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The Summary

None of us can predict with certainty the twists and turns our lives will take. Life is uncertain, the future unknown. Yet the task of mastering our own fate remains.

We began this nine-year research project in 2002, when America entered a period of dramatic change and turmoil. That led us to a simple question: *Why do some companies thrive in uncertainty, even chaos, and others do not?*

In a world that feels increasingly disordered, some companies and leaders navigate exceptionally well. They don't merely react, they create. They don't merely survive, they thrive. It isn't that they thrive on chaos, but they *can* thrive *in* chaos.

To figure out how, we looked for companies that started out in a position of vulnerability, rose to become a great company with spectacular performance, and did so in highly unstable environments. We then compared these companies to a control group of companies that failed to become great in the same extreme environments, using the contrast between them to uncover the distinguishing factors that allow some to thrive in uncertainty.

We labeled our high-performing cases "10X" because they didn't just get by; they thrived. Every 10X case beat its industry index by at least *10 times*. If you invested \$10,000 in a portfolio of 10X companies at the end of 1972, your investment would have grown to more than \$6 million by the end of 2002 (our study era)—a performance 32 times better than the general stock market.

We looked for companies that met three basic tests:

1. The company sustained truly spectacular results for 15+ years relative to the general stock market and relative to its industry.
2. They achieved these results in a particularly turbulent environment, full of uncontrollable, fast-moving events.
3. The company began its rise to greatness from a position of vulnerability, being young and/or small at the start of its 10X journey.

Note: it is entirely possible that by the time you read these words, one or more of the companies on the list has stumbled, falling from greatness. We studied *historical eras* of dynastic performance that ended in 2002, not the companies as they are today.

We also looked for comparison companies—ones that started out in a similar position to our 10Xers, in the same industry (so they would have to face the same challenges), but who had different results. Comparing the two yields a wealth of insights into how a company can thrive in chaos.

Chapter 2: 10Xers

In October 1911, two teams of adventurers made their final preparations in their quest to be the first people in modern history to reach the South Pole. For one team, it would be a race to victory and a safe return home. For the second team, it would result in failure and death.

The two leaders—Roald Amundsen, the winner, and Robert Scott, the loser, were of similar ages and comparable experience. They started their journeys within days of each other, facing similar challenges (an extreme environment where temperatures could reach -20 F in the summer, made worse by gale force winds). And in 1911 there were no modern communications if they got in trouble. So what separated them? Why did one succeed and the other fail?

To prepare for their attempt, Amundsen rode his bicycle from Norway to Spain, experimented with eating raw dolphin meat, and made a pilgrimage to apprentice with Eskimos. He believed that you shouldn't wait until you were in an unexpected storm to discover you need more strength; you don't wait until you are shipwrecked to find out if you can eat raw dolphin; you don't wait until you are on an Antarctic journey to become a superb skier and dog handler like the Eskimos. Scott did none of those things.

Amundsen systematically built enormous buffers for unforeseen events. He stored 3 tons of supplies for 5 men (Scott had 1 ton for 17). He put 20 black pennants in precise increments on either side of his supply depots for miles (Scott put a single flag on the depot and none around it). In his final push, Amundsen carried enough extra supplies to miss every depot and still have plenty. Scott took exactly what he thought he would need. Amundsen assumed bad events would strike his team and prepared for them; Scott complained about his bad luck.

On December 15, 1911, Amundsen reached the South Pole, planted a flag, and prepared for the return journey. He had consistently gone 15-20 miles each day—no more, no less. When a team member suggested they go 25 and arrive faster, he said no—they needed to rest and sleep to keep up their energy. Scott, on the other hand, drove his team to exhaustion on good days and would sit in his tent on bad ones. On December 15, Scott was fully 360 miles behind. Scott arrived at the South Pole on January 17, 1912—and never made it back.

Amundsen exhibited many of the behaviors we are going to be looking at that made great companies. He prepared for the worst, avoided unnecessary risks, experimented to find what would work, and acted with great discipline. The same characteristics can be seen in leaders of our 10X companies. Amundsen was a 10X leader outside of the business world.

10Xers distinguished themselves by embracing a paradox of control and non-control: 10Xers understand that they face continuous uncertainty and that they cannot control, and cannot accurately predict, significant aspects of the world around them. 10Xers also reject the idea that forces outside their control or chance events will determine their results; they accept full responsibility for their own fate.

10Xers then bring this idea to life by a triad of core behaviors: *fanatic discipline*, *empirical creativity*, and *productive paranoia*.

Fanatic discipline. Discipline, in essence, is *consistency of action*—consistency with values, consistency with long-term goals, consistency with performance standards, consistency over time. Discipline is not the same as regimentation. True discipline requires the independence of mind to reject pressures to conform in ways incompatible with values, performance standards, and long-term aspirations. For a 10Xer, the only legitimate form of discipline is self-discipline, having the inner will to do whatever it takes to create a great outcome, no matter how difficult. Many CEO's have some level of discipline, but the 10Xers operated on an entirely different level. They weren't just disciplined, they were *fanatics*.

Empirical creativity. In 1994, Andy Grove, chief executive of Intel, took a routine blood test that indicated there could be a tumor in his prostate. Grove's response was to do extensive research on the medical data, even before seeing an urologist. Once the presence of a tumor was confirmed, he saw multiple specialists and continued to do research. Ultimately he decided on a unique course of action (that worked). Rather than just take the advice of the medical establishment (which actually had multiple opinions about the best course of action), he based his decision on thoroughly researched empirical evidence. Typical of 10Xers, he didn't look to conventional wisdom during a time of uncertainty, nor to other's opinions—he looked for empirical evidence.

Productive paranoia. 10Xers differ from their less successful comparisons in that they maintain hyper-vigilance in good times as well as bad. Even in positive conditions, 10Xers constantly consider that events could turn against them at any moment. In fact, they expect it—and recognize that they better be prepared when it does. By embracing the myriad of possible dangers, they put themselves in a superior position to overcome danger.

Note: it isn't just that they were disciplined, or paranoid—the difference is that they took those qualities to an extreme that few others did.

One other quality of 10Xers is that they are incredibly ambitious for their companies (not themselves). Every 10Xer we studied aimed for much more than just “becoming successful.” They didn't define themselves by money, fame, or power. They defined

themselves by impact and contribution and purpose. Bill Gates is a great example. He worked tirelessly to make Microsoft a great company (and became the world's richest, although that wasn't his goal); after doing so, he turned with his wife Melinda to the question, "How can we do the most good for the greatest number with the resources we have?" Among other goals, they purposed to eradicate malaria from the face of the earth.

Chapter 3: 20 Mile March

When we began this study, we thought we might see 10X winners respond to a volatile, fast-changing world full of new opportunities by pursuing aggressive growth and making radical, big leaps, catching and riding the Next Big Wave, time and again. But the less successful comparison cases pursued much more aggressive growth and undertook big-leap, radical-change adventures to a much greater degree than the 10X winners.

10X companies used an approach to growth we call "The 20 Mile March." The 20 Mile March is about *consistent* growth—not too slow and not too much, year after year after year. The 20 Mile March is more than a philosophy. It's about having concrete, clear, intelligent, and rigorously pursued metrics that keep you on track. The 20 Mile March creates two types of self-imposed discomfort: (1) the discomfort of unwavering commitment to high performance in difficult conditions, and (2) the discomfort of holding back in good conditions.

Southwest Airlines demanded of itself a profit every year, even when the entire industry lost money. From 1990 through 2003, the U.S. airline industry as a whole turned a profit in just 6 of 14 years. Southwest generated a profit *every year* for 30 consecutive years. Equally important, Southwest had the discipline to hold back in good times so as not to extend beyond its ability to preserve profitability and the Southwest culture. In 1996, more than a *hundred* cities clamored for Southwest service. However, Southwest only opened *four* new cities that year. Few companies are willing to leave growth on the table, but Southwest was.

Some people believe that in an out-of-control, fast-paced environment the 20 Mile March isn't realistic. However, we found that every 10X company exemplified the 20 Mile March during the era we studied. Furthermore, every comparison company failed to 20 Mile March with any kind of consistency. That is one of the strongest contrasts in our study.

10X companies didn't have a perfect record at hitting their mark, but they were close, and never saw missing the mark as "OK." If they missed it even once, they obsessed over what they needed to do to get back on track. *There's no excuse, and it's up to us to correct for our failures, period.* The 20

Mile March imposes order amidst disorder, consistency amidst swirling inconsistency. But it works only if you actually achieve your march year after year. If you set a 20 Mile March and then fail to achieve it—or worse, abandon fanatic discipline altogether—you may well get crushed by events.

20 Mile Marches can be focused on a certain profit level, but can also be non-financial. Intel, for instance, built its 20 Mile March around the idea of “Moore’s Law” (double the complexity of components per integrated circuit at an affordable cost every 18 months). Intel sustained its commitment to achieving Moore’s Law whether in good times or industry depression, retaining its best engineers, always moving to the next-generation chip, year in and year out, no matter what, for more than 30 years.

Chapter 4: Fire Bullets, Then Cannonballs

When we began this research effort, we anticipated that innovation might be a primary distinguishing factor for 10X success in unstable environments characterized by rapid change. We were surprised by what we found. Both 10X companies and the comparison companies were innovators; often the comparison companies had even more than the 10Xers did. Once a company meets the threshold of innovation necessary for survival and success in a given environment, it needs a mixture of other elements to become a 10X company—primarily a mixture of creativity and discipline.

A “fire bullets, then cannonballs” approach better explains the success of 10X companies than big-leap innovations. A bullet is a low-cost, low-risk test or experiment. 10Xers use bullets to empirically validate what will actually work. Based on that, they then concentrate their resources to fire a cannonball, enabling large returns from concentrated bets.

A cannonball is a “big bet” where a lot of resources are invested in a product, direction, or new initiative. Both the 10X companies and the comparison companies fired cannonballs; the difference is that the comparison companies were much more likely to make “uncalibrated” bets—ones that weren’t tested beforehand.

Here is the difference: the 10X companies fired calibrated (tested) cannonballs 69% of the time, compared to 22% of the time for the comparison companies. But calibrated cannonballs had a success rate nearly *four times* higher. Testing before making the big bet makes a big difference in your odds for success.

The key to it all is *empirical validation*. Be creative, but validate your creative ideas with empirical experience. You don’t even need to be the one to fire all the bullets; you can learn from the empirical experience of others. Southwest Airlines became one of the most successful start-up companies of all time by betting on a model that it copied from Pacific Southwest Airlines

(PSA). PSA developed the model, but then abandoned it—and eventually was taken over. Southwest stayed committed to the model. More important than being first or the most creative is figuring out what works in practice, doing it better than anyone else, and then making the most of it with a 20 Mile March.

Chapter 5: Leading Above the Death Line

In 1996, David Breshears looked down from 24,500 feet, high on Mount Everest, preparing for the big move to carry “The Pig” to the summit. The Pig was a 42-pound IMAX camera, being used to create the first-ever IMAX movie from the highest point on earth. What Breshears saw below alarmed him. More than 50 people were leaving Camp II and climbing towards Breshears; furthermore, his team was getting a late start, they were sleep-deprived and on edge from hurricane-force winds that had battered their tents the night before.

Breshears considered all the possible problems and obstacles, and decided to defer the climb until the mountain was cleared. On the way down, he crossed paths with teams going up led by Rob Hall and Scott Fischer, both expert and experienced guides. Both continued up the mountain despite seeing the same problems Breshears did.

The next time Breshears would see Hall and Fischer, 15 days later en route to his successful IMAX shoot on the mountain, both Hall and Fischer would be dead, frozen high on the mountain, victims of the greatest disaster in Everest history.

Breshears’ approach to Everest exemplifies the ideas in this chapter, which addresses how 10Xers lead their companies with *productive paranoia*. The 10X winners in our research always assumed that conditions can—and often do—unexpectedly change, violently and fast. They were always asking “What if?” By preparing ahead of time, building reserves, maintaining “irrationally” large margins of safety, bounding their risk, and honing their disciplines in good times and bad, they handled disruptions from a position of strength and flexibility. They understood that the only mistakes you can learn from are the ones you survive.

In this chapter we will explore three core sets of practices for leading and building a great enterprise with productive paranoia:

1. Build cash reserves and buffers to prepare for unexpected events and bad luck *before* they happen.
2. Bound risk and manage it.
3. Zoom out, then zoom in, remaining hyper-vigilant to sense changing conditions and respond effectively.

Building Reserves. By the late 1990's, Intel's cash position had soared to more than \$10 billion, reaching 40% of annual revenues. Having such a high level of cash might be irrational and inefficient 95% of the time, but Intel leadership worried about the 5% of the time when catastrophe might devastate the industry or some other unexpected shock might batter the company. In those rare cases, *which inevitably come*, Intel would be able to continue its relentless 20 Mile March, to keep creating, keep inventing, keep pursuing its quest to become an enduringly great company.

What was true for Intel was true for the other 10X companies—80% of the time they carried much higher cash reserves than their comparisons. In other words, they were ready when disruptions hit. They might not know in advance what the disruption would be, but they were ready when it hit, regardless of what it was.

Bounding risk. We thought 10X companies might have achieved their success by taking more risks, but as we got further into the research we discovered that the 10Xers appeared to lead their companies with a more conservative, risk-averse approach. They did take risks, but carefully. They didn't take risks that would endanger the whole company, or where the potential downside was greater than the potential upside. Risks they did take were analyzed carefully and executed with great discipline. They also weren't afraid to pull the plug when things didn't work out as planned.

Zoom out, then zoom in. These terms capture an essential manifestation of productive paranoia, a dual-lens capability. 10X leaders remain obsessively focused on their objectives *and* hyper-vigilant about changes in their environment; they push for perfect execution *and* adjust to changing conditions. For example:

In 1979, six Intel managers took three full days of intense discussions regarding a report that analyzed Intel's weakening position with its microprocessor relative to Motorola. Motorola had begun to pull ahead, and if Motorola gained a dominant share it could become the industry standard, making it very difficult for Intel to compete. The team *zoomed out*. They thoroughly analyzed why Motorola was winning and developed a strategic plan (called Operation Crush) to respond. Then they *zoomed in*. The task force finished its work on Friday, and Intel approved the plan and allocated a multi-million dollar budget the following Tuesday. Within a week 100+ Crush members met, and then fanned out across the globe to garner 2,000 design wins for Intel within a year. That turned the tide.

Once Intel recognized the threat, they moved fast, but not recklessly. They got hold of the big picture, and then executed diligently.

We will all face moments when the quality of our performance matters much more than other moments, moments that we can seize or squander. 10Xers prepare for

those moments, recognize those moments, upend their lives in those moments, and deliver their best in those moments. They respond to unequal times with unequal intensity, when it matters most.

Chapter 6: SMaC

SMaC stands for Specific, Methodical, and Consistent. A SMaC recipe is a set of durable operating practices that create a replicable and consistent success formula.

When deregulation hit the airlines in 1979, Howard Putnam, then CEO of Southwest Airlines, had to evaluate the potential impact on the airline. He concluded that they wouldn't change their approach; rather, he identified a "cookie-cutter" approach that they would use to continue to expand. Some of those elements included:

1. Remain a short-haul carrier, under 2-hour segments.
2. Use the 737 as their primary carrier
3. Stay out of food services
4. Focus on passengers; don't carry air freight or mail.
5. Continue high aircraft utilization and quick turn-arounds, usually 10 minutes or less.
6. Continue low fares and high frequency of service.
7. Keep a fun atmosphere.

Putnam's list was based on insight and knowing *what works*. For example, using only 737's meant all their pilots could fly all their jets, which gives immense scheduling flexibility. You need only one set of parts, one set of manuals, one set of maintenance procedures, etc. But the truly amazing thing about the list is its consistency over time. Those elements only changed about 20% over 25 years. It's a perfect example of a SMaC recipe.

Conventional wisdom says that change is hard. But if change is so difficult, why do we see more evidence of radical change in the less successful comparison cases? Because change is not the most difficult part. Far more difficult than implementing change is figuring out what works, understanding why it works, grasping when to change, and knowing when not to.

When faced with declining results, 10Xers do not first assume that their principles and methods have become obsolete. Rather, they first consider whether the enterprise has strayed from its recipe, or has forgone discipline and rigor in adhering to the recipe. They ask, "Is our recipe no longer working because we've lost discipline? Or is it no longer working because our circumstances have fundamentally changed?"

We've found in all our research studies that the signature of mediocrity is not an unwillingness to change; the signature of mediocrity is *chronic inconsistency*.

Keep in mind the premise of this study: the world is in a state of uncertainty and instability, full of rapid change and dramatic disruptions. Yet we found that the 10X companies changed their recipes less than their comparisons. This doesn't mean 10X leaders are complacent. Productive paranoids infused with fanatic discipline don't have any conception of complacency. 10Xers are obsessed, driven people. It's just that they accomplish their huge goals by adhering with great discipline to what they know works (while simultaneously watching their changing environment carefully).

Any enterprise faces a constant struggle to find the balance between continuity and change. No human enterprise can succeed at the highest levels without consistency; at the same time, no human enterprise can succeed at the highest levels without productive evolution.

There are two healthy approaches to amending the SMaC recipe: exercising empirical creativity (fire bullets, then cannonballs) which is more internally driven; and exercising productive paranoia (zoom out, then zoom in), which is more externally focused. Once they had their SMaC recipe, the 10X cases changed them only an average of 15% (compared to 60% for their comparisons). In other words, when they changed their recipe, they did it carefully and intentionally.

Chapter 7: Return On Luck

The very nature of this study—thriving in uncertainty, leading in chaos, etc. led us to the fascinating question, "Just what is the role of luck?" Maybe the 10X companies were just luckier. Analyzing luck is difficult, but by applying a consistent methodology to the 10X company and its comparison we were able to draw conclusions based on evidence.

We defined a luck event as one that meets three criteria:

1. Some significant aspect of the event occurs independently of the actions of the key actors in the enterprise.
2. The event has a potentially significant consequence (good or bad).
3. The event has some element of unpredictability.

We focused on this question: Did the 10X company get more good luck, or less bad luck, than the comparison company?

As a general finding, both the 10X cases and the comparisons each got some big good-luck events and some big bad-luck events; there is no evidence that the 10X cases

won because of luck. We also analyzed the time distribution of luck, wondering if the 10X cases got their good luck early, while the comparisons got their bad luck early, before they had a chance to fully establish themselves. Again, there was no appreciable difference.

Throughout our analysis, we were very careful to distinguish between luck and outcomes. An enterprise can get bad luck yet create a good outcome, and equally, a company can squander good luck and get a bad outcome. The real difference between the 10X and comparison cases wasn't luck per se but what they *did* with the luck they got.

Adding up all the evidence, we found that luck was not a significant factor in the difference between the companies' results. Luck did not cause 10X success—people do. The critical question is not "Are you lucky?" but "Do you get a high *return on luck*?"

All the concepts in this book contribute to getting a high ROL (return on luck). 10Xers recognize that we're all swimming in a sea of luck. They understand that we cannot cause, control, or predict luck. But by behaving and leading in 10X ways, they make the most of the luck they get.

Exercising a 20 Mile March approach means that when 10Xers get a lucky break, they seize it and build upon it, not just for days, but for years or decades.

Firing bullets before cannonballs increases the chances of stumbling upon something that works. Having big reserves gives 10Xers more options for responding to luck. Luck happens to everyone; it's possible to position yourself to take maximum advantage of it when it's good, and protect yourself when it's bad.

Epilogue: Great By Choice

We sense a dangerous disease infecting our modern culture and eroding hope: an increasingly prevalent view that greatness owes more to circumstance, even luck, than to action and discipline—that what happens to us matters more than what we do.

Our research evidence stands firmly against this view. This work began with the premise that most of what we face lies beyond our control, that life is uncertain and the future unknown. And luck plays a role for everyone. But if one company becomes great while another in similar circumstances and with comparable luck does not, the root cause of why one becomes great and the other does not simply cannot be circumstance or luck. Indeed, if there's one overarching message arising from our research, it is this: greatness is not a matter of circumstance; greatness is first and foremost a matter of conscious choice and discipline. The factors that make a company

great lie largely within the hands of its people. It isn't a matter of what happens to them but a matter of what they create, what they do, and how well they do it.

We are not imprisoned by our circumstances, our luck, or the inherent unfairness of life. We aren't imprisoned by the times in which we live, our previous mistakes, or our past successes. In the end, we can control only a tiny sliver of what happens to us. But even so, we are free to choose, free to become great by choice.



From the Pastor's Perspective

Great by Choice builds on the work Collins did and wrote about in his previous books, *Built to Last* and *Good to Great*. All of them look, from different vantage points, at how to build an enduringly great organization. His findings in all three books are somewhat similar and reinforce each other.

There were two particular things I took note of that I think have particular application for churches.

The first relates to building up a reserve that you can draw on in hard or lean times. In particular, I mean a financial reserve here. I know that many churches have such a small budget that they don't feel like it is possible to put money away; others feel the pull of all the needs around them and are philosophically opposed to saving; still others think it shows a lack of faith that God will provide. I think it shows wisdom, and I think every pastor should make it a priority. Lean times *will* hit; the latest economic figures should make that clear, and it *will* impact churches. Having a reserve at least gives you time to pray and make wise decisions about what cuts to make, what opportunities to forgo, etc. And having pastored both small and medium-sized churches, and planting churches where there was little to no budget, I do believe it's possible. It's more a question of will than it is of possibility.

The second thing I took note of was the idea of “fire bullets, then cannonballs,” especially in regards to outreach. Most churches aren’t growing, which, at the very least, indicates a lack of effective outreach.

My impression after looking at most churches is that we try 1-2 types of outreach, and stick with what we know, what is comfortable, regardless of whether it works or not. I wonder if we took the approach of trying everything to see what works, and then commit wholeheartedly, if we wouldn’t have better results.

One of the advantages of the “fire bullets” idea is that it can be used in any area to try out new ideas. Change is hard for any congregation; it can go more easily if new ideas are framed as experiments rather than commitments. Once there is some success, getting people to buy in is much easier. If that can be built into the culture of a church or organization, you can develop a culture where change is easier and more natural.