CHAPTER 1

Evolution through Revolution

One thing is clear: If our ideas and thoughts matched perfectly with what goes on in this world; and if the systems or processes we designed performed perfectly and matched with whatever we wanted them to do, what would be the basis for evolving or creating new ideas, new systems, new processes, new etc.? The answer: There wouldn't be any!

—Colonel John Boyd¹

cannot tell the story I want to tell, about a man who almost lost his job but emerged a hero. The head of a little-known business unit lost in a global conglomerate, and lackluster growth, he decided to try something new. Like all innovators, he endured the ridicule of his peers, who could simply not see the logic underlying his unorthodox new strategy. The dissent grew so strong he was almost forced out. But just in time things started to change. Revenue picked up, profit margins expanded, and the company began taking notice. Within two years, his seemingly radical strategy had more than doubled the size of his business.

This man is a client as well as a friend, and so confidentiality prevents me from sharing the details of his story. Instead, let me tell you another. This one you will certainly recognize and it makes precisely the same point.

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In August 2004, a two-year-old company with a brash idea was preparing to go public. Everyone in Silicon Valley and most investors around the world were debating the same questions: What is Google worth? Should I invest?

In hindsight, of course, we know the answer. Shares that were \$85 at the IPO trade are at about \$500 today. But in the summer of 2004, even smart, forward-looking investors could not predict Google's success.

"I'm not buying," Stephen Wozniak, cofounder of Apple, told the New York Times in the weeks before Google's IPO. "I'm not buying. Past experience leaves the taste that a few people—never ourselves will make out the first day, but that it's not likely to appreciate a lot in the near future or maybe even the long future."²

Jerry Kaplan, a well-known Silicon Valley entrepreneur who proved himself as the principal technologist at Lotus and went on to launch multiple companies, said, "I wouldn't be buying Google stock, and I don't know anyone who would. . . My experience is that when you step outside the bounds of normalcy, you are in very dangerous territory. A lot of things can go wrong."3

Why the hesitation? Because the company's explosive growth from \$439.5 million in 2002 to \$1.46 billion in just one year—looked to many investors too much like the rise-and-fall trajectory of Netscape, which had started out far ahead of slower incumbents but was soon defeated by Microsoft's Internet Explorer. Was Google heading the same way?

Just months before the IPO, the narrative of Google's slowing revenue growth was setting in: in the quarter that ended June 2004, that growth was just 7.5 percent, compared with 27 percent the prior quarter. Randy Komisar, a well-known technology entrepreneur, said, "You can't hide the fact that this thing is slowing down. There was a year of hypergrowth, and then it rolled over."4

A look at the company using traditional financial analysis supported the view that the Google IPO would fizzle. But look at what Google has achieved since going public. It has positioned itself at the center of the Internet world. It has transformed the advertising industry. It is the only large, profitable, publicly traded company to average more than 100 percent annual growth over the past 10 years. Its \$27 billion IPO valuation in 2004, once viewed by educated investors as excessive, just a few years later is overshadowed by its market value of more than \$140 billion (2010). And along the way it created thousands of millionaires.

Why didn't Google fizzle, as a lot of smart people predicted? Because its leaders looked hard at the competition and the standard model of doing things and saw there was a new way—a better way—of doing things.

It seems revolutionary now, partly because Google created a business not even imagined just a couple of decades ago. But Google was, in fact, following in some well-established footsteps, dating back centuries. At its core, finding this better way is nothing more—and nothing less—than a bold new way of thinking.

In all domains of competition—from business to sports to war—breakthrough success evolves through the same pattern. First the players fall into a routine, adopting the same practices. They are the thinkers who think inside the accepted paradigm. Then outliers, a few innovators who defy the standard practices, emerge. We will call them out-thinkers, because that's what they do. Outthinkers don't outmuscle their competitors, or outspend them; they out*think* them.

The thinkers first dismiss the outthinkers, then they ridicule them; eventually they realize the outthinkers have figured out something new and then they try to copy them. But if the outthinkers play their game right, by then it is too late. The outthinkers have won.

Outthinkers in War

In the military domain we see breakthroughs come about when an outthinker appears on the scene. Rather than perfect prevailing tactics, the outthinker takes a fresh perspective on the battlefield. This perspective Page 6

reveals as obvious strategies and methods that to others seem unorthodox, even crazy.

Hannibal's Defeat

Around 200 BC, when Scipio Africanus was asked by the council of Rome to lead Rome's defense against Hannibal, he already knew that the traditional approach would be ineffective. A series of military leaders had tried and failed to put an end to Hannibal's attacks. So Scipio Africanus set aside the obvious strategies. Instead, he turned his back to Hannibal—literally—and led his men into what is now Spain, laying siege on New Carthage (modern-day Cartagena).⁵

Why would he make such a seemingly backward move? Because Scipio understood better than his predecessors the strategic value of doing so. Carthage, the north African power, supplied Hannibal's campaign through New Carthage. So when Scipio overcame New Carthage, he cut Hannibal off from his supply lines. It was this counterintuitive choice—to turn his back on his target and instead attack New Carthage—that led to Hannibal's fall and, arguably, to the end of Carthage itself.

Genghis Khan's Victory

The European knights awoke before dawn. They climbed up into heavy, well-crafted armor and mounted oversized horses. They gathered their foot soldiers and archers and walked toward the battlefield.

As they lined up facing the trees through which their adversary would soon emerge, they felt great confidence. They were fighting close to home, so supplies were within a few miles; in contrast, their opponents had stretched their supply lines across hundreds of miles. The European knights had studied the arts of warfare from books and through years of formal training; their aggressors were savages, with tactics that had evolved little from those of early hunters. The knights didn't see how they could lose.

But when the Mongols blasted out of the woods, the knights' confidence turned to surprise and then fear. They had never before seen an enemy fight like the one they were facing now.

The Mongols made three key strategic choices that flummoxed traditional armies.

- 1. Surround rather than confront. At a time when battles were fought by two armies lined up face to face, the Mongols preferred instead to surround their opponents. What led them to this formation was not calculated strategy but instinct. The Mongols viewed warfare as hunting, so they fought the same way they hunted—by surrounding their prey, herding them toward the center, and then showering them with arrows.
- 2. Shoot from horses rather than from the ground. It was a then-accepted military theory that archers must shoot with their feet firmly planted on the ground to ensure accuracy. But the Mongol soldiers had spent years training to hunt with bows from horseback and could shoot accurately even while galloping.
- 3. Use a full cavalry rather than foot soldiers. Armies at the time were composed of a mixture of archers, foot soldiers, and cavalry. Battles were typically fought by deploying each in sequence: first archers would launch volleys to weaken their opponents, then foot soldiers would march in to engage in close combat, and finally cavalry rode their horses into battle, usually by flanking, to finish the job. But in the Mongol army, every soldier rode a horse, and the knights of Europe had no idea how to engage such an army.

The central lesson of the Mongols' success—and the lesson that this book intends to make clear—is that to win any strategic game, be it war, business, or chess, you must make a few strategic choices that will so disorient your competition that they will not be able to respond effectively.

What makes a difference and provides an advantage is doing what your competitors will not do or will not respond intelligently to. In that sense, the Mongol strategies provide a perfect model for today's business leaders. Rather than match the traditional strategies of their adversaries, they diverged from tradition and, in so doing, forced their enemies into a dilemma: Do we stick with what we know, or do we change our approach? Do we break the straight fighting lines our men have practiced for years to surround our opponents? Do we start shooting from

horseback even though we have never practiced this before? Do we tell our foot soldiers to go home and leave the fighting to the cavalry? The armor-clad knights could not adapt with sufficient speed—even if they had wanted to—and they found themselves sticking to their standard methods, with disastrous results.

Outthinkers in Sports

We see the same pattern at play in sports. An outthinker takes a new perspective on the game which reveals a new approach. This new approach proves superior but the competition, bound by training and tradition, are slow to adapt.

Dick Turns His Back on Tradition

In 1968 Dick Fosbury literally turned his back on tradition. The 21-year-old U.S. Olympian ran toward the high bar just as all of his competitors had. But as he approached his mark, he twisted his back awkwardly and flopped over it backward.

At the time of the 1968 Olympics, every gold medal winner in recent history had cleared the high bar using one of three forward techniques: the straddle, the Western roll, or the scissors jump. Every coach of every winner had trained their athletes in the same type of strategy: jumping over forward. Every expert and every textbook agreed.

As it turned out, it was the young college student, not the seasoned experts, who was proved right. Fosbury cleared 7 feet 41/4 inches, winning the gold medal and beating the world record by a full 2.5 inches. When the Olympics ended, perhaps even before, athletes around the world rewrote their training programs. They had to learn to master Fosbury's strange technique. By 1980, 13 of the 16 Olympic finalists were using the Fosbury Flop.⁶

Passing Over Tradition

We can only image what Dwight Eisenhower and Omar Bradley were thinking as they watched the Notre Dame-Army at West Point football Evolution through Revolution

game from the Army bench on November 1, 1913. Years before either fought in a war or became four-star generals, or before Eisenhower became a U.S. president, they had played for West Point's football team. Neither player mounted the field that day because their opponent, Notre Dame University, a poor Catholic college from Indiana that was virtually unknown in the East, was devastating the mighty Army team.

The game shocked Army—and indeed the entire sports world. The next day the *New York Times* report of the game began, "The Notre Dame eleven swept the Army off its feet on the plains this afternoon, and buried the soldiers under a 35 to 13 score."

Notre Dame won not by playing the game better but by playing an entirely different game, with an innovation that fatally flustered Army—the forward pass. The *New York Times* explained:

The Westerners flashed the most sensational football that has been seen in the East this year, baffling the cadets with a style of play and a perfectly developed forward pass, which carried the victors down the field thirty yards at a clip. ⁸

To today's fans, the idea of passing a ball forward to a teammate may not appear noteworthy. But in 1913 it held disruptive power because it forced opponents into a dilemma. Using the game they were used to, Army was getting killed. Should they change, and if so, how?

The Army team had mastered a form of football that resembled rugby, with players making close contact. Winning depended on strength and weight, gaining inches at a time. But when Notre Dame's quarterback tossed the ball over the pile of players in the second quarter, launching it 30 yards into a teammate's open arms, Army's skill at muscling the ball forward by inches was suddenly irrelevant.

To respond to Notre Dame's innovation, Army had to spread its players out on the field. All that did was make it easy for Notre Dame to run with the ball through the gaps. The media reported that the ball was in the air half of the time and that Army's players stood confused, unsure whether to move out for a pass or step in to stop a run.

What Made the Notre Dame-Army Game a Turning Point in the Evolution of American Football? Three Factors Came Together That Day

- 1. New rules: In 1913 the rules were changed, and teams were allowed to pass farther than the existing 20-yard limit. Suddenly the forward pass was more than an alternative to running the ball; it was an entirely new strategy. All of Notre Dame's touchdowns in the 1913 game came from forward passes, most of them longer than 20 yards.
- 2. Tactical asymmetry: Notre Dame had mastered the forward pass, whereas Army was entirely unfamiliar with it. This created an uneven match not unlike Genghis Khan's use of mounted archers against traditional mounted swordsmen.
- 3. Media: The national media houses were based in the East and primarily covered East Coast games. So Notre Dame and others in the Midwest had been able to develop the forward pass in obscurity.

Notre Dame's tactical innovation ushered in a new era of American football. Over the next 20 years, players increasingly practiced the forward pass, the shape of the ball changed to something longer and narrower, and the rules were adapted to reflect the new strategic situations the forward pass made possible. The system slowly adjusted to a new strategy.

The Lesson for Outthinkers in Business

First they ignore you, then they laugh at you, then they fight you, then you win.

—Mohandas Gandhi⁹

The Fosbury Flop and the Forward Pass; Mongol Dominance and Rome's Successful Rout of Hannibal—They All Reflect the Very Same Pattern

- 1. People grow rigid: they accept that a certain way of doing things (I call this the 1-2-3) is the best and stop seeking better options.
- 2. Someone questions what others have accepted and finds a new strategy (I call this the fourth option).
- 3. The new strategy proves superior.
- 4. The competition tries to copy it but can only do so slowly.

There are four challenges, then, for outthinking your competition:

- 1. You must first recognize where rigidity has taken hold.
- 2. You must then find a new strategic option (a fourth option) that others ignore.
- 3. You must figure out whether this new strategy is superior.
- 4. You must slow your competitors' ability to copy your innovation.

From this outthinker perspective, let's look at Google again. Dissect how Google built its powerful foundation, and we see the exact same pattern that led Genghis Khan and Notre Dame to victory.

Step	Google Case
1. People grow rigid: they accept a set way of doing things to be the best and stop seeking better options.	Investors, bankers, and Internet experts come to believe that the Internet search business is outdated. It has become an undifferentiated commodity business. They believe the Internet winners will be portals, megasites that provide a breadth of Internet content to users with one access point. Internet behemoths like Yahoo! and AltaVista are similarly convinced. They abandon their traditional search business to become portals.
2. Someone questions what others have accepted and finds a new alternative.	Larry Page and Sergey Brin, two Stanford University students, remain infatuated with Internet search. They develop a new way to structure the search process that filters the most popular websites toward the top of a list of search results. It measures a website's popularity by the number of other sites that link to it. They name the search engine Google and market it to Internet portals, convincing them to outsource their search activities to this simple, pure search service.

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Step	Google Case
3. The new way proves superior.	Google results are superior to its alternatives. Soon portals around the world sign deals with Google to outsource their search business. Google's offering is designed to be an obvious choice for portals. Portals can simply direct the search queries its users enter in the search pane to Google, which produces results and feeds these back to the portal. Google appears exclusively interested in doing search (a business portals are happy to exit) showing no intentions to sell advertising, which would put it in competition with its own customers. When Yahoo! and AltaVista sign deals to outsource their search to Google, Google instantly becomes the largest search engine in the world.
4. The competition tries to copy it but can't.	In 2003 Google launches AdSense and starts selling advertising directly to customers. As soon as Yahoo! learns of this, it cancels its contract with Google and returns to its previous search partner to offer a compelling alternative to Google. Other portals do the same. But by this time, Google has already taken a lead too long to close in on them quickly. Customers have grown accustomed to Google's search results and now seek it out, leaving whatever portal they have first landed on. Furthermore, because the Google engine learns with each search, it has now gathered experience none can match. This virtuous cycle—more visitors create better searches, attracting more visitors—compounds its advantage over copycats. Today, Google generates more than 95 percent of its revenue from selling advertising on its search business.

Conclusion

Great armies, athletes, and companies win by seeing new strategic options that adversaries are unable to respond intelligently to. To win, then, you want to:

- 1. See where the competition has grown rigid.
- 2. Identify new alternatives.
- 3. Test and refine the new alternatives to reach one or more that are superior.
- 4. Slow competitive efforts to react.

You need not think like an outthinker to survive. You can work harder and move faster within the old paradigm, but this is like rowing more forcefully while your neighbor has put up a sail. The thinkers will continue rowing and will make progress, but in the end, the outthinkers will sail past effortlessly, going with the flow and adjusting to the new paradigm.

The winds have shifted. A new generation of outthinkers has emerged. This book will show you how to play like an outthinker—how to put down your oar and put up your sail.