DISRUPT IT YOURSELF

EIGHT WAYS TO HACK A BETTER BUSINESS . . . BEFORE THE COMPETITION DOES

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For my parents—the original disrupters
For our son, Niko, a next-generation disrupter
And for my partner, Hari, who helps all of us
keep a foot on the ground, and without whom
this book would not have been possible.

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Foreword

Disrupt yourself" has become as routine in business parlance as "maximize shareholder value." They are phrases that roll off the tongue so readily and so often that one might be lulled into a false belief that their fulfillment is both easy to achieve and pervasive in companies today. In reality, they are some of the most challenging and important tasks at hand. And accomplishing them is becoming more difficult every day as the pace of technological change continues to accelerate, upending the status quo and paving the way for new, disruptive challenger products, services, and business models, which often appear with lightning speed.

The average lifespan of an S&P 500 company has decreased to about fifteen years, down from sixty-seven years in the 1920s, and the vast majority of Fortune 500 companies from the class of 1955 are no longer on the list. Companies and brands that were once part of our daily vernacular—Circuit City, Blockbuster, and Oldsmobile—have been replaced by companies such as Amazon, Netflix, and Tesla. Facebook, Uber, and Airbnb have created entire new industries seemingly overnight, and the gestation period from startup to multibillion market capitalization continues to shrink dramatically for the successful ones.

The year 2018 marked Stanley Black & Decker's 175th anniversary. We are a manufacturer that was formed in the wake of the first Industrial Revolution and has continued to innovate in order to stay relevant during the second and third. We are now in the midst of a fourth industrial revolution, which is creating exciting and daunting challenges and opportunities for us and all legacy industrial companies. This time around it is different, in the sense that the speed of change has accelerated to a point at which it is impossible—or will soon become so—for any one institution to be able to absorb the change. Achieving longevity and sustainable success in this era requires new collaborative leadership models, new skills, and new cultural attributes. The degree of difficulty has never been so steep and the stakes are sky high. I envision a near future where the difference between business leaders who understand and actualize this and those who don't will be the defining factor in the sustainability of legacy companies.

This doesn't, however, mean turning everyone in your company into an innovation expert and dismantling what has made your organization successful. As Simone Ahuja argues in Disrupt-It-Yourself, it means taking the unique aspects of your company and culture and putting them to work. It means creating the internal structures for management, tapping into existing talent in addition to bringing in new ways of thinking, and creating a culture that enables speed and experimentation—one that captures the passion and purpose of your people.

Make no mistake: *intrapreneurship*, as Ahuja calls it, is no small task. When the topic is raised, many experts are right to consider the dangers of a company's "immune system" kicking in and essentially kicking out new ways of thinking and acting. It's probably the greatest danger to innovation within a large organization.

To overcome this challenge, purpose is a great starting point. When we think about the most recent class of organizations that have been formed, they often focus on an MTP or "massive transformative purpose." That purpose unites employees around a common mission and reason for being and helps align their efforts. It serves as a guidepost for decision-making when, in order to truly disrupt within an organization, some of the company's rules have to be, frankly, overruled. It helps employees connect with customers and the value-creating solutions that set the company apart from its competitors.

For Stanley Black & Decker, our purpose is "for those who make the world." As a $20-plus billion global manufacturer, we are for the makers, innovators, creators, and protectors who are out doing the hard work to make our world a better place. We support the craftsmen and the caregivers, the people on the front lines building our lives every day. We have to make the hardest-working, most innovative tools and solutions because customers depend on them for their livelihoods and for the safety and security of their workers, customers, and communities. Our people find that to be quite inspiring.

With that as the backdrop, I believe that you'll enjoy the flexible model for innovation in *Disrupt-It-Yourself* and find it immensely relevant. I met Simone about five years ago at a C-level gathering where she was speaking about innovation and intrapreneurship. She inspired me at the time, and it turned out she was prescient. Her intellect and knowledge of the subject matter are extraordinary and her passion for it is self-evident.

Much of what she believed about the subject is turning out to be absolutely correct, and she shares that knowledge in the pages that follow. We have utilized her ideas to help us define our approach to intrapreneurship and innovation and to catalyze the transformation within our company. This book offers a framework for designing an intrapreneurial program, recognizing that each organization is different and offering options to tailor the program to an enterprise's individual circumstances.

She also provides numerous examples (including some from our own company) about the hardworking people who are able to push through the boundaries that exist in traditional organizations in order to drive innovations over the finish line. That is no small task given the bureaucracies and hierarchies we have created over the years. Those processes and the discipline they create have been key to driving high levels of shareholder value in the past, but now a different type of leadership is required.

This new style of leadership must encourage disruption, trial and error, fast movement, constant learning, and collaborative work styles while breaking down the barriers to achievement. It has certainly asked of me, as I recently crossed sixty, a completely different approach to management and leadership—learning to let go and truly empowering our people to unleash that talent and creativity that exist within.

While we certainly don't have everything figured out at Stanley Black & Decker, all fifty-eight thousand of us are on a continuing journey of learning, applying, and relearning, and even unlearning in some cases. I encourage you to embrace the pace of change and the opportunities you have in front of you. There is only one way to continue to be relevant, and that's continuing to innovate with purpose, openness, and ever-increasing speed.

Perhaps the phrase should be "disrupt yourself and maximize shareholder value": in this day and age, you can't maximize shareholder value and ensure your long-term success unless you are working on disrupting yourself.

—Jim Loree
President & CEO
Stanley Black & Decker

Introduction

> We as large organizations have just as much a right to play into that future if not more so than these kids in a garage somewhere that we're scared of.
>
> —Kyle Nel, CEO of Uncommon Partners, former executive director of Lowe's Innovation Labs

I frequently find myself in animated discussions with leaders about impending disruption. They have seen repeatedly how innovations hatched by hot startups can swiftly displace incumbents and generate entirely new markets. We share ideas about how they can prepare for these disruptions and respond to the rapid shifts that are in progress. More than anything, I urge them to trigger these changes themselves. It's a part of what I call the Disrupt-It-Yourself imperative, which presupposes that the only way an organization can win in an innovation-driven economy is to invent the future itself by unleashing more of its own talent and energy.

Many of the executives I know are waking up to this imperative. They are aware that they need more intrapreneurs—people who, despite being employees, behave in many ways like entrepreneurs. But they're not sure how to create the conditions needed to attract and empower these people, much less manage the whole spectrum of innovations from incremental improvements of existing offerings to highly ambitious and groundbreaking "moonshots."

The discovery flows both ways in these conversations. I find myself leaning forward to follow up on an original insight or to commiserate with a team's grueling setbacks. And occasionally, the person across the table decides to throw me a curveball. One such moment occurred about a year ago, when a manager working in a large innovation lab broke the news to me: "That thing you're looking for? You'll never find it."

I had been unpacking my plan for this book—to look under the hood at innovation-hungry companies to discover the secret combination of structure, roles, and tools that create a powerful engine of Disrupt-It-Yourself (DIY) activity. He sighed and continued, "Seriously, the one perfect setup for supporting intrapreneurship? That icon of so-called Disrupt-It-Yourself innovation? It doesn't exist."

Fair enough. I had uncovered some impressive programs supporting streams of extremely promising initiatives, but no one had unpacked the DIY approach in a way that was clear and flawless—or truly transferrable.

And that is exactly as it should be. Not only is every DIY effort distinct but each is forever evolving. Every organization needs something slightly different. Rather than dream up an arbitrary ideal for the mythic intrapreneurial organization, I became determined to upload and translate the hidden principles that underpin the most successful approaches in practice today. As part of that, I've crafted a powerful synthesis of actionable prescriptions based on sound evidence. These are strategies that can be applied with great flexibility and guide refinements over time. That's the winning formula.

In one sense, companies have a lot in common these days. Most are waking up to the same basic understanding that Cisco's longtime CEO John Chambers alluded to when he told an audience that "forty percent of businesses . . . will not exist in a meaningful way in ten years." He went on to say: "If I'm not making you sweat, I should be. . . . Either we disrupt or we get disrupted."[1] The innovation-focused consultancy Innosight supports Chambers's conclusions with its corporate longevity forecast. It found that the big US companies that made up the S&P 500 back in 1964 tended to stay on the list for a long time—an average of thirty-three years. That tenure has done nothing but shrink since. In 2016, the average time on the list was down to twenty-four years. By 2027, forecasters predict it will be just twelve.[2] However, while over 40 percent of executives say that their company is at risk or very at risk of disruption, 78 percent of innovation portfolios are allocated to continuous (or incremental) innovation instead of disruptive risks.[3]

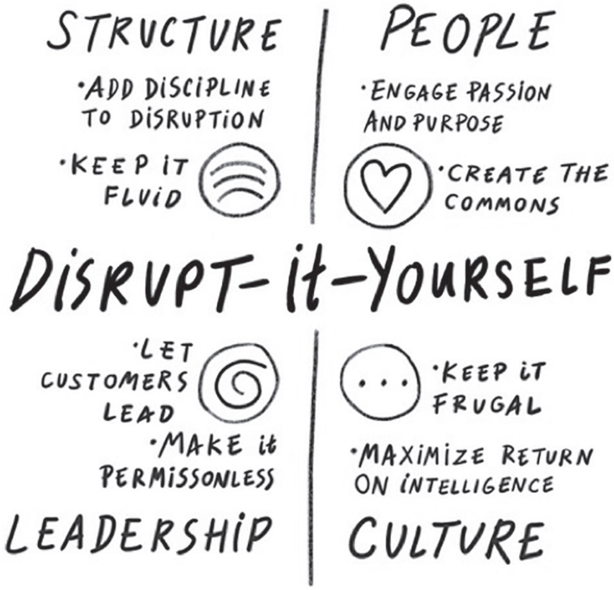
Meanwhile, the life cycle of products and services in competitive markets is shorter than ever. If a firm wants to grow, it is no longer enough to stamp out yesterday's widgets more efficiently. The management teams I work with are finding that yesterday's growth strategies—which often leave risky disruptive innovation to startups and then buy the ones that succeed—have lost much of their logic. Today entrepreneurs are more capable than ever of quickly scaling and capturing market share on their own, and post-merger integration is increasingly challenging, so it makes more and more sense for established organizations to enable and empower a broad spectrum of innovation on the inside—including disruptive innovation. Even Wall Street and boards of directors are increasingly pressuring CEOs to drive internal disruption by making big, risky bets that could upend the company and industry, while simultaneously maintaining core business. But many organizations and leaders lack confidence in their abilities to do so. When PricewaterhouseCoopers (PwC) surveyed managers in a wide range of companies in 2013, it found a small minority of "most innovative" firms expected, on average, to see growth of 62 percent over five years and a much larger "least innovative" group that expected just 21 percent—in other words, an annualized growth rate of 3.9 percent.[4] McKinsey & Company found a similar level of pessimism in its Global Innovation Survey. Although 84 percent of executives who responded agreed that innovation was important to their growth strategy, a mere 6 percent said they were satisfied with their organizations' innovation performance. Most recognized that, unfortunately, they are sitting in companies that are highly optimized for producing yesterday's offerings as opposed to discovering tomorrow's.

There is a common phrase that many of these leaders use. One senior manager I interviewed put it this way: "Our CEO said, 'You know, I'm worried. I don't want us to have a Kodak moment.'" The CEO's reference, of course, was to Kodak's precipitous decline into irrelevance after a technology revolution destroyed its business model—the kind of collapse no CEO wants to preside over. She continued, "I think all big companies right now are in that same boat. Everybody I talk to has had a similar experience where somebody at the senior level has said, 'We need to make sure that we're not caught off guard, taken by surprise by some new company that starts up.' And that's why this group I am in was created."

She's right, and hers is hardly the only internal innovation group hatched in response to this pressure. Programs are in place in hundreds of firms, in different stages of development. But, until recently, many had assumed that a sufficient amount of innovation would spring up naturally, without any particular effort to support it in a systematic way. Now they find they are losing talent, lagging in competitive markets, and bleeding brand equity. Faced with the very real threat of seeing their core business lines disrupted, they recognize they must adopt and maintain a Disrupt-It-Yourself—or DIY—approach. They have come to realize that more of their innovation must be "organic"—seeded, grown, and successfully harvested by the firm that will benefit from it.

What kind of enterprise is capable of bringing breakthrough innovation to market with a DIY approach? Any organization can, provided it starts with a serious resolve to

1. build a strong internal structure for innovation and growth management, investing in a well-balanced innovation portfolio that will provide a sustainable edge;
2. harness the creativity and knowledge of people at all ranks and across all parts of the organization, building supportive systems and processes to leverage human strengths;
3. shift the prevailing culture to one that enables and celebrates experimentation with fast and frugal solutions and agile responses to dynamic conditions; and
4. develop leadership capable of engaging and retaining the people most committed to solving the problems of the future, and securing the enterprise's place in it.



While many companies are facing similar challenges, they also have a host of differences. They are vastly distinct in their capabilities and cultures. They have varying infrastructures and incentive schemes. They are led by different personalities, draw talent from different pools, and collaborate with different partners. All are complex entities made up of many moving parts. Whatever intrapreneurial practices work for them must work in the contexts of their unique situations. There is no single one-size-fits-all solution, and there can't be.

In this book, I present a flexible model based on my research and experience with companies learning to disrupt themselves while they carry on their everyday operations. To make these ideas immediately actionable, I identify eight key principles, analyze why they are so important, and show how organizations can put them to work at once.

Principle 1—Keep It Frugal

Many successful DIY initiatives have been pet projects pursued on shoestring budgets, if any budget at all. This limitation turns out to be beneficial to them in many ways. In situations where more resources could be thrown at early-stage ideas, teams should resist calls for funding that will bring more scrutiny, more impatience, and less ingenuity in tapping internal assets and networks. "Keeping it frugal" is consistent with seeking massive returns, especially initially, and can help organizations to disrupt internally.

Principle 2—Make It Permissionless

The intrapreneur's classic motto is "Ask for forgiveness, not for permission." Choosing not to go by the book on company policies and processes and instead finding back channels is often the only way to pursue a new opportunity. But not every employee capable of intrapreneurship is in a position to take on that level of personal risk. I see the companies most focused on innovative disruption bending their own rules to allow people to take their ideas further without seeking permission or having it denied. As Jim Loree mentions in the foreword of this book, "In order to truly disrupt within an organization, some of the company's rules have to be, frankly, overruled."

Principle 3—Let Customers Lead

One of the greatest advantages that intrapreneurs have over entrepreneurs is access to a large base of customers who represent the market for a new product, service, or business model and who could provide feedback critical to its development. Turning this theoretical advantage into a real one is an essential mission for companies seeking more internal innovation, and it is a big part of the rationale for establishing formal incubation and accelerator programs to become a Disrupt-It-Yourself organization.

Principle 4—Make It Fluid

The entrepreneurial community is able to respond more nimbly than large enterprises to new market opportunities in part because they can quickly pull together the team, funding, and other resources that make sense in a given situation. Large organizations should not assume it is impossible for them to operate in this fluid manner. DIY organizations can create platforms and policies to respond in agile ways to ad hoc needs.

Principle 5—Maximize Return on Intelligence

Part of creating a discipline for disruption is determining how to measure success: only with reliable metrics can you know if you are doing better at any activity this year than last. But the metrics designed for a Disrupt-It-Yourself approach cannot be the same ones used to guide the management of mature businesses. They must be applied with the same rigor as performance measurement in other areas of the business but be focused, in early stages, on maximizing learning from experimentation.

Principle 6—Create the Commons

If the idea is to create more avenues for innovation in an organization, it cannot be treated as an activity for the elite. Democratizing progress is a growing trend in society in general, and a key tenet of most enterprises' formal Disrupt-It-Yourself programs.

Principle 7—Engage Passion and Purpose

Passion is one of those words that hard-nosed managers tend to shy away from. It sounds too subjective, too laden with emotion, and too soft to be taken seriously as a target for managerial interventions. Yet the passion that comes with a sense of purpose is undeniably at the heart of the greatest Disrupt-It-Yourself success stories. Any effort to systematically encourage a spectrum of internal innovation cannot overlook it; the most sophisticated and effective programs I know are figuring out how to help people discover and channel their passion as well as inspire others with it.

Principle 8—Add Discipline to Disruption

If well managed and disciplined, multiple streams of innovation can reinforce one another to produce sustainable growth. As part of that, leaders and organizations must embrace hybridity in their innovation capabilities by simultaneously capitalizing on valuable opportunities for the near-to midterm and developing fundamentally transformational ideas and technologies for the future. This is not an either/or situation; no one should see the incremental innovation of the core that yields steady performance gains as an alternative to the bold moves and big bets required for disruptive transformation. Both are needed.

Each of these principles is important on its own and has produced its share of valuable innovations. But it's the whole set that collectively constitutes the playbook I am sharing with you. After two context-setting chapters—the first describing who intrapreneurs are and what moves them, and the second exploring the organizational barriers that make it so hard for intrapreneurs to innovate and for companies to develop rich DIY portfolios—the bulk of this book offers chapters devoted to each of the eight principles, with stories of how each has been customized and operationalized to fit organizations of all sizes and types.

Together, the principles constitute a powerful and practical framework for designing a Disrupt-It-Yourself organization. Having this DIY playbook in hand is your first leap to bringing more predictability—and greater success—to internal innovation, leveraging your people's ingenuity, and creating an intrapreneurial culture that is fueled by passion and purpose. It makes a strong case for a structured process, yet it relies on experimentation within that process and iterates from there to yield solutions that are more built-to-purpose and valuable. This is a fluid approach. It can be tailored to your enterprise's circumstances and meet the needs of your shareholders and stakeholders in a way that your core business simply cannot.

Creating a Disrupt-It-Yourself system that suits your needs begins with a deep understanding of people—both the intrapreneurs trying to accomplish great things and the customers, current and potential, with needs to be met. With that in mind, this book is packed with protagonists—the constructive disrupters behind countless new products, services, features, and ways of working within their organizations.

You have protagonists like these in your own world too. Seek them out, talk to them about the principles outlined here, and collaborate on the best ways to apply them. You share a deep interest in the future success of your enterprise. None of you want to see its products, services, or business model rendered obsolete by outside disrupters. Collectively you have the knowledge to imagine new solutions and the means to make those ideas real. By working together, you can apply these principles and disrupt-it-yourself.

disrupt-it-yourself v. To launch a spectrum of high-impact innovation from within an established organization; to use a fast and frugal approach common to an entrepreneurial startup to invent a valuable new solution that finds a mass market; to enlist others in the process and refuse to be disrupted externally.

DIYer n. A Disrupt-It-Yourself innovator; an employee who acts and behaves more like an entrepreneur in the context of an established organization; a contemporary version of the traditional intrapreneur.

ONE

Navy Seals, Not Pirates:
Meet the DIY Disrupters

This stuff makes my skin look like chalk." That was thirteen-year-old Balanda Atis's immediate reaction when she looked at herself in the mirror.

Trying on makeup is a rite of passage for many teenage girls, and that made it all the more disappointing for Atis when she applied liquid foundation for the first time and found the results unimpressive. Cosmetics companies, it turned out, didn't make shades that suited her skin tone. Atis and her Haitian American friends in East Orange, New Jersey, found that liquid and powder foundations had an unattractive ashy-white effect on their darker skin. It was a problem regardless of brand, formula, or product—until Atis set her sights on solving it.

When Atis joined L'Oréal USA as a chemist in 1999, she was formulating mascara, but the foundation issue weighed on her mind. In 2006, when the company launched a new line of foundations intended to address a wider variety of skin tones, Atis saw that they still didn't measure up. It lit a fire under her. She informed the head of L'Oréal's makeup division, who challenged her to come up with a solution. Atis began to work on the problem as a side project. In short order she enlisted two other scientists at L'Oréal to join her cause.

Although Atis and her colleagues were not freed from doing their day jobs, L'Oréal gave the trio access to a lab. Fueled by passion and purpose, they produced and tested foundation samples on their own time. Lacking opportunities for data collection, they tagged along on trips to existing conferences and fairs across the country, collecting skin tone measurements from thousands of women of color. The big breakthrough came when Atis discovered they could work with an existing color compound. Ultramarine blue was seldom used in cosmetics and difficult to work with, but it allowed them to create richer, deeper shades without the muddy finish that was so common in existing darker foundations. Atis and her tiny team succeeded in satisfying a massive customer need that had existed for generations.

Atis is what the business world has come to recognize as an intrapreneur. Gifford Pinchot III coined the term back in the late 1970s when he wrote about the growing number of corporate employees behaving like entrepreneurs. He even envisioned a new kind of commercial enterprise—"something akin to free market entrepreneurship within the corporate organization"—and a new way of doing business that "would be a social invention of considerable importance, both for the individuals in it, and for the productivity and responsivity of the corporation."[1]

One of Pinchot's favorite examples, and mine, is Arthur Fry, the 3M employee who famously invented Post-it Notes.

When Fry "was told by the marketing division his idea wasn't wanted by customers, he did his own market research," Pinchot wrote. "When manufacturing told him his Post-It Notes were impossible to make, he worked out the production technology himself and, in blatant disregard of the rules, borrowed and re-engineered a 3M production line at night to prove his process would work. No problem, no matter how far from his supposed area of expertise as a lab person, fell outside his responsibility."[2] Pinchot's summation that "the intrapreneur is the general manager of a new business that doesn't yet exist" also sounds like an apt description of Balanda Atis.

But Atis and others like her today are also different from the intrapreneurs of decades ago. They're more diverse in their skill sets and backgrounds, more digitally native, more networked and connected, and more ambitious to do bigger things—and they are increasingly supported by the emerging function of innovation within large organizations. When the term intrapreneur took off and business journalists and academics started using it, they often had in mind CEOs who managed their companies in an entrepreneurial fashion and pursued top-line growth. Arthur Fry and the intrapreneurs Pinchot identified were products of long careers in their employers' organizations, and they had significant credibility and even some resources at their command. But the whole point of coining the term intrapreneur was to stress that there are people outside the corner office who could bring about valuable change.

Fast-forward a few decades and the democratizing trend has continued to the point where intrapreneurs can be found deeper in the ranks of organizations, pursuing high-impact ideas and making serious headway, often with collaborators they've enlisted on their own and at times even within innovation systems created by their organization. Compare that to the past, when a lone engineer or solo creative might have tinkered with a solution after hours, trying to keep it under wraps until it was perfected. In the old model, this person's efforts were rarely encouraged by management, much less planned or accounted for as part of the organization's official research and development agenda.

Now the reality in many firms is quite different. Today employees with varied skill sets and backgrounds work in fluid, multifunctional teams, attracting positive attention and pursuing breakthroughs that are aligned with their organizations' innovation priorities. And the most innovative firms deeply understand the need to create space and add light structure to accelerate their efforts.

It is tempting to want to give people like Balanda Atis a new name. I like to call them DIYers. We could also say they are "corporate hackers," to underline their talent of tapping into and around the bureaucratic machinery surrounding them to advance their projects. Or we could call them "constructive disrupters," since today's intrapreneurs often don't stop at trying to tweak the performance of the existing business. Sometimes they seriously challenge it, from product offering to business model, yet they do it actively from the inside and, by doing this, help keep the enterprise viable.

Whatever we call them, companies need more intrapreneurs, and their DIY initiatives, to succeed. Innovation is a clear driver of growth in today's complex and fast-moving markets. With that in mind, it makes sense to understand just who these people are, how they work, and what makes them tick.

The New Intrapreneurs Are DIYers

If Arthur Fry was the prototypical intrapreneur of the 1970s, and Balanda Atis represents the twenty-first-century DIY approach to intrapreneurship, what has fundamentally changed?

Intrapreneurship was . . .	***Disrupt-It-Yourself is . . .***
Higher-ranking, tenured executives, but constrained by working within departmental silos	People deeper in the ranks, connected to resources and knowledge through networks inside and outside the company
Focused on enhancing existing products or launching related services	Targeting new markets and novel solutions—even if they require new business models that threaten current revenue streams
A lone genius working solo	Enthusiastic collaborators who recruit like-minded colleagues with diverse skills, and who know how to navigate their organization
A creative who sees innovation as an art	Any employee who sees innovation as a systematic way to solve a problem or forge the future
An engineer or scientist by training	Employees with multidisciplinary backgrounds, deeply empathetic to customer needs
An established employee, who seemed reliably grounded in the company's past	Members of diverse communities, which the enterprise recognizes as key to its future

An employee in a big corporation	An employee in an organization large or small, for-profit, non-profit, or in the public sector
An individual whose life circumstances allowed them to burn the midnight oil, unpaid for the extra hours	A person whose passion for an idea drives them to start a side project, and ultimately the wise enterprise may provide material support
Driven by intrinsic rewards, extrinsic rewards not an option.	Driven by intrinsic rewards, and propelled farther when smart organizations offer options for extrinsic rewards.

The Intrapreneurial Archetype

If you could hire a hundred Balandas tomorrow, you would do it, right? What better move could you make to ensure your company's relevance in the future? We've already heard the stats and predictions about how vulnerable today's largest and most longstanding companies are. And as fund managers like to put it, their past performance is no guarantee of future results. Highfliers routinely end up crashing down to earth. So if you don't want your business to join the countless others already consigned to the dustbin of history, at some point you'll have to disrupt-it-yourself—and your best chance of doing that is to grow, develop, and support your ranks of intrapreneurs.

Unfortunately, you probably couldn't hire those hundred Balandas if you tried—not because these talented disrupters wouldn't work for your company but because it's hard to find them in the labor market. There are no job titles or specific functional areas reserved for people who spot opportunities and jump on them. It's tough for the HR department, or software tools scanning applications, to zero in on the résumé line that shows whether someone thinks like an entrepreneur. And it can be challenging to spot the intrapreneurs who are already sitting inside your organization. They're definitely there, some of them making progress on side hustles no one even knows about, and many more of them with valuable ideas they would like to pursue.

Is it possible that there is nothing remarkable about intrapreneurs as individuals—that most of us, with enough encouragement and confidence, could succeed in challenging the status quo? That's a key message, for example, of Adam Grant's recent bestseller *Originals*, and I couldn't agree more with his goal to create more creatives. But as most knowledge workers look across their workplaces, they don't see a landscape densely populated by mavericks. Intrapreneurs are still relatively rare, distinguished by both who they are and what they do.[3] So, if we did list the job qualifications for the intrapreneurs, the innovators you would want on the inside of your organization, it would look like this:

- **Action obsessed.** Forward-thinking and optimistic, intrapreneurs are energized by what hasn't been done before. Think of Balanda Atis: undeterred by the fact that a global industry with all its resources had not solved the problem she saw. She forged ahead anyway, finding partners, doing the science, cultivating a community of internal supporters, and generally taking every step in her power to pursue her idea with passion.
- **Progress focused.** Intrapreneurs are impatient with

systems that put the brakes on progress. Dakota Crow, an "entrepreneur in residence" at UnitedHealth Group's internal incubator, told me about the frustration people feel when their momentum is blocked by well-intentioned managers adhering to process: "If you're pushing on a product or idea and you've got enough validation to move forward, stopping is like someone saying, 'Wait—pull the car over. We've got to change the tires.' You're like, 'I've got plenty of tread!" The next words out of his mouth could have been uttered by any one of the intrapreneurs I've met: "I'm just not a fan of process for the sake of process."

- Problem oriented. Despite their bias for action, intrapreneurs don't accept the first solution they arrive at just to be done with the job. They go through iterations working the problem, attacking it from different angles, and challenging the assumptions that might constrain their thinking. A favorite phrase of Intuit's Scott Cook comes to mind: the most creative people "fall in love with the problem, not the solution."[4] Intrapreneurs understand that there are typically multiple answers to every problem and many paths to any solution. They are learners, scanning all sources for information that can advance their progress.
- Natural hackers. In software, hackers love the intellectual challenge of confronting a system designed to do certain things and cleverly exploiting it to achieve something different. Likewise, intrapreneurs overcome the limitations of an organization by bending its strengths to their will. A senior marketing manager at an American candy manufacturer is a fountain of new product ideas in need of customer validation. Yet customers are often treated like a protected species by those who "own" these

relationships—sometimes they are completely off limits. So this intrapreneurial manager hacked a simple solution. "An organization with several thousand employees has access to at least several thousand *consumers*," he surmised. (Especially an organization that creates and distributes candy.) On any given day, he can walk around and get a "semi-outsider" perspective on new ideas by inviting feedback from employees. He hacked a good solution to what otherwise is a stubborn problem.

- Talent attractors. Calling intrapreneurs "hackers" might summon up the image of a lone genius chipping away at a pet project in isolation—on the contrary, they are by necessity and temperament radically inclusive. They engage in open-source partnering and codesign solutions with end users and other stakeholders. When I asked Bob Schwartz, GE Healthcare's global design chief, about this intrapreneurial trait, he told me: "There are so many stakeholders needed to get anything out the door in any manufacturing environment—and they have to be co-owners with you." If that means you spend a lot of time "waving your hands over your head" evangelizing your idea, while making it as much as you can about them, he said, so be it. This is a theme that cuts across most of the DIY efforts I studied: Intrapreneurs don't try to go it alone. They reach across the aisle to complementary areas where they need help and enlist them by making it clear "what's in it" for them.
- Married to mission. Intrapreneurs are often cast as an organization's heretics, but the thing to understand is that they are frequently the most devout believers in its mission. Their problem is with how the mission is being translated into strategy and tactics. Ian Stephenson, who

made a career out of being a maverick at Cargill, stressed this point. He said, "Entrepreneurialism inside a large organization is about identifying gaps and misalignments, and better aligning the organization so it performs better." In this formulation, the deviator from the strategy paradoxically keeps the company on track. Stephenson went on to say, "[Intrapreneurship] is being married to a purpose but not necessarily married to a way to do it. You know the what and the why—it's just the how that you want to be able to play across."

- **Frugal by nature.** Like hackers, intrapreneurs proceed on the cheap, reusing existing resources, recycling materials, and employing messy, make-do methods over expensive, sanctioned systems. They are resourceful and don't ask for much—even when more would be granted.

I was struck by Babak Forutanpour's response when higher-ups at Qualcomm expressed an eagerness to support the grassroots innovation movement he had nurtured from one team of eight to ultimately thousands of employees on dozens of teams working over lunchtimes and weekends. He recalls, "We all agreed: let's just ask for a little pizza and beer money." The figure he went back with was $7,000—giving the fourteen teams $500 each to cover takeout. The point is simple: the classic engineering bias toward getting maximum output from minimum input is in these internal disrupters' bones.

From action-oriented to mission-driven and frugal, that's seven key attributes—and there's more, since intrapreneurs are also resourceful, thick skinned, and resilient. Of course, it's a lot to expect from any single individual—and the truth is that every innovator has his or her own particular strengths and preferred modes of working. Back in 1980, Karl Vesper made this point about entrepreneurs too—that it was more useful to understand that they come in many flavors than to try to pin down their collective "type." He came up with at least eight varieties, many of which overlap with my findings.[5] That's part of why Marc Nager, managing director at Telluride Venture Accelerator and former CEO of Startup Weekend, says that good teams usually come in threes. "You need the person with the structure who can operate things," he says, "but also need the visionary, and then the executor. In other words: the hipster, the hacker, and the hustler."

The Bottom Line

So what's a classic intrapreneur? An employee who isn't necessarily given the setup and top-down mandate to create something new and valuable, but starts doing it anyway. Intrapreneurs are the people who are just doing their jobs when they discover needs that are not being met by their organization. They are the internal disrupters who see the possibility of addressing those problems from where they sit, and they begin finding their ways to solutions. They make progress by enlisting others, achieving small victories, and pushing ahead, for the most part under the radar. That classic entrepreneurial story of someone starting a company in their garage with fifty dollars?—translate that to someone inside a company, and that's also the classic story of intrapreneurship.

These people have always existed in large organizations. Historically, they have been somewhat taken for granted, and occasionally appreciated—in other words, they have been tolerated. Today, large organizations understand the need for constant innovation, and for the first time intrapreneurs are starting to be developed, recruited, systematically supported, and celebrated.

So there is great reason to feel hopeful for the future, in spite of all the doomsday scenarios painted about large companies. Intrapreneurs are more able to make headway and add value than ever before—especially in organizations that recognize their value—and, along with forward-looking leaders, help pave a path to a Disrupt-It-Yourself organization.

It's incumbent upon leaders to identify the disrupters the company should be supporting better, while also building the systems and driving the culture change that will produce more of them.

TWO

Why Does It Have to Be So Hard?

Intrapreneurs, the innovative employees who help large organizations drive innovation and at times even disrupt themselves, aren't the same as entrepreneurs on the outside. They're not your typical corporate employees either: some do, in fact, leave big organizations to commercialize ideas on their own. Those who go that route follow a well-worn path—one taken by Steve Wozniak, for example, when he left Hewlett Packard to build the first Apple computer (he moonlighted on the task for a while prior to his departure); by Robert Noyce when he felt he wasn't getting enough traction at Shockley Semiconductor and walked away to start Fairchild Semiconductor (and later Intel); and for that matter, by Shockley Semiconductor's own founder, William

Shockley, who made his mark at Bell Labs before he chose to go his own way.

These are well-known cases, and they have many elements in common with others I've seen. Capable people work to build startling advancements in staid firms. They bring together communities that have common hopes and challenges and are willing to float ideas and resources. They are enabled by technology and motivated by passion and purpose. That passion can also spark their departure if they don't receive the support they need.

This risk of intrapreneurial flight is only rising. As new startups emerge every day, and barriers to entry continue to fall, entrepreneurship begins to seem less exceptional and more like a proper path for anyone with an idea and the confidence to pursue it. At times, these disrupters feel they must leave in order to pursue their passion. Short of deciding to launch their own businesses, intrapreneurs exit for other familiar reasons. Some move on when another company steps up to offer a tempting platform and position—one with more assets and a greater appreciation for people and their bright ideas. Others leave out of simple frustration.

In no way do I want to single out any one company when key executives leave to pursue an innovation on their own. If only I could single out just one—if only the problem were limited to just a few companies. In fact, all the symptoms—the layers of decision-making, budget constraints, and problematic incentives—are typical of big companies. It's like this: if this were a zombie movie, we'd be at the point in the second hour when most of the world has been infected and the few companies that have managed to protect their vitality, creativity, and agility are the hearty exceptions.

Before we cut to the chase and see how those few companies enable sustainable intrapreneurship, we need to understand what cuts it to the quick in so many others. The diagnosis comes down to two kinds of problems, some created by the structure of large organizations, and others due to the mind-sets that take hold in them. As we look at these structural and mind-set barriers in their various forms, we'll learn that no one is really and actively trying to kill innovation. People are behaving rationally, and almost all of them with good intentions. The problem is that they are deciding and acting within a context, and the system around them is arrayed in complex ways against the forces of innovation.

The First, Worst Barrier: Mind-Set

Having said that nobody is actively trying to kill innovation, I should quickly add that it doesn't always feel that way. People with great ideas for making their employers better often get the sense that someone is out to get them—and that someone is usually their immediate boss. Sure, in a layer far above them top management might be broadcasting positive messages that invite them to (or even insist that they) "behave more entrepreneurially" and "invent the future" and "save us all from crushing, humiliating irrelevancy." But when they take top management at its word, they learn just how far away that top layer is, *and* how close the manager is whose main goal is to keep them focused on the work they were expressly hired to perform.

This is what Babak Forutanpour was up against as a software engineer at Qualcomm circa 2004. Once he was onboarded and unpacked his laptop, he realized there was no suitable place to bring a new idea to have it vetted and considered for development. “No one was listening and my boss didn’t even want to brainstorm,” he recalled.

Eventually he was so desperate for a sounding board that he pulled together a “little biweekly luncheon” with like-minded people outside his usual circle. “If nothing else,” he figured, they could all “eat a ham sandwich with someone interesting.” But that initial group quickly decided to go beyond the sandwich and try to accomplish something more substantial together. In short order they came up with a cool new technical solution for reducing ambient noise. After a thorough vetting of prototypes by subject-matter experts, a patent that eventually produced real value for Qualcomm was applied for and awarded. That filing was followed by more, and Forutanpour found himself the accidental founder of a movement within the company.

The group acquired a name—FLUX, for “forward-looking user experience”—and it started spawning many new lunch-group teams in its wake. That’s when Forutanpour experienced the type of active resistance that stops innovation in its tracks. The same manager who was uninterested in his ideas now wanted him to stop using his free time to develop them. “Shut it down,” his boss said.

At this point, Forutanpour became even more effusive—demonstrating just how much intrapreneurs like him care about their work and what matters. Suffice it to say, he got himself out of that reporting relationship and went to work in another part of the organization. And FLUX kept growing, from eight people to over three thousand, meeting on four continents and capturing seventy patents in over seventy months.

Not every disrupter on the inside could snatch victory so decidedly away from defeat as Forutanpour did. As we saw here, top management in many companies emphasizes ideation and initiative, yet people can't get traction with their own supervisors. The entrepreneurial mind-set is shallow and intermittent at best.

In a 2013 survey of corporate professionals by Accenture, only 20 percent said their managers encourage entrepreneurial ideas.[1] That mind-set barrier has destructive effects on two levels. First, it robs the company of any immediate innovations those intrapreneurs were imagining. Second, it drives away those who represent the organization's best chance of innovating more in the future. Plenty of other studies show that when people leave jobs, they are not choosing to leave companies so much as they are choosing to leave bosses.[2] I suspect this is especially true for intrapreneurs. So it's tempting to say to employers: get rid of those toxic managers so this mind-set issue is alleviated.

However, the modern corporation has made managers who they are. Think for a moment about how middle managers are incented, and it becomes clear that very little about intrapreneurship serves them well. They have solid reasons for not helping people pursue these dreams: any amount of time spent on activity that isn't mandated by senior leadership is time taken away from the entire team's tightly defined performance objectives. Beyond concerns about ROI, a host of other barriers emerge, including fear that support of such initiatives will be penalized rather than rewarded, not to mention a host of cultural issues such as innovation initiatives not being taken seriously.

Betting on long shots is fine at the level of the enterprise—in fact, from a whole-portfolio view you must lay a lot of bets and accept that most won't pay off. But at the work-group level, those odds look terrible, and managers have every reason to adopt a play-it-safe mind-set. This is where mind-set and structural barriers come together.

The Second Serious Barrier: Structure

The boss's perspective is a big problem for intrapreneurs, but the barriers in the typical large company go beyond mind-set and come right down to its structural underpinning. According to Vijay Anand, senior vice president at Intuit, it's not a lack of desire that blocks companies from supporting entrepreneurship; it's just the way they are wired. According to Anand, "large organizations are necessarily focused on running the business and managing for continuity. That's not always a bad thing, but it seldom leaves much space for new ways of working."

Organizations finely tuned to accomplish certain things in certain ways lose their ability to imagine other possibilities. The old expression goes, "The fish cannot see the water it swims in." That's a great metaphor for people working in contexts where assumptions about what a market wants and how an organization should respond have firmly taken hold. These become givens in their thinking, not even considered as conditions that could be different.

I wholeheartedly agree with Larry Keeley of Doblin, who told me this: "Every time somebody tells me, 'We've got cultural obstacles to innovation,' what I usually say is, 'Well, maybe—but let me first show you all the things that are standing in the way in terms of incentives, metrics, and rewards. And once we fix all that, then you can tell me if we've fixed your culture, or if we've fixed the mechanics of how you innovate.'"

Let's look at a few of these structural barriers to see what they amount to collectively.

Lack of Slack

First, we have to admit that in the less global, less hyper-competitive markets of the past, firms had more slack in their operations. Exploratory projects and experiments that might never pan out could more easily be indulged. But these days, slack rarely exists because efficiency-minded management systems have gotten so good at identifying and eliminating it.

Slack is more than a brand of collaboration software. Among organizational theorists, it's a term of art and a matter of deep interest. For example, Nitin Nohria, the dean of Harvard Business School, writing with Ranjay Gulati, defined it as "the pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output," and he is absolutely convinced of its importance to innovation. Basically, Nohria and Gulati's finding is this; when an organization is run as a very tight ship, it gets today's work done with great efficiency, but it doesn't manage to discover what it could do differently tomorrow. Accenture's 2013 survey (cited previously) asked employees to single out the biggest barrier to entrepreneurialism in their companies. The top answer was that their jobs kept them too busy to pursue new ideas.[3] Wayne Morris, an innovation director at enterprise software maker SAP, told me that "in a software engineering-type organization, you always have developers who have pet projects they work on after hours and on weekends." But when they bring these concepts to their managers, he said, they are likely to hear: "Thanks for the idea—but your job is to focus on your deliverables of X, Y, and Z."

Lack of slack is why so many of today's intrapreneurs do their thing on their own time. And belief in slack is why a few firms, starting with 3M, have tried offering employees "20 percent time" or some version of it, granting people a chunk of their workweek to lay aside formal assignments and pursue projects they think have potential. Essentially, these internal disrupters are trying to engineer in the slack that organizations have worked so hard to engineer out.

The Metrics Question

Companies have gained a lot of sophistication and precision over the years in how they measure success. Once upon a time, this was done with the pedantic process of waiting till the end of the year, letting the accountants sum everything up, and finally seeing that revenues exceeded costs—hooray! (Or didn't—start cost cutting immediately!) Everyone realized the shortcoming in this situation, that the measures didn't happen at a level or with a timeliness to suggest smart course corrections. Measurement science came a long way during the total quality management movement, when work processes came under the microscope and all the various steps of value creation in a business had "metrics" applied to them. That had the desired effect, and the easiest way to sum up the result is with the now-famous phrase: "What gets measured gets managed."

A lot about the creative process, however, is fuzzy and doesn't lend itself to tight specification. If an executed idea innovation doesn't end up setting the world on fire, it's usually impossible to point to the assembly-line step where the defect was introduced and some diligent worker should have yanked the pull cord. So metrics were devised, and performance measurement systems and worker incentives got attached to them. But they were applied to the parts of an organization's work that were engineered for predictability and efficiency—not to the messiness of innovation. In Stanford emeritus professor James March's words, the corporation became a machine more engineered for exploitation than exploration.[4]

At a Fortune 50 retailer, one executive told me how "the metrics question" comes up in innovation initiatives and undermines the more visionary and radical projects. It's hard enough to come up with a yardstick when an effort doesn't map neatly to an established profit-and-loss (P&L) center—which disruptive innovations rarely do. Things get even dicier when the goals are set up within a broader corporate framework that is all about maximizing shareholder value.

In principle, there should be no reason that a desire to meet a fiduciary responsibility to shareholders would cut off investments in innovation. What could serve them better? But it all depends on timelines and incentives. Senior leaders are classically rewarded by stock performance, which in turn leads to a focus on quarterly results. In this scenario it's better to focus on short-term cost cutting and incremental changes than longer-term moonshots. The short-term-ism that has taken hold in the capital markets has drained investors' patience with ideas that require funds to develop and don't pay off fast. Company boards and Wall Street finally seem to be getting it, but for a long time the Street has rewarded only cost cutting or quick incremental improvements with immediate revenue gain, and has been cruel to firms visibly attempting to disrupt themselves. Case in point: when Target handed out pink slips in 2017, it was because, in CEO Brian Cornell's words, "our focus on innovation has to be something we can realize over the next three or four years inside the core business."[5] The most high-profile departures were from the special group the firm created to explore the future of retail and launch highly innovative experiments.

This is part of why we have seen a wave of companies going private. When I asked Salim Ismail—serial tech entrepreneur, founder and chairman of ExO Foundation and ExO Works, and XPRIZE board member—his advice for a company wishing to be more disruptive, he said, "Number one: get off the public market and take it private. . . . You can't do something radically different if you're having to meet your quarterly Wall Street numbers. It's just not possible." Short of that, Bob Schwartz of GE Healthcare spells out what intrapreneurs have to learn if they want to take a DIY approach in a Fortune 500 environment. "They're all big, corporate meat grinders," he says, "and they have to deliver to Wall Street—constantly." When you're dealing with someone who has P&L responsibility, your goal shouldn't be to get them to forget the bottom line. It won't happen. The key is to understand why investing feels so risky to them. In his innovation-focused Global Design group, Schwartz says that pressure is something "we all know and we understand. And we have respect for it."

Unfortunately, when top management has its eyes focused on the next quarter's results, innovation gets lip service that doesn't get translated into performance objectives and incentives.

The Alignment Conundrum

What else could drive a manager to look away from a novel idea? Often, it's a lack of clear innovation strategy. In a professionally managed company, performance objectives align with a strategic plan that has been devised up high and cascaded down through the organization. Execution is the key to success, and management is already challenged to communicate strategy through the ranks effectively—and new approaches without clear strategy add complexity rather than value.

The more closely a company stays focused on its core business, the less supportive it is of experimental forays. Strategies often come with stretch goals, which will require everyone rowing hard together; so, this resistance, often called the "corporate immune system," becomes much more active when an intrapreneur's idea sounds like it falls outside "business as usual" practices and into DIY, especially if it cannibalizes an existing line of business. If a proposed change presents that kind of risk, managers need proof that it will pay off—with a bigger return than what is already in place. These objections can be at the heart of what I heard one Intuit intrapreneur call "the alignment conundrum"—that built-in problem that an employee's new idea "is not aligned with our strategy."

Larry Keeley tells me this is one of the most common and, to him, ridiculous excuses that managers in big companies invoke to reject a fledgling innovation. "It's the same cliché rejection pattern that you hear all the time," he says. "Managers say, 'This is great, but it just doesn't move the needle'—by which they mean it won't produce $100 million in incremental revenues this year." Meanwhile, he points out, all those start-up businesses that "aren't living inside of a corporation are very happy with, let's say, a first-year success of $20 million." The fact that big companies "have a higher jump bar before they even notice" a promising idea means they miss out on most opportunities until the chance to get in on the ground floor is lost. They don't see the strategic case for encouraging the initiative, so they kill it off.

Of course it's important to have strategic objectives that everyone understands as well as a path laid out for achieving them. But if tactics are too precise and exclude innovation entirely, then execution leaves no room for improvisation, and this rigidity becomes the enemy of innovation.

The Bureaucracy Barrier

One of the biggest and most consistent structural barriers to a Disrupt-It-Yourself approach turns out to be bureaucracy and standard operating procedures. By the time a company has reached any scale, it has figured out how to organize itself to achieve consistent, high-quality output. Certain roles have to be filled and steps followed. But at some point, the focus on "how we do things around here" becomes a fixation, with managers devoting more attention to process than to product.

Marc Nager recalls some would-be entrepreneurs who came to the Startup Weekend events he used to lead. Many times, they came armed with laptops fully loaded with project management tools and techniques. But they "got hung up on all these sophisticated solutions and they overcomplicated a lot," Nager says. "We came in and said, 'Use sticky notes.'"

Managers are pinned to process for various reasons. Process is an essential thing to prop up bureaucracy. Bureaucracy is a very effective way to limit access to the valuable assets of the enterprise—and one of the easiest ways to shut down something that was "not invented here."

There is a great irony in this. As we've seen, intrapreneurs often choose to stay in corporate settings because they see the opportunity to deploy the strong assets of established businesses—the customer access, the supply chain relationships, the resident expertise, and more. And companies with underutilized assets are in dire need of new, more valuable ways to deploy them. Yet the two sides can't connect, because the assets are so effectively cordoned off by processes and bureaucracy. As Deloitte puts it, "the hierarchical and inflexible structures within organizations often ignore or actively suppress ideas that are created bottom-up."[6]

Overriding the Organizational Immune System

Hallmark Cards art director Gordon MacKenzie famously described his employer as "the giant hairball" that any employee who wanted to do creative work had to learn to orbit.[7]

It's an apt term for describing the system an intrapreneur is up against in the typical corporation. It's easy to make the diagnosis but much tougher to unravel, disarm, or override the symptoms. And this immune system can be overcome—with the right approach.

This book takes the optimistic but realistic position that almost any organization can be won over to a spectrum of innovation. It requires management interventions on multiple fronts and tremendous determination on the part of intrapreneurs, managers, and leaders, but it can be done. Chapters 3 through 9 follow the strategic model I take into companies. They show that a Disrupt-It-Yourself approach has taken root in large and established organizations—and how this approach to innovation can be nurtured and sustained.

In aggregate, the takeaway across my model is this: Get messy. The only way to change mind-sets and overcome the odds is to embrace the complexity of the organization and engage it on many fronts. Understand the pathology of the risk-averse, change-resistant, process-bound enterprise, and you begin to see the path forward.

THREE

Principle 1: Keep It Frugal

It may be the biggest debate to date in innovation circles: Does imposing constraints and leveraging ingenuity yield better results in the end? Or does it make more sense, if you care about innovation and want to see more attempts succeed, to show it a little more love, in the form of cash?

Intrapreneurs are famously resourceful. Many of the best stories about corporate innovation involve someone hacking a solution using limited resources, often in their spare time. I'm a huge fan of this approach, having coauthored a book full of them. (*Jugaad Innovation* took its name from the MacGyver-like frugal ingenuity practiced broadly in India, as in other emerging economies, and by entrepreneurs and increasingly by large firms in developed economies.[1]) But it's also true that most of the intrapreneurs I've known haven't exactly had the choice. They've either been working in situations where innovation was not in their job description and so no resources for exploration were available to them, or they were flying under the radar where they didn't want to access lavish resources before they were ready to reveal their findings. So did success come despite short funding or because of it? If someone has a promising idea in a company that prioritizes innovation, why not throw some money at them right away?

Tom and David Kelley of the design firm IDEO explain why not. "Although creative constraint sounds like an oxymoron," they wrote in *Creative Confidence*, "one way to spark creative action is to constrain it." They are quick to concede that "given a choice, most of us would of course prefer a little more budget, a little more staff, and a little more time." But they don't recommend loosening the purse strings: "Constraints can spur creativity and incite action, as long as you have the confidence to embrace them."[2] To confidence, I would add a flexible and asset-based mind-set. Importantly, these constraints help us do "less but better" in the words of *Essentialism: The Disciplined Pursuit of Less* author Greg McKeown. This approach is fundamental to the success of many intrapreneurs. McKeown reminds us that, "*Essentialism* is not about how to get more things done; it's about how to get the right things done."[3]

Creatives in the arts and entertainment world often lend support to this idea. Take the filmmaker Martin Villeneuve, who told a TED audience in 2013 about his experiences trying to make a sci-fi movie on a budget of $2 million. (Contrast this with, say, the 2013 Hollywood blockbuster *Iron Man 3*, budgeted at $200 million.) Granted, the critically acclaimed *Mars et Avril* took time and encountered numerous setbacks, but Villeneuve was convinced that "the more problems we had, the better the film got." He told the TED crowd: "If you treat the problems as possibilities, life will start to dance with you in the most amazing ways."[4] This plays out off the silver screen as well, even in highly regulated industries such as aerospace. For example, the entirety of India's Mangalyaan Mars mission cost just 4.5 billion rupees, or about $74 million. Compare this to NASA's own MAVEN Mars orbiter, which has a total mission cost of around $672 million—or, for that matter, the budget of *Gravity*, starring Sandra Bullock and George Clooney, which topped $100 million.

But others caution that starving your innovators is no way to produce a rich pipeline of new offerings.[5] Worse, it adds insult to injury, signaling to innovators that their efforts aren't valued.

Not surprisingly, this urgent question—fund or be frugal—comes up every day in my work with corporate clients and their disrupters. As part of that, I have developed *Disrupt-It-Yourself* as a concise playbook that puts frugal innovation into play in a way that benefits institutions and motivates innovators. It's a matter of understanding what works and why—and knowing what practices to abandon. Some of the best cases of ingenuity I've seen in my career reveal ways to unlock the power of frugal intrapreneurship to build a creative culture that keeps innovators engaged without breaking the bank.

Frugal Intrapreneurship *In Situ*

The story behind an ingenious product from Philips Healthcare raises questions about what innovation should cost, both to develop and for the customer to buy. A few years ago, the firm introduced an offering called Efficia ECG100. It was a low-cost, portable alternative to the expensive electrocardiogram (ECG) devices typically installed in hospitals for cardiac screening.

Ravi Ramaswamy, who led the innovation team behind it, says the impetus was a growing sense in the company that products for emerging markets should not simply be stripped-down versions of the solutions being sold in richer countries. They should be designed from the bottom up to fit a particular market's needs. In this case, there was also compelling personal interest from the team at the Philips Innovation Campus in Bangalore in designing medical devices for resource-constrained remote areas. They all knew people in both villages and urban areas who could benefit from them. Ramaswamy himself told a story of visiting a close friend who is a pediatrician in Thailand, and finding him in poor spirits: "He said that he lost two babies yesterday." Looking around the doctor's office, Ramaswamy couldn't believe what he was hearing: "Why did you lose them? You've got two incubators right over there." The friend shook his head. The equipment was "the best in the world," he agreed. "But my staff don't know how to use them. They are of no use to me." They were so complicated that local paramedics and nurses needed specialized training to use them. That's when Ramaswamy realized that anything he created for use in resource-constrained settings should not only be easy to buy but also easy to use.

The heart-monitoring solution that ended up meeting both criteria started with the team questioning the assumption that the two parts of an ECG—its data acquisition sensors and its data analysis and display capability—had to be together in the machine itself. In an age when smartphones are everywhere and people are familiar with their interfaces, the team figured it must be possible to use a mobile platform to create something highly portable, easy to use, and connected to a shared system located off-site. It would be capable of capturing, analyzing, and producing instant visualizations of that data.

Brilliant idea, right? But not obviously a major moneymaker for Philips. Ramaswamy knew he would need to make a great pitch to top management before asking for real resources. "I put together a team of eight or ten individuals," he told me, "and I stayed with them day and night." Right up front, he explained to his colleagues that this would be a labor of love. "This is something we have to do in our spare time," he said. "Let's do it over the weekend, in the evening—but at the same time, make sure that our daytime responsibilities do not suffer." Operating under the radar was temporary but necessary. On that basis, he challenged them: "Can we come up with a product prototype that will work?"

The prototype exceeded everyone's expectations. What is now a diagnostic-quality electrocardiogram started with the team's purchase of an off-the-shelf mobile device. Any Android phone or tablet could act as the user interface after the simple installation of an app. The team's energies went into making an ECG acquisition box that was just as compact (the final product weighed less than ten ounces) and intuitive to use. "We worked on it for about six to eight months," Ramaswamy recalled, before asking for a meeting with Philips Healthcare's business unit leader. After hearing the idea and trying out the prototype, the executive said: "This is a fantastic product. It's going to be the pathway to the future." Ramaswamy reported that "from then on, there was no looking back. We had the complete support of the business unit in terms of driving this model."

The enthusiastic response from the business unit leader suggests he might have recognized the Efficia ECG100 as the kind of *jugaad* innovation that can prove broadly transformative. Indeed, Ramaswamy notes about the redesigned cardiograph that "as we delve deeper into it, we also find relevance in the developed world . . . even the US." In richer markets, it may not be that hospitals would switch from more sophisticated to simpler equipment. Rather, the availability of this inexpensive, intuitive solution could allow for a dramatic expansion of the usage of ECG machines beyond the highly trained doctors who have been their sole users. This, along with its light weight and mobility, could upend existing assumptions about where and by whom health care can be delivered.

Now *that's* a success story. But would it have happened if the innovation team had gone down the typical product development path with full funding and executive oversight? Would it ever have seen the light of day? Ramaswamy barely blinks: *no way*.

THE SHIFT: KEEP IT FRUGAL

From	To
Placing few big bets	Including many small experiments and rapid prototyping
Defaulting to greater resources	Using fewer resources to bring more autonomy and spur creativity
Using complex and costly tools	Shifting to an asset-based mind-set, using simple/existing/off-the-shelf tools

Turning Old Assets into New Building Blocks

It's a great wrinkle in the Philips Healthcare story that the innovation itself was created for resource-poor customers. And it may be that innovating *for* high-value, low-cost scenarios helps teams embrace working *with* high-value, low-cost scenarios. But really these are different goals. One team can innovate luxury goods at very low cost, and another team can just as easily spend millions creating solutions for bottom-of-the-pyramid customers—and I've seen both being done by what are considered to be the world's most innovative companies. The takeaway from Philips is that producing high value at low cost requires being resourceful—which is a matter of skill but just as importantly a matter of mind-set. "For me, it is like looking at a glass half-full or a glass half-empty," Ramaswamy said. "I always like to look at it as half-full, and find ways and means of accomplishing a vision."

A classic way of describing what resourceful builders do is *bricolage*. The term comes from the French *bricoler* ("to tinker") and has a strong DIY connotation to it—people engaging in bricolage are using materials they have on hand to accomplish things they were never intended for. Looking at business settings, management scholars use the term to describe how intrapreneurs actively solve problems and seek opportunities, relying on preexisting elements and recombining resources for novel uses.[6] That's a perfect way to sum up, for example, how a frugal innovation initiative at the University of Queensland in Australia called the HyShot Flight Program managed to conduct the world's first successful test flight of a scramjet engine.

The idea of the scramjet—a supersonic jet that uses a very different propulsion system than conventional fuel combustion—was something NASA had already spent $100 million on, but as the university reported the news in 2001, the program led by its own Dr. Allan Paull had a budget of just $1.5 million. Its success "resulted from three years of scrounging and cobbling together of scientific and engineering partnerships" and plenty of goodwill from universities, governments, and scientists around the world.

It also required some literal cobbling together. Paull explained: "Ours is a low-cost alternative, and we've had to develop all sorts of ancillary equipment on the cheap. We've bought a lot of bits and pieces off the shelf from automotive shops such as glues and silastics at $2 to $3 a pot." The press release issued by the university quipped that what Paull's team produced "may be a scrounge-jet, as well as a scramjet." But it concluded, "Financial adversity has inspired ingenuity."[7] Others like Astro Teller of Alphabet's X R & D lab agree; "If you're really trying to create a culture in which people run at the hardest part of the problem first, that's not something in which people need a lot of money in order to be able to do. In fact, it's the opposite. The only people who can really afford to waste their money are people who have lots of money."

David VanHimbergen is another industrious leader. Today, he is CEO of Tide Spin, an on-demand laundry and dry-cleaning delivery service operating in the Chicago area. But only a few years ago he was just a Procter & Gamble (P&G) manager with an idea, looking around his organization for the means to make it a reality. The idea sprang from his observations about the consumer behavior of millennials, who "were starting to uncover savvy ways to outsource aspects of their life—things they're not invested in." Increasingly, he figured, one of those aspects would be doing laundry. He worked in a company that arguably knew more than anyone about how to sell detergent. But what if some large segment of consumers stopped buying detergent because they outsourced the task?

It wasn't long before VanHimbergen and three colleagues were pursuing that line of reasoning, banking on P&G's brand strength to make the business a preferred service provider. All based in Chicago, they set up camp in a "coworking" space—a facility that opened in 2012 to allow digital startups to rent small amounts of office space and work side by side in a kind of entrepreneurial hothouse. As this tiny team went about figuring out a business model to make laundry pickup and delivery profitable for P&G, they used an off-the-shelf app at the onset, thereby stretching their bare-bones budget a little bit further and saving months of development time. The real breakthrough came when the team found an existing asset within Procter & Gamble that it could leverage to save an enormous source of cost and risk: a small chain of dry-cleaning businesses the company had set up in 2010. With this service-model experiment already in place, the team saw a chance to piggyback on the physical facilities and thus be able to focus most of its thinking and resources on the customer experience.

Meanwhile, its members were tapping their networks across the sprawling organization for experience and advice on every aspect of the operation. VanHimbergen summed it up for me: "At a company the size of P&G, you can find an expert in just about any area. We have linguistics experts that are masters of text analytics. Why would you think we'd have that? But if you ask around, you find the right people."

Left and right the team was grabbing elements that were freely available—the Tide brand, the coworking space, the dry-cleaning shops, the app platforms, and the expert counsel. Rather than starting from scratch, they used existing assets differently to create something new and valuable.

The bricolage-style development I've been describing is something often associated with entrepreneurs; Phil Knight, for example, started Nike by teaming up with his former track coach and using a waffle iron to prototype the new sneaker sole they had in mind. But *intrapreneurs*, the disrupters inside of your organization, are also highly likely to operate in this fashion because they are inside companies with numerous underutilized resources around them just waiting to be repurposed.

This bricolage/DIY ideal of intrapreneurship outlines a clear path for frugal innovation. But before we pull all the loose ends together, let's inspect the one thing that can throw motivated innovators off the scent of invention almost immediately: funding.

The High Cost of Spending Money

The fact that intrapreneurs can do impactful things with limited funds doesn't mean that they can't find ways to spend money if they have it. There are so many ways to push resources into innovation projects that, theoretically, any idea could have any amount allocated to it—and the team could easily use it up. I often run an interactive exercise with clients where we divide the group into two teams. Each team has the same problem to solve—but one team gets a $100 budget while the other gets $1 million. Invariably, the $1 million team finds a way to spend its money—whether or not it's needed. Why? One, it's human nature, and two, they're trained that way. In most organizations, if you don't spend your budget this year, you lose it next year. But most cases of this type of spending, even in real scenarios, turns out to be discretionary. It's simple: when we have the budget, we reach outside the company's walls to consultants, contractors, and solution providers rather than leveraging the resources we already have, including ingenuity, knowledge, and networks, to figure out the problem.

In a recent discussion thread on the question-and-answer website Quora, someone asked what it would typically cost to engage an industrial design firm. One respondent, Sam Birchenough, is the owner of a product design and development firm in Los Angeles, which he describes as smaller than midsized firms like IDEO, but very capable. "I'll tell you one thing," he began. "As a design firm, we quote far less than larger firms [but] most potential clients are still shocked at the actual cost-to-market of their idea. I gave a rough quote of ~$40k just today to design, engineer, and prototype a small electronic wearable device (excluding pcb design and software)."[8] Birchenough found that "this was a much[,] much higher number than the person was expecting," but his point was that others would see it as chump change. With consultants in other firms billing out at anywhere from $150 to $500 per hour, depending on the kind of work being done, $40,000 might get you a three-person team working on your problem for all of one week. Or more likely, it would not get you even that, because the consultancy would not bother taking on such a small project. Ben Einstein, a venture capitalist who provides advice and mentoring to his seed-stage founders, wrote that even if you've just received a significant amount of funding, "hiring a design firm is plain old expensive . . . It's not uncommon for functional prototypes to cost $500K for a full development cycle."[9]

Often, an intrapreneurial team is able to avoid nearly every kind of cost, assuming it has the time, the access, and the relationships to tap into internal expertise. The irony is that when big budgets are allocated to internal ventures, it's not always because the project is known to *need* a lot of funding but because management is using budget as a signaling device. To constituencies both inside and outside the company, major investment says, "This is important." And it's true, that can be self-fulfilling. After all, if a project isn't expensive, top management may feel very little responsibility for whether it succeeds. By allocating major funds, executives force themselves to keep paying attention. Of course, more resources also make it easier to attract capable leadership and other talent to a project, as then it seems like something the company is committed to.

But there are other ways to get buy-in without spending eye-popping sums of money. This is what I saw at Pernod Ricard. Amandine Robin told me about some internal innovations she and the other eight members of the company's first "Youth Action Council" (YAC) hatched. One, for example, is an Airbnb-style site called HomeViviality, which is an insider home-borrowing option for Pernod Ricard people on the road. Amandine said the YAC was determined to proceed frugally: "In all of our initiatives, we wanted to have the entrepreneur mind-set—meaning it's self-funding and it's not a huge budget." Every problem that came up, they tried to solve "as an entrepreneur would, who generally doesn't have lots of money but has lots of creativity." Despite their low-budget profile, the group had a high profile in terms of visibility and access to top management, because YAC was specially commissioned by the CEO, housed in a work area near the C-suite, and had a standing slot on the agenda of periodic executive meetings and offsites.

BARRIERS TO KEEPING IT FRUGAL

- Less funding = less oversight
- It can feel risky
- No template or established metrics: harder to measure progress
- Requires identification of nonfinancial support: time + assets

Amandine may be a little like the intrapreneurs in your organization. They might choose to forgo formal funding in exchange for flying under the radar. Why? Because they know that keeping it frugal is the best chance they have to succeed.

A Different Type of Innovator's Dilemma

Throwing money around like a rock star is never a responsible thing for an enterprise to do. But the bigger issue with early-stage projects is that spending a lot on them can actually damage their chances for success. I'm not talking about the effects of constraints on sheer creativity, where the jury may still be out. Beyond the inventiveness of the ideas themselves, I'm talking about the organizational dynamics that kick into gear when a large budget is allocated.

Simply stated, when you spend more on a project than is required to produce a given amount of value, your ROI—both your return on investment and return on intelligence, as we'll talk about in chapter 7—goes down. This means the initiative operates longer in the red, making it more vulnerable each day to someone asking, "Couldn't we find better uses for these resources?" One great advantage of an innovation produced on a tiny budget is that if it succeeds at all, it offers instant positive ROI.

Because well-resourced projects invite more scrutiny, they are subject to more interference. Multiple cooks start showing up in the kitchen, adding their own seasoning to the broth. And projects with a sizeable budget are typically housed within an existing business unit—one that has its established business model and procedures, and that unit immediately starts to set the project team straight on how things are supposed to be done and what matters most.

So intrapreneurs operate more efficiently sans the official oversight that comes with a big budget. Without it, intrapreneurs can retain the creative control they want longer—staying closely connected to customer needs, whether or not they fit neatly into an existing business model. Ravi Ramaswamy was very cognizant that he needed to keep the cost of his efforts down: "At some point, we got funded for it. And I said, 'We should keep it below the cost of other things,' because I knew that the business unit would come after me saying, 'Why are you wasting time and money when we already have a product [like this]?'"

In some ways it is worse when a project manages to win over many hearts and minds in the organization at too early a point. As an innovative idea visibly starts to gain traction, increasing numbers of people are drawn to it and want a piece of it. It can feel great to have that affirmation, but these are often not the kinds of contributors a startup needs. Some are there for the intrinsic rewards; others only find it appealing once it offers extrinsic ones. Neil Tambe, who started at Deloitte Consulting and now hones his intrapreneurial skills in a government role in Detroit, made this point well. In a post on his blog, Tambe warned executives not to go out of their way to convince skeptics to sign on to innovation teams, especially by sugarcoating the process or perks. Instead, he advised: "Tell people the truth and find people who are passionate about what you're doing." In his experience, "those passionate people are the ones who stick with you through thick and thin"—mainly because "they care about making an impact, not what they'll get out of joining your team."[10]

People who are really passionate about their ideas will forge ahead even if they don't have the so-called appropriate resources or the time allotted; the corollary is that in settings with ample resources, projects will go ahead that *don't* have that same amount of passion attached to them. But ultimately it is the passion and purpose, not the resources, that drive success (a subject we will return to in chapter 9). So the lack of resources can have the pleasant side effect of shaking out the "meh" projects.

This is exactly why Babak Forutanpour at Qualcomm turned down the offer of resources and just asked for pizza money. Keeping it frugal becomes a no-brainer—and it's second nature to intrapreneurs.

The DIY Playbook—Keep It Frugal

All the evidence above demonstrates that it is getting easier for organizations to invent their future little by little at a very low cost. This isn't the case only for intrapreneurs—it's easier for everyone. This is considered a fact in the startup world. When I asked Salim Ismail for his take, he nodded, saying, "Innovation once cost a lot, and now it does not." I couldn't agree more.

What organizations need now are the right tools and a ready mind-set to innovate from within. The Disrupt-It-Yourself agenda items below directly support my main message: deep-six the deep pockets. Simple tools, small budgets, and human ingenuity can deliver impressive results, including maximum agility with fewer "business as usual" strings attached.

Together with the plays contained in chapters 4–9, these action items are designed to give you a fast, flexible way to create a disruptive culture. Knowing that nothing innovative is ever truly linear (or one size fits all), consider these to be á la cart strategies for keeping it frugal:

1. Remain Asset-Based
2. Keep It Simple
3. Encourage Frugal Experiments
4. Focus on Teams
5. Rethink Incentives

1. Remain Asset-Based

Recycle resources. At Pernod Ricard, intrapreneurs told me about the "circular economy" that exists within their production facilities, meaning nothing gets lost and resources such as ingredients are reused along the production chain. Constructive disrupters have an asset-based mind-set that enables them to reuse existing resources, repurpose hardware, ask around internally for coaching and expertise, hack their own solutions, and scrounge for parts to cobble together prototypes.

Share infrastructure. In addition to reusing internal resources, intrapreneurs can tap into the same third-party infrastructure as entrepreneurs. They can get web services through pay-by-the-sip vendors like Amazon; they can go to 3D printing shops to produce hardware prototypes; they can install themselves in coworking spaces just as the Tide Spin team did.

Create a frugal culture. The play for organizations is to create a culture where it's okay to use duct tape and discarded material for experiments—both literally and figuratively. Even more, people from across the organization need to be ready and willing to share their specialized knowledge and expertise. Increasingly, managers in big corporations need to focus on frugal execution and to identify, hire, and retain the people they find to be most resourceful through interviews, recommendations, and past history of frugal experimentation.

2. Keep It Simple

Skip the extras. In an agile software environment, simplicity is about "maximizing the work not done." Likewise, simplicity is a hallmark of frugal intrapreneurship. Too many bows and bells rob resources and add sparse value, especially in the early stages of development. The team at Philips Healthcare put this into play perfectly with their high value, low-cost ECG device: it's portable, practical, and devoid of extraneous features.

Target value. As you mix simplicity into your organizational mantra, keep your design approach simple and focus on value first. Doing less with fewer steps is more effective when actions are orchestrated to target only the critical benefits you know you need.

Focus on customer needs. The top intrapreneurs in your shop are usually sitting close to the front line, or otherwise have direct access to what customers want right now, or know about a pain that has yet to be addressed. Listen to these folks, take their ideas to heart, and help create a pathway to execution.

Make autonomy a top priority. Simplicity needs to filter across to organizational design. With fewer layers of accountability, innovators can stay "stealth" and remain free from attack by the natural immune system of the organization.

3. Encourage Frugal Experiments

Enable side projects. It used to be that R&D experimentation was a high-stakes game. You were betting a chunk of capital on success, so failure wasn't an option. Today, frugal experimentation makes it possible to have a portfolio of small, diverse bets off the books that nobody even knows about. Remember Balanda Atis from L'Oréal? She and a few like-minded colleagues conducted experiments on the side that eventually contributed to a new blockbuster product line.

Make small bets. Small-scale experiments make it feasible to fly under the radar and test multiple ideas at once. Then, when something takes off, you can double down without hand-wringing about leaving other experiments behind. This approach allows for quick returns while mitigating risk.

Leverage early wins. Build on small victories to gain momentum. Tide Spin's VanHimbergen acknowledged that the venture was "messy for the first six or so months" and required trial and error to nail down the business model. Their early win came when they partnered with the Tide Dry Cleaners franchise—a P&G startup running under its own set of rules. It freed up their micro operating budget and allowed them to invest in the new staff they needed to scale the venture.[11]

Actually build something. Product prototypes (or minimum viable products) create a path for validation and development. As we've seen, it's plausible to cobble together prototypes with sparse funding, using asset-based thinking, and come up with something tangible to guide iteration. One intrapreneur put it this way: "Anything can sound good on paper, but by the time the prototype is developed, I have a team of collaborators who are knowledgeable and passionate enough to sell the idea to executives. And stakeholders have something tangible to look at and pass around." Ramaswamy concurred: "You can talk about a possible product, but it's a very different feeling when you can put a prototype on the table and start touching it to see how the machine responds to your needs."

And the kicker: When the Philips ECG machine was finally integrated into a product line, much of the groundwork for manufacturing and distribution was already laid out across the organization by the intrapreneurs who had built the prototype and the colleagues they enlisted along the way. *Boom*: That's what "keep it frugal" looks like.

4. Focus on Teams

Create quality teams. This new reality—that "innovation once cost a lot, and now it does not," to quote Ismail—is why organizations need to focus on creating quality teams over choosing any specific early-stage concept. The assumption is not only that the idea will likely need to pivot but that some teams are more capable than others of pivoting—plus those teams can make quick progress because putting together a minimum viable product to test is so inexpensive.

Look for passion. How do you know a great team when you see one? I put my money on passion, ingenuity, and agility as leading indicators of success. Intrapreneurs are enabled by technology—but they are motivated by a shared passion to solve a problem.

5. Rethink Incentives

Experiment with incentives. There's an ongoing question of frugality (or generosity) as it relates to individuals' compensation—in other words, how much financial reward should go to the innovators? Some companies put forward personal or intangible rewards that are appealing but not all that expensive. At Stanley Black & Decker, for example, the inducement to enter one of its innovation competitions is the chance to drive the company-owned Tesla for a month. While that may kick-start the motivation of many, it might not be quite enough for some. The firm also provides time with senior leadership or a chance to share learnings with their colleagues on a broad platform. I wholeheartedly agree with Ismail who says that incentives should go to the point of giving intrapreneurs real “upside” potential—that is, an actual stake in the ultimate market success of the innovation. The bottom line is that organizations need to experiment with incentives and decide for themselves what works within their walls.

Use respect as remuneration. It’s critical to create compensation that syncs with the “keep it frugal” ethos. What I know for sure is that companies absolutely must deliver psychic rewards like trust and respect. Intrapreneurs should be celebrated. They should be given the opportunity to take the ball and run with it, to lead the initiative and take it to scale. That is the type of incentive that motivates the passionate problem solvers that step up and become intrapreneurs. This is all about autonomy. Daniel H. Pink, the best-selling author of *Drive: The Surprising Truth About What Motivates Us*, argued convincingly that mastery, autonomy, and purpose are the three big motivators of human achievement—and some of his favorite examples were intrapreneurs.[12]

Executive Scorecard

- Do you model the “keep it frugal” ethos in a positive way to maximize intrapreneurship?
- Have you created a culture where people share infrastructure and reuse resources for intrapreneurial ventures?
- Do you take value and customer focus seriously in innovative efforts?
- Are simplicity and autonomy a part of your organization?

- Do you experiment with nonfinancial incentives for intrapreneurs?

FOUR

Principle 2: Make It Permissionless

Grace Hopper, the mathematician and US naval officer behind the first computer compiler, was known for her programming creativity and also for having a way with words. Hopper had a lot of ideas that challenged convention—including that programming languages should be machine-independent (that one led to the development of the programming language COBOL)—and she also encouraged the people around her to do more boundary pushing. You might not recognize her name, but you've probably heard the famous expression attributed to her: "It's easier to ask forgiveness than it is to get permission."[1]

That sentiment is a common thread that cuts across the experience of successful intrapreneurs. In fact, it is arguably a pillar of intrapreneurship everywhere. Take the wholesale redevelopment of the 2013 Toyota Avalon. Led by designers and engineers working far from the company's Japanese headquarters, the initiative was culture defying for Toyota. When the US-based team told their story to industry analyst Mark Phelan, they stressed that they "worked in the margins of Toyota's playbook, following the old adage that it's better to beg forgiveness than permission."[2] I also heard the phrase from Marc Nager, founder of Startup Weekend and managing director at Telluride Venture Accelerator. He said that companies need a "culture of permissionless innovation," and "innovation isn't something that you should be asking approval for. You shouldn't have to sell to your boss." And when Alexis Ohanian wrote an entrepreneurial memoir of how he and Steve Huffman created the social news aggregation site Reddit.com, he aptly titled it *Without Their Permission*.[3]

Having worked with a lot of innovators, I've seen that they aren't trying to be defiant exactly—especially the ones who work within large enterprises. Intrapreneurs aren't breaking rules for the sheer thrill of it. They simply want to get something done that they suspect will be derailed by bureaucracy if they ask for permission to proceed. So they get really good at sidestepping, bypassing, and ducking conversations in which they would likely be told no or "go back to your day job." Their plan is to take an idea far enough so that when it is ultimately unveiled to decision makers in the organization, it will be far too valuable to refuse or shut down.

Perhaps like you, I find myself celebrating the underdog instincts and clever end runs that ultimately lead to breakthrough accomplishments for innovators and their organizations. After all, against-all-odds, eleventh-hour success is inspiring. At the same time, is it really effective for employers to settle for a surreptitious approach to something as important as intrapreneurship? Enterprises whose leaders are focused on internal innovation and organic growth, like Intuit and Amazon, are finding more deliberate ways to legitimize and support experimentation. In fact, organizations can learn a lot from what I see as a slightly different version of "making it permissionless."

Let's examine what "permissionless" looks like today in organizations before considering a new model that lets leaders provide support without crushing the creativity and potential of upstart intrapreneurs.

The Look and Feel of Permission-Free: Flying the Pirate Flag

Intrapreneurs have several stealth strategies they adopt to route around all these bothersome permission issues. They do end runs, fly under the radar, go rogue, and even engage in hacking behavior.

In some organizations, intrapreneurs resort to what innovation consultant Thomas Wedell-Wedellsborg calls "stealthstorming." In an article for *Forbes*, he told the story of an innovation within Pfizer (called pfizerWorks) dreamed up by Jordan Cohen, a manager in its HR department. As Cohen looked across the entire company, he saw legions of knowledge workers who were frustrated spending time on mundane tasks when there were so many more creative things they could be doing. He designed pfizerWorks to be an internal temp service of sorts, staffed with people who were vetted and trained on enterprise systems and who were available around the clock at a standard fair price to anyone who had the funds in their budgets to spend. Brilliant!

Cohen got pretty far providing this service internally without having to explain it to anyone with the power to shut it down.[4] But as it scaled up and required more of his time, he "couldn't continue to pretend the project didn't exist." This is where some deliberate concealment kicked in. "To deflect questions, Cohen told people it was part of a companywide initiative called Adapting to Scale (ATS), which was aimed at standardizing processes and sharing best practices. Nobody knew exactly what ATS involved—and pfizerWorks *was* in fact aligned with the initiative—so Cohen's story provided adequate cover, allowing him to spend time on pfizerWorks for a time without raising awkward questions."[5] He saw it as deflection for the greater good.

A less subversive tactic for avoiding permission is "running at the resistance" to try to defuse it—like an end run. Dipanjan Chatterjee, lead strategist at Target, wields this tactic as a way to beat naysayers to the punch: he identifies the risks of a project himself at the outset and tries to neutralize them early on rather than ducking them later. At Lowe's, the building products retailer, Kyle Nel shared a similar strategy for clearing a path through the bureaucratic thicket there: "My biggest advocates were in the legal and risk mitigation areas. This is largely because I enlisted them early." Both Chatterjee and Nel are being proactive rather than deceptive.

If you really want to see inventive individuals subverting formal authority, go into a government setting. Mitchell Weiss studies "public entrepreneurship" and the intrapreneurial activity that happens within federal agencies and nongovernmental organizations (NGOs). In that realm, he says "hacking the bureaucracy" is a term that is increasingly used. "Bureaucratic hacks adhere to the law but make use of little-known or little-used provisions to get things done faster," he explained. The obvious analogy is hacking an information system by finding a bug to exploit. He has seen public employees take this approach to hire new tech workers and speed website releases, for example. "I recently spoke with a big-city procurement officer who was lamenting his inability to run pilot programs," Weiss reported. At the suggestion that maybe there was some hackable bug in the policy code, the officer decided to look it up and study the fine print. Sure enough, "buried in it was the very permission he was looking for."[6]

When I asked Bob Schwartz of GE Healthcare how he managed the permission process, he essentially said, "*We didn't*." "We were subversive. We didn't ask anyone's permission," he said. To Schwartz, "every single thing that requires intrapreneurship is something that's off the grid and under the radar."

Subversive or not, permission is sometimes out of the question logistically. Sometimes just identifying the decision maker can be difficult, let alone gaining access to that person. At times, the intrapreneur's idea relates to a different part of the enterprise, or no one in the chain of command "owns" the problem it would solve. Or maybe it falls between, falls outside, or cuts across organizational lines in a way that makes it unclear "who has the D" (to use Paul Rogers's and Marcia Blenko's phrase).[7]

Regardless of the strategy or rationale, most intrapreneurs seem to believe that this is just how it needs to be. The system

BARRIERS TO MAKING IT PERMISSIONLESS

- For managers, granting permission to innovate takes time away from core business activities.
- Fear and uncertainty prevent action—it requires trust.
- It means saying yes more often.
- It's culturally unacceptable—middle managers and others may balk.

around them is impenetrable and built for a purpose that never anticipated what they are trying to do. Unfortunately, all this unilateral innovation eventually creates difficulties for intrapreneurs as well as organizations.

When Permissionless Is a Problem: Part 1

For intrapreneurs, going stealth loses its utility when they eventually need management's blessing. Sometimes this occurs when customer feedback is required to take an idea to the next level. (It can be hard to reach out to real customers when customer relationships are closely held by those who "own" them.) Other times entrepreneurs need to bring managers into the loop because a more substantial investment, and perhaps additional knowledge, is required. As we saw in chapter 3, a lot can be accomplished on a very frugal basis, but there comes a time when a team needs expertise it doesn't have or funds to cover expenses that can't be paid with slack in an operations budget.

In other situations, intrapreneurs need to get on management's radar because their industry context is especially rules based. For example, there may be risks of running afoul of industry regulations. In sectors like finance and health care, it doesn't take much deviation from the status quo to get into fraught legal territory. There's a reason that, at Citigroup, experiments in areas including blockchain distributed ledger technologies and cryptocurrencies are happening under the direction of the formal Citi Innovation Labs. In banking, things have to be done by the book, and *rogue* is not exactly a term of endearment. For that matter, most industries are subject to some type of regulation.

Intrapreneurs eventually need to come in from the cold.

Proceeding without permission is really just a question of getting things *underway*—getting into action, with the intent of asking for forgiveness when the odds are very good it will be granted.

When Permissionless Is a Problem: Part 2

Underground innovation is no walk in the park for bosses either. As soon as a manager or senior leader becomes officially aware of a project, she must react, either by accepting responsibility for it or killing it. It is now being pursued on her watch. At the very least she must become informed about it and prepared to explain it to her own higher-ups.

All of this puts a lot of pressure on management. When stealth innovators come clean, they're essentially asking someone else to take on some reputational risk, but it's likely someone who doesn't share their passion for the idea and won't get much credit if it succeeds. This is the kind of situation where Patrick Doyle, former CEO of Domino's Pizza, talks about "omission bias" creeping into a manager's thinking. His point is that managers are more worried about being responsible for "sins of commission" (mismanaging a task that is clearly expected of them) than about their "sins of omission" (neglecting to pursue or support a new idea).[8] Certainly careers suffer more from managers' visible actions than their invisible inactions, even if the two are equally damaging to the company's future.

The second problem managers face is that any deviation from the status quo represents some level of business risk. Chatterjee readies himself for this barrier when he finds himself in front of a senior group to get buy-in for a new way of working. "They just love saying, 'Well, this is a great idea but . . .'—*boom*—'have you thought about *this* risk?'" Yet Chatterjee can't blame organizations for balking at being blindsided. Ultimately, it's management's job to find and mitigate risk. Without some of that, there would be no business to innovate. Again, someone who is just coming into the loop is seldom fired up with passion for an idea, and they are more likely to see the legitimate downside.

The third problem managers face is losing their best and brightest people because they are not in a position to support them as they would like. Plenty of research, going back a long way, has established that innovation-minded employees tend to leave companies when their ideas don't gain traction. Rosabeth Moss Kanter found more than a quarter century ago that if intrapreneurs perceive their organizations to be too bureaucratic to change, they are likely to decamp.[9]

This is why some managers turn a blind eye to rogue endeavors. The rule-benders get away with their covert work because, on some level, their bosses know that it's valuable. And sometimes they would rather not be forced to take an official stand on stealth projects. They are supportive of what's going on—as long as they don't have to go on the record about it.

All of this leads to ambiguity and on both sides: Managers, on the one hand, don't want to crush intrapreneurial efforts, so they live by an ineffectual *see no evil/hear no evil* philosophy. Intrapreneurs, on the other hand, are afraid of being shut down, so at times they keep things under wraps longer than they should. How can intrapreneurs and organizations mitigate this ambiguity together? We'll look at some best practices and then move on to a permissionless playbook that applies to all organizations.

THE SHIFT: MAKE IT PERMISSIONLESS

From	To
Complex and multilayered approval system	Fast, nimble low-friction approval process
Centralized innovation approach	Decentralized approach—innovation across the organization and at the edge
Leadership that micro-manages and confines	Leadership that is deeply trusting, provides "air cover," and creates space for intrapreneurs

Give Permission—To Skip Permission

Intuit, maker of TurboTax and QuickBooks, has thought a lot about the tension I'm emphasizing and has come up with some smart ways to resolve it.

Jeff Zias, who leads the company's "unstructured time" provision, explained to me why this specific idea is part of a larger solution at Intuit. "What's different and fundamental for us is that in our case, with about eight thousand employees, we want everybody to feel empowered to innovate, and in fact feel *required* to some degree to innovate."

By "unstructured time," Zias is referring to what many of us have learned to call 15 or 20 percent time. Like some other companies, starting with 3M (back in 1948), Intuit encourages employees to use a percentage of their on-the-clock time to develop relevant side projects. At Google, for example, 20 percent time was credited with giving employees the latitude to develop ideas that turned into Gmail and AdSense. Yet Google's own experience—it shut down its 20 percent policy in 2013—suggests that it isn't enough to just announce that people can and should spend the equivalent of a day a week on passion projects. According to Zias, Intuit realized it needed to do more to "inject some structure into that unstructured time."

One way the company does this is by hosting periodic multiday "hackathons" where teams of developers present pet projects and compete to tackle specific challenges aligned with the company's broader strategy (for example: easy, fast tax return completion) in exchange for prizes and recognition. The cloud storage company Dropbox does something very similar in its "Hack Week," which one of its managers described as "an entire five days every summer for people to explore whatever projects interest them." Dropbox doesn't insist that the projects be aligned with any themes, but "what's really great," he said, "is that people end up working on projects that deeply benefit Dropbox in some way or another." Hack Week is therefore "the celebration of, *yeah*, you should be able to have an idea and own it and see it all the way through."[10]

But intrapreneurs at Intuit are not left to sink or swim on their own. The company supports project sponsors through multiple stakeholders. First, they have people whose whole job is coaching and encouraging innovation (Zias is one of them). Next, the organization's innovation catalysts are trained volunteers who spend 10 percent of their time guiding other employees to use design principles to create products that improve customers' lives. Finally, managers across Intuit are expressly incentivized to recognize and support entrepreneurial behavior and experimentation.

Intuit's approach is to leave intrapreneurs in that mode of "not asking permission" but giving them a legitimate structure for operating that way.

Offer the "Institutional Yes"

Giving people formal license to proceed without permission, as Intuit does, is one way to decriminalize proactive innovation. Another approach is what Jeff Bezos calls "the institutional yes"—a reflexive response on the part of managers to greenlight experiments in innovation, rather than hit the brakes on them.

As part of that, Amazon has a setup called "working backwards," which begins with innovators drawing up press releases and FAQ documents for their early-stage ideas—as though they have become reality and it's launch day. Teams are encouraged to do this as a first step with any idea they hope ultimately to get funded, and to immediately start floating it with possible sponsors.

This is the opposite of keeping projects under wraps till they are ready for prime time. This puts an idea front and center almost as soon as it pops into someone's mind. Amazon works this way because it wants things out in the open where they can be encouraged and honed with multiple perspectives—and where the rest of the organization can learn from them. (We'll get into this point more deeply in chapter 7's discussion of return on intelligence.) But in order to achieve this, Amazon needs to make sure intrapreneurial ideas don't perish on first contact with the cruel managerial world. That means keeping positional authority in check and giving people at all levels the ability to greenlight experiments.

Jeff Wilke, Amazon's chief executive of worldwide consumer, told *Forbes*: "We set up an environment where basically anyone can say 'yes' as long as they have the resources to begin to support it."[11] Along with that empowerment goes a lot of training to overcome the knee-jerk response to risk.

Another concept Bezos shares with decision makers across Amazon is the difference between "one-way doors" and "two-way doors." If a decision forces you to walk through a one-way door, that means there is no going back. You must continue down that path. Most decisions, however, are two-way doors: you can step across the threshold and if you don't like what you see, turn around with minimal expenditure lost and some valuable lessons learned. Amazon constantly reminds managers, as they're looking at innovation ideas, not to mistake two-way doors for one-way doors. The upshot is they'll say yes more often.

There is much more to Amazon's approach to putting internal innovation on rails and turning into an "invention machine." For me, it all fits under the general philosophy of upfront permission granting: as long as you're taking smart risks, innovation means never having to say you're sorry.

Provide Air Cover

Cristina Notermann, director of product insights at the retail giant Target, brings forward and supports many intrapreneurial efforts. When I asked her about the most important thing for translating ideas to impact, she didn't hesitate. "Number one: we need leadership to provide air cover." This is something I heard in several of my interviews and recognize as a main way to avoid the "permissionless" conundrum. Providing air cover—having someone at a high level serving as your defender—is effectively granting permission to break a few rules. It means when someone at an intermediate level calls you out for your breach of protocol, you have a powerful champion to protect you from the consequences.

In companies across sectors, from Fidelity to Target to Philips, I've consistently seen innovations that owe their existence to air cover from managers and executives alike.

At Pernod Ricard, it was the CEO who set up an intrapreneurial group and gave them "carte blanche," in the words of Amandine Robin. Then, to make sure it wasn't *only* the CEO providing air cover, she and the other members of the Youth Action Council got on stage at a management meeting of global unit CEOs. Robin told me: "We introduced what we wanted to do and told them that we might have ideas that are outside of the box, ideas that you might think are a bit crazy. 'All that we ask of you, our CEOs around the world, is to be open to the ideas that we bring.' We actually asked them to say yes, and they all screamed, 'Yes!'"

Air cover is an idea that resonated with USAID's Seema Patel as well. She said: "Air cover in government can come from lots of different places, not just your own senior leadership. Say the White House puts out a memo about open government and encourages all federal agencies to think about how they engage citizens in innovation. That's air cover."

Air cover, the institutional yes, and permission to skip permission all create the space and autonomy intrapreneurs need to flourish. These ideas, plus the strategies in the Disrupt-It-Yourself playbook below, are designed to keep your most creative people engaged in forging the future of the company.

The DIY Playbook—Make It Permissionless

Making intrapreneurship sustainable requires creating a permission-lite environment for intrapreneurs. It's autonomy with guardrails. The goal is to establish a network of support rather than a system of tight control by leaders. This "support, don't control" mantra reinforces frugal funding and has two additional benefits. First, it is an easy fit for intrapreneurs, who want a safe space to pursue new ideas and side projects. Second, it doesn't oblige large companies and their leaders to bend over backward to manage and measure early-stage projects. Here are the plays that put permissionless to work:

1. Support, Don't Control
2. Say Yes More Often
3. Add Light Structure

1. Support, Don't Control

Provide air cover. Intrapreneurs need support from senior leaders. We saw companies like Pernod Ricard and USAID providing high-level air cover to promising initiatives that would otherwise be under assault from corporate antibodies that kill intrapreneurship.

Mentor, don't control. Support innovators with coaching, mentoring, and training. This type of reinforcement gives them low-cost assistance and keeps eyes on their efforts without choking off the ingenuity and creative magic that comes with the intrapreneurial process.

Listen up. Part of granting permission is stopping to listen to intrapreneurial ideas instead of nixing them off the bat based on risks or logistics—or the big killer, business-as-usual process.

We know that Amazon puts this play to good use. A software engineer named Charlie Ward, for example, planted the seed of Amazon Prime when he made an employee suggestion to offer free shipping.[12] And Alexa, the voice of the company's popular Echo devices, grew out of an internal team's proposal for an "intelligent personal assistant."

2. Say Yes More Often

Create a permissionless culture. Companies like Amazon are known for granting permission for experimentation. Take their lead and try to create a more "permission granting" culture by instituting a policy called "the institutional yes." This and similar moves make it hard to say no so that people can reveal their ideas without expecting to be blocked.

Make permissionless the rule, rather than the exception. Decide on the degree to which permissionless will work for you and build it into your business. Intuit's approach is to make some amount of "not asking permission" accepted and expected rather than a shady thing. Essentially, it has put in place features that allow intrapreneurs to accomplish quite a bit before they take the lid off whatever they've been cooking up.

Let their pirate flag fly. Some intrapreneurs draw energy from being able to see themselves as the rebels and pirates who are ready to defy the rules and risk censure to realize their visions. Companies need to manage the balance: If you treat intrapreneurship as a criminal offense, you'll get too little of it. But if you make it too law abiding, you might just kill it off even faster.

Make it okay to pull the plug. Intrapreneurs should make the call about when to self-correct, pivot, or end a pilot or experiment. This level of autonomy creates trust, preserves passion, and encourages intrapreneurs to use what they learn to discover a more feasible solution.

3. Add Light Structure

Create permissionless programs. Design your own program to give employees permission to innovate within established parameters. Consider the "innovation challenges" and competitive hackathons that many companies launch internally. Some of these are inspired by highly visible open contests like the $10 million Ansari X PRIZE, which challenged comers to develop a spacecraft capable of entering space and returning safely twice within ten days. Elon Musk's Hyperloop-related challenges are another high-profile example. Companies that replicate this kind of thing within their own walls can often point to exciting results. At Facebook, for example, the "like" button came out of such a process.[13]

Fund free time. An alternative to Intuit's unstructured time is "unstructured money." Adobe, for one, gives intrapreneurs a stipend to get them started. Through what it calls its "Kickbox" initiative (involving red boxes around the building with kickstarter kits for innovators), it gives any employee who agrees to participate in a two-day innovation workshop a prepaid credit card with a thousand dollars loaded on it. With that money, they are challenged to bring the idea as far into prototype territory as they can, at which point they make a pitch to win funding at a more generous level.[14] In other words, Adobe not only gives permission; it also provides light structure and frugal funding.

Choose one rule. Few organizations can eliminate permission altogether. Instead, try choosing one solid guardrail and launch from there. "Innovate within your job area" or "keep side projects simple" or "spend time but not money" are all one-rule ideas to try if you want to land on the side of permissionless innovation.

Extend permissionless to customers. Few organizations offer a permissionless path to enroll customers in intrapreneurial trials. Yet customer feedback is a key component for validating (or shutting down) ideas. Intuit broke down this particular barrier by giving employees permission to create a prototype and test their hypothesis with *just one customer*. And not just any customer, but one who is hypothesized to be well served by the solution. If that single customer uses the solution and recommends it to others, then the intrapreneur is encouraged scale it up to a larger cohort of customers in order to collect more data.

Executive Scorecard

- What level of “permissionless” intrapreneurship can you live with and how will you formalize it in your organization?
- How much air cover do you provide for intrapreneurs to make your environment a safe place to innovate?
- Is intrapreneurship occurring perpetually below the radar in your organization because you do not have the proper supports in place to enable it to bubble up?
- Does your culture allow leaders to listen to intrapreneurial ideas—and say yes more often?
- What programs do you have in place that add guardrails and structure, allowing innovators to proceed without formal permission?
- Do you provide support, training, and mentoring for intrapreneurs without imposing strict control over project decisions?

FIVE

Principle 3: Let Customers Lead

At an office of the giant business software company SAP in Calgary, Canada, Wayne Morris served as program director for service innovation, part of a global team whose focus is on speeding up the firm's applications of emerging technologies. One story he shared with me shows just how much acceleration can happen when the right connections are made.

Some years ago, he was meeting with one of SAP's large business customers and touting an innovative software application the firm had just released. The customer got the point of it immediately, but wasn't sure it quite hit the mark. As Morris recalls, the customer said, "Well, here's where I think you have a gap," and he went on to describe the functionality his department could really use. Shortly afterward, when Morris found himself in the development team's building and stopped by to tell them about the customer's wish, he got a pleasant surprise. They said, "You mean something like *this*?" As it happened, two developers on a different team had been working on that very problem for the past year as a pet project and had a solution that was more than half-baked. "Spot on," Morris told them. "That's *exactly* what would fill the gap." It was given priority status for development and incorporated into the very next release of the product—which obviously satisfied the customer, but also delighted the developers. "They felt incredibly happy that finally someone had acknowledged the work that they'd done," Morris said, "and they could be very proud that their invention had become part of a product and now could be called an innovation."

Nothing clears the way for intrapreneurship like the ability to connect with real customers' pressing needs. But could it be less left to chance? Consider the next words out of Morris's mouth: "We didn't have a way of surfacing something like that in the past." Therefore, the connection he made that week was a random, lucky event: "I happened to have a visit scheduled and they showed it to me. It was lucky." I would argue, as Morris did, for shifting that kind of connection from being a purely serendipitous event to a purposeful, supported endeavor. Responsible access to customers is the biggest thing managers can grant to improve intrapreneurs' chances of success—and we'll see how some innovative companies are managing to provide that.

The Case to Include Customers

There are certain advantages to being an intrapreneur rather than an entrepreneur. Working inside a large company, for instance, offers access to operational scale, wide-ranging expertise, and financial as well as physical resources. All these elements are the envy of startups—but if we're talking about the quality of the innovation itself, the one organizational asset that stands high above the rest is an *accessible customer base*. The insights a team can gain by interacting with real potential buyers and beneficiaries of its solution make all the difference to whether that solution will prove valuable.

Ravi Ramaswamy of Philips emphasizes that even though being "customer-led" might sound obvious, it isn't put into practice by many would-be innovators. "I have seen others design products that they *believe* are right for the world," he says, because they "sit in an ivory tower and *think* about what the customer needs." Instead, he advises, "Get close to the customer. Ask the customer what they want. Look at how the customer is using your product."

The approach worked like magic when Ramaswamy and his team developed their radically simplified portable ECG machine.

If more and more innovators these days have become believers in what Ramaswamy's preaching, we have the "design thinking" and "lean startup" movements to thank. Both have caught fire in innovation circles as powerful sets of principles and tools for turning early-stage ideas into viable solutions.[1] It's a tenet of both schools of thought (and also of jugaad innovation) that innovators should not assume they know what customers want nor think it's sufficient to hear what people say in focus groups. They have to get out of their offices and track their customers in the wild. Then, they need to put a prototype in the customer's hands that shows at least some potential for solving a problem—this is a low-resolution "minimum viable product" versus a fully realized solution—and improve on it through quick, customer-informed iterations. Picasso once said that "an idea is a point of departure and no more. As soon as you elaborate it, it becomes transformed by thought."[2] When the idea is for a new commercial offering, a good portion of that thought should be contributed by the customer.

Involving customers in an innovation early is valuable because their feedback at that point can substantially guide how the solution takes shape, rather than just tweak the final details. Chances are much greater that the novel offering will meet their need. This is how things are done at UnitedHealth Group, for example, whose internal corporate intrapreneurship program bases its process on lean startup principles. Of the five phases in its "enterprise lean" concept, the first three—assessing the problem-market fit, the solution-market fit, and the product-market fit—involve deep interactions with customers.

The first phase is about surfacing customer pain points and figuring out just how much of a pain they really are. These intrapreneurs consider questions like: "Are customers hacking their way to a solution now—where they just have to figure *something* out?" And is the problem "so painful that it's costing them treasure and time?" Discovering big opportunities requires empathic interviewing—getting out and talking to people, and trying to distinguish between a "morphine pain" versus an "aspirin pain." In subsequent phases, similarly nuanced conversations help the team understand how much of a market there is for a solution, and whether the current version of a solution holds great enough appeal.

Even beyond the obvious upside for solution design, intrapreneurs benefit from customer contact. We know that employee engagement rises, for example, when they are able to meet customers and see the impact the enterprise's products and services have on them. This effect is even stronger for the intrapreneurs who are driven to improve those solutions. And when a customer takes an interest in an intrapreneurial project, that can provide another form of air cover (discussed in chapter 4). As Ramaswamy puts it, “Once you start relating to the customer, you find that small delays or mishaps get absolved, because he’s been involved in the process.”

In a classic *Harvard Business Review* article called “Managing in the White Space,” Mark Maletz and Nitin Nohria shared the story of an intrapreneurial team getting air cover from customers’ interest in its work. In this case, the team was inside an industrial components supplier and was trying to launch a lower-end line of products that some powerful colleagues feared would cannibalize the company’s high-end sales. When team members talked with anyone about the effort, “they made it clear that they had listened carefully to *customers* and were working to cut through the company’s bureaucracy,” Maletz and Nohria wrote. “In doing so, they occupied the strategic high ground and made it difficult for others to oppose them.”[3]

Customer access also gives intrapreneurial teams a source of legitimizing metrics—that is, objective ways to track and report their progress. Coming up with the right metrics for early-stage innovation work is notoriously difficult; everyone seems to get that the yardsticks established for mature lines of business don’t apply, but it’s hard to come up with similarly rigorous alternatives. Intuit founder Scott Cook is a big believer in what he calls “love metrics”[4]—which might sound soft but can actually be assessed with some precision. How much do people love the idea of the product? Did they recommend it to their peers? How often do they come back? These kinds of measures can be more than sufficient to confirm a team’s hypotheses or prove the need for a course correction. In a blog post for Inuit Labs, Vijay Anand wrote that Cook often coaches Inuit's teams with this wisdom: "If you're not getting high activity from the users you already have, it's time to pivot." That thinking permeates Intuit's managerial ranks. On the subject of how to assess the value of an innovation in progress, Anand continued, "When a team asks me if something is a good idea, I ask them for their unit of one—the one customer their product will delight. And once that works, I tell them to bring me 100. When 100 delighted customers actively use a product, I know there's something to it."[5]

THE SHIFT: LET CUSTOMERS TAKE THE LEAD

From	*To*
Launching the "perfect" product based on assumptions	Testing small ideas with customers early and often
Keeping the customer at arm's length	Bringing customers into the innovation team via codesign and feedback
Initiatives led by R&D, designers, and developers	Customer-led initiatives

Looking Through a Customer Lens

Many innovators are familiar with the story of the GE Adventure Series—which involves turning dark, scary CT scanning tunnels into inviting storybook hideaways for young patients. I mention it here because it shows how customer access pays off on multiple levels for an intrapreneurial effort.

First, it was by visiting a customer's facility—the pediatric oncology department of a major hospital—that industrial designer Doug Dietz recognized a customer problem crying out for a better solution. He tells the story of how he had just finished working on a CT design project and thought he'd done a wonderful job. He was very proud of himself, and in 2005 he went to one of the hospitals where the equipment was being installed for the first time. But it only took an hour of observation for him to realize how reductively he had pursued his mission. The first people he watched interacting with the new machinery were a family with a young child. The child was so terrified by the machine that she needed to be sedated. He also saw the anxiety of her parents as their frightened child went through the CT procedure. He watched them leave looking distressed and exhausted. Even now, his eyes well up when he recalls the question that occurred to him in that moment: *What was the car ride home like for that family?* That had been his failing as a designer, he realized: thinking only about the device and the procedure and not about how the whole experience would leave the patient and family feeling.

GE Healthcare is in the business of engineering medical devices. Its expertise is in imaging technology, not child psychology. There was very little chance that the idea would dawn on its industrial engineers, sitting back at their workstations, that they needed to reframe the problem in this way. Dietz had to be there to get that the key to better outcomes—including better image capture, higher machine utilization, and better patient experience—was decreasing the need for sedation. It wasn't just about making machines more capable, it was about making children—and families—more comfortable.

Second, it was because of customer collaboration that the GE Adventure Series was as good as it was. There are two layers of customers for a CT machine—the patient who experiences it and the institution that purchases it—and Dietz and his design and engineering colleagues immersed themselves in both groups. On the patient level, they hosted sessions with kids and spent time with visitors to the highly engaging exhibits at the Betty Brinn Children's Museum. On the buyer level, they partnered with radiology departments to create what would work best for them. Listen to Bob Schwartz describe the installation at the University of California San Francisco Benioff Children's Hospital: "We worked collaboratively with them to make a connection to the hospital's environment, integrating things in the Bay area that children and families would recognize—like cable cars, the coastal aspects of where they are, Muir Woods—and to add technology and features we hadn't done before. There was a lot of [informational] material created so that when children who see this for the first time . . . they can already be in the story that they're going to find when they get to the hospital."

Third, the fact that there were paying customers who were interested certainly helped the business unit get behind the innovation. Schwartz talked about the huge boost the effort got when it caught the eye of Kathleen Kapsin, radiology director of Children's Hospital of Pittsburgh, part of the University of Pittsburgh Medical Center (UPMC).[6] "Kathleen was all in," he said, "and not only was she willing to collaborate with us on the development of the first one to put in her hospital radiology service, but they were also willing to pay us to do it." With that, the team was able to say a customer had purchased the Adventure Series—and not just any customer, but UPMC, a highly regarded institution and very important customer to GE. "That was instant street cred," Schwartz said, which made it easier for internal colleagues to believe the team must be on to something.

Today the GE Adventure Series is in many more hospitals and has expanded its storytelling repertoire to a dozen or so scenarios. It's a commercial success story, and that starts with its being a patient-level success story. UPMC's follow-up analysis showed that while its Children's Hospital performed 351 sedations for CT scans in 2005, that number dropped to just 45 in the very next year, after its Adventure Series "distraction rooms" came online. By the next year, it dropped further, to 9. Put another way, sedations were reduced almost 97 percent. Add up all the ways in which customers guided the intrapreneurs, and it is clear the team's customer access was the really crucial element in achieving this victory. The GE Adventure Series was something Schwartz characterized as "completely out there, off the edge, should never have succeeded"—and yet it did.[7]

Why We Build Barriers Around the Customer

The problem for intrapreneurs is that in an established enterprise getting facetime with customers can be like trying to break into Fort Knox. Just because a company says it wants innovation, and knows that successful innovation depends on customer input, doesn't mean the doors swing open to anyone with an idea to test. And things only get harder when the team asking for access to customers is trying to experiment with something truly novel. Alexander Osterwalder, the management theorist behind the "business model canvas," sees a lot of attempts at disruptive innovation rebuffed by colleagues trying to cordon off customers. He summed it up this way: "The sales team might think the innovation team will mess with their bonus structure or raise customer expectations for a new product. The marketing team might think that testing low-fidelity experimental ideas will mess with the brand. The legal team might think business experiments could create liabilities."[8]

Put yourself in any of those teams' shoes and it is easy to see why they are concerned. The best of the "good" reasons to deny access is that it's possible to damage trusting customer relationships built over years by showing up with subpar ideas and experiments that go nowhere. A team experimenting with new offerings might have the philosophy that even if they fail, valuable lessons will be learned—but traditional keepers of customer relationships may fear that these interactions erode trust and brand reputation. In the work I do with clients, we find that many customers not only enjoy but appreciate being a part of a smart codesign process.

BARRIERS TO LETTING CUSTOMERS LEAD

- Involving customers can feel risky—especially in organizations that need to be "perfect" before interacting with end users.
- Politics—giving customer access to developers, for example, rankles managers who traditionally own and silo customer relationships.
- Organizations may want to monitor all aspects of interactions, creating drag on experiments.

Other reasons for being stingy with customer access are even less justified. They may simply be reflexive habits of an organization that has always had a centralized approach and disciplined methodology around new product development. Carie Davis, an innovation specialist formerly at Coca-Cola, told me about the new way of thinking that confronted people when she engaged the innovation coaches at Startup Weekend to run sessions in Atlanta. These intense events push teams to move quickly from hatching ideas to getting market feedback on them by building quick-and-dirty versions, taking them out to real people, and trying to sell them. “That would never happen in everyday life at Coca-Cola because everything has to be controlled,” Davis said. “If you’re putting something in the market, you’ve got to be sure.” One goal of the exercise was to force people to go against their current instincts, and in doing so recognize that those instincts might often be barriers to innovation.[9]

The worst of the “bad” reasons for blocking access to customers is that powerful salespeople own important customer relationships and serve as gatekeepers, deciding which internal initiatives will be put in front of them. They tend to favor already mature offerings for which they can personally make the pitch more knowledgeably. They get compensated more for closing a big-ticket sale versus some exploratory “co-creation” arrangement in which more knowledge than money is being exchanged. And they would always rather go back to the customers they already serve than make the new contacts that an innovative offering might appeal to more.

This lack of motivation for salespeople to put innovations in front of clients is something that has been formally researched. The authors behind a 2010 study called “Antecedents of Salespeople’s Reluctance to Sell Radically New Products” conclude that such products have “several aspects that can decrease salespeople’s interest in them. For instance, familiarizing themselves and their customers with the new product could be unpleasant, undercompensated, and time-consuming for salespeople. Furthermore, establishing relationships with prospective customers may, for example, be incompatible with efforts to deepen relationships with existing customers, or be socially awkward.” And thus, a company’s resolve to get new offerings into market can be undone by the very people it entrusts with making the sales.[10]

The Gate Crashers—Becoming Customer-Led

Like all things about cultivating intrapreneurship, being customer-led is no black-and-white matter. Customers are a precious asset to a company and cannot be subjected to endless queries about ill-formed ideas or recruited into too many pilots with low prospects for success. But in general, the objective has to be to this: take organizations that are too biased against granting access to customers, and create environments that are more biased toward allowing it. Because, ultimately, customer-led innovation takes hold faster, yields more revenue, generates valuable intelligence, and creates a market for new solutions.

We see this transition happening slowly and unevenly in several sectors and industry situations that have a natural advantage or vested interest in making innovation customer-led.

The Usual Suspects

First, data-driven organizations such as Amazon and Intuit are aggressively customer-driven when it comes to innovation. (Amazon's immense data analytics capabilities, for example, allow it to know what customers want next sometimes before they do.) Intuit, as well, makes it easy for intrapreneurs to get past the challenge of customer access. As discussed, they guide intrapreneurs to choose one customer whom they believe would be best served by the solution. If that single customer uses the solution and recommends it to others, then the idea is validated for further exploration and development.

One example of this was a product idea called ShopOwner, launched by an Intuit employee in Bangalore. He observed that rural-area store clerks were losing track of sales by relying on their memory to quote prices and create handwritten sales slips. Most did not have on-site computers or cash registers with integrated accounting features, but nearly all had smartphones. His simple solution: an app that bundled point-of-sale accounting, simple inventory management, and printed receipts. Based on that plan, he and his team not only created a prototype but also tested it—in less than a week. Their first customer? The café located within Intuit's own Bangalore office.

That café owner loved the prototype, and it was deemed good enough to scale up for further testing and discovery. According to Vijay Anand, a senior vice president at Intuit, this "unit of one" approach enables a great many ideas to be tested quickly and on the cheap. Meanwhile, collecting data using existing customers provides Intuit with insights that can be leveraged beyond the first experiment, which keeps collaboration front-of-mind for intrapreneurs.

Professional Services Firms

Given that the nature of their work has them constantly interacting with clients, conferring on how to solve evolving problems, people in professional services have a clear advantage as customer-led intrapreneurs.

Heidi Gardner of Harvard Law School is an expert in management professional service firms such as management consultancies, accounting firms, and law practices. When Gardner and some of her colleagues studied how "new practice creation" happens, they found that one of the essential ingredients was a "defensible turf." Translated, that means a practice innovation needs to be acknowledged by others to be considered legit and deserve its own dedicated team and leadership. Staking out that new turf within the firm, then, depends in part on validation by external sources, such as powerful clients "to legitimize the new activity."[11]

Innovation Labs

In addition to the coaching and startup resources they provide to employees with promising ideas, innovation labs, garages, and other dedicated incubation infrastructures we see springing up in so many large traditional enterprises also create clear pathways and mechanisms for reaching out to customers without getting into trouble.

At Pernod Ricard, for instance, the creation of a separate entity, the Breakthrough Innovation Group, has meant that good ideas can be tested with consumers as a matter of course. Under the guidance of managing director Alain Dufossé, the group focuses on new products and reimagined consumer experiences, all in the name of "building the future of *convivialité*" (or, loosely translated, sharing a spirit of togetherness).

There are plenty of other separate innovation units that companies have created to overcome this barrier to customers. The Boston-based investment giant Fidelity, for example, created its Fidelity Labs to allow for experiments that couldn't otherwise be pursued, given the nature of its work and the highly regulated sector it operates in. Sean Belka, the head of Fidelity Labs, put it to me this way: "Obviously, the business we're in—this is people's life savings or their children's college money. Experimenting in the real world with that in a production environment is not appropriate." But as a design strategist, he is determined to help his colleagues bring a customer lens to their work. "What we did," he explained, "is create Fidelity Labs to create a safe space for experimentation."

As I talked to the Fidelity team behind one recent innovation, FidSafe, I could feel the energy level go up a notch when the topic turned to their customer interactions. FidSafe is a highly secure, cloud-based space that gives anyone, even if they are not a Fidelity customer, a place to organize all the documents, scans, or photos relevant to their finances—from copies of their birth certificate and social security documentation to statements from all the pension funds, 401(k) accounts, and bank accounts they own to photographs of their prized possessions. The team figured out what features and functionality FidSafe needed to offer by, you guessed it, talking to real customers.

Whether in a professional services firm or a distilled beverages producer, the idea here is the same. Intrapreneurial teams need to interact meaningfully with customers, capture what they learn, and translate that into new products and services to complete the circuit. This is far simpler for the types of organizations I just mentioned, as well as for employees in largely customer-facing positions. Typical employees, however, who work deep in the many layers and functions of industrial organizations, need organizational support, including leadership support, to break down the walls that separate them from customers.

DIY Playbook—Let Customers Lead

We've covered a lot of territory in this chapter but the main takeaway is simple: organizations that allow intrapreneurs to take their cues from customers create an instant advantage and avoid many of the barriers that derail internal innovation. These are the plays that I have seen work best in industries and environments across the board:

1. Create Leading-edge Customer Focus
2. Hack Better Access to Customers
3. Turn Customer into Innovation Partners
4. Make Intrapreneurship a Sales Priority

1. Create Leading-Edge Customer Focus

Go lean. The lean startup approach to innovation is worth learning. The whole system is centered on hypothesis-driven experimentation with a focus on regularly speaking to and observing customers as well as taking an analytical approach to the market by acting quickly to build, measure, and learn—fast.

At Deutsche Telekom, a special program for intrapreneurs called UQBATE is based on the lean startup approach; its process is focused on connecting intrapreneurs with customers. Any company with an intrapreneurial support function based on these fundamental lean startup principles needs to create a space in which idea owners have license to and, in fact, *must* involve customers in their iterative development process.

Use design methodology. Like the lean startup approach, design thinking and jugaad innovation are all about seeing things through the eyes of the customer. Intuit was an early convert to design thinking and created a team of "innovation catalysts" to help their intrapreneurs prototype a solution, field an experiment, and interact with customers. That was over a decade ago, and by now the design thinking philosophy has completely taken hold in the organization as a way to keep intrapreneurs connected to customers.

2. Hack Better Access to Customers

Use a "pull" approach. One intrapreneur I know became frustrated spending all his effort trying to persuade colleagues to put a new solution in front of some of the firm's sophisticated clients. Finally he changed tactics and started publishing articles and giving speeches in places where these customers typically encountered new ideas. Sure enough, the clients came to him wanting to know more. When the calls came in from customers, his colleagues were suddenly more willing to arrange meetings. This "pull" approach (rather than "push") enabled him to take control and be more proactive in reaching out to clients.

Piggyback on corporate events. Setting up in public settings to meet customers is a frugal way for intrapreneurs to interact with their target market and access the intelligence they need. For example, when Balanda Atis and her team at L'Oréal were developing foundation for women of color, they needed to be creative to collect the consumer data they needed. Their strategy? Tag along on dozens of regularly scheduled road shows at malls and state fairs. Atis and her team brought their samples and measuring tools and were able to collect skin tone measurements and ask questions directly to the women they wanted to serve. It provided an instant customer connection that was fundamental to their success.

Locate internal customers. If you're working in a consumer goods company with a large enough workforce, you can find real customers among your employees. A senior marketing manager reminded me that it's hard to know "what has legs . . . or what needs to be pivoted or modified" until you've done the experimentation—but even a big company can run only so many tests with customers. "Leveraging employees is a way to do a little early market experimentation without tapping your finite resource pool" of customers.

3. Turn Customers into Innovation Partners

Co-create with customers. The term *co-creation* has been floating around for at least two decades. Coined by C. K. Prahalad and Venkat Ramaswamy, co-creation is "the joint creation of value by the company and the customer; allowing the customer to co-construct the service experience to suit their context."[12] At the global logistics company DHL, a key component of the company's quest for growth is its Customer Innovation Workshops, in which future-thinking DHL team members and important customers "are jointly engaged in developing ideas for new products, services, or processes." One recent high-profile result of this was the Parcelcopter—a realization of the much-anticipated package-delivery drone. In a three-month proof-of-concept project, DHL customers tested the system with some 130 packages delivered to two remote villages in the Bavarian Alps.

Engage each level of customer. Intrapreneurs should consider each successive layer of customer and determine how to include varying perspectives in the design process. We saw how Doug Dietz of GE Healthcare spearheaded the creation of the Adventure Series CT scans after recognizing that while the equipment worked great from the perspective of the manufacturer, it was far less of a success in terms of how young patients reacted to the unfriendly machinery.

Recognize customer accomplishments. Honoring customers that contribute to intrapreneurship deepens the relationship and starts to make a market for new solutions. For instance, the DHL Innovation Center presents an annual award for customers who work with their intrapreneurs. In 2016, the winner of

DHL's Most Innovative Customer Solution award was Daimler/ Smart, which partnered with DHL Parcel to develop a service that "enables Smart car owners to have their parcels delivered to the trunk of their vehicle."[13] The award is the highlight of the company's annual conference that brings together several hundred logistics professionals, including DHL customers, prospective customers, and supply chain partners.

4. Make Intrapreneurship a Sales Priority

Take intrapreneurship to the front line. A main tenet of the Disrupt-It-Yourself ethos is that intrapreneurship should not be isolated to professional innovators, scientists, and product development teams. Salespeople and others at the front line (at call centers, for example) come up with some of the best ideas of all because they have a direct link to the market and know customers' needs and concerns. You can bet they will be more likely to tap into their customer relationship to validate solutions when they feel the passion.

Incentivize sales to partner with intrapreneurs. We can learn from a number of effective efforts by companies (including Colgate and Citigroup) to set targets for their sales organizations to raise the percentage of revenues that should come from new and innovative products. The manufacturing company 3M came up with this metric decades ago, when it specified that 25 percent of revenues must come from products launched in the past three years. In addition to boosting the profile of innovation, this play gives account managers a clear reason to introduce innovation teams to their customers and do more to help the customer-led innovation pan out.

Executive Scorecard

- Are customers hacking their own solutions to problems in your space? How have you responded?
- Is there an established path for intrapreneurs in your organization to connect with customers and include them in the development of new products and services?
- Are marketing and sales employees motivated and incentivized to support intrapreneurship? Are they a part of the intrapreneurship effort?
- Do the rules and systems that govern your enterprise function to connect intrapreneurs with customers or keep them apart?
- Are customers invited into your innovation process?

SIX

Principle 4: Keep It Fluid

I was impressed to hear how one intrapreneur at a major retail chain managed to put together the multitalented team she needed to make her vision a reality. Her passionately held vision was that the company should make space on its website for the kinds of unique and quirky items made only by smaller manufacturers and artists. As she looked across the current merchandise selection, she worried that the sameness that came with big-box buying was boring—and that customers would gravitate to sellers where they could find more distinctive options. But executing the change she had in mind would be a tall order. In its business-as-usual mode, the retailer's vast size, with its network of stores and tightly managed inventory, meant that it dealt only with large-scale, highly vetted suppliers.

Without a background in procurement, she did not have the experience or contacts to source the items she had in mind.

When she eventually got the idea approved by management for exploration, she was given permission to hire the expertise needed from outside. As she tells the story, she was interviewing consultants and was close to putting a veteran Amazon manager under contract. That's when one of the consultants changed her mind. "Honestly, we could do the work for you," a logistics specialist said, "but you have an insanely good sourcing infrastructure setup [at your own company]. Why wouldn't you just exploit that?"

Good question. The answer, unfortunately, was that the organization was rigidly structured into silos and pyramids, and their processes made it nearly impossible to gain access to expertise in other parts of the business. Anyone with a sufficient budget is inclined to take the path of least resistance and hire from the outside. But in this case, the argument for internal talent was so solid, and her vision of the idea so strong, that it merited an attempt.

To her surprise, once she deftly made it past the management layer (which tends to systematically fend off requests for colleagues' time) and connected with the supply chain staff she needed, she found them eager to join her. She learned that some of them already shared her concern: the company was missing out on a vibrant artisanal movement it had the capabilities to tap into. None had acted on the idea because it seemed like such a radical change to instigate from where they sat in the organization.

Now, sensing an opening, her colleagues jumped at the chance to take part in something potentially transformational. Even in the early days of the project, when she could tap only 20 percent of their time, progress was so rapid it surprised even the team itself. It was a win-win: she benefitted from world-class expertise without spending extra money to hire external consultants, and her colleagues were energized and engaged by the creative demands of a project they believed in. It was just one project, but it helped send a message more broadly: the experts the company had throughout its ranks should not be so tightly bound to their routine job descriptions that they couldn't support its innovation goals. The approach to DIY initiatives could and should be much more fluid.

THE SHIFT: KEEP IT FLUID

From	***To***
Complicated organizational structure	Clean line from innovation front lines to C-suite
Hierarchy and silos	Self-organizing project teams
Centralized and insular innovation	Building relationships throughout the organization

In Search of Fluidity

This story points to another big principle of Disrupt-It-Yourself: *keep it fluid*. Intrapreneurs inside DIY organizations need to be able to identify and connect with specialists across the organization with minimal friction. They need to unite with people who have shared interests and relevant skills to form ad hoc project teams. And since this fluid team formation does not happen naturally in most organizations, companies need light structures to enable new levels of information sharing, networking, and mobility across their talent pools.

We've known for decades that to compete in increasingly competitive and dynamic markets, enterprises must become nimbler. Steady, incremental progress along a course set in the past is not an option in markets where more agile competitors constantly innovate and change. It has also become clear that to respond nimbly to emerging opportunities, organizations must be able to pull teams together spontaneously with the right combinations of strengths. "Adhocracy" is the term that Warren Bennis coined years ago for an organization that operates in this mode, in clear contrast to the usual bureaucracy. It's an appealing vision, that individuals with vital and complementary talents could emerge, *Avengers*-style, from the far corners of an enterprise at a moment's notice and hit the ground running as a productive team.

This is not what happens naturally in the traditional organizational structure used to achieve scale in slower, more stable environments. That traditional structure has been a pyramid or at best a matrix, with clear lines of command running through many layers of well-defined jobs, all easily labeled in a classic org chart. Across millennia, that was the only structure that could handle the coordinated information flows required to keep a vast army of people moving toward the same overall objective. Today things are dramatically different. Communications and information technologies make other coordination mechanisms possible, and decades-old bureaucratic models must be updated in order to stay relevant.

Take the "Holacracy" concept that Tony Hsieh, founder of the online shoe retailer Zappos, has advocated.[1] Its philosophy is that two major rationales for the old way of structuring and governing organizations are now irrelevant. First, because communication is cheap and easy, you don't need a top-down control structure to ensure that everyone understands and is working toward the same goal. Second, because things change much faster and less predictably in today's competitive markets, it makes no sense to optimize an organization for unquestioning execution of strategies set by "leaders" long ago and far away. Holacracy wants to achieve control by distributing power, not centralizing it. Hsieh likes to draw a contrast between thriving cities and traditional companies: when a city doubles in size, research shows that its productivity per resident typically rises by 15 percent, but as companies expand, their productivity drifts downward. "So we're trying to figure out how to structure Zappos more like a city," he says, "and less like a bureaucratic corporation." The key to the difference is that cities are self-organizing systems—all the actors within them just do what they individually think is right, without being told what must be done by, say, the mayor. In a company that has adopted Holacracy, employees "act more like entrepreneurs and self-direct their work instead of reporting to a manager who tells them what to do."[2]

In a lot of ways, Holacracy is an outgrowth of an earlier line of thinking that had many management theorists pointing to the "Hollywood model" of serving a demanding market hungry for hit after hit. In any major filmmaking center, people with visions for projects they want to pursue have access to an entire ecosystem of funders, firms, and freelancers, from which they assemble all the capabilities they need and can afford. Consultants to other kinds of businesses have advised their clients to migrate closer to filmmaking's project-centered model. This would mean figuring out how to create that kind of richly capable ecosystem inside a firm, as well as making the boundaries of the firm very porous, so that people running projects could have maximum flexibility to involve the external contributors and partners they needed.

Going back even further to 1990, an executive named Lars Kolind arrived at the Danish company Oticon with a bold new structural idea he called "the spaghetti organization." If you think about the clean boxes and lines on the traditional command-and-control organization chart, and then you think about what happens to those lines in a Holacratic or Hollywood system, you see where he got his metaphor. To the great surprise of the engineers working on Oticon's innovative hearing aids, as well as all its functional groups from finance to sales and from HR to PR, Kolind in one fell swoop did away with everyone's job title and moved them all from their accustomed offices and desks too. Most important, he told them that it was up to them now to decide where their talents could be best applied. No one would be assigned to projects where they would receive top-down mandates from project bosses. Instead, projects would be posted on a central bulletin board, and employees could gravitate to the ones they saw as the best fit for their skills or as an opportunity to develop new skills that would make them more capable. Once they were on a team, they were expected to be as much in charge of it as anyone else. Project "leaders" were only there to provide the necessary coordination and support, not to be the delegators and decision makers telling the rest what to do. The organizing principle was the goal of the project itself, and the whole team equally shared the responsibility of figuring out how to achieve it and fairly distributing the necessary work among themselves.

Ultimately, Oticon's radical experiment gave way to a more conventional restructuring as a matrix organization. Why? Some management hadn't fully committed to the model (the company didn't give up hierarchy altogether—and the perks of what was left of traditional business may have been too good to encourage lasting change), and in the model itself, employees may have been overly focused on only the most high-profile projects or overextending themselves. But, remarkably, "spaghetti" served the company very well for almost a decade. It worked as long as it did, most agree, because the company's sense of purpose, as a hearing-aid producer, was so focused. Everyone in the company had a very clear idea about the customer and the job to be done for that customer, and they shared an excitement about the breakthroughs that could be made with advancing technology, without being territorial about who did what. Innovation was something everyone was on board with and wanted to be part of in the most effective way possible—not in a predefined way.

Should your company try something similarly radical? When Kolind sent his first memo explaining the new approach to his whole workforce, the title on it was "Think the Unthinkable"—and "unthinkable" still describes how this level of organizational disruption would be received by most companies. But short of complete transformation, there are many things managers can do to create more flexibility in how projects are initiated and staffed. The question top management should be asking itself is: If the goal is "keeping it fluid" with respect to how teams form and disband, how do we provide the platforms and communication tools to enable that? How do we encourage it to happen, reward it when it does, and generally change the norms that guide our people's daily behavior?

Companies must shift toward a more fluid model, even if they cannot give up their bureaucratic org charts and processes altogether. But to succeed with more fluidity, they will need new mechanisms for (1) coordinating and aligning the efforts of self-managing teams, (2) for encouraging symbiotic behavior among people who no longer have clear and consistent reporting lines and group identity, (3) for motivating and recognizing great work in the absence of clear paths for promotion, and (4) for identifying those people who should be given more responsibility and bigger roles in ensuring the company's future success.

Create a Team of Teams

General Stanley McChrystal would recognize what Tony Hsieh did at Zappos or Lars Kolind did at Oticon as variations on a "team of teams" approach, his phrase for an entire organization made up of agile, independent teams that nevertheless manage to align and achieve shared goals. This is the model he credits with turning the tide in the US military's fight against al-Qaeda in Iraq after he took control of the Joint Special Operations Command (JSOC) in 2003. McChrystal reconceived JSOC as a team of teams because he wanted the advantages of small groups—such as direct communications, fast decision-making, and agility to respond to evolving conditions—while operating on the scale required to accomplish very big objectives. At UnitedHealth Group, managers throughout the organization read McChrystal's best-selling book on his team of teams approach[3] and translated it to their own vast workforce. Deb Sundal, who drives innovation projects as a senior vice president there (in the Enterprise R&D function's product architecture group) told me she and her colleagues like the model because it starts with an assumption that responsibility for innovation will not be centralized but can "live close to the problems" in highly distributed "communities of innovation" across the enterprise.

That also sounds like a good description of what ING Group did when it flattened the organization chart for its twenty thousand employees over a two-year period and created highly empowered teams it calls "squads." According to the company's chief information officer Peter Jacobs, the transformation was inspired by the realization that even though ING is a financial services company, it is really an information technology company and thus should take its cues from other tech innovators, such as Facebook, Google, Netflix, Spotify, and Uber. "The interesting thing," he told *McKinsey Quarterly*, "is that none of these companies operate in the same industry or share a common purpose. One is a media company, another is search-engine based, and another one is in the transport business. What they all have in common is a particular way of working and a distinctive people culture. In most cases they work in small fluid teams that are united in a common purpose, follow an agile 'manifesto,' interact closely with customers, and are constantly able to reshape what they are working on."[4]

BARRIERS TO KEEPING IT FLUID

- Involves structural change, which challenges hierarchy
- Shifts the decision-making role of managers, HR, legal, and others
- Means teaming must be a core capability
- Requires full senior management and board support

The squads at ING are each led by an owner responsible for a product or service. There are "chapter leaders" who are subject-matter experts and "customer journey experts" who keep their focus on customer relationships. The old walls between marketing specialists, product and commercial specialists, user-experience designers, data analysts, and IT engineers have been torn down. Now all of these sit together in multidisciplinary teams dedicated to solving client needs and aligned by a common vision of what ING's brand should stand for. Bart Schlatmann, former chief operational officer of ING, summed up the transformation in an interview: "We gave up traditional hierarchy, formal meetings, overengineering, detailed planning, and excessive 'input steering' in exchange for empowered teams, informal networks, and 'output steering.'"[5]

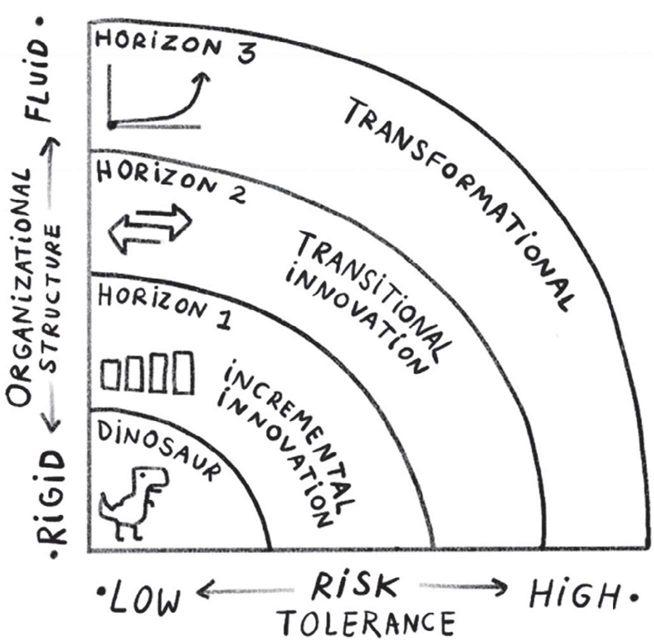
Small work group empowerment has also been a major theme at China's Haier Group under the leadership of Zhang Ruimin. Zhang was convinced that to compete in markets that increasingly reward innovation, his company's organizational structure would have to do more to unlock the potential of its people. He also wanted to do away with the bureaucratic gridlock of the typical huge enterprise. He saw a more powerful model in a system of networked teams. To transform an efficiency-oriented monolith, he decided to radically redesign the structure in which some fifty thousand employees worldwide do their daily work, with an eye to increasing its agility. Smaller units, he decided, could move faster. What was before a classic pyramid was transformed into a distributed network of more than four thousand self-managed, cross-functional units, each including members with skills in research and development, supply chain management, and sales and marketing. Because these units share the same basic structure and processes, they are able to operate in a loosely coupled way.

Haier's small intrapreneurial cells today hold the power to interact directly with customers and to make decisions autonomously based on what they learn. To make this bottom-up, customer-centric organizational structure work, Zhang transformed the idea of a manager from being commander and supervisor to supporter and provider, responsible for connecting self-managing units with the resources they need to serve customer needs as responsively as possible. To him, it does not make sense to give managers greater decision-making power than this because "they are not directly in touch with customers."

Each unit therefore operates as a unique profit center and must hold its own in a larger organization full of other capable and focused teams. But each also has the benefit of being part of a massive multinational corporation, with access to rich resources and high-level air cover. Haier's organizational agility enables it to react swiftly to rapidly changing—or unexpected—customer needs and innovate faster, better, and cheaper than its rivals. For instance, in China, any call placed to its national customer service center is answered within three rings and a technician is dispatched to the customer's house within three hours—even on Sundays. Some years ago, one such call came from a farmer in a remote village in Sichuan province who complained about the constantly clogged drainpipe in his washing machine. The Haier technician who went to investigate found that the farmer was using the machine daily to wash the dirt off his freshly harvested potatoes. The mud was causing the clogging. "Most companies would react by saying, 'This machine is not designed for this purpose,'" noted Philip Carmichael, Haier's president for the Asia-Pacific region, "but Haier's approach was to say, 'This guy [the farmer] probably isn't the only one who's tried to wash potatoes. Is there a way to adapt this product to this requirement? Maybe we can make a machine that actually washes potatoes and clothes.'"[6]

Haier's flexible thinking was spot on: it turns out that many farmers across China needed a better solution for washing their produce. Sensing a market opportunity, Haier's cross-functional teams quickly acted on their intuition by developing a washing machine with larger pipes that could handle the silt. The product was a hit among farmers. But Haier's creative teams didn't stop there. They also invented a washing machine that can peel potatoes and even designed an appliance for herders in Inner Mongolia and the Tibetan Plateau to help churn yak milk into butter. These atypical inventions, built on mental and organizational agility, eventually inspired Haier to introduce in 2009 a washing machine able to wash clothes without detergent. That groundbreaking innovation helped propel Haier to the number-one position in the laundry equipment market not only in China but around the world.

More generally, as an organization capable of adapting fluidly and quickly to unforeseen threats and opportunities, Haier continues to grow. Its networked, team-based structure is well suited to its complex market environment. In Zhang's own favorite phrase, he has succeeded in "making a big company small" and giving a very large business the flexibility of an agile startup.



Keep People Fluid

In chapter 1, I mentioned Marc Nager's description of the ideal intrapreneurial team. The phrase he used has been popular ever since Rei Inamoto, a former chief creative officer at an ad agency, used it at a SXSW conference in 2012. "To run an efficient team, you only need three people: a hipster, a hacker, and a hustler," Inamoto said. "When I look at the better teams I've been a part of, this has absolutely proven to be true." Hipsters, he went on to explain, often come up with the cool new ideas, and throughout projects they keep asserting their sense of what will appeal to leading-edge customers. Hackers are the ones with the technical chops to make quick progress on prototypes and understand what is feasible at scale. Hustlers are the extroverts who can get in front of funders and buyers and make the sale. In the entrepreneurial world, the expectation is not that these three people will find each other and marry for life. Rather, a "3H" team coalesces around an opportunity and then just as easily disbands when that project comes to a close.

Some types of enterprises find it easier to "keep it fluid" in this way because they have the natural advantage of doing work that lends itself to discrete projects rather than constant, steady flows of routine work. Take USAID, for example (more formally, the United States Agency for International Development). This federal agency serves US national security and foreign policy goals by promoting the economic stability and growth required for enduring peace in many parts of the world. With teams spread around the globe, all seeking better approaches to public health, emergency humanitarian assistance, and more, USAID decided in 2014 to create a hub to collect, test, and share innovation. The mission of this hub, called the Global Development

Lab, is to "deliver new innovations, tools, and approaches for accelerating development impact and to transform the way we do development work."

As part of the US federal government, USAID has its share of bureaucracy, but it also knows that fluidity is central to its operations. The people I met at USAID are part of a headquarters group called the Global Development Lab, supporting the efforts of people doing innovative work on projects out in the field. Chief of innovative design Seema Patel doesn't hesitate to reach out and collaborate with pretty much anyone across the enterprise. "It's a fluid organization," she said. "I don't feel like I need anyone's permission to exchange ideas or even plan projects together. That way of working creates a freedom that you don't see within a lot of corporate environments that are structured into management strata."

In companies that encourage greater fluidity, valuable connections can be made in all kinds of ways. Recall Babak Forutanpour's brown-bag lunch groups at Qualcomm. The point was to mix people together who would not ordinarily interact, and to get them bouncing ideas off each other. Over a five-year period, his original group of eight coconspirators grew into an intrapreneurial movement of three thousand employees working on hundreds of inventive ideas and hacker-style solutions on the side. The great thing about these teams is that they were self-organizing and autonomous—no one issued orders—and they all operated in a similar way. With Forutanpour's simple model and a shared excitement for innovation, people were able to create a huge amount of new value for the company. Likewise for Ravi Ramaswamy's innovators in Bangalore: "Today, when I sit back and look," he told me, "I see another fifty or sixty people like me working on what we can do in other markets." As a result, "the number of products that we have in the market has gone up exponentially."

Where fluidity really pays off is in settings where units have enough flexibility to release people from their normal day-to-day duties when an opportunity arises that calls for their talent. At Amazon, for example, the expectation is that employees will be the source of most new business ideas. And thousands of them submit proposals for innovations of all kinds through the "working backwards" process mentioned in chapter 4. In a recent *Forbes* article about the process, Amazon's consumer business chief Jeff Wilke told the story of a young woman whose proposal had just been approved for further development. But before she heard the news, she had moved into a new position in the company. She was taken aback when Wilke not only gave the project the greenlight but asked if she wanted to run the new business.[7] A day later, she accepted. The fact that such an impromptu reassignment was even possible says as much about the boss who had just promoted her as about the woman herself. At Amazon, that kind of fluidity in response to an opportunity is not seen as a nuisance but as central to how the organization works.

Whether it's a team as small as three people or a larger one, it stands to reason that the composition of structures, skills, and personalities that is right for one innovation initiative won't be identical to another. Sorting out just the right teams to go after a range of interesting opportunities will be a continuous and never-ending process. It is also bound to sometimes be downright messy. Yet, for companies that rise to the challenge, the payoff can be immense in terms of ongoing innovation and, yes, creating a Disrupt-It-Yourself organization.

DIY Playbook—Keep It Fluid

Fluidity delivers more control and autonomy to individual intrapreneurs and small groups, and less to the management layers above them. This tricky little paradigm switch packs a positive punch that promises to increase innovation if managed properly. The trouble is that the type of organizational structure that enables fluidity is less rigid than we are accustomed to today. Just as everything digital tears down existing walls, we need to eliminate artificial, outdated boundaries and allow intrapreneurs some latitude to self-direct, self-manage, and self-organize. Here's a look at how to make it work:

1. Create a Team of Teams
2. Make Management Fluid
3. Support Agility Through Structure

1. Create a Team of Teams

Support fluid teams. Organizations must institutionalize how they support teams. Again: support, don't control; eliminate rigid, outdated bureaucracy; give teams resources to achieve their goals; and create a culture that accepts responsibility and expects some measure of failure. Do whatever it takes to empower teams to succeed.

Allow room to self-organize. Intrapreneurial activity thrives in organizations that are not overly rigid about roles or too sectioned into silos to allow some creative self-organization. If you want to see new ideas bubbling up and turning into valuable new offerings and ways of working, you must enable teams to form and disband on their own based on your people's shared passions and varying skills. You must find ways to set hierarchy aside and ensure the free flow of information that allows colleagues to become aware of each other's initiatives. Whether or not you go as far as Tony Hsieh using the model of Holacracy at Zappos, think of what he is trying to achieve with it and how you might move closer to that as well.

Keep fluidity simple. You may have heard of Amazon's "two pizza rule." When Jeff Bezos recognized that teams needed to be less constrained and more efficient, he mandated small, highly autonomous groups—with no more members than could be fed with two pizzas. His simple solution swept away a barrier to fluidity.

Get agile. The agile software development methodology is an obvious place to look to inspire action and identify a path for organizational fluidity. It presents a set of principles under which requirements and solutions evolve through the collaborative effort of self-organizing cross-functional teams. Begin by reading the "Agile Manifesto," published in 2001 by a set of forward-thinking software developers.[8] Cherry-pick the parts of the agile way you can use to evolve your organization. Agile principles are closely linked to the fast and frugal approach of *Jugaad Innovation*, and Eric Reis centered his foundational book, *The Lean Startup*, around it.

2. Make Management Fluid

Rethink the role of managers. Fluidity is made more manageable in organizations with far fewer management layers. Yet the role of managers should morph, not disappear. The job of line managers at ING, for example, is to coach and mentor teams, remain informed, act as advisers, and gain trust and followership—not to focus on adherence to process.

Measure for fluidity. More and more, we celebrate leaders who collaborate, make connections, and empower their teams to set goals and make their own decisions within the context of an overarching strategy or business plan. This in turn requires organizations to rethink the traditional orientation of goal and performance management within the context of teams.

Prepare to get messy. Fluidity drives intrapreneurship but it is seldom neat and clean. Managers need to adapt their structure, empower people to experiment, and learn from what does *not* work in order to leverage everything that does.

3. Support Agility Through Structure

Make tech fluid. Software tools for goal sharing, information sharing, and project sharing are all part of creating fluidity. Consider technologies like Slack, Hive, Pivotal Tracker, and others. Then standardize and implement them as a component of the organization's IT and HR management system. Or don't, if it's simply too hard for your organization to integrate at scale—but make sure it's easy for your intrapreneurs to use these on the side without a lot of red tape.

Get centered. Centralized or separate innovation centers can help design the standard for fluidity as well as help you set up structures to put self-organizing teams in place within an organization.

Executive Scorecard

- Does your organizational structure support intrapreneurship by allowing people to move fluidly across the organization to collaborate for innovation and problem-solving?

- What place do empowered teams play in your organizational culture?
- Do your management and performance measurement systems support fluidity and agility?
- Have you found ways to allow the “messiness” that fosters intrapreneurship and innovation?

SEVEN

Principle 5: Maximize Return on Intelligence

In 2016 and 2017, I worked with Stanley Black & Decker's Global Emerging Markets group to help them explore ways to accelerate their growth in rapidly developing economies such as India, China, and Brazil. It was a major aspiration—so why think small? The plan was to bypass incremental product improvements and leap right into business model innovation as a way to meet the needs of emerging market customers, with a focus on the tradespeople who work as carpenters, plumbers, and electricians. We started with a disciplined ethnographic study of the markets to create a foundation of knowledge. The lessons learned from this "walk in their shoes" research formed the basis of several compelling hypotheses that we eventually formed into eight potentially viable business model opportunities.

The next phase? Fast and frugal experimentation.

We prioritized each of the business models and acted rapidly to experiment with our top picks in the marketplace—without breaking the bank. In India, for instance, our research highlighted a critical need to "meet users where they are," both physically and by targeting their unique needs. The insight culminated in new business model design including mobile services for tool distribution and tool repair. We began the focused experiment with just a couple of vans and a handful of motorcycles serving locations that were popular with local tradespeople.

In order to extract the most knowledge out of these experiments, we tracked thirteen input and outcome metrics over a four-week period, including average repair time, miles driven, total tool repair sales, and van-related direct costs. The result? Copious amounts of data about customers collected at very low cost that were quickly integrated back into a more refined business model design of this new way to reach and serve customers.

Sam Reid, cofounder of Ideas2Impact and one of our partners in the effort, made the point that the initiative was as much about what we could learn for calibrating future ventures as it was about success in any one experiment. "A lot of organizations spend time telling people to celebrate failure, 'fail fast,' 'fail forward,' etc., in the hopes that their teams will overcome a lifetime of seeing failure as bad because their boss, teachers, and others say they should," he said. "This may work for some, but we've found it more useful to just call the outcome of whatever we do 'learning.' When we do well, it's learning. When we don't, it's learning. By focusing everyone on capturing and applying new insights from innovation efforts, we've turned the whole process into more of a continuous journey towards becoming smarter, faster, and better versus a win/lose event."

Reid is right. Each of our experiments and their metrics allowed us to quickly and inexpensively test models that otherwise would have been rolled out in large-scale pilots. Our series of small experiments enabled multiple iterations and adjustments at low to no cost—saving money by allowing insights to arrive earlier, before a massive rollout was required.

The takeaway is that intrapreneurs can deliver value via insight and learning long before they are celebrated as successful innovators. Every idea tested with customers helps fine-tune a solution—or indicate what not to do next time. Every new attempt at change delivers data about how to become better. In addition, looking at learning as a kind of currency creates a corporate culture that is more risk tolerant. And when these insights are shared across the organization (rather than swept under the carpet), others can benefit from this learning—helping build a corporate culture willing to test ideas and take smart risks.

Stanley Black & Decker (SBD) knows a bit about aspiring to create a culture of experimentation. Jaime Ramirez, who is president for global emerging markets at the company, said, "We are committed to being a learning organization, and we don't want to put up barriers to innovation by settling for business-as-usual approaches. This is an ongoing process and we need to remain open minded to fully benefit from it."

The New World ROI—Return on Intelligence

Not every project needs to succeed in traditional ROI (return on investment) terms, but the work should leave everyone smarter for having done it. Sean Belka of Fidelity Labs, for instance, told me this: "Our goal is not to push something through every time.

It is to utilize our methodology to execute on a robust learning agenda—the outcome of which may be to stop and redeploy these resources." Similarly, Cristina Notermann at Target said her favorite intrapreneurial team motto is "Follow the learnings"—and explained that it can lead to several distinct behaviors, only one of which would be to execute the plan.

Another way I've heard this put is: "Risk equals 'unknowns' times investment." What this means is that one way to dial down the risk associated with a new venture is to invest less money in it. And an alternative way is to gain more information and therefore trim the "unknowns" that make success uncertain. Typically, the result of information gathering is some kind of course correction by the team—and the sooner the better. "We don't want to spend too much time chasing down a path" that ultimately won't work, he said. "We want to learn quickly and adjust, so that a bad idea gets canceled or gets pivoted to a better idea."

My term for what they are all orbiting around is "return on *intelligence*"—a reformulation of ROI that puts the short-term emphasis on intellectual rather than financial gains. Of course, intelligence gains ultimately translate into performance gains for an enterprise, and using my kind of ROI leads to more appropriate metrics for new ventures.

This philosophy resonates with entrepreneurs in high-potential startups, whose strategy is to get something simple out fast so they can learn from it and start improving upon it. The big question, as Salim Ismail told me, is: "What's the smallest feature footprint that allows you to get to market and get feedback from users?" He likes to point out that the initial public versions of Twitter, Foursquare, and Facebook were "quite flaky" with their flawed design and questionable user interaction. "But they iterated rapidly with initial customer data and were ultimately successful." Why? Because they learned—and applied those learnings.

It was the same with Reddit, which now ranks as the fourth-most-visited website in the United States, and eighth in the world. Alexis Ohanian, who cofounded the site with Steve Huffman, said that at the outset, they were "just two dudes in a room . . . [who] had no idea what we were doing—no idea at all." But they learned fast, with an attitude of "that's what life is, just figuring stuff out." His advice to other innovators is to accept that "the first version of everything is janky" but "don't let that stop you from putting stuff out in the world."[1]

Intrapreneurial projects pay return on intelligence by leaving the people who come later older and wiser as business builders. One manager working in an incubator unit of a large company told me about the "depository he started—almost an internal Google of ideas." Say an intrapreneur comes up with a great idea about *x*, he explained. "Okay, type in *x*—and out comes fifteen *x*-related ideas that people have worked on in the last two years." The depository will provide immediate access to documents and status information, and also the contact information of the team to connect and determine: "What can I learn from them? What worked and did not work for them?"

Whether a digital repository, a simple app, or even just the company blog, organizations need a mechanism for capturing learnings from experimental forays. The idea is to save other teams from reinventing the wheel or reinvestigating paths that you already know lead down a blind alley. By institutionalizing intelligence, innovators allow future teams to make progress faster, yielding undeniable value. Another name for this is "reinvested learnings."

SHIFT: MAXIMIZE RETURN ON INTELLI-GENCE

From	*To*
Traditional metrics	New KPIs that support intrapreneurship and disruption
Rewarding only results in the current scenario	Rewarding insights for the unknown and the future
Traditional corporate culture	A culture that does not fear disruption
Intrapreneurship as a fun idea	Intrapreneurship as a core competency and disciplined approach

Measure to Leverage Learning

The trick is to capture insight and record learnings before they seep back into the floorboards of the garage, lab, or office park where they were produced. That's where metrics come into play.

Wait, did I hear a collective groan? Mention "performance metrics" and people on all sides of an innovation effort shrink back. Or, on a more positive note, they may tell you about those happy occasions when they escaped measurement.

Bob Schwartz at GE, for example, recalled when the CEO of his division told another colleague: "I can measure sales, and I can measure variable cost productivity, and I can measure manufacturing speed and shipping times—but that stuff that Schwartz and his team does, I can't measure it. I can't figure out how to put a metric around it. All I know is that every time they do it, I sell more stuff."

Selling more stuff is something that organizations can get behind. But metrics? Intrapreneurs worry they will lead to projects being weeded out before they have the chance to grow. This is often why innovation teams demand a degree of separation from the main business. As much as most of us in big business might nod that, yes, new initiatives must be measured differently, we can't help reverting to our accustomed yardsticks—and periodically using them to rap the knuckles of innovators.

Performance metrics—*you can't live with 'em and you can't kill 'em*. Innovators need metrics to keep them on track, and organizations need them to measure progress. And in the case of innovation, they both need them to ensure that intrapreneurial behavior takes hold and spreads out across the enterprise.

BARRIERS TO MAXIMIZING RETURN ON INTELLIGENCE

- Difficult for organizations that don't put a high value on learning
- Requires new metrics, KPIs, and other accountability measures
- Its value is nonfinancial at first
- Organizations with a heavy focus on traditional ROI struggle to make the shift

Making Metrics Manageable

Without transparency around goals and clarity about how a project is progressing, we would never know how to measure success. But where do we begin measuring? Jeff Zias at Intuit believes that the right metrics for innovation need to be examined and debated on at least three levels:

1. The top level of overall innovation performance by the firm;
2. The midlevel of the performance of its innovation

program (that is, whatever formal structure and processes it has put in place, perhaps under the direction of a chief innovation officer); and

3. The initiative level for individual teams to track and report their progress.

That top level is what the company-level innovation rankings produced by *Fortune* and *Forbes* try to gauge with their algorithms based on publicly available data.[2] For Intuit, Zias said, the overall goal is simply stated but hard to measure. "I believe the right innovation metrics have to do with 'Are we actually improving our customers' lives in a way that they most care about over time?' So it's this notion of measuring the actual improvement across *everything* we should be focused on, knowing 'What do the customers find valuable, and are we continuously improving that?'"

A level down from there, if an innovation function has been established—maybe in the form of a lab, hub, garage, or center—top management needs metrics to know how it is doing. At this level, managers puzzle over what to measure. When the newsletter *Innovation Leader* surveyed 198 senior innovation executives in 2014 about what kinds of measures they were using, it discovered quite a mix of "activity" and "impact" metrics.

The five most commonly used metrics were: (1) revenue generated by new products; (2) number of projects in the innovation pipeline; (3) stage-gate-specific metrics—that is, projects moving from one stage to the next; (4) P&L impact or other financial impact; and (5) number of ideas generated.[3] But there are also many more, as I can attest from working with innovation chiefs in multiple settings. Some track the total number of experiments conducted in a year; the number of experiments supported by managers; and the degree to which senior leaders are engaged with experiments and have "skin in the game."

At the program level, Intuit uses a lot of metrics companywide. Within just Zias' own bailiwick of unstructured time, for example, he puts numbers to questions like: "Are people using it? What's the trend? Are people using it over a span of time? Are we getting graduates from unstructured time that are turning into important new offerings? Or are these only supported offerings that move forward?"

Finally, at the level of the individual initiative, metrics must be designed to determine whether it is making appropriate progress, hitting milestone goals, and ultimately delivering the hoped-for value. "Starting from the genesis of an idea," Zias said, a team must have a way of measuring "Is there a customer problem, and what is the problem?"

Zias underscored that Intuit has the advantage of being in the software business; it can track customer behavior to find out if people are getting stuck, if they are looking or not looking to the help pages, if they're finishing, and if they're coming back—as well as if they're getting more in refunds. Each of these becomes a relevant metric.

The Right Metrics for the Job

Deb Sundal leads the part of UnitedHealth Group's innovation system dedicated to supporting intrapreneurs. She told me that performance metrics on her watch have clear functions in three phases: *intake* of new intrapreneurial projects, *design* of those projects, and *realization* of their potential. Figuring out how progress will be measured and reported is one of the most critical tasks of the design phase—yet Sundal finds it is the step that intrapreneurs are most likely to neglect.

The takeaway for Sundal is that part of her team's service to intrapreneurs is to help them think through measurement issues during that crucial design phase—and to consider not only "What should we measure?" but also "Have we communicated with others about what we're measuring? Is there alignment and agreement?" Intrapreneurs are usually eager to move quickly from seeing an opportunity to seizing it, so it is valuable to provide a process for "taking the time to draw alignment across the multiple stakeholders who are either investing, building the teams, or doing the work."

At Tide Spin, VanHimbergen measured success by focusing on the growth of repeat business. "We've been growing week over week. As long as we see growth there, with a lot of early trials coming back and using us again, that's validating our value proposition, which is key to early-stage learning."

If there is one dominant theme cutting across all these examples of how intrapreneurial efforts are assessed, it goes straight back to our theme of learning. Zias, for one, believes strongly in measurement geared toward "evidence of learning." In other words, a team should be able to show that each iteration of its work was smarter than the last, based on feedback received and course corrections in response. At the team level, he wants to see the kind of documentation a scientist conducting an experiment would produce: "Did you have assumptions, and did you lay them out? After you ran experiments, what did you learn?" That record of thinking and discovery becomes great collateral for moving forward, whether the next foray is made by the same team or another one. Zias describes the intelligence gained by well-measured experimentation as "the currency of how our culture works."

At LEGO Group, a company that urgently relies on its ability to produce a constant stream of new products for a very demanding customer, David Gram, the company's former senior innovation director, said a key lesson from his innovation lab was, "Don't aim to get it right the first time, aim to learn." In an extreme form of this, design teams in the company's Future Lab are given just two weeks to test and iterate a pretotype. That's not a typo—it's an even earlier-stage mockup than a prototype, used to focus collaborative efforts. In these early conversations, "the team constantly feels they are learning new stuff." Then, because the biggest commercialization lessons come when they get it out in the real world, LEGO does market validation through small pilot launches. All along, Gram said, the team measures how much insight and learning they have been able to validate through the various steps and sites.[4]

The implication of all this is that companies that believe in the learning benefits of intrapreneurial efforts find ways of measuring those gains.

So what could be next? Could projects that produce more insight and learning be greenlighted more readily for new phases of work? Could the people behind them be rewarded for that success? Return on intelligence is a conceptual term, but some effort to attach rigorous and defensible metrics to it, this form of ROI could be calculated with greater precision—and help drive the change companies want to see throughout their ranks and drive the innovation that must deliver to grow sustainably. Again, this is why it is so important to get metrics right: they are the most potent reinforcing mechanisms in any effort to influence behavior. Today's companies need to reconcile their old habits of measuring performance with their new goals of supporting intrapreneurial risk-taking. They need to measure return on intelligence.

Learning the Agile Way

Innovation teams have added another core idea to go along with lean startup and design thinking. It's the idea of agile development, and it comes with its own set of methods and metrics. As we looked at initially in chapter 7 with agile, fluid teams, following an agile methodology essentially means that after you embark on an extended effort to create something, you should keep rechecking that your original plan still makes sense based on what you are learning along the way. To recall the words of a long-ago general, "No battle plan ever survives first contact with the enemy." The same goes for innovation: as changes unfold in the broader context of a project and feedback is received from various quarters, it makes sense to adjust the plan based on what you've learned.

Perhaps that doesn't sound radically different—it seems like a pragmatic way to proceed. But most big companies create a blueprint and then build based on it, working heads-down for months, even years, to execute the design. That has traditionally seemed like the quickest and most manageable way to proceed. One where we seldom ever stop or look back to learn.

Agile development gives up that perceived efficiency, because it has teams constantly iterating and reprioritizing, taking one step back in order to take two steps forward. But for all its adjustments it ends up being more efficient. It avoids that day when a team finishes its work, looks up, and only then discovers that the world has moved on, or the thing they built doesn't really solve an important customer problem. Agile development produces fewer blunders and more valuable solutions in the end because learning is at the center of its process.

What is often called "the agile movement" started in software and has spread into other areas.[5] Deb Sundal at UnitedHealth Group is one of many intrapreneurial leaders who use the term more broadly. “Businesses tend to like the waterfall approach,” she said, referring to the traditional software engineering approach in which decisions flow in one direction, cascading from high-level specifications to smaller details. But the lesson to be learned from watching technology developers today is that “you cannot advance innovation in a waterfall approach. It has to be agile.”

With the world shifting at every turn to respond to disruption, in software and everywhere else, the agile methodology and its rapid iteration resonate broadly because they achieve a high return on intelligence.

Let a Thousand ~~Failures~~ Learnings Bloom

When managers at UnitedHealth Group went through the exercise of drawing up a mission statement, they specified the enterprise’s beliefs and values in five big areas, along with how they translate to people’s behaviors. Under the heading of innovation, it pledges: “We will be curious and not afraid to fail in honest efforts to focus on practical and purposeful innovation.”

It’s the word *fail* that catches my eye. Seldom is it included in such a prominent display of company aspirations. But more businesses should be following suit, because return on intelligence often equates to return on failure.

As we know, most innovation efforts fail at first. Looking specifically at corporate efforts, 2013 research by Harvard’s Beth Altringer shows that global intrapreneurial projects fail at least 70 percent of the time.[6] Yet failure is much more meaningful than that simple word implies. Bob Schwartz sees plenty of ideas for new products pursued that, while "they don't wind up in the marketplace necessarily," are extremely valuable. "The power of them is that they open a different kind of conversation that didn't exist before." Sometimes they introduce a new concept that is ahead of today's technological capabilities, or they inspire people to push forward into a new domain. For this reason, Ratan Tata, founder of Tata Group, once told *The Economist* that failure is a "gold mine" for a great company.[7] And Honda founder Soichiro Honda declared, "Success is only 1 percent of your work, and the rest—bold overcoming of obstacles. If you are not afraid of obstacles, success will come to you itself."[8]

Indeed, the idea of "embracing failure" has become a mantra in innovation circles. But the point is not really to embrace failure, it's to embrace learning—and to recognize that a huge amount can be learned from failures. A disproved hypothesis is valuable knowledge and produces the next round of effort. So, as Babak Forutanpour puts it, companies should be telling their people: "If you failed trying to build a system with design flaws that should have been obvious, then shame on you. But if you failed at something where something was *learned*, we're actually going to give you a bonus."

There is a reason, of course, that managers would have to be very clear in stating this—and many increasingly are. It goes against eons of experience and expectations. In most people's lives, failures have not been sources of joy; they have been cause for humiliation. This is underlined by a recent survey of corporate employees by Accenture, which found that "although 42 percent consider tolerance of failure from management very important, only one in every eight employees thinks their company is good at that."[9]

In companies that visibly punish failures, you can't blame people for hiding them, even when their hard-won knowledge could help their colleagues. Even if they don't believe they will be penalized for the failure, many don't see the need to communicate what didn't pan out. And if they do understand that value, there isn't often a clear pathway to share what was learned. This isn't a problem limited to business settings; in many realms, when scholars conducting scientific research fail to find what they set out to find, their papers don't get cited or, in many cases, even published. And therefore people keep repeating the effort, going down the same paths that look promising but turn out to be dead ends.

More recently, there has been a trend toward companies visibly doing the opposite of punishing failures: they have started to celebrate them—and better yet, to reframe them as learning. Intuit, for example, coaches teams to see disproven hypotheses as a success and learning event. "The only true failure is failure to learn," says Intuit innovation leader Jeff Zias, "so we began coaching teams to learn fast, to gather disproven or proven hypotheses as learnings, and to consider every form of fast learning a success." Tata Group has an annual competition with a prize for the best failed idea, showing Ratan Tata's belief in failure being valuable—a goldmine for a company. BMW was an early advocate of celebrating failure, having honored its first "flop of the year" decades ago. And maybe the first company to start throwing parties for failed projects was W. L. Gore, maker of GORE-TEX fabric. As strange as these celebrations may sound, they have the powerful effect of signaling that behaviors like problem-finding, problem-solving, self-correction, and smart risk-taking are admirable—and are so needed that they should be held up as models even when they fall short of their goals.

More than that, the competitive nature of a "best failure" award has the benefit of making people think harder about what separates better flops from worse ones. A failed plan deserves to be celebrated, for example, if it accidentally achieves something unexpected (like the well-known accidental discoveries of Post-it Notes and Viagra). And a project deserves to be celebrated if its unhoped-for results wound up steering efforts down a more productive path. But a failure does not deserve to be celebrated if it did not create knowledge that hadn't existed before. And it certainly doesn't deserve to be celebrated if, even after its failure becomes evident, it refuses to die.

On this last point, Google has a special honor it bestows on those who understood when to stop working on something and pulled the plug on it. As Salim Ismail told me about it, he underscored how valuable this is. Typically, a lot of good money is thrown after bad on souring initiatives just because people don't want their names associated with terminated or "failed" projects. In classic Silicon Valley style, Alphabet X (the research and development lab formerly know as Google X) has a high-ranking manager with the job title of "Captain of Moonshots" whose job it is to develop big-thinking projects. His name is Astro Teller, and the "moonshots" he's seeking are radically new answers to real-life problems. Other companies might benefit from how Teller thinks about incentives for innovation. He advocates granting ownership stakes, or "upside" in other forms, to the leaders of projects with bigger risk/reward profiles. But he also believes in giving people more reason to say when something isn't working. In some cases, this means actual bonuses to teams who have admitted, "We spent the last year on this, but we're done. We're dead. All the data says no." At one postmortem party, he physically put a project in its "grave" and summed up the lessons learned from it in an epitaph.[10] According to Ismail, "When people heard about that, it gave them more confidence that they could pursue long-shot opportunities, and their failure, if that's how things turned out, would not be punished."

It will be interesting in the years to come to observe whether these failure awards continue to proliferate, and whether the companies celebrating them see growing numbers of project teams self-nominating themselves for the distinction. Wayne Morris at SAP told me that the Silicon Valley mantra of "Fail early, fail often" is often repeated around him, but he said, "Personally, I don't like the way it's phrased." He prefers to talk in terms of discovering what won't work. Dr. Vishal Sikka, formerly of SAP, seems to agree. In an interview with the *Financial Times* about how SAP celebrates failure, he explained, "At the end of every cycle, we do an 'I wish/I like' session. 'I like' is the things that went right; and 'I wish' are the things we wish we'd done differently." This, he believes, is the way to achieve "continuous, rapid innovation, learning from failures, with the failure of a project not being equated with the failure of a person."[11] This is similar to what we do with our clients. For example, after we've run an experiment, we capture each stakeholder's "what we liked" and "what we would do differently." Along with various metrics, capturing and synthesizing this kind of feedback helps define a clear path to move forward—or not to move forward at all.

Zias at Intuit is another manager who likes twisting things around to be about "the speed of learning." If an intrapreneur says to him, "We were so stupid—the thing we did completely failed," he quickly turns the conversation around and says, "I think what you've done is just quickly disproven your hypothesis—which is awesome."

That type of encouragement keeps people innovating. The more they innovate, the more they learn—and that learning guides the success of future moonshots. This virtuous circle only works when we connect the loop between intrapreneurship and learning. But how?

DIY Playbook—Maximize Return on Intelligence

Intrapreneurs rely on constant learning in an open, agile environment where the culture can balance structure with autonomy and metrics with flexibility as part of these DIY principles:

1. When in Doubt, Test It Out
2. Make Learning a Priority
3. Measure Return on Intelligence
4. Make Failure Feasible

1. When in Doubt, Test It Out

Experiment to learn quickly and efficiently. We've seen numerous strategies for fast and frugal idea testing—starting with asset-based thinking, trial and error, small bets, and more. Reddit cofounders Alexis Ohanian and Steve Huffman were "just two dudes in a room" with no idea what we were doing—but they learned fast through iteration. Starting with no-frills, frugal bets helps you learn and pivot faster using fewer resources. This approach takes the sting away from failure and allows you to build on success.

Pretotype and prototype. LEGO's "pretotype" and other ways to build simple proofs of concept enable fast and frugal testing with props that people can pick up and pass around.

Let go of assumptions. The DIY ethos requires a clean slate policy, including bypassing confirmation bias (looking for evidence to support your existing assumption) in order to remain open to new insight. It's important, as well, to avoid premature debate, waiting until you have facts and data from field tests before using teams to pull ideas apart.

2. Make Learning a Priority

Create a learning competency. Learning yields growth and innovation, vastly advances our strategic understanding of business, and helps us avoid repeating mistakes and doubling back down dead ends. As mentioned earlier, Stanley Black & Decker's business model experiments in fast-paced emerging markets allowed them to test ideas that otherwise would have been rolled out in large-scale pilots. The repeatable process enabled multiple iterations and adjustments at low to no cost—saving money and drawing insights early, before a massive rollout was required. In essence, they built a learning competency through active practice and by adding inquiry into their everyday work.

Learn from stakeholders. The initial public versions of Twitter and Foursquare were flawed, but they used customer data to improve and become successful. Learning occurs faster when we put ourselves in the path of other people. Traditionally, this meant a one-way exchange of information from teachers, experts, or anyone with formal authority. Intrapreneurs understand that learning emerges through interactions with *any* stakeholder group, although the most valuable source of business insight is often customers. (Intrapreneurs are frequently in front-line or external-facing positions.) Learning occurs, as well, by participating in diverse teams, by connecting with industry colleagues, and by seeking out specialized expertise within your own organization.

Don't get overly attached to ideas. Intrapreneurs let go of assumptions and overturn ideas they may have considered to be fact in the past. I tell would-be innovators: be ready to let the data disprove your theories. This mind-set leaves them open to disruptive thinking and gets them accustomed to finding new ways to validate hunches.

Create a culture that values learning. Intuit, Google, and GE Healthcare are established innovators because they make inquiry and innovation high priorities from the top down and bottom up. As we see in these organizations, leaders need to reward ingenuity and build it into the central mission of the enterprise. In addition, because the effort is all about advancement, organizations need to take risks to make leaps in learning.

Remove structural obstacles by creating a clear approach for innovation. Give intrapreneurs the time and space they need to proceed. According to Larry Keeley, that means "enough time to produce an actual concept—which can be an intensive freed-up period of about three to four weeks—plus a center of excellence to fully support and assist their effort."

3. Measure Return on Intelligence

Connect learning to results. Use appropriate metrics to manage goals and show success in generating learning. This approach to learning creates a discipline around intrapreneurship, thereby legitimizing it and opening up a path for internal innovation.

Create flexible metrics. Simply put, metrics are powerful drivers of innovation. Measures and key performance metrics (KPIs) may need to be newly created expressly to support return on intelligence. One senior manager proposes "setting up metrics that foster innovative behavior, champion openness to new ideas, and challeng[e] the status quo." Other elements, such as small wins, early-stage testing, customer validation, upvotes from colleagues, and even simply posing ideas that test the status quo can all be measured as part of a new set of metrics to help intrapreneurs gain momentum.

Scale insight. One positive by-product of measurement is the data it generates. At Tide Spin, David VanHimbergen measured the growth of repeat business to find signs of success. Sharing data widely helps scale insights, institutionalize learning, and generate a record of intrapreneurial projects and the output they have produced.

4. Make Failure Feasible

Empower people to pull the plug. Individual intrapreneurs should make the call about when to pivot or end a pilot. (Clear metrics for return on intelligence remove guesswork from the equation.) This level of trust minimizes stigma from failure, preserves passion, and encourages intrapreneurs to use what they learn to discover a more feasible solution.

Reward failure. Alphabet's Astro Teller said: "People will do profoundly amazing things if you set the social norms correctly. It's those social norms and actually reinforcing them . . . That's what unlocks innovation."[12] Making failure a social norm creates a culture that encourages experiments as opposed to penalizing and personalizing failure. Even more, finding ways to reward failure increases learning dramatically. That is why Intuit, Google, BMW, and W. L. Gore commemorate their "best" failures with awards that celebrate risk-taking and encourage problem-solving.

Reframe failure as learning. Failure carries too much baggage for some organizations. In these cases, rather than trying to overcome a deeply embedded aversion to failure, it's best to simply reframe failure as learning. As Blood Orange collaborator Sam Reid told us, "We've found it more useful to just call the outcome of whatever we do 'learning.' When we do well, it's learning. When we don't, it's learning. By focusing everyone on capturing and applying new insights from innovation efforts, we've turned the whole process into more of a continuous journey towards becoming smarter, faster, and better versus a win/lose event."

Turn failure into value. Babak Forutanpour says that companies should want you to fail, as long as you fail at something where a lesson was learned. Expressly separating and elevating "valuable" flops from useless ones helps organizations recognize when failed attempts generate learning, create knowledge, and send innovators down a new and potentially profitable path.

Scale learning from failure. Use after-action review to analyze failure and make adjustments based on what you've learned. Target, for one, "follows the learnings" by using them to do things differently. Some organizations tell stories of major failure to make them memorable and to help create a narrative with lessons the rest of the organization can learn; others use innovation management software to track how and when insights are shared, as well as how many views these insights elicit.

Executive Scorecard:

- How do you encourage learning across the organization?
- Are learning, insight, and experimentation expressly infused within your culture?
- Is experimentation a clear and express part of your innovation strategy?

- Do you have metrics that measure and manage learning and sharing intelligence?
- Is failure a part of the accepted social norms of the enterprise?
- How do you reward the "best" failures or learnings and scale these insights?