, she was primed for a new direction. Tupperware provided it.

* * *

Bald, gruff, and secretive, Earl Tupper was an unlikely candidate to inspire legions of devoted customers. A fiercely intelligent autodidact, he didn't suffer fools gladly, and he was quick to punish employees who offered anything less than rapid and unquestioning obedience. But Tupper knew plastic, and plastic was the future.

After the Great Depression bankrupted his landscaping business, Tupper took a job in the research-and-development department of DuPont's cutting-edge plastics division. A year later, he left DuPont to start his own plastics company. Working twenty-two hours a day, stopping only to eat and sleep on a cot in his factory, Tupper developed an array of new products from the material. When the war began, he was perfectly positioned to profit from all that research. Tupper Plastics began producing plastic components for everything from gas masks to jeeps in order to supply the war effort. Tupper, just a few years past thirty, became a millionaire virtually overnight. After the war, however, Tupper couldn't secure enough plastic resin to meet the company's production needs. The only material his suppliers had in large quantities was polyethylene, a smelly, greasy plastic waste product with no known commercial application. Intrigued, Tupper began

experimenting with the stuff. Eventually, he zeroed in on the right combination of temperature and pressure to form a durable and flexible solid from polyethylene, one unlike any other plastic on the market. Odorless, safe, and resistant to acids like lemon juice and vinegar, the new plastic would be ideal for storing food, Tupper realized. Thus Tupperware was born.

Tupperware got off to a brisk start with bulk orders from other businesses—making tens of thousands of plastic cigarette cases for Camel, for instance—but by 1949 it was clear the company needed a fresh approach. Retail sales were flat and an illustrated mail-order catalog had floundered. The plastic containers with the airtight seal weren't just a new product, they represented an entirely new category. Store displays weren't sufficient: a charmless stack of bowls and lids didn't convey the product's unique selling points. It was in no way obvious that you could fill a Tupperware bowl with soup, close it tightly, and drop it without spilling anything. Nor would it be intuitive to “burp” the containers to create a vacuum and “lock in freshness.” People were used to storing food in metal cans or ceramic jars. It wouldn't be enough to explain how flexible and resilient polyethylene was compared to earlier plastics, or to make promises about how fresh it would keep your food. Customers needed to see and feel Tupperware in action.

That's when Tupper noticed skyrocketing demand around Detroit, where Brownie Wise and her team of dealers were buying large quantities of Tupperware directly from the company and reselling it themselves. Home parties had proven to be the perfect venue to highlight the new product's benefits. The pitch was visible, tactile. For Stanley, a dealer might deliberately spill something on the customer's floor before mopping it up. For Tupperware, Wise's dealers would fill a container with liquid, close it firmly, and throw it across the customer's kitchen. Big risk, big payoff when the container didn't spill a drop. Wise's Tupperware parties were miniature magic shows that translated into sales bonanzas.

By the time Earl Tupper noticed what was happening in Detroit, Wise had so much Tupperware flowing through the

business that she'd had to move distribution out of her own house and into a warehouse. That year, she ordered well over a hundred thousand dollars of Tupperware to supply her dealers, equivalent to more than \$1 million today. These were numbers the Tupper Corporation simply couldn't ignore. Wise was selling more Tupperware than the largest department stores in the country.

Unlike Beveridge, Earl Tupper was perfectly open to women in management. He simply wanted the best person for the job, and he believed he'd found the perfect hire in Wise. A representative from the company went to her with a proposal. Tupper knew that home-party dealers around the country were starting to catch on to his products, but he didn't have the in-house expertise to organize and mobilize those efforts. Would she be willing to oversee a new, larger territory and *really* develop it? If so, how did the entire state of Florida sound?

In 1950, Wise moved to Kissimmee, in central Florida, with her mother and eleven-year-old Jerry. After setting up shop in a spacious storefront, she got to work recruiting local dealers. Wise created a manual explaining the product, the home-party selling model, and her philosophy of selling, and started running weekly training sessions with her dealers. Wise knew the role skill played in sales volume—while she could have spent more time recruiting dealers, it was far more efficient to invest the bulk of her efforts in developing the ones she already had. “I would go on the record for the statement,” she wrote, “that one well-trained demonstrator will outclass two, and sometimes even three dealers who are handed a line of samples, given a pat on the back, a price list and sent on their way.”

In reality, Wise's true “customers” were the dealers on her team. Her secret weapon was her ability to communicate with them, whether to teach or to motivate. This was an art she had begun to master as a teenager at union rallies and that she had refined writing advice columns as “Hibiscus.” Articulating a convincing vision of success and rallying people toward it was Wise's true gift. “This plan has proved itself a tremendous and profitable success in other states,” Wise's sales manual began,

“and with your cooperation, we will attain the same success here.” The Sunshine State was theirs to win.

Except, it wasn't. Other Tupperware dealers had already staked their claim to part of the state, and despite Tupper's promise to resolve these territorial disputes on her behalf, the company proved unable to sort out the situation. In fact, similar issues were cropping up across the country. The strength of the home-party system was becoming a weakness—now that dealers understood the potential profits in selling Tupperware, the lack of a clear hierarchy was leading to bitter conflicts and rivalries.

To address this, the company established a division to organize its dealers into area managers, branch managers, district managers, and unit managers, going all the way down to the individual dealers. The Hostess Division promised to resolve the territorial disputes, but in the end Wise was left with only a part of Florida, not the whole state as she'd been promised. Still, she could see which way the wind was blowing and decided to play along. There was no bright future to be seen for anyone—Tupperware, the dealers, or herself—along the old path. The top-down approach had potential.

Unfortunately, the man Tupper put in charge of the Hostess Division mismanaged the business so badly that Wise's dealers weren't paid their end-of-year commissions—forcing Wise to pay them herself. Worse, shipments of the product were delayed or misrouted. In March 1951, as members of her carefully recruited and trained team of dealers began to leave the business altogether out of sheer frustration, Wise called headquarters and demanded to speak with Earl Tupper directly. Tupper took the call—Wise was, after all, the country's top distributor of his product—and Wise told him in no uncertain terms exactly what she thought of his leadership. After Wise detailed the company's many failings and demanded immediate assistance, Tupper got off the phone and set to rectifying the situation personally. When he found himself unable to fix all that was broken about the Hostess Division, he decided it was time to meet Brownie Wise in person.

The following month, Earl Tupper met Wise at a company sales conference. There Wise and Tupper's other top managers convinced him to dispense with retail sales and showrooms altogether. Tupper decided that, from then on, the company would market and sell its products exclusively through the party plan. To lead the new Tupperware Home Parties Division, Tupper hired a new general sales manager: Brownie Wise, who became one of only a handful of women in top management positions in America at the time. Tupper knew that Wise had the necessary skill set to lead his new sales army.

"You talk a lot and everybody listens," he told her.

As promised, Tupper took Tupperware off the retail market altogether, placing the future of the product, and the company itself, entirely in the hands of its home-party dealers, led by Wise. That trust was well placed. In short order, sales of Tupperware soared. That September, the company's board made Wise a vice president. Frank Stanley Beveridge had been proven decisively wrong. Women did have a place in management after all.

Wise's time as a youth spent delivering speeches at union rallies served her well when it came time to address hundreds and then thousands of Tupperware dealers at the company's grand events. She was a natural leader, comfortable socializing in any context and more than happy to match wits with male managers who resented her authority—even as she exhorted female dealers to use soft selling techniques and feminine persuasion to sell more Tupperware. Wise understood that the key to the company's growth would be identifying the most successful selling techniques, refining them, and then disseminating them to every home dealer around the country. Yet, even as she adapted to the challenges of training and leading a national sales organization, she made the time to write, edit, and illustrate her newsletter, now intended to unite the entire sales force.

Wise helped establish Tupperware's energetic and competitive corporate culture, and this in turn had a dramatic impact on all sales-driven companies that followed. Under

Wise's leadership, incentives were of prime importance. The most successful sellers were invited to an annual four-day convention at Tupperware's sales headquarters in Florida. There they attended motivational talks and met with fellow top sellers. Wise's "jubilees" were extravagant, featuring wild games with prizes ranging from appliances to vacations to speedboats. The point of the parties and all Tupperware's other seller incentives was to give each dealer a very good reason to keep driving up their numbers even as they did the full-time work of housewife and mother. "Build the people," Wise said, "and they'll build the business." And build it they did. By 1952 the company was growing like wildfire. Wise's salary was over \$20,000 (equivalent to \$215,000 today), the most money she had ever earned. The grateful company even bought Wise a mansion near the new Florida sales headquarters.

Though Tupper wrote letters to compliment Wise on the turnaround and deeply respected her hustle—in 1953, he bought her a horse, too—the relationship between the two soured as Wise's star threatened to eclipse the product itself. Wise was establishing a name for herself beyond her role at Tupperware, frequently appearing in magazines, newspapers, and eventually on television. On April 17, 1954, she became the first woman to appear on the cover of *BusinessWeek*. The article laid much of the credit for Tupperware's success on her techniques, not on Tupper . . . or his revolutionary product. Though Tupper was happier out of the spotlight, he felt that Tupperware should always come first. After the piece was published, he wrote Wise a note: "Good executive as you are, I still like best the pictures . . . with TUPPERWARE!"

For all Tupper's open-mindedness when it came to gender roles, he was stiff-necked and egotistical, never thrilled to be corrected or one-upped by any subordinate, something he saw as disloyalty. Wise, for her part, felt she knew Tupperware's customers better than he did, and was quick to point it out when she believed his thinking missed the mark. When Tupper considered putting a new line of Tupperware back into department stores, Wise fired off a stern letter to her boss defending the home-party model: "The average home

demonstrator does not realize how little is sold in stores where the product is displayed,” Wise wrote. “[The fact that our] products are for sale in a store . . . knocks out his punch line in the presentation of Tupperware to the effect that it is sold exclusively on the Home Party Plan. . . . Tupperware must be demonstrated.”

Whether Wise was right about the danger of retail sales or not, her blunt manner struck Tupper differently now that she was his employee and no longer an independent distributor. The two started exchanging angry letters. At a certain point, Tupper refused to answer Wise’s phone calls.

By 1958, Wise was a bona fide media celebrity, an influencer long before Instagram. Thanks to that influence, the company had more than ten thousand dealers and millions in sales. But Tupper was through with the business he’d founded, perhaps because it no longer felt like it was truly his. He wanted to sell the company and, to do that, he needed to separate Brownie Wise from the brand she’d helped create. “She’s fired,” he told his team, “and I want all evidence of her gone.” As Wise had never been granted Tupper Corporation stock, she was sent packing with almost nothing. A fierce legal battle won her nothing more than a year’s salary. Soon after, Tupper sold his company for \$16 million, divorced his wife, and bought an island in Central America.

Despite starting several new companies over the years, Wise never recaptured the limelight or achieved a similar degree of success. Instead she lived a quiet life with her son and her horses. Over the years, however, she may have taken some satisfaction in watching the company she helped build practice the methods she developed, continually growing its army of suburban housewife evangelists and winning the hearts and minds of customers through her innovative persuasion techniques. Wise had lived her dream, even though she’d eventually had to wake from it. Now her ideas helped countless other women live their own. Tupperware would go on to be sold in more than a hundred countries, and ambitious dealers still throw Tupperware parties all over the world.

Winning Hearts, Minds, and Stomachs: Kellogg's Corn Flakes

New York City's Times Square sits at the junction of Broadway and Seventh Avenue in Manhattan. The "Crossroads of the World," this short stretch of city blocks has been lined with end-to-end (and top-to-bottom) advertisements—billboards, neon signs, and now massive, glowing screens—for well over a hundred years. In 1904, the square was renamed for the *New York Times* when the newspaper moved its offices to its south end at Broadway and Forty-Second Street. The *Times* has since moved west, but Times Square itself remains the first and most important place to go if you're a business seeking a platform to capture the attention of the world. Home to New York City's largest and most important theatrical stages, Times Square itself is a stage unparalleled by any other on the planet.

Seeking a stage in 1912 is Will Keith Kellogg, CEO of the Kellogg Company. W.K., as he is known, believes strongly in the importance of the right stage. He watched from the sidelines as his brother, the famous health expert John Harvey Kellogg, made himself a household name through careful personal branding and ceaseless self-promotion on the world lecture circuit. After severing ties with his difficult brother and starting a company to sell the cereal the two had created, self-effacing Will embraced the power of promotion.

At the north end of Times Square, at Forty-Eighth Street where Broadway and Seventh Avenue intersect, sits the Mecca Building, the most invisible icon of the time. Its facade is continuously hidden by signs of all shapes, sizes, and colors. The building plays a prominent role in nearly every photograph and film made of Times Square—it would eventually be demolished in 2004—even as its structure remains hidden.

Today Will intends to top all those previous efforts. Literally. Signing a five-year lease for use of the roof of the building, he is about to begin construction on what will be the world's largest electric sign. For the rest of the year, eighteen men will toil to construct an eighty-ton altar to Kellogg's Corn

Flakes atop the Mecca Building. One hundred and six feet wide and eighty feet high, the \$40,000 sign will feature a boy's smiling face and a box of cereal, each forty feet high, sandwiched around Will's distinctive red signature, which graces the front of all his company's products, a guarantee of freshness and quality in every box of cereal.

When the boy's face frowns, electric letters will read: "I Want Kellogg's Toasted Corn Flakes." Then the face will smile. A new message will appear: "I Got Kellogg's Toasted Corn Flakes."

Gazing down the length of the island from the top of the Mecca Building, W. K. Kellogg can't help but see the irony. He's never thought of himself as much of a communicator. His brother has always done the talking, sending Will off to do the dirty work while he poses for the press, dressed all in white with that ridiculous cockatoo on his shoulder. But this is Will's company and Will's product, and he wants the world to know.

* * *

As meat production boomed in the United States in the nineteenth century, so did the size and substance of the American breakfast. After all, prosperous Europeans didn't begin their day with a humble bowl of porridge. They sat down to large, filling buffets featuring everything from ham and sausage to delicacies like smoked tongue. As America's fortunes rose, so did the appetite of its middle class for luxurious breakfasts featuring piles of cured and salted meats, platters of eggs, and mounds of fried potatoes. Manifesting destiny sure worked up an appetite.

With big breakfasts becoming the national norm, a backlash was inevitable. A wave of new Protestant denominations appeared across the country in the mid-nineteenth century, and one distinguished itself by zeroing in on the religious implications of poor eating habits: the Seventh-Day Adventists.

Born April 7, 1860, in Battle Creek, Michigan, Will Keith Kellogg was raised in the Seventh-Day Adventist Church, which had recently established its headquarters in Battle

Creek. The Adventists believed in celebrating the Sabbath on Saturdays and placed a distinct emphasis on healthy living. Their creed advocated a strict vegetarian diet and abstinence from caffeine, tobacco, and alcohol. Will adhered to Adventist principles all his life, although he relaxed his diet in later years.

With the Second Coming imminent, Will's father, a broom maker, didn't place undue emphasis on education. "My father," Will wrote, "was not insistent upon my attending school . . . regularly." It didn't hurt that Will's teachers saw him as taciturn and "dim-witted." In fact, Will had a brilliant mind, but he also had dental problems, which led him to smile rarely, as well as undiagnosed nearsightedness, which made both seeing the blackboard and interpreting the emotions of his peers difficult. He left school after the sixth grade and went to work making brooms like his father, eventually commuting to nearby Kalamazoo to study bookkeeping, accounting, and other business skills. His older brother John Harvey Kellogg, on the other hand, was so precocious that the church leadership groomed him from a young age for a prominent role among the Seventh-Day Adventists. By the time he was a teenager, John, or J.H., was editing the Adventist newsletter, *The Health Reformer*, and writing long, lucid essays arguing for the sect and its practices. John went on to earn his medical degree from Bellevue Hospital Medical College in New York City, becoming an accomplished surgeon.

In 1876 John returned home to take over management of the Western Health Reform Institute, a resort established around the dietary principles of the Adventists. The sect's founder and prophet, Ellen White, said these rules had been divinely inspired, but she knew that John's medical expertise and authority would provide an important scientific counterpoint to her religious claims. Under John's leadership, the institute, renamed the Battle Creek Sanitarium, became famous around the world for its revolutionary approach to helping people "learn to stay well." Spa, hotel, and "university of health," the "San," as it was called, flourished under Kellogg's leadership, growing from a hundred patients at a time to over seven thousand at its peak. It became a

destination for everyone from desperate sufferers of every imaginable affliction to the wealthy and famous looking for a respite: President Harding, Henry Ford, and Amelia Earhart, among other notable characters of the era, all spent time there. The sprawling complex of buildings at the San offered these patients everything from “physical culture”—exercise—to massage to cutting-edge treatments like electrotherapy. Ultimately, the success of the San was driven by John’s brilliance as a communicator. In addition to treating patients and giving speeches, he wrote many books on healthy living that sold millions of copies. Though some of his medical proclamations were questionable—he discouraged sex for anything other than procreation and, as for vinegar, it was “a poison, not a food”—the passage of time has validated many, from the dangers of smoking to the importance of the digestive tract to overall health, a precursor to today’s emphasis on the “gut microbiome.”

By 1880 it had become clear that writing books, giving lectures around the world, publishing a health magazine, running other companies selling exercise machines and other “wellness” products, and seeing patients left little time to actually run the institute. Shy and taciturn Will, who was about to get married and needed to buy a house, was looking for stable employment that didn’t involve the tedium of making brooms. John decided that, as a trained bookkeeper, Will would make the ideal manager for the San’s various businesses. When John asked him, Will took the job. In fact, Will had become accustomed during their childhood to doing whatever he was told by his domineering older brother. Now that even extended to calling John “Dr. Kellogg.” Will made an ideal “lackey” (as Will ruefully called himself), working eighty or more hours a week not only performing endless administrative tasks but also handling the maintenance of the vast facilities.

The workload was punishing, but it was John’s poor treatment that drove Will to his limits. Will essentially ran the institute for “no glory and very little money,” as he later said. Even as John carefully branded himself a public intellectual, dressing entirely in white and carrying a cockatoo on his

shoulder while meeting with celebrities and courting the press, he never acknowledged his brother's role with an official title—Will's job was to run the San invisibly. Dr. Kellogg, riding his bicycle between appointments on the San's large campus, would insist that Will jog alongside with a notepad and pen in case he had any ideas along the way. To cap it all off, John even referred to Will as a "loafer."

John Harvey Kellogg was far ahead of his time in his emphasis on digestive health. An advocate for what he called "biologic living," John believed in avoiding spicy, salty, and greasy foods and that eggs and dairy were best kept to a minimum. At the time, one of the most common American health complaints was "dyspepsia," a word that referred collectively to indigestion and other digestive issues like constipation. Kellogg correctly surmised that this wave of complaints was driven by the heavy American diet. As a remedy, he prescribed a low-protein and low-fat diet to his patients. Having made a study of gorillas in captivity, Kellogg also believed that humans should move their bowels four or five times every day. Thus meals at the San were not only extremely bland but also extremely high in fiber, supplemented by frequent enemas to keep the digestive tract clear.

For breakfast, Kellogg served his patients dry, hard biscuits without milk or even water in order to stimulate their salivary glands. When one woman broke her dentures trying to eat one, Kellogg began experimenting. He made a dough of wheat flour, oats, and cornmeal and baked it at high temperatures to break the starch down into more easily digestible sugar, or dextrose, a process he dubbed "dextrinization." After crumbling the loaves and baking the crumbs, Kellogg had his first hit product: Granula, which would eventually be changed to "granola" to avoid a lawsuit over another cereal product of the same name.

Granola became a standard part of breakfast at the San, so popular with patients that Will set up a store near the dining room where they could buy boxes to take home. The owners of the facility had no interest in selling health foods, so John and Will founded their own mail-order business to keep

former patients supplied with the product at fifteen cents a pound. By 1889, it was shipping two tons of granola a week.

In 1883, John established a test kitchen where he, his wife, Ella, and Will could experiment with new foods. The three tried out many different combinations of grains and preparation methods before stumbling on another promising recipe. After rolling out boiled wheat dough as thinly as possible, they would scrape little flakes off with a knife and then bake these morsels until they were “little pieces of toast.” Dr. Kellogg later claimed that the final process for making flaked cereal came to him in a dream. In reality, a batch of raw dough was left out all night, growing mold and fermenting before it was discovered. After being boiled and rolled flat, according to John, “it came out in the form of large, thin flakes, each individual wheat berry forming one flake!” When these flakes were baked, they were crunchy and delicious. Will built on this happy accident, performing many more experiments to perfect the preparation process while keeping careful notes on each batch in a laboratory notebook. Later his employees would remember that W. K. Kellogg had “unerring judgment” when it came to discerning the most promising samples of a new product under development.

The San’s patients raved about the new offering. John patented the process for making flaked cereal in May 1895, wisely ensuring the patent covered flakes made of grains other than wheat. In typical fashion, he left his brother’s name off the patent despite Will’s undeniable involvement. That summer, the Kellogg brothers introduced wheat flakes, which Dr. Kellogg called “Granose,” at a Seventh-Day Adventist event held at the San. This was their first true marketing effort. Their mail-order business, the Sanitas Nut Food Company, sold ten-ounce boxes of Granose for fifteen cents each and very quickly had to hire more staff to keep up with demand. In its first year of production, 113,400 pounds of Granose were sold in all.

Meanwhile, Will kept experimenting with the recipe, eventually substituting corn for wheat in 1898. The corn flakes proved even more popular. That year, Will moved production of the cereal to a two-story building in town to expand

capacity. Working 120 hours a week, Will ran the new factory, which remained in operation twenty-four hours a day to meet demand, while attending to all his regular duties at the San and running his brother's other businesses. Will saw great potential in corn flakes beyond the ranks of Seventh-Day Adventists and Battle Creek Sanitarium alumni. As John often said, Americans everywhere were making themselves sick with their heavy, greasy breakfasts. In addition, as the pace of life accelerated thanks to the Industrial Revolution, fewer people had time to sit down to a cooked breakfast every morning. They needed to get to work at the factory or office. Corn flakes would be a healthier and more convenient alternative for millions of Americans.

Though Will was still a poor man at over forty years old, J.H. had made his fortune and had no interest in risking his wealth—or his medical reputation—by trying to scale Sanitas. “[I] thought it was important to do nothing of any sort that would touch even the more sensitive sensibilities,” John later testified under oath, “or give any occasion . . . for thinking I was actuated by commercial or financial motives.” Will wasn't too proud to admit that he *was* actuated by commercial or financial motives. He urged his brother to advertise nationally and sell the cereal in grocery stores, but John refused. Filled with resentment, Will continued to work for his brother, even as copycat entrepreneurs, lured by the success of Granose, moved to Battle Creek and opened their own cereal manufacturing concerns. Employees of the San would sell the Kelloggs' recipes to them or even start manufacturing the cereal themselves. One former patient, C. W. Post, brought his own breakfast cereal, Grape-Nuts, to market with tremendous success. Grape-Nuts was made with neither grapes nor nuts—it was simply J. H. Kellogg's granola recipe with sugar added. Years earlier, Post had worked in the San's kitchen in lieu of paying the fee. Against Will's wishes, John had made no secret of their process at the time. When Post left, he took all the recipes with him. Now the Postum Cereal Company (what would eventually become General Foods) was bringing in millions of dollars a year selling Grape-Nuts, as well as Postum, which was actually J. H. Kellogg's grain-based coffee substitute. Post's was the most successful of the more than one

hundred new cereal companies that opened in Battle Creek between 1888 and 1905.

At that point, Will finally decided he'd had enough. If John wouldn't seize this opportunity, he would. Despite his bitterness toward his brother, Will realized he had one important advantage thanks to having managed the Battle Creek Sanitarium and John's other concerns for more than two decades: he was intimately familiar with every aspect of operating a business. In fact, he'd made a careful study of the latest ideas and techniques in management over the years, applying everything he'd learned to running things as efficiently and profitably as possible. This may be why the San's patients placed their faith in the forty-six-year-old entrepreneur, too. Former residents helped Will raise \$200,000 in starting capital.

In June 1905, Will offered to buy the rights to the cereal from his brother. John agreed—at the time, he was badly in need of cash to shore up his other businesses. The brothers signed an agreement in January 1906, Will resigned from his many other roles, and on February 19 of that year he founded the Battle Creek Toasted Corn Flake Company.

Early on, Will added his own signature to the design on the box, though the product was still called "Sanitas Toasted Corn Flakes." He wanted to unambiguously distinguish the "original" Corn Flakes from its many imitators, and that meant tying it to the famous Kellogg name. (Naturally, C. W. Post copied corn flakes as soon as they hit the market, naming them Post Toasties and making millions more on yet another plagiarized product.) But Will also saw his signature as a guarantee of quality and freshness. He took the trust of his customers very seriously throughout his life. This trust would be crucial in distinguishing his products from the many, mostly unscrupulous, imitators in Battle Creek and, eventually, around the world. Will set higher and higher standards in the production of his cereals, and these standards would greatly influence the burgeoning industry of manufactured food in America. Today Kellogg's familiar red signature still appears on nearly every product the company makes.

In the summer of 1907, while John was abroad, Will seized another opportunity: The Battle Creek Toasted Corn Flake Company became the Kellogg Toasted Corn Flake Company. Likewise, Sanitas Toasted Corn Flakes became Kellogg's Toasted Corn Flakes. Will knew that John would object to the changes when he returned, but he felt confident he could win that battle should it come to a lawsuit. (In the end, the wrangling between the brothers over both the product and its name would drag on for more than a decade, with a hard-fought, though decisive, victory for Will in 1920.) Either way, it was high time to advertise the new brand.

Will had created ads and brochures for the San in the past, so he had some advertising experience. At first he ran a few small ads in Dayton, Ohio, and sent representatives door-to-door with free samples. But he quickly realized that he was thinking too small. Kellogg wouldn't win the country one town at a time. He'd need to take a big risk to catapult his corn flakes to the national level. Kellogg's Toasted Corn Flakes needed attention fast, and lots of it.

Will decided to invest his remaining capital in a full-page advertisement in *The Ladies' Home Journal*, which reached more than 1 million women across the country. For a risk like that, he knew he'd need a world-class campaign, so he turned to his close friend, Arch Shaw. Shaw was a brilliant business mind who eventually helped establish the field of management studies at Harvard Business School. Kellogg and Shaw had met in 1897 when Shaw sold Will an accounting system for keeping better track of his brother's businesses. The two men had become friends. Long after founding the company, Kellogg would turn frequently to Shaw for advice and assistance. In 1906 he didn't have sufficient capital to pay Shaw, so Shaw, wisely as it turned out, accepted shares in the company instead, a decision that eventually made him wealthy.

Shaw's campaign, a master class in consumer psychology, delivered the goods by leveraging the truth. The ad began: "This announcement violates all the rules of good advertising." It went on to explain that, since the company was new, its corn flakes were unavailable in most grocery stores.

Since it didn't yet have a sales force, it would give a "season's supply" of its product to anyone willing to demand that their local grocer keep the cereal in stock.

The campaign worked. Almost overnight, American housewives became Will's unpaid sales army, bringing their coupons to grocery stores and demanding their free cereal. In response to this sudden surge in demand, grocers across the country began to carry Will's product. The company sold almost 180,000 boxes by the end of its first year. Will was spending borrowed money, the equivalent of millions of dollars in ads, but the momentum was undeniably worth the risk. Advertising worked, and therefore he would need to keep the pressure on. In 1907 he ran a new campaign in New York City announcing that "Wednesday is 'Wink Day.'" It urged housewives to "wink at your grocer and see what you get." What they got was a free box of Kellogg's Corn Flakes, as long as they winked on a Wednesday. Despite, or perhaps because of, Will's strict religious upbringing, he knew the attention-grabbing power of a little earthy humor. "This advertising will arouse the curiosity of the entire city," Will correctly predicted. This campaign resulted in a fifteen-fold increase in sales in the city alone. By 1909 the company was producing 120,000 boxes of corn flakes a day. That year, Will added coupons to the backs of the cereal boxes that kids could clip and mail in for a colorful activity book. When that gimmick succeeded, he decided to dispense with the hassle of mailing giveaways and started including free toys inside the box. These buttons, rings, puzzles, and games cost money to produce, but by volume they were actually cheaper than the volume of cereal they replaced. The free prize inside charmed kids and boosted profits at the same time.

Out of his brother's shadow at last, W. K. Kellogg thrived. As a business leader, he proved to be bold and decisive—a sharp contrast with the retiring boy people knew from his childhood. He worked tirelessly to out-innovate the competition, continually refining the recipes and developing successful new ones like Rice Krispies. He applied the systematic approach that had kept the San running smoothly for all those years not only to production but also to scaling his

products' advertising, where his approach was always about more, bigger, and better. Will spared no expense, erecting thousands of billboards across the country from his first year of operation onward.

In 1912 Will signed a five-year lease on the rooftop of Broadway's Mecca Building. On that prominent spot, he constructed the largest electric sign ever built. More than a hundred feet wide, the eighty-ton structure, featuring a boy's smiling face and his own red signature, cost the equivalent of a million dollars. Then he turned the story of the sign itself into an ad campaign. That year alone, he spent \$1 million on ads in nearly every magazine and newspaper in the country, reaching over 18 million people. By this point, Kellogg's ads were illustrated by the country's top commercial artists and famous for their catchy slogans. They also started featuring cartoon mascots that would also appear in the comics sections of the newspapers.

By 1930 Kellogg had become the world's largest maker of breakfast cereals. As the Great Depression worsened, Will doubled down on advertising, just as he had in previous economic downturns, and the product thrived. To help keep the residents of Battle Creek employed, he reduced the length of the workday to six hours and added a fourth shift in order to spread payroll among more workers. He also started work on a ten-acre park on the grounds as a way to create more jobs.

On April 27, 1931, the Kellogg Company held an event in Battle Creek to celebrate its twenty-fifth anniversary and pay tribute to its founder. "The Kellogg Company," Senator James J. Davis of Pennsylvania, one of the invited luminaries, said, "offers one of our country's most shining examples of the fundamental truth that the real secret of lasting success in business lies in the contribution that is made toward improving the condition of the whole body of our people." Kellogg's president, Lewis Brown, pointed to another truth: "Mr. Kellogg spent the last dollar of his initial capital in newspapers," he said, "and in the quarter century since then has expended about \$25,000,000 in this form of advertising." In Brown's view, the company's health and longevity came down to this extraordinary commitment to communication. "It

has been the policy of this company,” he continued, “to increase advertising expenditures, especially during periods of general depression, because we have found that fighting for sales will bring them in. Some of our best gains were recorded in the years 1907–08, 1921 and 1930.” In fact, between 1906 and 1939, Will spent nearly \$100 million—the equivalent of almost \$2 billion today—on advertising. In the 1930s, more of this money began to go toward a new form of advertising pioneered by the Kellogg Company: sponsored radio shows for children. W. K. Kellogg’s unflagging investment in capturing the attention of American consumers in both good times and bad paid off many times over, making the company an American manufactured food giant.

Though aggressive in business, Will was never particularly interested in wealth or status. In line with his religious beliefs, Kellogg established the Kellogg Foundation in 1934 with a large portion of his fortune, \$66 million in Kellogg Company stock, equivalent to \$1 billion today. Will had been nearsighted as a child, undiagnosed until he was an adult, and this was one of the reasons he struggled academically. He’d also lost most of his teeth due to poor dental care, which is why he rarely smiled. With outside help, then, he might have grown up neither taciturn nor “dim-witted.” Therefore, the foundation would focus on, among other things, improving children’s dental and eye care.

In 1939, W. K. Kellogg stepped down as active head of his company, leaving day-to-day operations to others for the first time since 1906. The San, meanwhile, struggled to bring in patients in the worsening economic climate and eventually had to be sold. J. H. Kellogg moved his operation to a smaller facility. In 1943, John wrote a heartfelt, seven-page apology to his brother. But he didn’t mail it, and died later that year. Years later, Will was given the letter and was pleased to learn that he’d had John’s blessing before he died.

In 1951, W. K. Kellogg died at ninety-one in Battle Creek. In his final years, he’d lost most of his vision to glaucoma. One of his favorite pastimes in retirement was sitting in the parking lot outside his factory, listening to the machinery and enjoying the smell of toasted cereal.

Though the Battle Creek Sanitarium and the health philosophies of its founder are mostly forgotten, people eat well over 100 billion bowls of Kellogg's Corn Flakes every year, unaware of the cereal's origins as a nineteenth-century health fad. In fact, J. H. Kellogg and even W. K. Kellogg would be chagrined to learn that most of the Kellogg Company's offerings today are laden with far more sugar than even Will would have dared add when he was free of his brother's control. Cereals like Sugar Frosted Flakes (now simply Frosted Flakes) and Sugar Smacks (now Honey Smacks)—both introduced right after Will's death—are thought by many health experts to have contributed to today's obesity crisis in children.

In recent years, the Kellogg Company has tried to adapt to changing health trends. For example, in 2017 it acquired RXBAR, manufacturer of a trendy, health-focused nutrition bar, for more than half a billion dollars. That brand's success—driven by the conceit of putting its short, all-natural ingredient list on the front of the package—has helped shore up Kellogg against the sagging popularity of highly processed, carbohydrate-laden breakfast foods. Time will tell whether the health claims made by RXBAR will bear out. In the meantime, it's clear that customers are still listening to the Kellogg Company and its world-class, world-spanning advertising. Every year, the company brings in more than \$13 billion in net sales around the world.

* * *

Building customer and employee loyalty through compelling messaging strengthens your position at any time, but persuasion makes the greatest difference when the chips are down.

As we saw in each of these stories, powerful communication is a crucial component of the most sought-after characteristic of any organization: resilience. A great quarter means nothing if you go bankrupt the next. Patagonia, Tupperware, and Kellogg's endured rocky times not because of any one product's success but thanks to their savvy and

persistent use of advertising, marketing, and PR. Good times or bad, these companies never stopped talking.

Other factors also play a role in staying power, of course. There is an art to going the distance. In the [next chapter](#), we look at why some organizations weather the storm while others founder.

9

Resilience

Just as water retains no constant shape, so in warfare there are no constant conditions.

—Sun Tzu, *The Art of War*

The success of any business is subject to all kinds of external forces. Fads come and go. Markets rise and fall. Economies boom and go bust. Sometimes conditions are so favorable it seems impossible for any business, no matter how poorly managed, to sink. Leaders are always responding to threats from the outside world beyond their control. And then, once or twice in a generation, an even larger disruption sweeps across the planet—a war, a pandemic, a political shift—that leaves nothing unchanged in its wake.

But failure in the face of political or economic volatility isn't inevitable. The best-led companies in the world have wins and losses in good times and in bad, but often they endure, even thrive, through times of great change. Even through the extraordinary disruption at the height of the coronavirus pandemic, we saw how some companies sustained themselves by mitigating risks and leveraging opportunities while others simply choked. What are the characteristics of resilient organizations and their leaders? Why do certain companies come out of adversity stronger while others wither, their leaders shouting excuses as their businesses sink beneath the waves?

In this chapter, we'll look for clues to the nature and origins of resilience in the face of recession, war, and other external conditions outside of any leader's control. History reveals that there is business to be done in even the worst of times.

Run with What You've Got: Adidas

Adi Dassler watches nervously as his first and only employee, Josef "Sepp" Erhardt, clambers onto a large, wooden contraption in his mother's former laundry shed. A framework of wooden beams supports an old bicycle, its pedals attached by scavenged leather belts to a tub. Though it looks like a nineteenth-century version of a Peloton bike, it's actually a jury-rigged leather mill. Buying an industrial mill is out of the question for young Adi. Even if he could afford one, the electricity in town would be too unreliable to use it. Since the end of the Great War, Germany has struggled to meet even the basic needs of its citizens. Adi simply *can't* make the athletic shoes he has in mind unless he has soft, milled leather. But with a little improvisation, he thinks he may have solved the problem. The pedal-powered leather mill in the shed is Dassler's design. If anything breaks or Sepp gets hurt, Adi only has himself to blame. *If this doesn't work*, he thinks, *I'm not sure what will*. Dassler's nascent shoe business is riding on that bike.

Gingerly, Sepp applies pressure to one pedal and then the other. The bicycle's single remaining wheel begins to turn. Dassler's jury-rigged mill rotates and is soon spinning at a brisk clip. Scraps of leather, some scavenged from helmets and water pouches abandoned on nearby battlefields, tumble back and forth as Sepp pedals faster and faster.

The damn thing works!

Dassler, who would tinker and improvise his way through yet another global conflict before founding the sportswear giant Adidas, tells Sepp to keep pedaling. As the leather tumbles round and round, it becomes softer, more workable. Soon, it will be ready for shaping and stitching. An electric

mill would be better, but with the wreckage of Germany's decisive loss all around them, the bike will have to do.

For now.

* * *

Herzogenaurach is a small town in northern Bavaria, in Germany. Today it is most famous as the hometown of not one but two major sporting good companies: Adidas and Puma. Their two rival founders were actually brothers: Adi and Rudi Dassler.

In 1914, Europe descended into war. Two of the four Dassler children, Fritz and Rudolf, known as Rudi, were conscripted into the German army right away and sent to the front. Though most Germans expected the conflict to be over quickly, the two Dassler brothers spent four long years in the trenches. In the war's final year, Adolf, or Adi, who was yet to turn eighteen, was conscripted as well. By the time all three soldiers returned home to Herzogenaurach, their mother had closed her laundry business. People could no longer afford to send their clothes out for cleaning.

After the war, Adi completed an apprenticeship in a bakery but decided against becoming a baker even after investing all the work. Shoes had piqued his interest. Adi had an all-consuming new idea: that the shoes you wore could be specifically adapted to the unique needs of your sport. As the son of a cobbler and a multisport athlete, Adi was uniquely positioned to have this insight—and act on it.

Eager to put his notion to the test, Adi set up shop in his mother's former laundry shed. At first he simply repaired shoes to earn money. The postwar economic situation meant that many of the townsfolk wouldn't be able to afford new ones. While fixing old shoes came easily enough to Adi, making new ones would be more than a matter of aptitude. Shoes required materials and equipment that simply wasn't easy to find in impoverished postwar Germany. It was a period of runaway inflation. Securing a line of credit from a bank was out of the question.

Adi turned his attention from what he didn't have—reliable power, adequate supplies, modern machinery, access to borrowed capital—to what he did. Surveying the wreckage of war, he realized that the wreckage itself could become a resource. Intrepidly, he began scavenging the nearby battlefields for anything that might come in handy. Helmets, pouches, and parachutes became the raw materials for Adi's new designs.

“Developing shoes was his hobby, not his job,” his future wife, Käthe, later said. “He did it very scientifically.” Alone in his makeshift shoe lab, Dassler conceived of and tested solutions to problems he'd experienced as an athlete. First, he wanted to improve traction for his beloved track-and-field events. For that he'd need a blacksmith. He asked his childhood friend Fritz Zehlein to hand-forge spikes he could drive through the soles. Adding spikes to shoes for general traction wasn't a new idea, although Dassler did get a patent for the crucial padding he added inside the shoe. In the 1890s, the English manufacturer Foster & Sons, which would later spin off Reebok, was the first to add spikes to running shoes. (Adidas acquired Reebok in 2005.) Dassler's contribution was the idea of adapting the spikes and making other modifications to design to address the unique needs of each sport. Through trial and error, and with Fritz's help forging different spike designs, Adi developed shoes for long-distance runners, sprinters, and long jumpers. He also created a leather soccer boot with metal studs embedded in the soles. (Naturally, sharp spikes had no place on a soccer pitch.)

In 1923, Adi's brother Rudi abandoned his plans of becoming a policeman to join Adi's shoe business. Adi, the inventor, worked quietly in his shop while Rudi, the talker, drummed up business. The following year, the two founded an athletic footwear company: Gebrüder Dassler. To generate sales, the brothers sent samples of Adi's work to the growing number of sports clubs in the region. Sports and science were both national obsessions in the Weimar Republic. Adi's bold, experimental designs caught the national mood as the country chased modernity and renewal. By 1925 a dozen workers were producing fifty pairs of shoes a day, both studded football

boots and spiked track shoes. Over time, it became clear that Gebrüder Dassler had weathered both its own growing pains as well as the immediate postwar malaise. The laundry shed would no longer cut it. The following year, the brothers moved their operation into a factory space next to the train station, installed new machinery, and hired more workers. Fifty pairs a day became a hundred.

One strength of sportswear as a business is its visibility. An athlete's choice of shoe brand can never be a trade secret. Adi realized there could be no better advertisement for his shoes than getting them on the feet of a winner. But there was more to his pioneering idea of athletic sponsorships than free publicity. He wanted to prove that the right pair of shoes, specifically adapted to the needs of a sport, would increase performance. The only way to do that would be to convince top athletes to give them a try. At the highest levels, victory could be determined by the smallest of factors. If his shoes could shave even a few seconds off an athlete's performance, they could determine the winner.

Adi brought his spiked track shoes to the 1928 Summer Olympics in Amsterdam. There he met the pioneering female athlete Lina Radke. Impressed by Adi's thoughtful design, directly inspired by his own domain knowledge in track and field, Radke agreed to wear his shoes when she competed in the 800-meter. Radke went on to win the event, capturing Germany's first Olympic gold medal in athletics. Not only was this a coup for Gebrüder Dassler, it was also a validation of Adi's theories about improving performance through specialized footwear. The world record Radke set in Amsterdam would stand until 1944.

Naturally, Radke's success wearing Adi Dassler's shoes caught the attention of others in the German athletic establishment. One key figure intrigued by the product was Josef Waitzer. Waitzer had competed in four track-and-field events himself at the 1912 Summer Olympics in Stockholm before turning to coaching. By 1928 he'd written several books on athletic training and had been named head coach of Germany's Olympic track-and-field team. When Waitzer learned about Gebrüder Dassler, he traveled to

Herzogenaurach to visit the factory. Waitzer and Adi Dassler quickly bonded over their mutual obsession with athletic performance. This friendship soon came in handy: Waitzer became a consultant to the business, offering vital technical expertise only a seasoned track-and-field coach on the world circuit could provide. He also helped ensure that more German athletes would wear Gebrüder Dassler shoes to compete in track-and-field events. Whenever they did, he offered Adi detailed feedback on the performance of his designs so he could improve them.

Adi Dassler's father had given his son a solid foundation in the basics of cobbling. To take his skill set to the next level, however, Adi would need advanced training. In 1932 he enrolled in a footwear technical college in Pirmasens, a town near Germany's border with France that was famous for its shoe industry. There he fell in love with Katharina "Käthe" Martz, the daughter of an instructor at the school, and the two married in 1934. Käthe was bold and assertive, traits that would save Adi's business more than once. The two would have five children in all.

Meanwhile, another sea change was sweeping across Germany and Europe. National Socialism was on the rise. Fritz, Adi, and Rudi Dassler all joined the Nazi Party in 1933. Germany's new chancellor, Adolf Hitler, had an ambition to prove the athletic superiority of Aryan athletes. While among the brothers Rudi felt the strongest sympathy with the ideology of the Nazi Party, even Adi believed that Hitler's obsession with athletic competition could be nothing but good for business. Meanwhile, refusing to join would threaten Gebrüder Dassler's continued operations. Soon Adi was supplying athletic shoes to sports clubs in the Hitler Youth movement and coaching the young athletes.

In 1936 Berlin played host to the Olympics. It was a chance for the new Germany under Hitler to flex its might on the global stage. Dassler's close relationship with Josef Waitzer ensured that many German track-and-field athletes would be wearing his track shoes at the event. But Adi had his sights on another country's athlete.

At the time, the American runner Jesse Owens was already an international track-and-field superstar. In high school, he'd tied the world record for the 100-yard dash. At the Big Ten meet in 1935, Owens had set three world records and tied a fourth. Convincing Owens to wear Gebrüder Dassler shoes would catapult the brand to international prominence. As for Hitler's opinion of German shoes being worn by a Black athlete, that was a risk Adi was willing to take. The only problem was that Adi didn't know Owens, nor did he speak any English.

With no other option, Adi found the American athlete in the Olympic Village and handed him a complimentary pair of shoes. Lightweight, low-cut, and with six carefully arranged pikes, the shoes must have impressed Owens. Perhaps Owens's own experience working in a shoe repair shop helped him appreciate Dassler's craftsmanship. Either way, in what became the first sponsorship of a Black athlete, Owens wore the German shoes in the 100-meter dash, where he won gold. Next he defeated the German track-and-field star Carl "Luz" Long, breaking a personal record in the process. In all, Owens won four Olympic gold medals in total. It was a stunning victory for the United States. And for Gebrüder Dassler.

The effect on the business was immediate. As Adi had predicted, Owens's choice of footwear while dominating the Olympic Games drove huge international demand for Gebrüder Dassler shoes. Soon the brothers had to open a second factory to meet that additional demand. By this point, well over a hundred employees were making shoes designed by Adi to address the unique needs of eleven sports. But Dassler's association with Owens's win would have an even greater consequence later on.

Though the early years after the Great War had been difficult, nearly everything the Dassler brothers had attempted since founding the company seemed to work out. Conditions in sports- and design-obsessed Germany were optimal for an athletic shoe company that took a scientific approach to improving performance. And now, with seven gold, five silver, and five bronze Olympic medals awarded to athletes wearing Gebrüder Dassler shoes, and two world and three Olympic

records set, Adi had all the validation he needed: wearing the right shoes mattered.

A few years after the Olympics, however, Hitler invaded Poland, beginning a global conflict that would upend the status quo once more. Nothing is more disruptive to a business war than war itself. Did Gebrüder Dassler have the resilience to endure what Hitler's minister of propaganda, Joseph Goebbels, would call "total war"?

* * *

At the start of World War II, the German government allowed Gebrüder Dassler to operate at reduced capacity, with fewer staff and limited supplies. The brothers closed the second factory. Restrictions like these were familiar to Adi, who had improvised with far less when he was starting out in his mother's laundry shed. A year into the war, however, Adi was conscripted as a radio technician. He could work with very little, but his absence would make improvisation impossible. Perhaps due to his connections in the Nazi Party, however, Adi was determined essential to the business and quickly sent home. The company was then given a contract to produce more than ten thousand pairs of shoes for the German army.

This bit of luck infuriated Rudi. As the older brother, he resented the implication that Adi was crucial to the company's operations. Rudi had already felt that his attention to the business side was undervalued, and that Adi didn't have the chops to run Gebrüder Dassler in his absence. It didn't help that Rudi had been sparring with Adi's assertive wife, Käthe. Tensions grew between the brothers, exacerbated by the close quarters. Both brothers and their families lived in the same house together with their parents.

Tensions boiled over when Rudolf himself was conscripted in 1943 even though he had fought four long years in World War I. He blamed this on Adi—clearly, he was being chosen to make up for Adi's early release. Rudi wrote a bitter letter to his brother from Poland: "I will not hesitate to seek the closure of the factory so that you be forced to take up an occupation that will allow you to play the leader and, as a first-class sportsman, to carry a gun."

Rudi was as good as his word, actively using his contacts in the German military to wrest control of the factory away from his brother. In October of that year, the Nazi government forced the factory to start making weapons and other war materials. Adi suspected that this was the result of Rudi's efforts to get him conscripted by proving he was inessential to the business.

The seamstresses in the Dassler factory were soon spot-welding blast shields and sights onto "stovepipes": simple knockoffs of American bazookas that proved remarkably effective at destroying Allied tanks. The stovepipes arrived too late to turn the tide of the war, but the weapon's presence attracted the attention of victorious American troops arriving in Herzogenaurach in April 1945. As their tanks rounded on the factory and the soldiers debated whether to reduce it to rubble, Käthe Dassler boldly approached. She explained to the Americans that the bazookas had been produced only under duress, and that the brothers wished for nothing more than to make shoes again. In fact, she added, they had made the very shoes worn by Jesse Owens in 1936.

Gebrüder Dassler was spared thanks to Käthe's courageous intervention. American soldiers, stationed at a nearby air base, soon became avid Gebrüder Dassler customers themselves, putting in large orders for basketball and baseball shoes. American officers stationed in the Dasslers' home after the war also helped the company secure needed supplies, like rubber from rafts and canvas from tents, to restart production. In an effort to avoid a repeat of the mistakes of the Treaty of Versailles, signed after World War I, the Americans were eager to revive the German economy this time around, which meant helping businesses like Gebrüder Dassler get off the ground. Once again Adi Dassler was applying his ingenuity to repurposing war materials for shoes. But there was one more challenge to Adi's resilience ahead, and while the business would endure, albeit in a new form, the relationship between the brothers would not.

Their close association with the Nazis had left both brothers vulnerable under the new regime. After the war, Rudi was held in an internment camp for German war prisoners.

Trying to get permission to return to the factory, he grew paranoid that Adi was actively trying to keep him locked up. The American investigators did in fact suspect that Rudi aided the Gestapo, in part because Adi had told them that Rudi worked for the Nazi secret police in their Nuremberg office—something Rudi vehemently denied. Despite their suspicions, however, the Americans were handling hundreds of thousands of such murky cases and simply didn't have the resources to resolve all the claims and counterclaims. On July 31, 1946, they released all prisoners who weren't considered a security threat, including Rudolf Dassler. In all, he had spent a year in American custody.

Meanwhile, Adi himself was classified an active Nazi collaborator, a status barring him from owning a business. But employees and residents of Herzogenaurach spoke up on his behalf. The half-Jewish mayor of a nearby village testified that Adi had warned him of his impending arrest by the Gestapo and sheltered him in his house. "The way I knew him," one witness said, "sports was the only kind of politics that counted for him." The day before Rudi returned, Adi was reclassified a "follower" thanks to this spirited defense, a lighter charge involving a fine and probation. He would be allowed to resume ownership of the company.

When Rudi finally returned to their shared home in Herzogenaurach, the rift between the brothers only intensified. Rudi, resentful that his brother had been let off the hook, now told the denazification committee that his brother had actively and solely instigated the manufacturing of arms at the factory. He also accused Adi of organizing political speeches there. Furious, Adi's wife, Käthe, leapt to Adi's defense: "The speeches held inside and outside the factory should be attributed to Rudolf Dassler," she wrote in a statement to the committee, "as any factory employee could confirm." Käthe's defense combined with the words of the many other townsfolk who spoke on Adi's behalf carried more weight than Rudolf's already suspect denunciation. Adolf was reclassified once more and essentially cleared of all charges.

With the split between the brothers now irrevocable, Rudolf Dassler moved his wife and children to a house on the

other side of the river. After dividing their assets, the brothers decided to go their separate ways in business. Rudi reopened the shuttered second factory and established his own shoe company there, one that would eventually become Puma. A third of the employees followed Rudi to the new business and the remainder stayed with Adi, who named his new company Addas, a shortening of Adi Dassler. When he tried to register that name, however, he discovered that it was already in use by a children's shoe company. Adi's company became Adidas instead. Adi had once added three parallel straps to a football shoe to add stability to the foot. This elegant design feature became the company's trademark.

Remarkably, Adidas and Puma both became international sportswear giants. At Adidas, Käthe replaced Rudi as Adi's partner. With her running the business with extraordinary competence, Adi was once again free to devote himself completely to his designs. He would go on to develop shoes for tennis players, skiers, boxers, bowlers, fencers, and many more. Throughout his life, he made a practice of meeting with athletes from around the world to discuss the specific problems they faced before devising innovative ways to address those problems.

By the 1960s, Adidas had become the world's largest manufacturer of sport shoes. The company's sixteen factories produced 22,000 pairs of shoes a day. Despite his wealth and success, however, Adi Dassler remained committed to creating new designs, always looking to adapt his shoes more closely to the unique needs of each sport. Some of his most important innovations included screw-in cleats for football shoes, nylon soles to reduce weight, and replaceable spikes for track athletes.

Rudolf Dassler passed away in December 1975. Adolf followed three years later. The two brothers had never reconciled. Käthe ran Adidas alone for several years before her son, Horst, took the reins in the 1980s. Käthe died in 1984.

Resilience encompasses multiple traits: the capacity to bounce back, and the grit and humility necessary to do so. It also requires ingenuity. No business enjoys perfect conditions

for very long. As a leader, you will be called on to make do with less. To perform at the highest level with nothing but what you can scavenge. To run with what you've got.

Never Stop Advertising: Wrigley vs. Recession

It's 1907, and William Wrigley Jr. may have bitten off more than he can chew.

If the new advertising campaign fails, it isn't going to be because of the product. Wads of Juicy Fruit and Spearmint gum can be found stuck to the soles of pedestrians across the city of Chicago and in more and more parts of the rest of the country. People love the gum when they try it. Chewing gum, and chewing Wrigley's gum specifically, has become a wholesome new pastime for a new century. Some are even choosing gum over cigarettes. Fresh spearmint, real fruit extracts, real sugar, a tight seal to maintain freshness: Wrigley puts a premium on quality, and he believes this distinguishes his product from the stale, flavorless alternatives competing for the American jaw.

And yet, he's already sunk \$100,000 into New York City advertising—posters, neon signs, billboards—to no result. *Twice*. All that money “hardly made a ripple” in the country's most important market. “It was money dropped into a hole,” Wrigley later said. Even so, he's back for round three.

Wrigley knows that if he can win here, he can win the American market. And if he can win in America, he has a good shot of winning across the Atlantic, where chewing gum is still seen as a bad habit. It's a big bet with a bigger potential payoff. When his first two attempts to win the Big Apple had failed, he'd doubted himself. Where had his extraordinary intuition for consumer psychology failed him: The copy? The illustrations? The placement? Perhaps it was time to give up his grand ambitions, focus all his efforts on the Chicago area, and leave the national market to the likes of Beeman's and Chiclets. His major competitors had teamed up against him when he'd refused to join their monopolistic trust. He'd figured he could take them all on alone. Now his ambition and his pride have left him nearly broke.

But over time Wrigley decided that the ads were just fine. His instincts on that front have always been good—he knows how customers think. He'd simply underestimated the scale of the challenge. Times have been tough all around. And now New York is in the middle of a financial panic. The stock exchange is in free fall. There's a run on the banks. Businesses are going bankrupt left and right. Wrigley, like the country, is simply going uphill.

As a young man, Wrigley set out with a friend to make their fortune in mining. On that long ride west, he'd watched with fascination as the firemen relentlessly shoveled coal into the train's firebox. Going uphill, they'd had to shovel every fifteen seconds just to keep the train moving. Slow the pace for a moment and the massive iron beast began the inevitable slide backward.

If Wrigley wants to endure even as bigger businesses topple, he can never stop advertising. If he stops shoveling coal, he isn't going to coast—he's going to roll right back down again. The fact is, gum is an ideal product for a recession: a nervous habit for nervous people. But when people are stressed, they're easily distracted, flighty. They need to be reminded, over and over again, of how refreshing—and affordable—a stick of Wrigley's Spearmint would be at this very moment.

And psychology aside, ad space is much cheaper during a financial panic. With the money he's spending, he's going to be able to light up the entire city.

* * *

Today you probably recognize the name Wrigley from the company's distinctive, old-fashioned sticks of chewing gum and, if you're a baseball fan, from the home of the Chicago Cubs, Wrigley Field. In his heyday, however, William Wrigley Jr.'s name was synonymous with resilience, for driving forward while others fell back. Wrigley survived a hardscrabble upbringing only to endure not one but two economic downturns, each of which toppled mighty competitors. Like his gum—made of chicle, not wax or tree sap—he could take a good chewing without coming apart.

Wrigley did this, in part, by reinventing advertising and direct marketing for the twentieth century. “No matter what the condition of a business,” Wrigley told his son, Philip K. Wrigley, who successfully built on his legacy, “never stop advertising.” He also persevered by exhibiting extraordinary flexibility. Long before the Santa Clara Valley was renamed for the silicon chips that would be designed there, William Wrigley Jr. mastered the strategic pivot.

Born in Philadelphia in 1861 to a large family of Quakers, William Wrigley Jr. got himself expelled for a school prank and went to work in his father’s factory. There he spent ten hours a day stirring vats of Wrigley’s Mineral Scouring Soap. Entirely too restless for this kind of work, thirteen-year-old William begged for the opportunity to be a traveling salesman. Surprisingly, his father agreed—his son looked older than his age—and William Jr. spent the next four years driving a team of horses across Pennsylvania, New York, and New England. Convincing merchants to buy crates of soap offered teenage Wrigley an invaluable foundation in persuasion, the art of making the sale. For the rest of his life, he would teach his employees the lessons he’d learned on the road: be kind, patient, and conscientious. And always look out for the other guy, because he needs to make a living, too.

Wrigley eventually returned to Philadelphia, but he kept selling dad’s soap. In 1885, at the age of twenty-three, Wrigley married and, six years later, moved his wife and newborn daughter to Chicago to open a new branch of the business. With nothing but thirty-two dollars and, in the words of the *New York Times*, “nerve and enterprise and an optimistic spirit which never failed him,” Wrigley set out to make his fortune.

Resilience requires a profound understanding of customer behavior. People still need things when times are bad. Just different things, and in different ways. Give them what they want in the way they want it, or get out of the way. In psychology, the capacity to estimate how someone else’s thoughts, beliefs, and emotions might differ from your own, to see the world through someone else’s eyes, is called “theory of mind.” Not everyone is very good at it. Successful leaders who fail in hard times tend to have this blind spot, a lack of

empathy for how the customer's mindset changes when things are tough. Unstoppable when times are good, they stick to business as usual when conditions sour and then wonder helplessly why the winning formula no longer works. William Wrigley Jr. survived in hard times thanks both to the grit instilled by his difficult upbringing as well as to his extraordinary human instincts, instincts sharpened by years as a traveling salesman. He was always consumed by the question that should drive every leader: What do they want *now*?

When merchants refused to stock Wrigley's Mineral Scouring Soap because the margins on the product were too thin, Wrigley convinced his father to double the retail price to ten cents per box. That helped the margins, but he knew there was more to the merchants' hesitation than slim profits. Even these business-savvy, big-city merchants were people, and "everybody likes something extra, for nothing." He decided to offer a "premium"—a gift to retailers as an incentive to stock his soap. For all the marketing jargon, grocers and other merchants knew that soap was soap, essentially a commodity. But buy a box of Wrigley's Scouring Soap and they'd get a free red umbrella. Sure, the umbrella was cheap and the red dye ran in the rain, but what could they expect from a free umbrella?

The soap hadn't changed, but the experience of buying it had. The effect of those cheap umbrellas on the company's sales was significant enough for Wrigley to invest more heavily in the premium idea. In part, this meant freeing himself from his father's control. He separated his business from the Wrigley Manufacturing Company and became an independent soap wholesaler. For Wrigley, it had never really been about a particular product, even one with his family name on the box. He'd spent too long stirring those steaming vats as a child to have any particular affection for the soap. For him it was all about the customer.

To drive sales, Wrigley started experimenting with different premiums to sell the soap to retailers, eventually settling on baking powder. By 1892, the baking powder had become even more popular than the soap. Wrigley nimbly

switched gears and sold the baking powder instead, demonstrating a strategic flexibility that would become his trademark. The powder now needed its own premium, something both cheap and appealing. A little “something extra” to ever so slightly tilt merchants in his product’s direction. Wrigley put himself in the mind of a busy merchant rushing around a hot, crowded store, taking inventory and fending off shoplifters, always on. It sounded stressful. What would take the edge off?

* * *

Human beings have chewed gum for millennia, whether to freshen breath, quench thirst, promote alertness, or stave off hunger. The practice sprang up independently across civilizations. Human DNA has been sequenced from five-thousand-year-old lumps of birch bark pitch, teeth marks still visible. The ancient Greeks chewed a gum made from the resin of the mastic tree. In China, people chewed ginseng root. In South Asia, betel nuts have been chewed for thousands of years. In parts of the New World, Native Americans chewed spruce sap, and some European settlers adopted the practice in New England.

In the 1840s, a man named John Curtis built the first spruce sap chewing gum factory in Maine and the product caught on. Spruce sap had problems, however—it was an acquired taste at best, and it tended to get brittle when chewed. Adding paraffin wax helped, so wax mixed with sap became the American chew of choice. Wrigley bought a few boxes of the stuff because chewing gum was a nervous habit and shopkeepers were a nervous bunch. His instinct on the appeal of gum as a premium proved correct. In fact, as the business grew, Wrigley realized that the gum had now become more popular than the baking powder, just as the powder had once eclipsed the soap. Time for another pivot. Wrigley made the premium into the product once more. Let the customer lead.

As with soap, Wrigley was relatively indifferent to the product itself. His first two brands were created by his gum supplier: Vassar for women and Lotta for everyone else. “Anyone can make gum,” Wrigley said. “The trick is to sell

it.” Wrigley’s obsessive interest was the psychology of the American consumer, not food chemistry. That said, the gum did lose flavor awfully quickly. It even disintegrated as you chewed. Wrigley decided that a product with this kind of potential deserved a little more of attention. After researching the alternatives, Wrigley told his supplier to use chicle instead of combining sap and wax. A natural latex made from trees in Central America and Mexico, chicle had been popular with both the Aztecs and the Maya. Providing a longer-lasting, better-tasting chew than sap, chicle was slowly gaining ground thanks to popular new brands like Chiclets. In 1893 Wrigley introduced two new brands of chicle gum that would endure: Juicy Fruit and Wrigley’s Spearmint. The fruit extracts in Juicy Fruit held their flavor particularly well, and the spearmint served as a powerful breath freshener. The new flavors became so popular that Wrigley abandoned Lotta and Vassar altogether. With the product side sorted for the moment, the main problem became the competition.

In 1899, six other chewing gum manufacturers invited Wrigley to join them in a trust. Working together, they would have more sway with retailers and more control over pricing and supply. When Wrigley refused to participate in this monopolistic effort, he found himself at war with all his competitors at once. To survive, Wrigley knew he would need the loyalty and affection of grocers. They were the ones who ultimately decided which chewing gums to stock and how prominently to place them in the store. Once again, Wrigley tapped into his extraordinary capacity for theory of mind. If the gum had become the product, it was time to offer a new premium. Wrigley started offering higher-end gifts chosen specifically to appeal to grocers: scales, coffee grinders, cash registers. These incentives boosted sales and convinced reticent retailers to place his display cases in plain view of customers. Unfortunately, the margins on gum were so thin that he still lost money. Rather than throw good money after bad, Wrigley decided to try a new approach, something as cutting-edge as premiums had once been. At the turn of the century, this meant turning to the new science of advertising.

Humans have advertised their products since ancient times. Papyrus posters decorated the walls of ancient Egypt. In China, printed signs advertising local shops date back to the Song dynasty. Advertising evolved, however, with the Industrial Revolution. As commerce and competition exploded, so did the sophistication and scale of advertising, which took on the trappings of a psychological science along the way. These new advertisements leaned ever more heavily into the realm of persuasion and manipulation as intense competition drove companies to go beyond merely listing their product's positive attributes. It was a craft Wrigley was born to master.

Unable to fend off the chewing gum trust with premiums alone, Wrigley started placing ads for his gums in Chicago newspapers and on Chicago store windows. Colorful, snappy, and memorable, his ads promised not only a refreshing break from tobacco but an unbeatable remedy for heartburn, flatulence, and, of course, bad breath. The ads caught the attention of shoppers, and Wrigley's profits began at last to grow. Increasingly confident in the strategy, Wrigley decided to make a bigger bet in 1902, spending \$100,000 on ads in New York City itself. To his chagrin, however, nothing much happened.

After losing that much money, many entrepreneurs would have given up on expansion altogether. But Wrigley knew his ads worked because they'd worked in Chicago and elsewhere. The key to growth was to "tell 'em quick and tell 'em often." He'd just underestimated the scale of that challenge in the Big Apple. So Wrigley tried again, sinking another \$100,000 into New York City ads. Once again, however, he failed to make a dent. Somehow this second failure only galvanized Wrigley to "get the dropped \$200,000 back."

A Japanese proverb says, "Fall down seven times, get up eight." This is the heart of resilience. Wrigley knew from experience that ads sold gum. The size of the spend might have been wrong, the copy on the posters might have needed tweaking, but the strategy itself was sound. He had no intention of giving up on it. He just needed to shore up his business and bide his time for the right moment.

Then the financial panic of 1907 struck.

“Everything was flat on its back and everybody was retrenching, particularly on advertising,” Wrigley later recalled. “I thought it was the ripe hour for a big national campaign.” Wrigley returned to New York City with a quarter-of-a-million-dollar loan. Demand for advertising space was at an all-time low, so Wrigley’s \$250,000 bought well over a million dollars of ad space. Neon signs advertising Wrigley’s gums went up all over town and, eventually, all over the country. This time the barrage of ads, magnified by the recession, was sufficient to capture 60 percent of the chewing gum market.

Wrigley sent struggling retailers coupons for free boxes of gum. Again, who didn’t like “something extra”? But when those retailers mailed their coupons to Wrigley’s distributors to receive their free box, it also gave those distributors the perfect opportunity to develop a relationship with the retailers. Wrigley knew how important these relationships were from his own experience as a traveling salesman.

Thanks to his bold and sustained efforts to grow the company even as the economy shrank, Wrigley’s products became the most popular gums in the country, breaking the chewing gum trust for good. By 1910 sales had gone from \$170,000 to \$3 million, and Wrigley’s Spearmint had become the nation’s bestselling brand. In 1911 Wrigley bought his gum supplier, bringing manufacturing in-house. With the scale he’d achieved, vertical integration only made sense. Three years later, Wrigley’s introduced Doublemint gum: it offered “Double Value” with “Double Strength Peppermint Flavor, Double Wrapped—Always Fresh and Clean.”

Wrigley’s success with his second round of New York City advertising shaped his strategy moving forward. Anybody could stick a wrapper on a piece of flavored chicle. Top-of-mind awareness was everything for an impulse purchase like chewing gum. “Advertising is like running a train,” he said. “You’ve got to keep on shoveling coal into the engine. Once you stop stoking, the fire goes out. The train will run on its own momentum for a while, but it will gradually slow down

and come to a dead stop.” In 1915 Wrigley took this thinking to its logical conclusion, mailing four sticks of Spearmint gum to every single household in the United States phone book, more than 1.5 million packages in all. He spent heavily on other stunts, too, like a chain of 117 billboards half a mile long along the Trenton–Atlantic City railway in New Jersey. Never stop advertising.

In 1919 Wrigley took the company public. By that point, the Wm. Wrigley Jr. Company employed twelve hundred people and produced 40 million sticks of gum a day. In accordance with Wrigley’s philosophy, \$4 million was shoveled into the advertising firebox each year. “They tell me our four plants turn out enough gum every day to reach from New York to Galveston and pretty nearly bridge the Gulf of Mexico if the sticks were laid end to end,” Wrigley said. The man himself had accumulated a fortune worth an estimated \$50 million. Wrigley’s gum was chewed around the world. Wrappers were printed in thirty-seven languages.

Wrigley always understood the importance of surprise to capturing the attention of a fickle public. No one would ever have expected to receive a package of free gum in the mail—that’s what gave the stunt its remarkable value. As the iconic twenty-story Wrigley Building took shape, the first large building north of the Chicago River and the first air-conditioned office building in the city, Wrigley explained his thinking to a reporter: “Did you find my name anywhere on this building?” he said. “Did you find any mention of Spearmint on its outside walls? People thought when I began to put this up that I would plaster my name all over it in letters big enough to be seen miles away. . . . As a matter of fact, it was better advertising not to plaster my name on the building. People talk more about it. It is the unusual thing—the thing they didn’t expect me to do.”

Even as the company thrived, Wrigley kept his foot on the pedal. “There is no such thing as getting a business so established that it does not need to advertise,” he said. “Babies who never heard about you are being born every day, and people who once knew you forget you if you don’t keep them reminded constantly.”

In 1925, William Wrigley Jr. turned day-to-day operations over to his son, Philip, and turned the majority of his attention to baseball. In 1916 he'd bought a minority stake in the Chicago Cubs with \$50,000 of his chewing gum earnings. By 1921 he'd become the team's majority owner, and he went on to invest millions more in the team. Wrigley maintained the ballpark as lovingly as he did his own factories, which were legendary for their rigorous cleanliness. He'd even pull on a pair of white gloves and run them along the stadium's railings to check for dirt. Wrigley applied the same philosophy to marketing the Cubs that had worked so well for chewing gum, allowing radio stations to cover their games for minimal fees, even if the coverage aired simultaneously on multiple stations. By 1925 Cubs games were a fixture on the radio.

Though Philip was now in charge, William Wrigley Jr. always maintained an active interest in the business. This was easy enough at first—the Roaring Twenties were good for gum. Business tripled over the course of the decade. Then, on Friday, November 27, 1929, Black Friday brought that decade of exuberant growth to an end. In October 1929, square in the middle of the worst stock market crash in American history, William Wrigley's photo appeared on the cover of *Time* magazine. Unfortunate as the timing was, it turned out to fit. Gum proved resilient enough to thrive even during the Great Depression. Net profits were \$12.2 million in 1930—on par with the company's previous rate of growth. "People chew harder when they are sad," Wrigley said.

Flexible when conditions changed, determined when they worsened, Wrigley's resilience was no accident of luck. When baking powder superseded soap, he pivoted, and when gum superseded baking powder, he pivoted again. All along the way, he never stopped investing in the business. When the financial panic of 1907 convinced Wrigley's competitors to hole up and weather the storm, he borrowed \$250,000 and spent it all on dirt-cheap advertising, blanketing New York City in neon.

William Wrigley saw everything as a resource to be carefully managed, which is why he insisted on such high standards of cleanliness and organization in every factory and

office. Wrigley invested in his businesses and he invested in others. When conditions worsened, as they did several times during his lifetime, he dug deeper. For example, when fellow Cubs owner Charles Weeghman ran into financial difficulties, Wrigley lent him money to get through—with Weeghman’s Cubs stock as collateral. By 1918, Weeghman had leveraged most of his stock in return for loans, his restaurants having been hit hard by the influenza epidemic. Soon Wrigley had full control of the team. Likewise, when wheat and cotton prices cratered in 1931, Wrigley announced that he would accept these commodities as payment for Wrigley products. He understood that survival depended on “shoveling coal into the engine.”

On January 26, 1932, William Wrigley Jr. died at the age of seventy. The company’s plants around the world were temporarily closed. His obituary highlighted the remarkable fact that he had spent \$100 million on advertising in his life, an astonishing sum equivalent to nearly \$2 billion today. He was probably the largest advertiser of a single product of his time. Tributes from political leaders, baseball players, financiers, and manufacturers poured in. In his long and busy life, Wrigley had pursued enterprises in “baseball, coal mining, transportation, the motion picture industry, ranching, and hotels,” according to the *New York Times*. It was “a national loss,” according to Arizona’s first governor, George W. P. Hunt. “Nearly all his many enterprises involved pioneer development.” Wrigley was buried in a custom sarcophagus on his beloved Santa Catalina Island.

In 2008, the Wm. Wrigley Jr. Company, largest manufacturer of chewing gum in the world, was sold to Mars Inc. for \$23 billion in cash. Today the company supplies half the chewing gum sold in both the United States and Europe.

To think, Wrigley once gave it away for free.

Level Up: Nintendo Takes America

October 1985. It’s the start of the American holiday shopping season at the epicenter of American holiday shopping: FAO Schwarz, the storied Manhattan toy mecca. Outside, the store’s

iconic red-suited “toy” soldiers stand guard. Despite the heavy security, however, a crack team of Nintendo operatives has infiltrated the store. FAO Schwarz, like nearly every other American retailer, has tried its best to fend off the Japanese company and its new video game console, the Nintendo Entertainment System (NES). That’s because the American video game market is all out of quarters. Thanks to a flood of shoddy, derivative, and sometimes even unplayable games, kids have turned their backs on the once-dominant video game consoles made by Atari and Coleco. But Nintendo has made the store an offer it can’t refuse: a full refund on every unsold product. The company will even set up the retail displays and demonstrate the games for customers. Even now, with the American video game industry at rock bottom, this is too good a deal to pass up. After all, it’s only Thanksgiving. If the NES flops, they can fill the space with Barbie Dream Houses by Christmas.

The Nintendo of America employees opening boxes in the back of the store are exhausted. Understaffed and overwhelmed, they’ve been working around the clock out of a filthy, rat-infested Hackensack, New Jersey, warehouse to prepare for the console’s test launch in hundreds of toy stores around the New York City area. If it succeeds in New York, Nintendo will roll the console out to the entire country. But the outlook for the product—and the American subsidiary that employs them—is bleak. Earlier this week, they threw everything they had at a glamorous and glitzy launch party in a trendy New York nightclub. It featured demo units for journalists to play, silver-plated versions of the toy robot that came with the console scattered around the room, and one giant robot in the center. Despite the open bar, an almost unbeatable lure for bored journalists, almost nobody showed. As far as the American media is concerned, video games are over.

Now FAO Schwarz has carved out a whopping fifteen-foot-by-fifteen-foot demonstration area for Nintendo to make its case to some of the most urbane and sophisticated ten-year-olds in the country. Gail Tilden, Nintendo’s advertising manager, watches eagerly as children and adults make their

way over to the display and give games like Gyromite (featuring the robot) and Duck Hunt (featuring a light-sensitive gun) a try. It's all a bit of camouflage. Through the colorful accessories and the VCR-like front-loading design, Nintendo hopes to blur the line between video game console, entertainment system, family computer, and toy.

The camouflage is necessary, but Tilden can't help but wince when people try to play with the slow, unwieldy robot.

"That thing is definitely like watching grass grow," she thinks.

Despite the underwhelming robot, it isn't long before Nintendo makes its first American sale. A man enters the store and, without pausing to try the demo, grabs a console and all fifteen available games off the shelves. The team watches eagerly as he heads to the register. Only once he leaves the store does someone volunteer the fact that he works for a Japanese competitor.

Deflated but undeterred, Tilden and her colleagues get back to work convincing America that the video game still has one remaining life.

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For decades now, console manufacturers have sought to dominate the home gaming market by cramming the most advanced components available into the smallest and sleekest packages. They differentiate their devices through the size and scope of their game libraries because, aside from the games themselves, there isn't much to distinguish what are essentially turnkey gaming computers. As a result, the dominant companies scheme to secure access to hit games, even if that exclusivity requires buying an entire studio, as Microsoft did in 2020 when it spent \$7.5 billion to acquire the parent company of Bethesda, developer of popular game franchises like Fallout and The Elder Scrolls, to shore up its new line of Xbox consoles.

Through all this one-upmanship, Japan's Nintendo stands apart. Its devices rarely use cutting-edge components. It prefers to work with what is cheap and abundant to maintain

low prices, both to keep its platforms accessible to new gamers and to allow for more creative risks. In the 1980s, designer Gunpei Yokoi built the revolutionary pocket Game & Watch device around LCD screens that had become affordable thanks to the pocket calculator boom. Rather than chase the best specs in the industry, Nintendo endures by applying ingenuity to the mechanics of play. Momentarily achieving the industry's best animation frame rate is less important to the company than making a gun that lets you shoot at enemies on the screen (the Zapper), a controller that translates your motions into action in the game (the Wii), or a device that displays three-dimensional graphics without the use of special glasses (the 3DS). Nintendo's resilience stems from a strategy of diversity. Continually betting on new ideas—in game design, play style, marketing, and nearly every other aspect of its business—means that the company is usually well positioned to thrive in the face of the unexpected.

When the coronavirus pandemic struck in 2020, industry observers wondered whether the tens of millions of Americans in lockdown would snap up Microsoft's Xbox or Sony's PlayStation to while away the time indoors. To nearly universal surprise, it was Nintendo's unique Switch console that captured the lion's share of this newly captive audience, setting hardware sales records and outselling its more powerful rivals. The Switch, which features motion-sensitive controllers like the earlier Wii console and allows for seamless transition from big-screen TV play to mobile gaming, isn't as powerful as competing consoles. It doesn't get the latest and greatest AAA video game releases, the ultrarealistic military shooters and celebrity-studded sports franchises. At least, not until long after its rivals do. But it offers access to its own, exclusive, brightly colored universe of iconic characters like Mario, Link, and Donkey Kong. Hard-core gamers might have scoffed, but in an uncertain time, it was the newest release in the Animal Crossing series, a cute but comforting franchise developed by Nintendo, that became an international phenomenon during the crisis, propelling the Switch to dominance.

Though the company is synonymous with video games today, Nintendo opened its doors in 1889, sixty-nine years before the first video game. During its history, it has consistently had some of its biggest wins during times of upheaval: wars, market crashes, pandemics. Its commitment to ingenuity and experimentation over the blind pursuit of market trends has made it one of the most recession-proof companies in the world.

* * *

Founded in Kyoto, Japan, Nintendo began as a manufacturer of hand-made gambling cards known as *hanafuda*. Though the word “Nintendo” is often interpreted as “leave luck to heaven,” its founder, Fusajiro Yamauchi, might have been making a veiled reference to the yakuza, Japanese organized crime members, who gambled with hanafuda. In any case, Yamauchi’s true intentions are lost to history. This is no surprise considering the company’s longevity. A bare handful of modern corporate giants hail from the nineteenth century.

In business, careful diversification builds resilience. Expanding the company’s range of products and services to address more needs and appeal to more customers helps protect against volatility in any one area. A leader can have a hunch about a product’s potential, but nothing is certain when it comes to predicting success or anticipating new challenges. Diversifying can reduce risk and leverage the power of serendipity. Prioritizing many small bets over a few large ones makes sense, especially in novelty-driven industries like entertainment, where a small bet has the potential for a huge payoff.

In 1963 Nintendo embarked on a diversification campaign of extraordinary breadth. This new direction was led by Hiroshi Yamauchi, great-grandson of the company’s founder. When Hiroshi’s grandfather, Nintendo’s second president, Sekiryō Kaneda, suffered a stroke, he asked Hiroshi to drop out of college and take over the business. Hiroshi agreed, but due to his youth and lack of management experience, many employees resented him and questioned his authority. He soon faced a strike by disgruntled staff. Demonstrating what would

become characteristic ruthlessness, he fired “anyone and everyone who might oppose him,” including a cousin.

Hiroshi Yamauchi had no interest in winning over the old guard. He wanted to shake things up and get Nintendo on the path to rapid growth. The market for hanafuda was limited to older, male gamblers, so he diversified into Western-style, plastic-coated playing cards, marketing them as a family pastime. He even licensed the necessary rights to put Disney characters on the backs. This first effort at diversification nearly doubled the company’s profits in a single year. Yamauchi took the company public.

In 1963 Yamauchi’s attempts to diversify Nintendo’s offerings grew more ambitious. After a visit to the humble offices and small factory of the United States Playing Card Company—the largest playing card manufacturer at the time—he decided that the entire category simply didn’t have enough potential for Nintendo, even if it could one day dominate it. He introduced a slew of new ventures: instant rice, ballpoint pens, a taxi service, a photocopier, a vacuum cleaner, even a “love hotel,” a type of pay-by-the-hour establishment popular in Japan. “He wasn’t interested in specializing,” Nintendo Entertainment System designer Masayuki Uemura later observed. “He was keenly interested in new trends.”

But as Yamauchi soon realized, effective diversification is about more than just diversity—there must be an overarching strategy knitting the bets together. He had no real plan beyond a desire to put his eggs in more than one basket. As a result, Nintendo ended up on the brink of bankruptcy. To diversify successfully, Yamauchi saw he would have to pursue directions that leveraged Nintendo’s existing strengths. Its greatest was its powerful and wide-ranging distribution system. Nintendo could move products quickly and efficiently into department stores and toy stores across the country. From that perspective, toys and games were the obvious area of focus for diversification and growth.

In 1964 Nintendo released its first toy, the Rabbit Coaster, a plastic course that children could use to “race” small beads.

Other toys followed. These early efforts met with enough success to encourage iteration and elaboration: the Rabbit Coaster became the more elaborate New Rabbit Coaster and then the space-themed Captain Ultra Coaster. Then Yamauchi discovered Gunpei Yokoi, hired to maintain the card-printing machines, fiddling with an extendable wooden claw of his own design on the factory floor. He ordered Yokoi to develop the claw into a proper plastic toy that Nintendo could get on shelves by that Christmas. The resulting Ultra Hand sold an astonishing 1.2 million units. Small bet, big payoff. Yamauchi subsequently promoted Yokoi and put him in charge of research and development for new toys.

With Japan's rapidly growing prominence in electronics, Yamauchi knew that electronic toys and games represented an area of opportunity. The company created a toy gun featuring a light-sensitive sensor, the Beam Gun, which evolved into a room-sized interactive shooting simulation. Nintendo spent billions of yen converting bowling alleys across the country to what it dubbed the Laser Clay Shooting System, demonstrating the kind of strategic flexibility now associated with Silicon Valley. Though he wasn't an inventor himself, Yamauchi had an enthusiasm for experimenting in many different areas using whatever was cheap and available and then pushing forward with any initiative that showed promise.

While flexibility is a strength when conditions are favorable, it shows its true value when the chips are down. Even with the popularity of the Laser Clay Shooting System growing rapidly, pre-orders piling up, and a dedicated factory operating around the clock, a factor outside of Yamauchi's control became a threat not just to the game but to Nintendo as a whole. The 1973 oil crisis hit Japan particularly hard, and nearly all orders for the Laser Clay system were canceled. Nintendo's profits halved. Yamauchi suddenly found his company 5 billion yen in debt in a country on the verge of recession.

With iron resolve, Yamauchi regrouped. Nintendo retooled the system into a freestanding game intended for the arcades appearing all over the country. Though electromechanical and not made with software, the "Mini Laser Clay" system

allowed for variant shooting games to be installed in the same cabinet, eliminating the need for arcade owners to buy expensive new hardware for every game and giving Nintendo an edge over the competition. Throughout the 1970s, the company released more games for the system, like Wild Gunman and Duck Hunt, and breathed new life into the “Mini Laser Clay” system each time. This was a glimpse of a promising new business model for Yamauchi.

In 1978 Nintendo succeeded with a new, software-driven arcade game called Radar Scope. Two years later, Yamauchi tasked his son-in-law, Minoru Arakawa, with opening Nintendo of America to distribute Radar Scope in the United States. Yamauchi saw great potential in the rapidly growing American arcade market. For Nintendo, international expansion could be another form of diversification, another path toward resilience. When one country is down, another might be up. Safer to go after both.

In technology, however, timing is everything. Radar Scope was already a year old when Nintendo’s American subsidiary opened its doors. Production and shipping problems added to the delay. By the time an ambitious three thousand units had arrived at the company’s warehouse, arcades balked at buying what felt like another tired Space Invaders clone. Arakawa managed to sell only a thousand Radar Scope cabinets before exhausting his options.

Arakawa was in a tough spot. He didn’t want to disappoint his father-in-law, but the remaining Radar Scope cabinets simply weren’t moving. With no other options, he suggested that Yamauchi reuse the strategy that had saved the Mini Laser Clay: swapping a new game into an old cabinet. Yamauchi decided Arakawa’s gambit was worth a small risk. Rather than divert one of the company’s top designers, he opened the project up to internal competition. A new staff artist with no game design experience, Shigeru Miyamoto, submitted several ideas for the Radar Scope replacement, and he was given the project, under Yokoi’s supervision.

Miyamoto had only recently joined the company, but he wasn’t shy to admit that he wasn’t all that impressed by its

products, or by video games in general. He was more of a Beatles fan than a hard-core quarter jockey. Though Miyamoto had never designed a game, Yamauchi saw that the young creative had vision and a clear aesthetic sensibility. Miyamoto, for his part, believed there was an opening in the market for something new: narrative. A game with a story, a clear beginning, middle, and end. Instead of a cartoonish villain, he wanted to feature a sympathetic antagonist with clear motivations.

Yamauchi had no interest in video games himself. To him they were always just a product, like instant rice or ballpoint pens. He did, however, understand that rushing to replace a tired game with a slight variation would only have been another egg in the same basket. As risky as it must have felt, tapping an untested maverick like Miyamoto to save Nintendo of America was smart diversification in action. Whether the young artist could deliver a hit, Miyamoto would certainly offer Nintendo something *new*. And novelty was what the company needed to expand its portfolio. The young game designer was welcome to pursue an entirely new direction. It just had to work in those unsold Radar Scope cabinets.

At first Miyamoto wanted to use characters from the comic strip *Popeye*: he envisioned a game dramatizing the love triangle between Popeye and Bluto for Olive Oyl's affections. When he realized Nintendo would need to secure the rights to those characters, however, Miyamoto designed three new ones instead: "Jumpman" would try to rescue his girlfriend from an angry ape. Miyamoto named the ape Donkey Kong: "Donkey" in the sense of stubbornness and "Kong" as a reference to the 1933 film *King Kong*. He gave Jumpman a hat (to avoid animating hair) and a mustache (with only a few pixels to work with, every attempt to animate a mouth looked like a mustache anyway). Slowly, a new kind of video game took shape.

Once the twenty thousand lines of Donkey Kong code were embedded in special conversion kits and sent to the United States, Arakawa and the rest of the small Nintendo of American team painstakingly installed them in the unused Radar Scope cabinets, in addition to replacing the cabinet

artwork, all through an extraordinarily hot summer. In the middle of this laborious process, their mustachioed landlord, Mario Segale, yelled at Arakawa about late rent. The team couldn't help but notice a certain physical similarity to Jumpman, and the character was renamed. Donkey Kong became the industry's top seller in 1981, and Jumpman, now Mario, went on to become Nintendo's mascot.

Arcade game cabinets were lucrative, but Yamauchi decided to take a risk on a home console along the lines of the immensely popular Atari 2600. Though his competitors were sanguine, he knew there was no predicting how long the arcade phenomenon might last. Late one evening in 1981, Yamauchi called one of his R&D heads, Masayuki Uemura, at home. Without preamble, he gave Uemura an impossible three-part design challenge: create a console that could accept interchangeable game cartridges, play games at a level that would not become obsolete for a year or more, and cost substantially less than any competing console. Resilience through diversification.

"He always liked to call me after he'd had a few drinks," Uemura later recalled, "so I didn't think much of it. I just said, 'Sure thing, boss,' and hung up." The next morning, however, a sober Yamauchi approached Uemura at his desk. "That thing we talked about—you're on it?" Uemura realized the boss was serious.

Uemura spent six months deconstructing the competition: "I bought every single [console], took them apart, analyzed them piece by piece." Reverse-engineering the devices was no easy task. "I had a semiconductor manufacturer dissolve the plastic covering on the chips to expose the wiring underneath," he said. "I took pictures, blew them up, and looked at the circuitry to understand it. I had some experience with arcade games, and right away I knew that none of what I was looking at would be any help in designing a new home system . . . they were simply old-fashioned."

With no option but to start from scratch, Uemura rose to Yamauchi's challenge in typical Nintendo fashion by innovating around cheap, off-the-shelf components. This

approach keeps material costs low, allowing the company to charge lower prices to consumers while keeping its own risks more manageable. Its success with the Laser Clay system had taught Nintendo the same lesson that Gillette learned with its razors and blades. The profit, if there were any, would be in games, not consoles.

On July 15, 1983, Nintendo released the Family Computer, or Famicom. Thanks in large part to its low price, less than half what competing consoles cost at the time, Nintendo sold half a million units in its first two months. The price kept profits minimal, but that was all part of the strategy. In September 1985, Nintendo released Super Mario Bros. for the Famicom, a follow-up to the company's arcade hit, Mario Bros., both featuring Nintendo of America's irate landlord. At the time, successful home video games sold in the thousands of units. The era-defining Super Mario Bros. would go on to sell millions, not only making up all that lost profit on Famicoms but driving more Famicom sales through its own popularity.

In Yamauchi's view, it was the right time to use his American subsidiary to bring the Famicom to the West. This was a profoundly unconventional view, but one that perfectly represents his approach to resilience through diversification. The years 1983 and 1984 had seen an almost total collapse of the American video game market. In Japan, they called this crash the Atari Shock, but in reality every corner of the American industry was affected. By 1985 the entire industry was in free fall. An endless glut of low-quality games and consoles had taken their toll: American kids were tired of wasting money on lousy games. "Now these games are really boring," a twelve-year-old boy told the *New York Times*. "They're all the same. You kill the invaders and that's it. Boring." The movie tie-in game E.T. the Extra-Terrestrial, rushed out in six weeks so Atari could catch the 1982 holiday season, had been so unplayable that the company buried a vast number of unsold cartridges in the New Mexico desert under a layer of concrete.

The downturn cost manufacturers hundreds of millions of dollars. Thousands of workers lost their jobs. In the eyes of

retailers, this meant the video game fad was over. As the president of one chain put it, “It’s just a product that’s run its course.” Likewise, hundreds of video game arcades closed across the country. As one arcade operator told the *Times*, “Too many machines are chasing too few quarters.”

Nintendo’s leader, however, saw it differently: he believed that the crash meant the market was primed for innovation. Truly new ideas. This was exactly the kind of problem that Nintendo was good at solving: when gamers grew tired of shoot-’em-ups, it succeeded with an ape-versus-plumber love triangle. To start, though, Yamauchi knew the Famicom would need to maintain high standards to avoid Atari’s fate. This would be difficult because Nintendo would depend on other companies to develop games for its console to ensure a large and robust library of options for consumers. That approach had been Atari’s undoing—when the company opened itself up to third-party developers, the market had quickly become saturated with abysmal games, including what were essentially interactive advertisements, like Kool-Aid Man and Pepsi Invaders. To get ahead of this problem, Yamauchi created an innovative licensing program called the Nintendo Seal of Quality. Thanks to a special chip in the Famicom, only authorized games would work on the device. Third-party developers would have to meet Nintendo’s strict quality standards if they wanted to make games for the new console, and they would be limited to producing two titles per year. Quality over quantity—whether they liked it or not.

With trust among consumers at an all-time low, Nintendo made another bold decision: to tell the truth. In sharp contrast to its competitors, Nintendo decided to use only accurate depictions of the graphics on its game covers. “There was an over-promise in the games that had been introduced prior,” Gail Tilden, Nintendo’s advertising manager at the time, recalled. “The consumer might see some beautiful fantasy graphics on the front, or a photographic image of people playing tennis, and then it was really just some enhanced version of Pong.” Rather than risk disappointing already jaded consumers, Nintendo decided to set expectations accurately at purchase.

Lucrative as the Japanese market was, the United States—with twice the population and vast cultural influence over the rest of the world—represented an order of magnitude more potential. Before they could even begin to woo the public, however, Nintendo had to win over American retailers. At the time, most were convinced that playing video games at home had been a short-lived fad. To sidestep this bias, Nintendo changed the product's design. In Japan, the Famicom looked like what it was: a home video game console, all too similar to the Atari and Coleco consoles still stacked up in the stockrooms of many American stores. For the U.S. market, Nintendo would have to differentiate its offering at first glance. It turned to home media devices for inspiration. At the time, VCRs were becoming a common feature of American living rooms. Borrowing their design language, Nintendo created a new shape for the Famicom. Employees dubbed it the “lunchbox.” They moved the slot where you inserted the cartridge—now called a “Game Pak”—from the top to the front of what it now called the “Control Deck.” (“We never used the word ‘videogame’ at all,” Tilden explained.) Then they traded the Famicom's toy-like white and red color scheme for a more sober one of gray, black, and red. Sharp corners replaced the Famicom's rounded ones. The cheerful Famicom became the sleek Nintendo Entertainment System.

In case the redesign alone wasn't enough to win over skeptics—Yamauchi never tried one solution when more would do—Nintendo's advertising emphasized the Robot Operating Buddy, or R.O.B., a plastic robot toy that could obey commands from certain games. The hope was that R.O.B. would make retailers view the system as a toy akin to popular action figures like Transformers and Voltron, not yet another overhyped video game product destined for burial in the New Mexico desert. In practice, the mind-numbingly slow robot and its lackluster games underwhelmed kids and were quickly discontinued. But the camouflage effect of the gimmick was undeniable. Nintendo also included its Light Gun with the console, rebranded the “Zapper,” developed along the same lines as Nintendo's original Beam Gun.

“America loves guns,” Famicom architect Uemura later said.

If he was going to win America, Yamauchi would need to prove the viability of the Famicom in the West beyond a shadow of a doubt. Rather than risk the company’s fortunes on a do-or-die nationwide rollout, he told the Nintendo of America team to test the product in New York City. If it won over the jaded and cynical kids of the Big Apple, it would work anywhere in the country. The problem was, retailers in the city were as pessimistic about video games as they were anywhere else. They didn’t care that children routinely camped outside stores in Japan to get their hands on the latest Famicom games. With no other options, Minoru Arakawa, head of Nintendo of America, offered stores a no-risk return policy: sell as many systems as you can and return the rest for a full refund. He also offered to have the company do all the work of setting up the product displays and running demos. The only thing retailers would risk was shelf space. It was an absurdly generous offer, but stores would accept nothing less.

In October 1985, Nintendo made the NES available for sale in hundreds of stores across New York City and the surrounding area. The subsidiary’s small staff worked around the clock to set up retail displays and demonstrate the games. And, by the end of that holiday season, the company had sold about half its inventory. It wasn’t a flat-out success, but the numbers convinced Yamauchi to keep pushing into the American market. To sell fifty thousand units in a market already saturated with consoles indicated what he’d suspected all along: kids still loved games. They just wanted good ones.

Early the following year, the company expanded into other cities: Los Angeles, Chicago, San Francisco. By the 1986 holiday season, momentum had grown, and Nintendo began bundling its new hit, Super Mario Bros., with the system itself. This decision spurred a huge surge in sales: now the blades were selling the razor. The Nintendo Entertainment System was soon outselling its competitors ten to one. By 1987, it had become the best-selling toy in the United States, with three million units sold. One of the new games, The Legend of

Zelda, became the first game not bundled with a console (as Super Mario Bros. had been) to sell a million copies.

Hiroshi Yamauchi served as Nintendo's president for more than five decades. During his tenure, he came to believe firmly in the primacy of the artist, even those who, like Shigeru Miyamoto, had no technical experience prior to designing their first game. "An ordinary man," Yamauchi said, "cannot develop good games no matter how hard he tries. A handful of people in this world can develop games that everybody wants. Those are the people we want at Nintendo." Nintendo's extraordinary creative resilience, its consistently excellent output over the years, can also be traced to a strategy of diversity. Yamauchi established three separate R&D units, lavishing them with resources and then pitting them against each other to drive them toward ever-greater feats of design, engineering, and sheer imaginative power.

In all his time at Nintendo's helm, Yamauchi never developed any personal interest in his company's products. Even as more and more adults discovered the joy of video games through Nintendo's offerings, Yamauchi played only Go, the Chinese game of strategy as old as *The Art of War*. At this one game, Yamauchi was very, very good. "Only the very best tacticians could ever hope to move beyond Q10, the 'black belt,' to reach Dan grade," *Next Generation* magazine explained in a profile. "Yamauchi is a seventh Dan master, and his playing style has been described variously as forceful, aggressive, open, flexible in defense, and unstoppable in the face of weakness." In this we can see everything that made Nintendo the dominant force it became.

In 2002 Yamauchi stepped down as president but continued as chairman of the board. In 2005 he retired. His shares in Nintendo made him one of Japan's wealthiest men, and he donated billions of yen to a cancer treatment center in Kyoto. He died in 2013 at the age of eighty-five.

Today Nintendo has sold nearly 5 billion video games and more than 750 million systems, from the original Famicom all the way to today's Nintendo Switch. Over the decades, Nintendo's characters—Mario, Donkey Kong, Princess Zelda,

Pikachu, and many more—have become international icons. The company has come a long way from playing cards, but ultimately its resilience has stemmed not from the fact that it makes video games but from its ingenious efforts at diversification, at repeatedly taking gambles on new ideas in game design, play style, and console form factor that no major competitor would risk. When the industry zigs, Nintendo zags.

Over and over, Hiroshi Yamauchi leveraged his company's strengths to take meaningful but manageable risks until he found something with real potential, then delivered on what worked at the highest standards of quality. If there's a better recipe for resilience, they have yet to find it.

* * *

“You don't learn to walk by following the rules,” Virgin founder Sir Richard Branson wrote. “You learn by doing, and by falling over.” Resilient businesses aren't afraid of falling. In fact, if they don't stumble now and then, they know they aren't taking enough risks. Fear of failure will kill a company faster than any flop.

The instinct in tough times is to hunker down and play it safe. As we've seen in this chapter, however, great leaders keep making bets in good times and bad. That's because they keep one eye toward the future even as they navigate the perils of the present. These leaders mitigate the risks by keeping their bets as small as possible, but they *never* let adverse conditions—industry woes, economic recessions, even wars—slow the pace of innovation. Then, when a bet shows promise, they put everything the company has behind it. They know that prudence and frugality won't save them. Sell or die.

There are no shortcuts. Start now, not when it's easier down the road. Great products take time to develop—you can't buy them later when resources aren't as tight. Countless businesses have cratered by throwing money at a problem that only starting earlier could have solved. If you wait until times are good to start building your company's future, you simply won't have one.

Conclusion

If you really look closely, most overnight successes took a long time.

—Steve Jobs

In the middle of a battle, even the commanding generals can be unsure who's winning and why. As the great Prussian military strategist Carl von Clausewitz wrote, "War is the realm of uncertainty; three-quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty." This is the "fog of war." At the time it's happening, it's nearly impossible to gauge the true state of any battle, let alone learn from it. Eventually, however, all business wars come to an end. A new equilibrium is established. Passions cool and key players move on to new roles or retirement. Slowly, the facts emerge: decisions made, actions taken, effects measured. Now wise leaders can draw on what has become history to discover useful lessons for the future.

From strategy to positioning to dirty tricks, each chapter of *The Art of Business Wars* followed a singular theme through the ins and outs of three extraordinary entrepreneurial journeys. Yet there are common elements to be found throughout this book. Considering the broad sweep of business history in all its remarkable breadth, it's noteworthy that the winners win in surprisingly similar ways. This book has offered us an unusual opportunity to compare and contrast different examples of success across industries and historical eras. What might we learn from this survey regarding our own leadership?

Good leaders are wily. Early on, they seem to intuit that “all warfare is based on deception,” as Sun Tzu said. Intuition plays a remarkably consistent role. In the twenty-seven stories in this book, very few of the combatants had any formal business training. Some learned to balance the books or drive a hard bargain from a parent, as Lillian Vernon did. Driven by necessity, others, like Henry Ford, invented an approach to management simply to pursue their vision more efficiently. Whether the battlefield was candy or cosmetics, however, they relied on their intuition to an extraordinary degree when making key decisions. This was necessary: most were breaking new ground, building businesses around new technologies—electric guitars, computer dating—where there was no playbook. In an unfamiliar, unpredictable environment, a leader who trusts their intuition enough to act decisively in the absence of clear answers is at a distinct advantage.

The capacity to recover and learn from failure is intrinsic to resilient leadership. In contrast to the rags-to-riches, idea-to-IPO arc company histories report, these leaders each had many more downs than ups. Routed on the battlefield over and over again, they learned humility—and persevered. Win or lose, they forged ahead eagerly from one fight to the next, eyes always on the horizon. Sun Tzu wrote, “If victory is long in coming, then men’s weapons will grow dull and their ardor will be damped.” Nothing is more damaging than prolonged warfare. Smart leaders deliberate, but they prioritize swift and decisive action once deliberation is through. The leaders in this book share an appetite for risk, a willingness to stake not only security but reputation on a single decision, not only once, but over and over again. There is no other way to win a war.

Great business leaders know their business, inside and out. “If you know the enemy and know yourself,” Sun Tzu said, “you need not fear the result of a hundred battles.” That doesn’t always mean they like the product or even use it, of course. Olive Ann Beech never learned to fly. Hiroshi Yamauchi never played video games. But they were all insatiably curious about their companies, their customers, and their competitors.

As important as domain knowledge and experience clearly are, however, it may be the simple determination of an Herb Kelleher or a Ruth Handler to win at any cost that carries the day. As Thomas Edison said, “Many of life’s failures are people who did not realize how close they were to success when they gave up.” Perhaps the key to winning a business war is *lack* of vision. These people simply couldn’t imagine any alternative to building their businesses. Where most of us would eventually give in and apply for a day job, or pursue a professional degree, these leaders all seemed blind to the possibility of permanent failure. Someone like Ray Kroc couldn’t have stopped looking for the next entrepreneurial opportunity if he tried.

History shows that no victory is ever final. No business war is ever truly won. The best any company can hope for is a respite, a golden period of profit and productivity. Eventually, new competitors enter the field and new battle lines are drawn. Sometimes the field itself changes, and every competitor is set scrambling at once. Fundamentally, a company is a *process* for turning effort and other resources into money, whether by making muscle cars (GM) or matches (Bumble). When an entrepreneur builds a business, they are tuning that process to the frequency of the market the way you would tune an old-fashioned dial radio to the right station. (It was Thomas Edison’s great rival George Westinghouse who came up with the idea of a commercial station to help sell more of his radios. On November 2, 1920, Westinghouse’s KDKA made the first commercial broadcast. When KDKA announced the results of the Harding-Cox presidential race before listeners got their morning papers, the world underwent yet another seismic shift driven by a business war.)

Successfully tuning a business to the right frequency is a feat of discipline and ingenuity, as we’ve seen in every chapter of this book. But the frequency keeps changing. When the world changes but the business doesn’t, the war is over. As a leader stubbornly resists the impulse to change a successful formula that is no longer working, the business fades, or implodes altogether. Meanwhile, someone else is at the knob, turning, tuning, listening . . .

As a society, we venerate entrepreneurs, and for good reason. Entrepreneurship is a path to success that is open to all, from women in a patriarchal society (Kiran Mazumdar-Shaw), immigrants in a new land (Yvon Chouinard), or both (Helena Rubinstein). Businesses endure recessions (Wrigley) and wars (Adidas). In ways large and small, entrepreneurs change the world. In their quest for dominance, they change the way we work, play, eat, and dress, almost incidentally. Business is a force of nature and there is no measuring its ultimate impact.

Just as modern military leaders still look to *The Art of War*, many business ideas found in this book have stood the test of time. Noel Lee's un-commoditizing of a commodity product. William Wrigley Jr.'s "never stop advertising." Mary Barra's "no more crappy cars." Hiroshi Yamauchi's diversification through small bets—even love hotels. But simply imitating a strategy doesn't guarantee success. Our greatest business leaders' long-term success involved a good deal more short-term failures than we often realize. To win the wars, you have to win battles, but you also have to be willing to lose battles and learn from your mistakes. What winners do is keep tuning, keep trying. As IBM's Thomas J. Watson said, success is simple: "Double your rate of failure. You are thinking of failure as the enemy of success. But it isn't at all. You can be discouraged by failure or you can learn from it, so go ahead and make mistakes. Make all you can."

Entrepreneurs experiment endlessly, as Earl Tupper did with plastic, until they find a lump of greasy plastic they can turn into a profitable business. Across the sweep of history, we tend to focus on the successful experiments, but on closer examination, we've seen entrepreneurs pivot and pivot again, William Wrigley from soap to baking powder to gum, Hiroshi Yamauchi from cards to toys to video games. Though they differ in substantial ways, successful entrepreneurs share a flexibility, a willingness and an ability to bend toward the market instead of waiting for the market to come to them.

* * *

What has this grand tour through some of the greatest business wars of the previous century and more taught us? Above all,

that periods of great change are inevitable. They are as predictable in their regularity as they are each unexpected and surprising at the moment they arrive. As good leaders understand, the next wave of disruption is always about to break onshore. Business wars aren't only fought against competitors—sometimes the whole environment seems to conspire toward your downfall. As we've seen again and again, widespread cataclysms are the acid test. Nearly any business can stay afloat in calm waters. A bustling marketplace can hide sluggish growth, sloppy management, and murky vision. Vast political and economic upheavals, however, sweep away the stragglers. Facades crumble and the truth of each business's viability is revealed. Companies on shaky foundations stumble and fall. Those that deliver exceptional value efficiently, however, thrive—even in the worst of times.

The difference comes down to leadership. Great leaders steer their companies through the kind of chaos that scours the landscape of their competitors: recessions, wars, pandemics. Their businesses barrel out of the storm clouds not depleted but transformed, even invigorated. Think of Olive Ann Beech holding a board meeting from her hospital bed, about to give birth, her husband in a coma down the hall, and World War II raging in Europe. Beech Aircraft adapted to the needs of war thanks to her selfless and determined leadership and adapted again when peacetime came. We should all strive toward this combination of humility and determination, the willingness to meet the demands of the day as they come with no thought to our own egos. In the end, that is the true art of business war.

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During my time as the host of the *Business Wars* podcast, we have covered more than forty wars in nearly every industry, going as far back as Hearst vs. Pulitzer's newspaper war 130 years ago, and as recent as Amazon vs. Walmart's rivalry against the backdrop of the global COVID-19 pandemic. Neither the show nor this book would have been possible without the efforts of many people.

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The stories in *The Art of Business Wars* draw on a wide variety of sources, from book and magazine profiles to contemporaneous accounts in the press to the words of the combatants themselves. Entrepreneurs, and those who write about them, tend to mythologize. As with the *Business Wars* podcast, we've done our best to verify the facts from multiple angles to get as close to the truth—and the lessons we can draw from it—as possible.

Key sources for each chapter are included below for those readers who would like to investigate more closely. Here we've only scratched the surface of what can be learned from these titanic entrepreneurial clashes.

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