

BOOK CLUB SYNOPSIS

**The Startup Way: How Modern Companies Use Entrepreneurial
Management to Transform Culture & Drive Long-Term Growth**
Eric Ries

Crown Business, 2017

CONTENTS

Introduction | 3

Part One: The Modern Company | 7

Chapter One: Respect the Past, Invent the Future | 9

Chapter Two: Entrepreneurship: The Missing Function | 14

Chapter Three: A Startup State of Mind | 18

Chapter Four: Lessons From The Lean Startup | 23

Chapter Five: A Management System for Innovation at Scale | 29

Part Two: A Road Map for Transformation | 32

Chapter Six: The Transformation: Phase One | 34

Chapter Seven: The Transformation: Phase Two | 40

Chapter Eight: The Transformation: Phase Three | 45

Chapter Nine: Innovation Accounting | 47

Part Three: The Big Picture | 53

Chapter Ten: A Unified Theory of Entrepreneurship | 55

Chapter Eleven: Toward a Pro-Entrepreneurship Public Policy | 58

Epilogue: A New Civic Religion | 61

About | 63

• intro

In the first pages of *The Startup Way*, Eric Ries references his previous book, *The Lean Startup*, published in 2011. The conclusions of that book will be discussed in greater detail at the end of Chapter 4, but in short, *The Lean Startup* provided a scientific approach to managing startups and getting products to customers faster.

The Lean Startup granted Ries access to all manner of organizations, including large firms, where he engaged in conversations with thought leaders. Fueled by these discussions, Ries wrote *The Startup Way* to build on the lessons of *The Lean Startup* and chiefly, to lay out a framework for entrepreneurial management leaders to drive sustained growth in uncertain environments.

BUILDING THE MISSING CAPABILITIES

Ries opens the book with an anecdote about a trip to General Electric upon the invitation of the company's top management, which ultimately resulted in his helping create GE's FastWorks process built on lean methods. They discussed the company's new Series X diesel and natural gas engine, and they realized they "could get to market radically faster by building a simpler engine in a matter of months, not years." The following day, Ries met with the founder of a hypergrowth tech startup to talk about how the company could scale beyond its first successful innovation.

While on the surface the conversations may seem different, Ries realized the issues facing both behemoth GE and the emerging startup were “surprisingly similar”: They both needed entrepreneurial cultures, and they were lacking some of the same capabilities. In fact, he concluded that today’s organizations—whether established or emerging—are often missing particular three capabilities that are critical to long-term success: “the ability to experiment rapidly with new products and new business models, the ability to empower their most creative people, and the ability to engage again and again in an innovation process—and manage it with rigor and accountability—so that they can unlock new sources of growth and productivity.”

Ries explains he initially thought corporate staffers were different from creative entrepreneurs like himself—and that “once organizations reach a certain size, they start dying slowly, from the inside.” But eventually a paradox emerged that caused Ries to change his mind: Ultimately, any high-growth entrepreneur is trying to build a big company; they simply think their company will remain scrappy and nimble—which is rarely the case. So Ries worked with thousands of managers and founders, from organizations like GE and Toyota to startups like Dropbox and Airbnb, to refine his approach detailed in the book.

THE FIVE PRINCIPLES BEHIND THE STARTUP WAY:

1. **Continuous innovation:** Great leaders seek out new breakthroughs repeatedly and draw from creativity at every level.
2. **Startup as atomic unit of work:** Companies need teams that can experiment to unlock new sources of growth.
3. **The missing function:** Entrepreneurship is just as vital to future success as marketing or finance, yet most companies are missing it.
4. **The second founding:** Find a way to make a profound change, whether the company is five or 100 years old.
5. **Continuous transformation:** Companies must figure out how to continually rewrite their organization’s DNA.

THE BOOK

Part one of *The Startup Way* will “uncover why traditional management practices are no longer up to the task” and why this moment in history is so critical. Part two will “dive into the ‘how’ of the Startup Way,” and part three will “explore what happens once the transformation process is ‘complete.’”

part one

THE MODERN COMPANY

Part one opens with a short anecdote about short-term lodgings startup Airbnb, which uncovered a hidden market and grew to a \$30 billion valuation in just 10 years. But the company realized it had to continue evolving beyond its current success, and it created a team that ultimately launched a product called Airbnb Trips—which will be discussed in greater detail in Chapter 8. This part of the book will explore “what it means to become a modern company, and the entrepreneurial structure it needs to survive and embody a long-term vision for the future.”

01

CHAPTER ONE

RESPECT THE PAST, INVENT THE FUTURE: CREATING THE MODERN COMPANY

In a discussion with GE CEO Jeff Immelt, Ries posited a theory: A modern company “harnesses the creativity and talent of every single one of its employees.” Most business leaders recognize, however, that running the core business leaves little time to test new ideas. They are anxious about the unpredictability of the world, including factors like globalization, automation, the explosion of startups in nearly every industry and the speed of change in both technological advances and consumer preferences.

Beyond those external forces, today’s managers are increasingly pressured to launch new products and enter new markets—and thus create even more uncertainty themselves. Meanwhile, the state of global communications means that new products can come from anywhere, and the capital costs required to try something new are drastically reduced because the entire supply chain can be borrowed for little investment.

THE MANAGEMENT PORTFOLIO

These factors are shifting the nature of competition, and to survive, many companies must create “new sources of growth that can only come from innovation.” This has real effects on the management portfolio of a company, as traditional management tools often don’t work in areas where innovations are being attempted. “Yet most companies don’t have anything to replace them with—yet.”

WHY TRADITIONAL MANAGEMENT TOOLS STRUGGLE WITH UNCERTAINTY

Traditional management tools struggle with uncertainty. Decades ago, General Motors' Alfred Sloan pioneered a structure of producing estimates for performance in an “ideal” year, working to reduce miscalculations and waste. That system “became the basis for all of twentieth-century general management. ... It is one of the true revolutionary ideas of the past one hundred years.” But this forecasting was designed in a different time and context, and it is still being used in situations where it doesn't work. In some cases, “failure to hit the forecast means a team executed poorly. But sometimes it means the forecast itself was a fantasy.”

HOW DO WE DEAL WITH FAILURE?

Ries recognized that tension when he met one day with the GE's Six Sigma leader for industrial business. Six Sigma—one of the most famous corporate transformations spawned by Sloan's work—is a process to develop and deliver near-perfect products, designed with no more than 3.4 defects per million opportunities.

While in the Six Sigma leader's office, Ries noticed the mug on the leader's desk read: “[Failure is not an option.]” Since Ries had seen many situations where “reality proved too unpredictable to avoid failure,” he knew that startups would find that statement ridiculous. Sensing this, he decided to dream up his own slogan, and eventually landed on one that he felt would reflect the thoughts of the world's most successful entrepreneurs: “I eat failure for breakfast.”

The difference between these slogans not only reflects why startups have found it difficult to adopt traditional management methods and vice versa, but it also demonstrates a discrepancy. Baked into methods like Six Sigma is the idea that careful planning and execution can prevent failure—but the startup part of the management portfolio challenges that presupposition.

CHANGING HOW COMPANIES “GROW UP”

Ries quotes Dropbox CTO Aditya Agarwal, who summed up “the entrepreneurial dilemma”: “One of the reasons it’s hard to build new things at larger companies is because people don’t have the mental model of ‘My job is to actually learn new things.’” Instead, the mental model is about getting good at something and continuing to do that, albeit with incremental learning about perfecting the craft. That’s why, said Agarwal, “[even] companies that seem to have launched one good product won’t easily know how to do it again.”

Even the innovative Dropbox has run into many of the same problems that plague traditional companies. After launching two new flagship products, Mailbox and Carousel, the startup was disappointed in their scale and ultimately shut them down. Agarwal has said of the reasons for this kind of failure, “We did not get enough pertinent user feedback. We were building and building but not listening enough.” He added, “It was the most painful experience the company has gone through ... but also the most rewarding and important one.” Dropbox took those painful lessons and adopted a series of changes before launching Paper, a new collaboration tool, in January 2017.

PROFITING FROM FAILURE AT AMAZON

At Amazon, it was the Fire phone that proved a flop. “Over the course of four years, the project went from an idea detailed in an aspirational mocked-up press release to almost universal disappointment after its launch in the summer of 2014. Initially priced at \$199, the Fire soon cost only \$0.99, and by the following winter, the company took a \$170 million write down based mostly on unsold phones.”

Undaunted, Jeff Bezos saw it not as a time for layoffs, but as an opportunity to learn. Ries quotes Bezos: “What matters is that companies that don’t continue to experiment or embrace failure eventually get in the position where the only thing they can do is make a Hail Mary bet at the end of their corporate existence.” The Fire team moved to other projects, and Amazon at large was getting into new markets from food delivery to original television. Ries posits that this offers a lesson: “Even in situations where you can’t forecast, you can

still plan.” The Fire’s launch didn’t go as expected, clearly, but there existed an assumption of risk that allowed the company to succeed in the long term anyway.

A FOCUS ON LEGACY

Most business leaders inherit their organization from a prior generation. So they must ask themselves: How can I leave the next generation with a stronger business, and what do we want our legacy to be?

Facebook COO Sheryl Sandberg tells a story about a meeting in which an employee complained about the “unfairness” of their performance evaluations being based on overall project success, rather than their individual contributions. Her response has stuck with Ries for years: She asked the staffers to imagine a disrupted company like Kodak or BlackBerry-maker RIM. By doing so, she prompted everyone in the room to think about all of the positive reviews, promotions and bonuses employees at those companies received for their individual contributions in the years leading up to the organization’s defeat. Finally, she asked, “Do you really want to be one of those managers?”

THE MISSING SYSTEM

Ries also visited Toyota, where he met with Shigeki Tomoyama, the chief officer of the IT and ITS groups, to discuss the process described in *The Lean Startup*. There, Tomoyama-san explained Toyota’s legendary high-quality production was missing “a corresponding system for discovering what to produce in the first place.” The company’s production was highly efficient, but it had lost some of its innovative spirit.

A TRULY MODERN COMPANY

In the final pages of the chapter, Ries provides several specific examples of old-fashioned versus modern companies. “A modern company is one in which every employee has the opportunity to be an entrepreneur. It respects its employees and their ideas at a fundamental level,” he says. “A modern company is disciplined at the rigorous execution of

their core business—without this, no innovation is possible—but it also employs a complementary set of entrepreneurial management tools for dealing with situations of extreme uncertainty.”

For example, an old-fashioned company is siloed, while a modern one comprises cross-functional teams. Old-fashioned organizations operate huge programs, while modern ones operate rapid experiments, and old-fashioned companies are comprised of managers and subordinates, while modern companies consist of leaders and the entrepreneurs they empower.

02

CHAPTER TWO

ENTREPRENEURSHIP: THE MISSING FUNCTION

Before marketing was a formal function, it was the responsibility of everyone—and no one—to get the word out. Of course, now we see that memorable marketing demands excellence and someone in charge, just like other functions, such as IT and finance.

In today's "typical organizational structure, who's in charge of grappling with uncertainty, unlocking unexpected and dramatic new forms of growth and impact, translating research insights into viable products, and harnessing the forces of disruption in the organization?" At small startups, it's usually the founders. But once a company grows, at a certain point, the honest answer is usually "nobody."

"The lack of a system for acting on new ideas is a huge problem for existing corporations that have had decades—sometimes longer—to become encumbered by layers of bureaucracy or hampered by burdensome 'this is how we've always done it' practices." And it often becomes a problem at hypergrowth startups after an expansion, too.

THE ENTREPRENEURIAL FUNCTION

When Ries meets with CEOs, he often asks who is responsible for the following two fundamental tasks:

1. Overseeing high-potential growth initiatives that could one day become new divisions of the company."
2. "Infusing everyday work across the organization with an entrepreneurial, experimental, iterative mindset."

These responsibilities rarely show up on an organizational chart. Instead, they fall to a low spot on the priority list for existing functional managers with many other day-to-day responsibilities—or even worse, they are considered “everyone’s responsibility.”

Ries declares “it’s time to move beyond these half-hearted measures and see entrepreneurship as a core discipline of a modern company. It has the singular role of being the overseer of the organization’s ‘startup DNA’—infusing an entrepreneurial mindset and techniques into the whole organization in order to invest in the next generation of innovations on a continuous basis.”

Great entrepreneurs can and should come from anywhere, and modern companies don’t need just another innovation lab. Rather, “[they] need the ability to consistently and reliably make bets on high-risk, high-reward projects without having to bet the whole company. And they need to find, train, and retain the kind of leaders who can pull this off.” Ries believes this practice should simply be called “function entrepreneurship.”

STARTUP AS ATOMIC UNIT OF WORK

“The first responsibility of the entrepreneurship function *is to oversee the company’s internal startups*. The company’s leaders need to understand the startup as an *atomic unit of work*, distinct from other kinds of project teams that companies typically employ.” While a startup is not the best management form for everything, it is the best form for performing well amid extreme uncertainty.

INTEGRATE STARTUPS INTO THE PARENT ORGANIZATION

“The second responsibility of the entrepreneurial function is to *manage the problem of success*.” A startup that is succeeding is more dangerous to the organization than one that fails, because it threatens the established order. So “the question is: For any experiment that succeeds, how will it find a home in the organization? Will it be absorbed by an existing division to become an entirely new division? How is that decided? Whose decision is it?” Ries notes these topics will be covered in detail in part two of the book.

IDEAS ARE VALIDATED, ADOPTED, AND SCALED

“Every division needs a way to test, refine and scale new ideas in order to innovate and grow. But ideas by themselves are worthless.” Discovering the potential of new ideas requires the presence of a dedicated yet flexible team that can pivot when needed. It’s conventional wisdom in the startup world that entrepreneurial management is distinct from general management, but it’s important to note these cannot be kept in isolation from each other. Instead, they must operate together.

Further, startups must execute in the context of the company. “The scarcity of resources most startups deal with argues for more, not less, financial discipline. ... Thus, every organizational unit is more properly understood as a *portfolio* that contains some mix of discovery and execution.”

ENTREPRENEURSHIP IS NOT JUST FOR ENTREPRENEURS

Entrepreneurship is not only for products, nor is it just for entrepreneurs. The entrepreneurial function impacts and supports other functions in doing work more effectively. “Ultimately, the non-entrepreneurs are just as important customers of the entrepreneurial function as the entrepreneurs themselves for three reasons:”

1. Lean Startup-style tools can be quite helpful in situations that have some degree of uncertainty, even if it isn’t extreme.
2. Non-startup managers need to know what’s going on, because entrepreneurs inevitably create conflict that will climb up the chain of command.
3. Entrepreneurs can and should come from anywhere in the organization—and you never know who they are going to be.

Chapter 10 will discuss in greater detail ideas about who can and should be an entrepreneur, but Ries first discusses the problem of where to find them.

THE UNDERGROUND NETWORK

“Every company has people who are willing to take risks to serve the customer better without regard for their own popularity.” One such

example is the type of people who worked on GE's Series X engine mentioned in the introduction of the book. GE's Vice Chair Beth Comstock said she had always known such people were at the company, but she had no formal way to help them thrive prior to the development of the FastWorks process: "I think there are always people in the organization who get it intuitively," she says. "They're just waiting to be unleashed. You don't know where they are, but once you give them the opportunity and the tools to focus them, they are just on fire."

With one product manager on the Series X team in particular, Comstock noticed that whenever a good idea bubbled up through a particular brainstorming program, this employee had something to do with it. These types of people exist at every company, Ries explains. "On the outside, they look like everyone else, moving along the promotion chain and doing their jobs well. But they're also part of a kind of underground network that can be tapped for unusual projects from time to time."

THE MISSING ORGANIZATIONAL CAPABILITIES

To support high performers and their way of working, Ries suggests that organizations ask and answer the following questions:

1. How do we create space for experiments with appropriate liability constraints?
2. How do we fund projects without knowing the return on investment in advance?
3. How do we create appropriate milestones for teams that are operating autonomously?
4. How do we provide professional development to help people get better at entrepreneurship as a skill?
5. How can we provide networking in and out of the company, so people will understand their new identity as a corporate entrepreneur?
6. How do we put the right people on the right teams?
7. How do we create new incentive and advancement systems?

To answer these questions, Ries turns to the structures of Silicon Valley.

03

CHAPTER THREE

A STARTUP STATE OF MIND

Startup people disagree on many things, but everyone “universally adheres to a series of deeply held convictions. These convictions form the true foundation of the structures that allow Silicon Valley startups to achieve their unique blend of risk-taking and rapid growth.” Ries explains that this chapter is not meant to be an exhaustive explanation of the way Silicon Valley works but rather a discussion of “the distinctive management structures the startup movement has pioneered that—though rarely explicitly acknowledged—are key to its success.”

“IT’S ALL ABOUT THE TEAM”

“The most commonly held belief in Silicon Valley is that ‘it’s all about the team.’” While corporate managers seek good ideas for what is to be done and then try to find the right people to carry them out, Silicon Valley investors make decisions by looking at people first, and then the idea. The marker of future success is the ability to formulate a good plan—and not necessarily a specific idea or strategy, which can change along the way. Conviction is the most prized attribute investors seek.

SMALL TEAMS BEAT BIG TEAMS

In traditional corporate structures, the size of the team is indicative of the project’s importance; in the startup world, in contrast, the belief is that “small teams can grow into big teams and have a disproportionate impact.” At Google, for example, if it’s “possible for ten to fifteen people to contain all of the knowledge necessary to debug Google Web

Search, then that's how many [people] there are.” A small team engenders an intense bond and makes for an extremely adaptable group. The physical and emotional closeness creates accountability, and it also makes startup teams well-suited to pivot, if needed.

EVERY TEAM HAS A CROSS-FUNCTIONAL STRUCTURE AT ITS CORE

“Startups are inherently cross-functional. Even if they begin with, say, a team of all engineers working on a hot new product, they inevitably face problems beyond engineering: financing, customer acquisition, marketing, customer service.” Usually, the founders and the early team have to solve these cross-functional challenges on their own—unless the company has found enough success and funding to bring in functional experts.

EVERY PROJECT STARTS WITH THE CUSTOMER IN MIND

Ries has worked with many teams in traditional corporations that don't fully understand the problem they are trying to solve from their customer's point of view. While a company might point to insufficient market share as a concern, Ries observes that few customers would share that belief: “Customers don't care about our market share; they only care if we make their lives better.” To avoid falling into this trap, Amazon uses a method called “working backward.” Before making any new product, the company creates a short internal press release detailing the problem, the existing solutions and why the new product will solve that particular issue better than anything else has.

SILICON VALLEY STARTUPS HAVE A SPECIFIC FINANCIAL STRUCTURE

In Silicon Valley, it makes sense that every employee has a stake in the outcome of the company, so employees are typically offered equity ownership as part of their compensation. This ties employees' financial incentives to the organization's long-term health, and it “allows employees' intrinsic creativity and commitment and motivation to flourish.”

WE ARE METRICS-OBSSESSED

No one truly knows what the future cash flow of a company will be, but it's still possible to measure value. "Every modern startup possesses a metrics dashboard that the team and board revisit on a regular *cadence* (schedule). The even more recent trend is to post real-time versions of this dashboard up around the office, on large flat-screen monitors that are visible to everyone. This is part of the transparency that startups tend to favor and that many large enterprises find frightening," but it helps to ensure that "everyone shares the same set of facts."

METERED FUNDING STAGES RISK

Ries once took a team of large-company executives on a Silicon Valley tour, and the group visited a startup in which Ries had invested. The executives were "aghast" when they found out Ries and other investors weren't demanding accountability measures like progress reports. In contrast, the startup founder was "baffled" they thought such things would happen. Ries explained to the executives that risk mitigation in Silicon Valley uses *metered funding*, meaning that after a round of seed-stage fundraising, the money is transferred into the startup's bank account. "In Silicon Valley, the money is yours. You can spend it on what you like with minimal oversight (especially in the early stages). But Lord help you if you try to raise more money and you haven't made any progress," Ries notes. It provides a balance between mitigating risk and allowing the freedom to innovate.

BOARD/INVESTOR DYNAMICS ARE KEY

Startups report to a board of directors not on a set schedule but when the founders think a meeting is appropriate. Rather than on artificial timelines, these reviews are based on actual progress. "Boards are designed to help the company think through strategic issues and whether or not to pivot. The process works because it's linked to *metered funding*." The board is also a streamlined way to update the many groups and people who have an economic interest in the startup, as venture firms are typically investing not their own money but that of limited partners, such as wealthy individuals or pension funds. In contrast to a traditional corporate structure—in which teams are subjected to a barrage of meetings, such as formal reviews, budget

updates and constant middle-manager check-ins—the startup method flows information in a way that doesn’t hinder employees’ ability to produce results.

OUR CULTURE IS EXPERIMENTAL AND ITERATIVE

By implementing all of these structures, “startups create an organization in which people can try things out without causing financial ruin. This is key to inspiring a culture of trust. When a company is set up properly, there’s no incentive to cover up failure; the whole idea is to search for truth, not a false message of profit projections.” While this system has loopholes, such as the potential for fraud, it is excellent for allowing experimentation.

WE BELIEVE IN MERITOCRACY

“This is one of the most universally held beliefs in the startup movement: that good ideas can come from anywhere and that people should be given resources and attention based on their talents, not their pedigree.” Ries acknowledges this idea of meritocracy is bound in controversy, however, since many deserving groups are not treated fairly in the funding and hiring processes. Still, Silicon Valley cannot properly be understood without mention of the meritocracy concept, “because everyone who lives and works there wants it to be true.”

A STARTUP IS MISSION—AND VISION—DRIVEN

“Silicon Valley is obsessed with vision and the ‘visionary founder’ who can uniquely execute it.” Nothing can truly replace vision. Without it, a startup cannot pivot because “[a] pivot is *a change in strategy without a change in vision*. ... The vision is the part of the team’s mission that is nonnegotiable.” As Jeff Lawson, the CEO of cloud startup Twilio, says, “You’re not going to get anywhere if you have a big vision but you’re not solving the customer’s problem. If you’re not solving a problem, you’re never going to be given the ability to implement that grand vision.”

WE BELIEVE IN ENTREPRENEURSHIP AS A CAREER PATH

Silicon Valley values the “founder mentality” that entrepreneurial employees gain and through their work in startups, as early staffers of successful startups often gain more responsibility at a much faster rate than is typical in other types of organizations. The ability to work and lead in this environment is a particular skill that is “absolutely distinct from most other business skills that lead to success in a corporate environment.”

Ries cautions that the practices outlined in this chapter are not meant to suggest that Silicon Valley is infallible, or that adopting them will lead to automatic success in innovation. Rather, it is meant to provide the basis of a language for talking about these practices as they inform the management system discussed throughout the book.

04

CHAPTER FOUR

LESSONS FROM THE LEAN STARTUP

Because *The Startup Way* is built on the lessons in Ries' previous book, he devotes this chapter to summarizing the basic principles in *The Lean Startup*. First, he lists the Lean Startup method's five basic steps:

"Identify the beliefs about your project that must be true in order for it to succeed. We call these *leap-of-faith assumptions*."

"Create an experiment to test those assumptions as quickly and inexpensively as possible. We call this initial effort a *minimum viable product*."

"Think like a scientist. Treat each experiment as an opportunity to learn what's working and what's not. We call this 'unit of progress' for startups *validated learning*."

"Take what you've learned from each experiment and start the loop over again. This cycle of iteration is called the *build-measure-learn feedback loop*."

"On a regular schedule (*cadence*), make a decision about whether to make a change in strategy (*pivot*) or stay the course (*persevere*)."

As discussed in the last chapter, startups are about vision. The goal of the Lean Startup method is to find the fastest path to realizing this vision.

LEAN STARTUP AT THE DEPARTMENT OF EDUCATION

Before delving into each of the five steps, Ries presents a Lean Startup example at a surprising organization: the U.S. Department of Education. In August 2013, U.S. President Barack Obama announced he was seeking a better way to hold higher education institutions accountable for serving their students and providing value.

Lisa Gelobter, the Department of Education's chief digital officer, explained that everyone had different ideas about how to approach the project and which metrics to focus on, including graduation rate, sticker price, financial aid and more. She said, "We took a step back and asked, 'Hold on. What is the problem we're trying to solve?'"

As a result of that introspection, the team went into the field, talking to students, parents and guidance counselors. They visited the Washington Mall once a week, asking high school juniors and seniors six simple questions and using the answers to refine their hypotheses about features. Once they were ready to test, the team built not expensive software but cardboard phones with sliding panels to replicate an app. By observing customers' behavior, the team learned what people actually searched for and which features they ignored—for example, not a single person clicked on a planned feature to compare schools side-by-side. With each cardboard iteration, the prototype was improved, and only when the team had confidence in its new design did it begin building the actual consumer tool.

THE TOOLS AND PROCESSES OF LEAN STARTUP

1. Leap-of-Faith Assumptions (LOFA)

Recall that Lean Startup is designed to operate in situations of extreme uncertainty that don't allow for an accurate forecast. Under these circumstances, the best thing to do is to form a set of hypotheses about what ideal outcomes would look like for the company. Ries calls these *leap-of-faith assumptions (LOFA)* and states that they "are often embedded within a traditional business plan that embodies the company's current guess at how its strategy will lead to the realization of its vision. Lean Startup requires making these assumptions explicit, so that we can find out as soon as possible which are true and which are not." Think

of the Department of Education's College Scorecard team, which thought people would want to compare colleges—only to find out it was of zero interest to users.

In another example, Ries recounts a daylong workshop he held with a group of software teams within a large corporation. After a discussion about assumptions, someone suddenly blurted out: “Wait a minute. I’m starting to realize that we’ve been working on this project for two years, and we’re not actually sure if there are any customers for it.” In response, Ries asked whose job it was to figure that out. While the project manager said their job was to make sure the project was done on time and the engineering manager said their role was to do the work according to the specification document, the team soon realized no one was assigned the task of determining the customer’s need for the product. “They had been operating with one very large leap-of-faith assumption—that people wanted this product—and had never acknowledged it as an assumption and tested it.”

We all make assumptions naturally, so we need to articulate them before getting too far in the process. To do so, try writing it down in a simple fashion. Then ask questions: How much is known about customers’ habits and preferences? What evidence is there that they have this problem and that they strongly desire a solution? This exercise reminds the team they won’t always be right about assumptions, which is fine because the goal is to learn.

In addition to general LOFA, a startup has two specific fundamental assumptions in its business plan: *the value hypothesis*, which tests whether a product delights customers when they use it, and the *growth hypothesis*, which tests how you’ll be able to get more customers.

Some teams worry the LOFA analysis will be wrong, and this information will lead them astray. But Ries indicates that “we know for sure that it *will* be wrong,” because extreme uncertainty makes accurate forecasting impossible. “This is why we call the kinds of experiments we do in Lean Startup *minimum viable products*.”

2. Minimum Viable Product (MVP)

The surprises about customer behavior and other factors that can upend a LOFA framework are the underpinning for beginning not with a perfect product but with a *minimum viable product (MVP)*. “An MVP is an early version of a new product that allows a team to collect the maximum amount of *validated learning* (learning based on real data gathering rather than guesses about the future) about customers. Ideally, this learning will maximize the number of LOFAs tested while minimizing cost, time, and effort. In today’s marketplace of uncertainty, whoever learns fastest wins.”

3. Validated Learning

Validated learning is the information you gain from your s. It is the opposite of “vanity” metrics in the traditional corporate structure that aim to show the kind of growth no one can really predict. Vanity metrics can also obscure the root cause of problems. As an alternative, try thinking of metrics in terms of “the *three A’s*: *actionable, accessible, and auditable*.”

- Actionable: “For a report to be considered actionable, it must demonstrate clear cause and effect and be related to changes in the product itself.”
- Accessible: “Everyone involved in the project should be able to see these reports and understand them, or there is no way they can be put to use.”
- Auditable: “The data has to be credible. ... The numbers and the analysis must be clear and sound, not complicated and not wishy-washy.”

4. Build-Measure-Learn

“Building an MVP launches you into the cycle of creation, measuring, and learning from that measuring. Ultimately, after measuring, analyzing, and assuming, you’ll see where your idea has traction and where it doesn’t. Then you can build another MVP and launch it to keep learning. This is the *build-measure-learn* feedback loop.”

Ries describes the loop in action at Twilio, the cloud communications platform company mentioned earlier in the book. At Twilio, managers “start by asking each team to experiment with an opportunity—for

example, testing the theory that Twilio could be used for call centers. Rather than be told what to build, the team is asked to figure out why customers haven't already built the call centers." It all begins with a process called PRFAQ, during which the team writes a press release and FAQ document for the customer that includes information like the estimated launch date and cost. Next, the team sits down with customers to get feedback on the idea and uses that information to write documentation instructions for the product—after which they go back to customers to get additional feedback.

"Once all this information is gathered, the team decides whether or not to move forward. If the answer is yes, they build a 'very, very, very basic' product that they can start iterating immediately."

5. Pivot or Persevere

"The goal of all of this experimentation is to learn enough to have a 'pivot or persevere' meeting to evaluate whether the current strategy is working. If each experiment seems more productive than the last—you're learning a lot *and* you're seeing data that supports at least some of your leap-of-faith assumptions—then you can *persevere*, do another MVP that is a refinement of the previous one, and continue through the build-measure-learn cycle."

Ries continues, "If not, and you're hearing the same negative feedback (or indifference) from customers over and over, even though you've made the product 'better,' or if the feedback you're getting convincingly invalidates one of your key assumptions, it's time for a *pivot*."

Legendary pivot stories include PayPal, which transformed from money-transfer mechanisms for PalmPilots to the web-based version we know today, and Netflix, which went from mailing DVDs to streaming.

"Often, we wait until far too late to consider a pivot." But, as Ries explains, this kind of crisis-filled environment is rarely "conducive to rational decision making."

Instead, Ries suggests, "Schedule the pivot-or-persevere meeting in advance. Put it on the calendar. Make it a routine part of everyday life."

While the exact cadence depends on the startup, Ries' general recommendation is to meet every six weeks as a chance to evaluate whether the current strategy is moving the company in the direction of the vision.

Sometimes one pivot leads to another until the team eventually realizes the vision can't find successful footing, and that's OK.

Ries describes one such situation at GE's Turbomachinery Solutions, where a team ended up canceling plans for a flash liquid expander meant to increase efficiency at large natural gas plants. Despite the project shutdown, GE didn't consider it a loss; the team used the methods of Lean Startup and ultimately "spent \$30,000 and seven months testing their assumptions, rather than a few million dollars and years of time and effort, only to watch it fail." As a result, the growth board applauded the team's efforts and valued the learning achieved.

One of the most important parts of the Lean Startup method is for a leader to ask questions of the team doing the build-measure-learn work—the most important being: What did you learn, and how do you know? This tactic represents a major shift in traditional corporate structure, which sees the leader as the supreme expert and the subordinates as executors of the plan. Breaking these sorts of habits is key to realizing a company's vision.

05

CHAPTER FIVE

A MANAGEMENT SYSTEM FOR INNOVATION AT SCALE

Ries details his visit to a Rust Belt manufacturing plant that was in the middle of a lean transformation. He was amazed by the manpower behind the kitchen appliances this manufacturer made; human staffers hardwired every button, thousands of times a day. Ries thought about how he uses only about four buttons on his 29-button microwave—and he asked the company’s leadership what percentage of buttons on their appliances were used most often.

“When I asked the leaders about this, they admitted to me that yes, the data exists”—but they hadn’t yet looked at it. Why? They were worried the information would reveal that valuable time and energy had been wasted.

In the entire company’s value chain, no one had taken responsibility for answering a simple question: “What is the evidence that more buttons make customers more likely to buy this appliance, [and] then buy from this company again and again over the long term?”

ACCOUNTABILITY IS THE FOUNDATION OF MANAGEMENT

“Entrepreneurial management is ... a discipline designed to help leaders become as rigorous in the entrepreneurial part of their ‘management portfolio’ as they are in the general management part. Just because innovation is decentralized and unpredictable doesn’t mean it can’t be managed. It just requires different tools and different

safeguards than the ones we're accustomed to seeing in traditional management settings."

The foundation of the Startup Way necessitates the presence of four elements: accountability, process, culture and people.

1. **Accountability:** Accountability entails "the systems, rewards, and incentives that drive employees' behavior and focus their attention."
2. **Process:** Process "concerns the tools and tactics that employees habitually use every day to get work done, such as project planning, management, team coordination, and collaboration."
3. **Culture:** Habits and processes congeal into culture—"the shared, often unstated, beliefs that determine what employees believe to be possible, because 'that's just the way things are around here.' Culture is the institutional 'muscle memory.'"
4. **People:** In turn, every culture attracts certain kinds of people: "the ultimate corporate resource. A toxic or old-fashioned culture repels innovative talent. Ultimately, the success of any organization depends on the caliber of people it is able to attract and retain."

THE OUTCOMES OF TRANSFORMATION

1. **It provides more opportunities for leadership:**
Traditional structures include only a few true general positions with full P&L responsibility, plus smaller leadership roles that are often considered to be irrelevant. "Internal startups give you the best of both worlds: real, honest-to-God opportunity but small, well-contained liability."
2. **It helps keep innovative people in the company instead of incentivizing them to leave:**
When founders of a startup purchased by a company end up leaving the organization, Ries argues this is an HR failure; they were forced out by bureaucracy.

3. **It reduces wasted time and energy:**
Recall the workers hand-wiring the buttons that often go unused on a microwave. “This problem plagues companies of every size, startups and established organizations alike: *We pour time and energy into building the wrong product.*” The Startup Way focuses on finding the right way to build a product from the onset.
4. **It’s a much better way to kill projects:**
In traditional management, companies don’t cancel projects often enough because of factors like political consequences. In the Startup Way, the project leader or founder takes accountability for allowing a project to die—rather than allowing a higher-up to kill it. Ries posits that failing with honor is a skill. “And it takes advantage of the most important lesson of the scientific method: If you can’t fail, you can’t learn.”
5. **The ability to solve heterogeneous problems with speed and agility:**
Major problems, like a product recall, require the whole organization to help solve them. But there are urgent, everyday problems that don’t rise to the CEO’s personal attention. Today, management struggles with these problems, but the entrepreneurial approach offers an answer: Put a startup on it, run an experiment, measure results, scale it up and bring it to top management’s attention if warranted.
6. **... Profit?:**
The Startup Way of working lets managers be more adaptive and agile—providing an impact on stock price for public companies and “a good, true story for investors about why your company will be able to do it again—based on real data that you collect every time you try an experiment.”

part two

A ROAD MAP FOR TRANSFORMATION

When people tell Ries they don't think lean methods will work for their organizations, he tells them the story of HealthCare.gov. The marketplace, "built at a cost of \$800 million over three years by a collection of fifty-five different contractors, had immediately crashed. At the end of its first day, only six people had actually managed to sign up for insurance. By the end of the second day the number was up—to an equally unimpressive 248." Mikey Dickerson, a site reliability engineer at Google, was brought on to help CTO of the United States Todd Park and his team figure out how to fix this colossal mess.

The problems were many. But the team asked why the site wasn't working and then "worked backward, applying the management and technology practices they'd brought from the private sector: small teams, rapid iteration, accountability metrics, and a culture of transparency without fear of recrimination." Dickerson issued rules about how the recovery process would be undertaken, and he took methods that were useful "from his work at Google—methods that form the Startup Way. He got people into the same room, he made them work together, he prioritized, he enforced a culture of meritocracy, and he asked for honesty." Thanks in part to his contributions, by December, the HealthCare.gov system could handle 50,000 users at a time, and 400 bugs had been fixed.

THE THREE PHASES

Before launching into part two, Ries explains the next section of the book is “structured around three phases of transformation.” While the first phase “is about laying the foundation—building the apparatus—through experimentation, adaptation and translation,” the second phase is about “rapid scaling and deployment.” In a successful transformation, the organization will eventually have the power to tackle the third phase, which involves “dealing with the deep systems of the corporation.”

06

CHAPTER SIX

THE TRANSFORMATION: PHASE ONE

Ries returns to the example of GE's Series X engine. It was a great project through which to test and prove the Lean Startup methods to company skeptics since "a huge multiplatform engine is about as far away from software as you can get."

SERIES X: "RAISE YOUR HAND IF YOU BELIEVE THIS FORECAST."

Ries gathered with the Series X team "to try to answer one of CEO Jeff Immelt's most persistent questions: 'Why is it taking me five years to get a Series X engine?'" He also wanted to determine what the team actually knew versus what they had guessed by making leap-of-faith assumptions.

The team revealed its forecast, which displayed typical hockey-stick growth: This as-yet-unbuilt engine would make billions of dollars for the company for the next 20 to 30 years. Ries then asked the team to raise their hands if they believed in the forecast's accuracy. When everyone indicated they did, he referred to a particular bar on the graph, asking, "Seriously, who *really* believes that in the year 2030, you're going to make exactly sixteen billion dollars from this engine?" This time, no hands raised. The future can't be predicted with that kind of accuracy.

Moving on in the meeting, the team discussed the technical specifications, market research and other parameters to which they were binding themselves. Finally they realized: "The company had

been so focused on the technical risks—*Can this product be built?*—that it hadn't focused on the marketing and sales-related risks—*Should this product be built?*"

Ries instead suggested the team build a minimum viable product engine. Rather than trying to design equipment that would work in five different contexts, and thus add additional layers of complexity to the project, he suggested that they first target a single user. He then pushed them to go even further and build not a line of engines, but one single engine for one specific customer.

As one engineer explained, the team wouldn't have to build something new; they could simply modify an existing engine, the 616, with a few changes that would meet the specifications for the power generation use. Ries reasoned that while it wouldn't be as profitable as the proposed Series X, this modified 616 could be sold at the Series X's lower price to test demand. "This new MVP was literally an order of magnitude faster than the original plan: from more than five years to fewer than six months."

The energy in the room ignited. The senior vice president and chief technology officer of GE Global Research spoke up and said he realized the need to adapt. "Once presented with the right framework for rethinking their assumptions, the engineers came up with the new plan through their own analysis and their own insights. It was very obvious to everyone that this method had worked and that the team had arrived at an outcome that the company would not have been able to get to any other way."

PHASE ONE: COMMON PATTERNS

"The beginning of a Startup Way transformation is very grassroots. It makes progress, one project at a time, in service of proving a larger thesis, both to management (top-down) and to the teams doing the testing (bottom-up)."

THE ENERGY FOR TRANSFORMATION

Three distinct forces drive this kind of change:

1. **Crisis:** Sometimes, a crisis inspires change—such as in the case of Healthcare.gov, whose team learned a hard lesson about what can happen when relying on traditional management methods.
2. **Strategy:** “Other times, a new organizational strategy clearly necessitates a new way of working.” For example, in the case of GE and the Series X engine, people at the top recognized the need for a radical overhaul. That said, this approach works only when the most senior leaders at the company have bought in and are ready to see it through.
3. **Hypergrowth:** “Success can be its own form of crisis. When a startup achieves ‘product/market fit,’ it can be forced to grow extremely rapidly.”

HOW THE SUCCESS OF THE SERIES X WORKSHOP INFLUENCED GE

When Immelt heard what happened in the workshop, he essentially agreed right then to launch what became FastWorks. He appointed a cross-functional team of top executives from engineering, HR, IT, marketing and finance to oversee the expansion of the approach, and they began training more teams. The goal was to test the approach with as many types of teams and projects as possible to show it could work in many different contexts.

Ries devotes the rest of the chapter to detailing the six keys to the team’s success:

1. **Start Small**
“What happened with Series X is the hallmark of any transformation. This first phase is about creating an archive of information to use moving forward by looking at the results of the early projects and asking what went well and what went poorly.”
2. **Build Dedicated, Cross-Functional Teams**
“The goal of building cross-functional teams is to harness and share collaborative energy from various disciplines within the

organization, allowing functional diversity to grow over time.” It’s important to assemble the team with as many critical functions represented as possible, which sometimes means including people who aren’t formally on the team but want to volunteer their time and skill.

3. Wield the Golden Sword

This is a process to cut swiftly through bureaucracy during meetings between teams and executives. “The team says to the senior leaders, here is what you get: faster cycle time, more insight into what’s happening on the ground, and a promise to solve the problem fully and control spending along the way. And here is what it will cost you: air cover, secure funding, and cross-functional collaborators. From the point of view of most executives, it’s a true bargain.”

4. Design a Good Experiment

In order for an experiment to tell us whether it’s worth continuing, it should have four features:

- *A clear falsifiable hypothesis:* “Without a clear vision of what is supposed to happen, we can’t judge success or failure. And without failure, you cannot learn.”
- *An obvious next action:* “Experiments fail for all kinds of reasons, so it’s important to examine as many [explanations] as possible.”
- *Strict risk containment:* We need to make sure we can live with the possible results and prevent disasters. Possible methods include not putting the corporate logo on the MVP, or limiting the number of customers exposed.
- *A tie between what is measured and at least one LOFA:* Experiments must test an assumption to be useful.

5. Create New Ways to Measure Success

In this first phase of transformation, the organization can determine whether they are succeeding through the use of *leading indicators* that measure *validated learning*.

- Leading indicators are not perfect measurements, but they show that the probability of something good happening is increasing. These indicators could be cycle time, customer satisfaction or engagement, among others.

6. Measure Success

“A little further down the path of experimentation, you’ll need to *create metrics to measure the success of your company’s entrepreneurial projects*. This entails replacing the company’s traditional metrics—often ROI—with *validated learning* (scientifically gathered information based on frequent experiments to test every element of a project).” At Dropbox, for example, the two basic metrics for testing the new Paper program mentioned in the first chapter were virality and whether participants trying out the program returned in week two.

- Metrics must meet the three A’s discussed in Chapter 4: actionable, accessible and auditable.

7. Establish a System of Executive Sponsors

“Every team that’s working in the Startup Way needs to have someone in company leadership they can call upon, when needed, to resolve the toughest problems they face when interacting within the larger organization. If they don’t, it can be fatal to an internal startup at worst and cause a huge waste of time at best.”

8. Translate This Way of Working Into Terms the Organization Can Understand

Each organization must make the process its own, which includes the language that surrounds the project. For example, GE’s FastWorks drew inspiration from the company’s tagline: “Imagination at Work.” According to Ries, “Learning to work in this new way is not about the rigid adoption of a series of principles; it’s about finding the ways the tools can be adapted and applied to each specific company.”

- At GE, the acceptance of FastWorks was slow-going at first, which sparked a realization that the company “needed to redefine and re-articulate how they wanted employees to think and act.” If they wanted to transform, they needed to revamp the “GE Values,” a list of principles that acted as the company’s “north star.”
- To do so, the leadership team developed a list of characteristics they recognized in companies achieving the kinds of results GE aspired to attain. Then, they narrowed

the list to 12 characteristics and asked employees: Which of these 12 traits is GE good at, and where among these are our biggest gaps?

- Almost everyone agreed there were seven things the company was already good at, and the remaining five were areas GE needed to improve upon in order to thrive.
- Ultimately the team decided to rename the GE Values as “GE Beliefs” and decided on the five following beliefs:
 1. Customers determine our success.
 2. Stay lean to go fast.
 3. Learn and adapt to win.
 4. Empower and inspire each other.
 5. Deliver results in an uncertain world.

07

CHAPTER SEVEN

THE TRANSFORMATION: PHASE TWO

“Regardless of how, when the moment for decisive action arrives, the hard work and preparation of Phase One pays off. The steep upward slope of the S curve of Phase Two is no time to be taking baby steps and learning new theories. With luck, when the time comes, the new playbook has been battle-tested, or at least probed and prodded a little bit. Because as much as we like to complain that our organizations move like molasses, when change happens, it can happen surprisingly fast.”

PHASE TWO: COMMON PATTERNS

As with phase one, there is no right way to implement the second phase of the Startup Way, but in this chapter, Ries details key patterns and tasks to try. Before diving into these, Ries returns to the GE FastWorks example.

FASTWORKS, PHASE TWO

About a year into his time at GE, Ries attended the annual officers’ meeting, where he shared his accomplishments and touched the larger systemic challenges he encountered during his time at the company. For example, some areas of the company were so resistant that the corporate FastWorks team likened their behavior to “‘organ rejection.’” To combat resistance, the team recommended to CEO Jeff Immelt a comprehensive proposal to kick off phase two that involved training senior managers and building an internal coaching team.

In June, the FastWorks team estimated this rollout would take two years, but Immelt indicated that he wanted it done by the end of the year. Immelt requested a scorecard indicating who had and hadn't completed the required FastWorks training, and suddenly the people who were too busy for a three-day training session signed up. Phase two had begun in earnest—but not without its challenges.

Crossing the Chasm

Ries invokes management consultant Geoffrey Moore's idea of the "chasm," which is "the recurring problem that between visionary early adoption and pragmatic mainstream acceptance, there's an abyss that can only be spanned by a shift in the way a product is marketed and sold. The issue isn't just that the product isn't polished enough but that mainstream customers seek a like-minded reference in order to make that leap to purchase." Ries writes, "This same dynamic plays out in corporate transformations in Phase Two. And it can lead to tense conversations." At GE, having someone from each division participate in the FastWorks training signified to others that they believed in the process, and it meant more than anything an outside consultant like Ries could say.

PHASE TWO: COMMON PATTERNS

1. Identify the Challenges Faced by Pilot Teams

"By the time a company is into Phase Two of transformation, it will have two major sources of information to draw upon. This is the payoff for letting teams fail and succeed." The first source "is made up of all the exceptions that had to be made for a team to kick off its project: compliance, hiring, approvals, etc. ... The variety of problems tends to be far-reaching, but the message among them is clear: *What was done ad-hoc and by decree in the early stages must now be systematized.*" The second source is the result of "the early projects themselves. Some will have succeeded and become templates for others to emulate. Many will have failed and produced detailed information as to why."

Note that resistance from within is a specific kind of challenge. Managers have been trained all their careers to act in a certain way, and because innovation is a variation, there is inherent conflict. "Rather than view these managers as villains, we have to

take their objections and skepticism seriously—and find ways to help them support the transformation rather than hinder it.”

2. Implement a Widespread Rollout

Ries spent months “on the road” training GE executives. This method is not the only way to take things to the next level, though; for the HealthCare.gov group, change was implemented by building a central team called the United States Digital Service that consolidated engineering resources and design talent to help agencies transform important citizen-facing services.

3. Identify and Make Proper Use of Executive-Level Champions

“In larger corporations, an important role emerges in Phase Two: the executive-level champion. Different from a coach and also distinct from the role of the executive sponsor in Phase One (who is required to be intimately involved with the program on a day-to-day level), the executive-level champion’s primary function is to clear obstacles that crop up for teams as the lean way of working spreads. ... Executive championship is instrumental in broadcasting the message that this is the way an organization intends to work.”

4. Train Representatives of All Internal Functions

Reflecting on the ways GE has changed, Immelt noted that FastWorks is different in that, unlike other programs, it could be stopped by certain functions due to concerns related to budget or compliance. Regarding the solution to these challenges, Ries quotes Immelt: “You need messaging, not so much for the people who are the practitioners, but for the people who can stop things. You put them on notice and say, ‘You’re going to fail. You do that at your own peril.’ I think that’s where culture change is hard, because you’ve got a movement, and the movement can go quickly, but you’re not just trying to get people to come with you. You’ve got to stop the people who want to block it.”

Know that there will be backlash. Some might think lean methods sound like another corporate initiative. That’s why Ries always starts with a Q&A period before kicking off a new project, finding that “even the skeptics are more willing to get on board once their concerns have been addressed.”

5. Establish an In-House Coaching Program

The startup community is full of advisors, and the Lean Startup movement has spawned an industry of consultants and experts who play this role. Ries generally recommends the term “coach” to refer to this role, as it helps avoid misunderstandings among other teams. Developing a slate of internal coaches is essential to phase two of the Lean Startup method.

Coaching has long been a part of the startup world, and more recent accelerator programs like Y Combinator and Techstars have formalized this approach into a structured program. Advisors take on the role of coaches and mentors, but no one is forced to talk to them or do as they say.

At any organization, there are already plenty of people who are both familiar with the company and skilled at coaching. Leveraging their expertise as internal coaches helps to create heft behind transformation.

6. Set Up the Mechanisms of Metered Funding/Growth Boards

Most companies Ries encounters, whether startup or enterprise, budget the same way: Managers spend a considerable amount of time preparing for an annual meeting and even more time defending their budget politically. He calls this method “entitlement funding,” because an underlying dynamic always seems to play out. It’s hard to get your preferred project on deck for funding—but once it’s there, it becomes what managers call a “spigot,” because it’s “always on, with the flow of funding varying from period to period.” The problem with this system is that “[if] teams feel entitled to funding, it’s almost impossible to generate the energy and focus that startups require.” The antidote, Ries says, is what he calls “*metered funding*.”

An example of metered funding in action is the budget process at Global Innovation Fund (GIF), a London-based nonprofit that invests in innovations targeted at improving the lives of the poorest people in developing countries.

GIF's approach to funding occurs in stages: In the earliest stage, grants to entrepreneurs are meant for learning, not outcomes, and are capped at \$230,000. The next level grants up to \$2.3 million to innovators transitioning "from piloting their models to scaling their intervention"—they need to test their business models and cost effectiveness while still providing rigorous evidence of impact. At the third stage, GIF grants up to \$15 million to innovators ready to take their creations to scale. The funds at this stage are used to help grow the business and strive for widespread adoption.

What Comes Next

"The only way to give this change staying power is to use the early successes and their attendant institutional clout to tackle the 'deep systems' of the company: its incentives structure, how people are held accountable, how resources are allocated. ... In most organizations, these systems are considered untouchable by most employees. To make changing them a prerequisite for embarking on the transformation is a nonstarter. But change them we must." How to go about doing so is the subject of the next chapter—and phase three of the Startup Way.

08

CHAPTER EIGHT

THE TRANSFORMATION: PHASE THREE

Ries believes “that every company that has scaled successfully has a second story, too—one that starts after the thrilling ride of turning an idea into reality and finding a place for it in the market.” He calls this moment “the second founding. It’s the period in a company’s growth when it goes from being just another organization to an institution that’s here to stay. It’s the moment when the company ‘grows up’ and adopts a managerial culture. ... Unfortunately, for many companies, this is also the moment when bureaucracy and lethargy set in, and the most innovative people—hamstrung by frustration—are sidelined or leave altogether.”

But a few companies pull off this transition without losing their startup DNA. “This is the work of Phase Three, in which organizations transform their internal processes. The goal: to create functions that are capable of continuous innovation. This moment is about changing the ‘deep systems’ of the organization to support innovation for the long-term life and value of the company.”

That said, a guide to the third phase of the Startup Way is impossible to codify. Therefore, this chapter is what Ries calls “the most misleading in this book.” He attempts to demonstrate what a truly large-scale transformation looks like from a number of different angles. “But precisely because these transformations are so large, so profound, and so different for every company, it’s difficult to be systematic about it. It’s

not that Phase Three is any less rigorous than Phases One and Two. In fact, it's quite difficult. But because each organization's understanding of what systems it needs to change will be based on the outcomes of its particular work, there's no list of common patterns. The work of Phase Three is to take what you've learned already and use it to create solutions for the issues specific to your organization."

09

CHAPTER NINE

INNOVATION ACCOUNTING

In the early days of IMVU, the startup Ries founded in 2004, the team was trying to raise money from venture capitalists. The pitch deck included some very small numbers, but they showed clear progress—so the team “earned the trust and investments of the VCs who not only understood our thinking as a team ... but also knew how to read into those tiny numbers in a more sophisticated way.” These VCs were able to look beyond the vanity metrics and see that the per-customer metrics were promising, and the change in metrics over time indicated something important had happened that was causing the hockey-stick growth to begin. While it wasn’t definitive for ultimate product fit and success, it was a promising leading indicator.

Ries writes, “Recognizing these early signs of success as worthy of further investment is the key skill that powers successful venture capital. Still, in most corporate contexts, finance teams would happily still pull the plug on a project like this.” To avoid this challenge, “[what] is needed in a startup project is a new way of interpreting early results, one that solves this basic repeated dilemma that all innovation teams face. In fact, once we get the right framework in place, teams can use my favorite reply to these frequent critics: ‘You say we have too small a sample size. Excellent. We’re glad you agree our budget should be increased. Let’s scale up the experiment and get a larger sample.’ This works because the criticism implicitly grants the premise that the early results are promising.”

Entrepreneurs tend to complain in private that VCs and CFOs kill promising new ventures before they are given a chance to succeed. Yet as Ries explains, it's important to take a step back and look at the problem from finance's point of view. "In normal corporate situations, a manager who misses his or her quarterly targets—even by a little bit—is in big trouble. In most organizations, a 10 percent miss in one quarter is probably not enough to get you fired on the spot, but woe befall any manager who makes a habit of it." How does an entrepreneur who misses targets by orders of magnitude and still asks for more funding adopt this new perspective?

"A team may come to finance with almost no customers and almost no revenue and ask to be treated as a success. Yes, it's possible that this team has learned amazing things, but it's also possible that they have just set the company's money on fire and spent the time on a beach doing nothing. From the point of view of traditional accounting, the two teams are indistinguishable. Their vanity metrics are the same. How is finance supposed to adjudicate which is worth further investment and which is not?" The true driver of finance decision-making is almost always politics, Ries writes.

INNOVATION ACCOUNTING: WHAT IS IT?

The Lean Startup's most well-known concepts are pivot and minimum viable product, but readers rarely send Ries fan mail about the idea of "*innovation accounting*," which is what aligns finance with the entrepreneurial model.

"Innovation accounting (IA) is a way of evaluating progress when all the metrics typically used in an established company (revenue, customers, ROI, market share) are effectively zero. It provides a framework of chained *leading indicators* ... Each link in the chain is essential and, when broken, demands immediate attention. It's a focusing device for teams, keeping their attention on the most important leap-of-faith assumptions. And it's a common, mathematical vocabulary for negotiating the use of resources among competing functions, divisions or regions. It provides a way to tie long-term growth and R&D into a system that follows a clear process for funding innovation that can be audited and which leads to value creation."

IA enables an apples-to-apples comparison between different startups to determine which is most worthy of continued funding. It's a "system for translating from the vague language of 'learning' to the hard language of dollars." It acts as a scorecard that can track a team's progress as a team moves from zero to current IA value to equity value and finally, to their fantasy plan.

Ries warns this chapter is "necessarily incomplete," providing high-level tools to encourage the hard work of learning the math involved, which must be done properly in order for innovation accounting to be effective.

THE THREE LEVELS OF INNOVATION ACCOUNTING

Level 1: Dashboard

"The innovation accounting process begins with a simple dashboard full of metrics that teams can agree are important. Many teams aren't yet aware of the drivers behind their revenue projections. They're focused instead on the financial goals or 'outputs'—things like ROI, market share, and margin—and not on the power required behind the scenes to grow them."

It makes sense, then, that many teams pad their projections to get funding. "Instead, teams would do better—and companies, too—if more were looking at the actual drivers of growth and trying to understand how, over time, these drivers could help make a business successful. Innovation accounting allows us to track this sort of progress and eventually translate what we learn into a language that finance teams and finance departments can understand. The key piece of data in this process is the 'per customer' input." These inputs can be measured in a sample of any size, and changes to it over time can be shown. Examples of these per-customer learning metrics include conversion rates, revenue per customer, retention rate, referral rate and more.

IA doesn't need to begin with a detailed spreadsheet. It can start with a simple dashboard. While teams can choose any metrics, they must be simple and actionable—and they must answer four key questions described in the next section of this chapter.

Level 2: Business Case

“Level 1 is not meant to be comprehensive. Rather, it is a necessary first step to help teams understand the process of innovation accounting. With Level 2, we go a bit deeper. Level 2 depends on having a thought-through business case and having identified the leap-of-faith assumptions that power it ... Now it’s time to start seeing those LOFAs as ‘inputs’ that drive the business case.”

The dashboard should provide a comprehensive understanding of what is happening, with enough clarity that anyone in finance can understand it, contain metrics that correspond to specific LOFAs from the business plan and encompass the value and growth hypotheses discussed in Chapter 4.

Level 3: Net Present Value

“In Level 3 innovation accounting, the goal is to translate learning into dollars by running full business cases after the relevant learning metrics have changed. This will allow you to recalculate your projected ROI. The challenge with a management system in which the ultimate goal is learning is that it doesn’t account for what that learning means financially.”

It’s usually difficult to explain this in Level 1 IA. “By Level 2 you can multiply the conversion rate by the average revenue per customer, and you should be able to see an improvement on the revenue per prospect. That’s a step in the right direction, but it’s not enough.”

Ries continues, “From here you can take the numbers from your dashboard and plug them into the business-plan spreadsheet and rerun the model. In Level 3, you can extrapolate from the early numbers to understand the long-term impact of what you’ve learned. As you become more sophisticated in your analysis, you can even determine how valuable the nascent business is in net-present-value terms.”

“Ultimately, Level 3 is the point at which you should be able to realize, in a hard and fast financial way, that the resources spent on one short-term project and learning are more financially beneficial than the allocation of funds for, as an example, two years’ worth of R&D,

marketing, and launching just to realize that a product failed.” A Level 3 dashboard essentially translates everything you learn into net-present-value terms.

INNOVATION ACCOUNTING AT SCALE: “THE BINGO CARDS”

An advantage of IA is that it demonstrates how projects, portfolios or even whole enterprises change over time, and it provides a common vocabulary and accountability framework. Ries shares an example of an IA “bingo card”: a diagram that demonstrates how experiments play out across the three scales of group levels (project teams, business unit/growth board and corporate/transformational), as well as four time horizons that represent the progress of adoption (execution, behavior change, customer impact and financial impact).

The Role of Finance

“Some of the metrics that this approach requires are already being tracked in the normal course of business operations. Some will require additional work that serves just to measure whether the new methods are working. Whose responsibility is it to develop these metrics and establish consistency across the whole portfolio—or even the whole company? If this were any other kind of project, the answer would be obvious: finance. A finance function that wants to support innovation (instead of hindering it) will have to do this work. For the largest organizations, this will have to include establishing an ‘innovation audit’ process to ensure this new kind of ‘standard work’ is being adopted everywhere.”

WHAT IS A GROWTH BOARD?

“A growth board is simply the purely internal version of a startup board: a group of people who meet on a regular basis to hear from teams about their progress and make funding decisions.” In essence, they are “operationalized venture capital funds.”

The Dropbox Growth Board

Aditya Agarwal, the VP of engineering at Dropbox, asserts that having a board for authority—and furthermore, calling the group a board—is a powerful move for a startup. The company’s growth board includes leaders from functions like engineering and product, plus some

combination of senior-most executives. The board meets with each team working on an innovation every two months. “We hold them accountable and give them strategic guidance on how to evolve or just point out the need to evolve or change their plan,” says Agarwal. The exact composition of the board is not what matters; it’s that the membership is consistent from meeting to meeting. It’s better to meet less frequently than risk having members miss meetings.

A growth board has three core responsibilities:

1. “To be the single point of corporate accountability for an internal startup.”
2. “To act as the single clearinghouse for information about the startup for the rest of the corporation.”
3. “To provide *metered funding* to startup teams.”

CORPORATE GROWTH BOARDS

Ries discusses possible “radical” implementations of innovation accounting, including M&A and IPO analogs for internal startups. They are meant merely as provocations here, but especially for the next generation of founders, this model provides their best employees with an opportunity for the rewards, focus and growth that comes with high-stakes entrepreneurship.

This model also leads to some questions: Which staffers should be considered entrepreneurs? What should the scope of the entrepreneurial function be, and which activities should it be responsible for? The answers to these questions may prove surprising and are the subject of the third section of the book.

part three

THE BIG PICTURE

It might sound reasonable to ask: What does the fourth or fifth phase of the Startup Way look like? In other words: When is the innovation done? Although these questions are reasonable, neither one is entirely accurate.

“Once this way of working becomes embedded in the everyday fabric of an organization, it’s no longer a transformation,” writes Ries. Nonetheless, new tools and techniques aren’t ruled out because of the inherent flexibility embedded within the Startup Way. With teams that self-organize around fresh ideas and coaches that spread practices that travel, these methods “are not nearly as disruptive or challenging as the original transformation that created the platform for them to spread. The cycle of continuous innovation will be completely ingrained in the fabric of the organization, able to absorb change and growth.”

What happens next? The organization must then move from *continuous innovation* to *continuous transformation*—“[an] ongoing cycle of change that can transform not just a function or a project or a team, but the very structure of the organization itself.”

CONTINUOUS TRANSFORMATION REQUIRES A RIGOROUS APPROACH

Reinvigorating an organization with the methods in this book represents effectively re-founding the company. “Every organization should have an active program of experimentation in new organizational forms and management methods. These programs should themselves be MVPs, embarked upon with caution and strictly defined liability, and helmed by the kinds of people who could one day become founders of the next company-wide transformation.”

RIGOROUS TRANSFORMATION IS ENTREPRENEURSHIP

“A corporate transformation is—in every way—a true startup, with the same kind of risk, rapid growth, and profound impact that an external startup contains.” The ROI on corporate transformations can be massive. Much like founding a new startup, transformation efforts require similar processes and skillsets, and the people best equipped to lead are often entrepreneurs.

THE BIGGER PICTURE

Whereas the second part of the book focused on the mechanisms for creating transformation, the third part centers on the larger questions: “Where should the engine of continuous transformation be located in an organization? And once it’s up and running, how can it be used, depending on what kind of organization it’s in, to change not just business practices but the laws and systems that support all of us?”

Ries believes this kind of transformation has implications beyond the scenarios previously discussed, as it might be able to affect society as a whole by supporting people, designing policy and creating an operating base for our country.

10

CHAPTER TEN

A UNIFIED THEORY OF ENTREPRENEURSHIP

Ries acknowledges there is no single management system that will work indefinitely. Startup founders have been nervous to ask him about incorporating techniques from other methods into the Lean Startup process as they grow bigger. But as long as they work, Ries sees no reason not to incorporate new ideas.

“This is the hard truth for all founders, of transformations and startups alike. At a certain point, when your transformation has grown powerful enough to affect the whole company, when it has totally won out over whatever culture it was designed to replace, it is also itself *too big* for radical changes. At GE, for example, any modification to the FastWorks program has to trickle down to hundreds of thousands of employees. It’s only human nature to start to see this as a risky move that could prove costly if it’s not correct.”

Once a transformation has achieved scale, it’s time to start a new one, with a new founder and team. Just as *The Lean Startup* argued for a shift in thinking from innovation to continuous innovation, Ries’ goal with *The Startup Way* is to leave readers with a hunger for continuous transformation, rather than just transformation.

Ries argues that businesses are better served by viewing transformation as a fact of life for the foreseeable future. He further predicts that “twenty-first-century managers will live through as many organizational transformations as new product platforms and see organizational

forms the same way we see our smartphones—as something disposable that’s top of the line for a few years, then rapidly surpassed.”

A UNIFIED THEORY OF ENTREPRENEURSHIP

Ries lists the following commitments that “form the overarching structure of entrepreneurship as a corporate function,” stating that what matters is that the organization:

1. “Assigns responsibility for the entrepreneurship function to somebody (too many orgs have nobody).”
2. “Gives these people real operating responsibility instead of designating them merely as futurists or instigators (as too many ‘chief innovation officers’ are).”
3. “Builds a career path and specialized performance development process for entrepreneurial talent (producing a common standard that can be used across pillars, no matter which function or division is affected).”
4. “Facilitates cross-training of entrepreneurs across the pillars. (This is why VCs who have had real-world operating experience as founders are so highly prized, though I should note the many VCs who have succeeded despite not having it. What matters is the mindset, not the résumé.)”
5. “Offers training, mentorship, support, coaching, and best practices designed to foster excellence in entrepreneurship across the organization.”
6. “And, somewhat counterintuitively, is responsible for educating the *non-entrepreneurs* of the organization, who, while not necessarily acting as drivers of change, will still need to adopt a more entrepreneurial way of working.”
7. “Has a seat at the table when the other functions—especially gatekeeper functions—are setting company policy. This is incredibly important for finance, legal, HR, and IT in particular.”

CORPORATE ENTREPRENEURSHIP

On the topic of corporate entrepreneurship, Ries indicates that it's important to ask: What does one call the “work of ‘evolving’ an organization to become better adapted to the world in which it finds itself?” Different from general change management, corporate entrepreneurship requires a most distinctive kind of leadership, the most audacious experimentation, the most difficult kind of cross-functional collaboration—and even after all that, it may not work.

Sound familiar? Ries believes corporate transformation is *corporate entrepreneurship*. Leaders of corporate transformation need funding, clear access to scalable resources, standards for accountability and other items every entrepreneur also needs. Every company should have someone working on transformation right now, and if they don't, it's an oversight that must be remedied immediately.

But even if you work at one of the companies featured in *The Startup Way*, your work is not complete—and it never is. “Continuous transformation—an organization's capability to test and learn from experiments having to do with its own structure and processes, promoting the best-proven techniques company-wide while limiting or discarding the rest—is what will give that organization the ability to thrive in the modern era.”

The true promise of the Startup Way method is that it is “a management system that contains within it the seeds of its own evolution by providing an opportunity for every employee to become an entrepreneur.”

11

CHAPTER ELEVEN

TOWARD A PRO-ENTREPRENEURSHIP PUBLIC POLICY

“This chapter is about where we might be able to run fruitful policy-making experiments that will help leaders face their current challenge: to create conditions that will allow the next generation of entrepreneurs to thrive.”

IT’S ABOUT POLICY, NOT POLITICS

Ries is worried about the ability of the United States to maintain leadership in this critical area of entrepreneurship. “Startups are, in a very crude sense, made up of three ingredients: products, capital, and labor. If the early twenty-first century has shown us anything, it is that products and capital are both extremely porous across borders, while labor is decidedly not.” In the rest of the chapter, Ries will share ideas about what pro-entrepreneurship public policy might look like. First, he explores the factors that motivate entrepreneurs.

WHAT MOTIVATES ENTREPRENEURS?

1. **Vision and Upside:**

Vision is a longing to improve the world, and that is critical. But to endure the pain of entrepreneurship, the payoff or upside needs to be correspondingly large—and could be the “stake in the outcome,” rather than financial.

2. Skills and Resources:

It is important to recognize that “even though innovation is sometimes cheap (at the beginning), having access to the resources required to get started is an enormously privileged position. There’s a reason that famous entrepreneurs in history, like Henry Ford, came from upper-middle-class backgrounds: They were rich in family connections to fall back on in the event of failure and had easy access to the startup funds and equipment (in Ford’s case, his own garage) they needed to get started.” We need to find ways to empower more entrepreneurs, as genius is widely distributed, yet opportunity is not.

3. Risks and Liabilities:

Entrepreneurs are obsessed with the risk of failure. “As for liability, being able to quit your job and start a company with no salary is a luxury only some people enjoy. There’s a reason we have the famous pop-culture image of the twenty-something tech founder (not coincidentally, almost always white and male) working in his parents’ garage. It’s much easier to start a company if you have no dependents and no mortgage or rent.” It’s especially easy if you don’t have to worry much about whether a failure will tank your future career opportunities. Anything that cushions people from the consequences of business failure will pay dramatic dividends in increasing entrepreneurship.

For a public policy to be truly pro-entrepreneurship, it must affect at least one of the three above factors. “These are the levers we need to move to create not just innovative companies but an innovative *culture*.”

SOURCES OF NEW STRUCTURES

A popular idea in Silicon Valley right now is Universal Basic Income (UBI). The idea is that governments should be able to guarantee every citizen a secure income that is unrelated to their ability to work. Oulu, Finland, is running an experiment to see how UBI encourages entrepreneurs.

Ries proposed another structure during his appearance on a call-in talk show on C-SPAN: Citizens could have the option to convert their unemployment payments into a small business loan on generous terms.

Another method is small business loans. “If the government wanted to dramatically increase the number of entrepreneurial experiments going on among its citizens, the easiest way to do so would be to inject startup capital directly into the hands of ordinary citizens.” This could take the form of a government-run microloan system that starts around \$100; each time a citizen paid back the loan in full they could receive a higher amount in the next round. If someone didn’t pay back the money, they would lose access to the program—without facing bankruptcy or other penalties.

Next, Ries briefly details possible regulatory relief for startups, including sliding scale regulations, non-compete agreements and patent law, bankruptcy reform and civic reforms.

Taken as a whole, consider these concepts the foundation of “minimum viable politics.” Ries says, “We need to find a way to bridge the distance between the pluralism and the many varied interests that are a part of our society.” He further asserts that “a pro-entrepreneurship public policy scrambles our political positions, because it draws from both sides of the aisle, seeking to address the needs and concerns of everyone in our society rather than just certain constituencies. As far as vision goes, it doesn’t get more valuable than that.”

EPILOGUE:

A New Civic Religion

Ries reiterates he is not advocating for the end of management, nor is the Startup Way a be-all, end-all system. “Rather, it is the first one that contains within it the seeds of its own evolution.”

Through this method, which encourages “a constant experimentation with the organization’s structures themselves, we are much more likely to be able to use new technological breakthroughs to create new and more powerful organizational forms. In order to do this, we have to see entrepreneurship as a core requirement of all employees, because we never know where new and surprising ideas will come from.”

We will need these concepts in coming years, “as we are in danger of confronting the four horsemen of economic stagnation”: an epidemic of short-termism, a lack of entrepreneurial opportunity, a loss of leadership, and low growth and instability. Ries also shares “pillars” of what a solution must include, reiterates how entrepreneurship can help with this vision, lists a simple bill of rights that every organization owes their employees and describes the benefits to society that will come if we change management practice. All of this requires the vast movement of different types of people, not simply politicians or founders alone.

Ries’ concluding message is this: “Don’t forget how far we’ve come or how far we still have to go. And, most of all, have faith that the changes we seek are achievable. I’ve witnessed them with my own eyes, in fits and starts, in the score or more of examples I shared in this book. I hope you will take inspiration from them and use them as a launching pad to greatly exceed what we have accomplished so far. So go. Get started.”

About World 50

World 50 is the premier resource for senior executives from globally respected organizations to privately and candidly share ideas, solutions and collaborative discovery.

The World 50 community represents more than 1,300 senior executives from more than 600 globally respected companies across six continents. Membership provides unparalleled access to world-class gatherings as well as year-round peer-to-peer and team-to-team collaboration, delivering insights found nowhere else. Intimate participation with remarkable practitioners and expert thinkers creates a candid dialogue on leading and growing significant enterprises in a global economy.

