

# INNOVATION CAPITAL

HOW TO COMPETE  
**AND WIN**  
LIKE THE WORLD'S MOST  
INNOVATIVE LEADERS

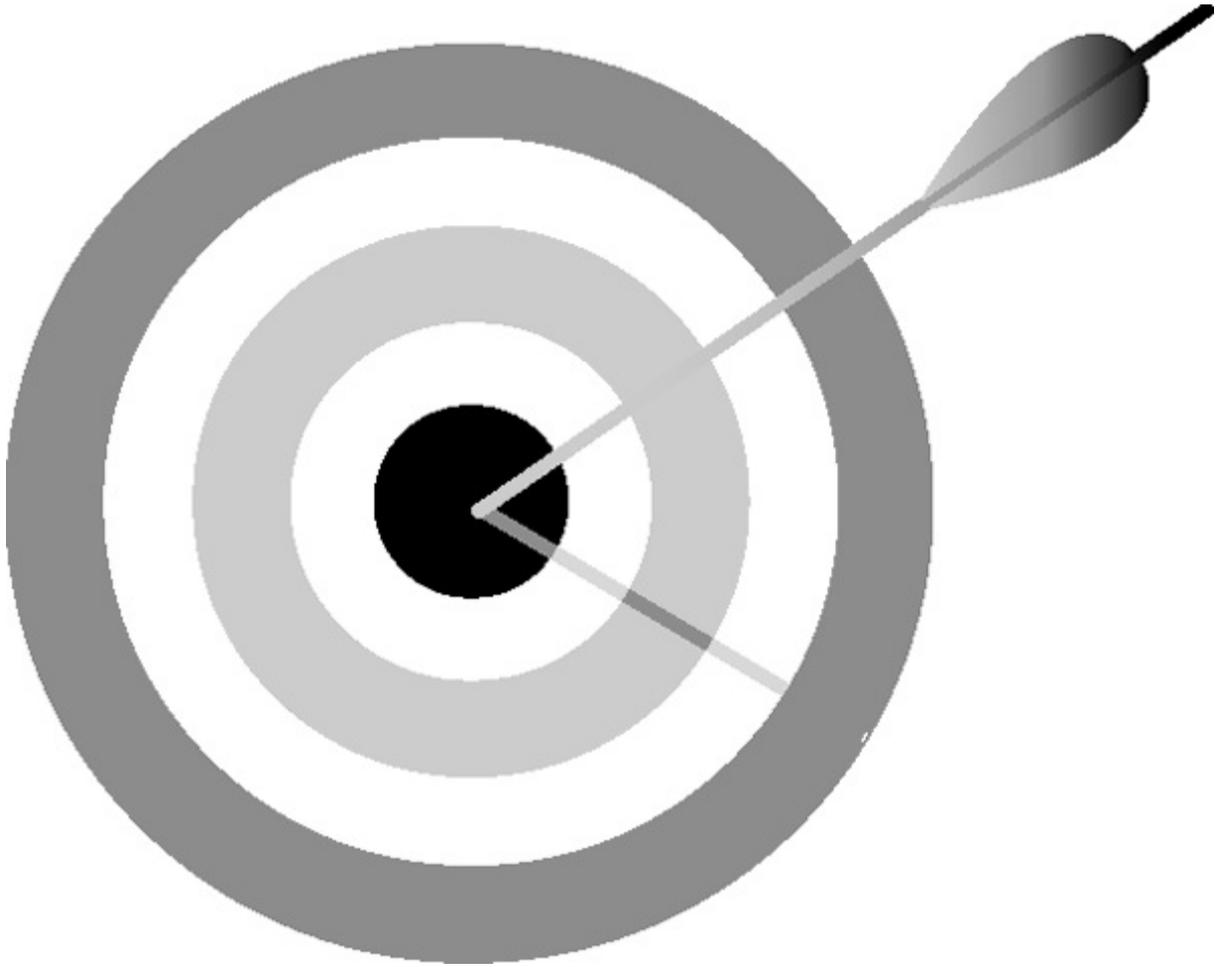


JEFF DYER  
NATHAN FURR  
CURTIS LEFRANDT

*From the bestselling authors of* **THE INNOVATOR'S DNA** *and* **THE INNOVATOR'S METHOD**

HARVARD BUSINESS REVIEW PRESS

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JEFF DYER

*To Ronalee, whose continuous love and support always sustains me.*

NATHAN FURR

*To Susannah Adore, Jordan Elisabeth, George van Waters, Josephine Apollo, and Beatrix Cosi—may they be earnest in everything they do.*

CURTIS LEFRANDT

*To my incredible family, Misty, Lia, Mika, Zeke, and Zoe—I owe you the world for joining me on this crazy adventure.*

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# **INNOVATION CAPITAL**

# Innovation Capital

## The Capacity to Win Resources to Innovate

This book is about a critical but underappreciated ingredient for successful innovation: how innovators win support to turn their ideas into reality. Although this ability may sound simple, for the innovators we studied, it was a subtle, multifaceted art at the very heart of their success.

The book is about innovation, but it's not about getting new ideas. Despite the importance of good ideas, innovators need something more than just a good idea to succeed. Nor is the book about innovation processes, such as customer engagement, design thinking, and lean startup. Despite the potential of these processes to ensure customer value, innovators still need resources to succeed. Nor do we explain how to create an innovation culture in this book. Even if leaders know how to create such a culture but lack the support to turn their innovation into reality, they will fail.

In saying this, we are in no way downplaying the importance of creativity, understanding customer jobs to be done, prototyping using minimum viable products, or organizational culture. These concepts are vital to success. But they have been covered in other books on innovation, including our own books, *The Innovator's DNA* (which teaches you how to get creative ideas) and *The Innovator's Method* (which teaches you how to test and validate

those ideas with customers).

But no other books have discussed this secret ingredient that separates non-innovators (with good ideas) from successful innovators (who win the support needed to turn their ideas into reality). This book is written to open the black box of that secret ingredient and answer the question, *How can you win the support needed from bosses, colleagues, partners, and investors to bring your idea to life?*

All aspiring innovators, whether they are working alone or in an organization, must overcome the *innovator's paradox* if they want to succeed. What is the innovator's paradox? Quite simply, the more novel, radical, or risky your idea, the greater the challenge you will face acquiring the resources you need to turn your idea into reality. Although we all say we want more-radical ideas because they are likely to have a greater impact, when it comes to getting the means to pursue radical ideas, the greater the risk and uncertainty, the more skittish potential supporters (investors, bosses, partners, etc.) become. Before jumping in, most supporters want the idea to be proven or at least want the uncertainty reduced in some meaningful way.

But how can you prove that an idea can work if you lack the resources to start developing it? You need resources to make innovative concepts succeed. Even the leanest of the lean startups need some resources to test out their ideas. Most truly big ideas need a lot more.

Your capacity to overcome the innovator's paradox—to secure the necessary means to turn novel and risky ideas into reality—is key to innovation leadership. We've all seen leaders who excel at winning backing for their ideas. But this ability isn't simply due to charisma, luck, or some other undefinable quality. Their capacity to inspire advocates and benefactors is a science and an

art that generates something they have that others do not: *innovation capital*.

## **Innovation Capital: The Ability to Win Resources for Your Ideas**

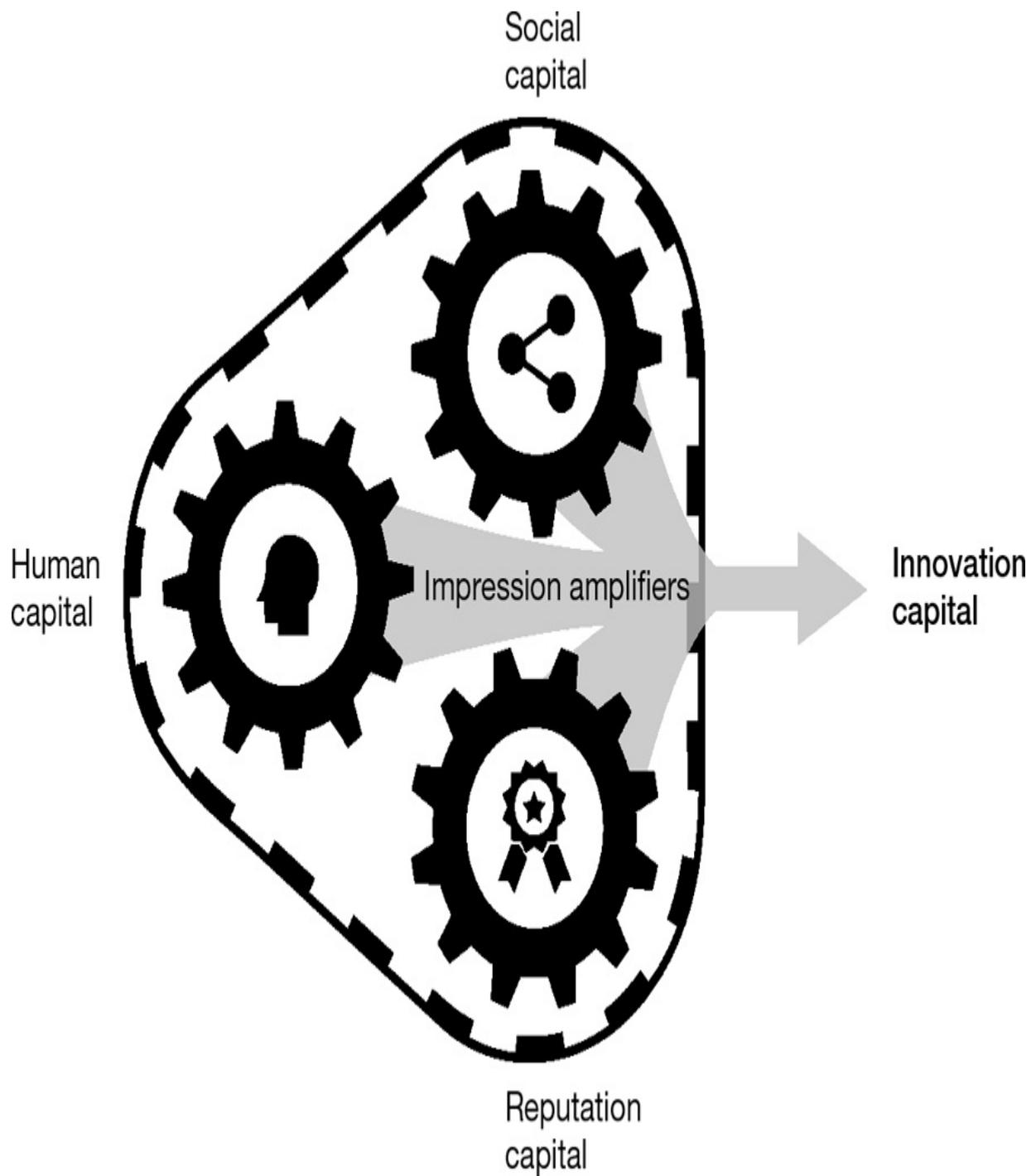
Over the last several years, we have had the chance to learn from dozens of Fortune 500 executives, dozens of innovation teams and startups, and exclusive interviews with some of the world's most innovative leaders, including Jeff Bezos (Amazon), Elon Musk (Tesla, SpaceX), Marc Benioff (Salesforce), Shantanu Narayen (Adobe), Indra Nooyi (PepsiCo), Mark Parker (Nike), and Jeff Weiner (LinkedIn), and many others. We discovered that the ability to win support for ideas is about much more than simply pitching effectively. It is an entire set of skills tied to leadership, influence, social capital, and relationship management. In short, innovative leaders build a body of skills that generate innovation capital: the ability to compete for—and win—the resources needed for innovation to flourish.

Innovation capital isn't tangible, like money or equipment. It is an intangible force, like political capital, that helps you assemble the means to implement your ideas. It comes from who you are (innovation-specific human capital), who you know (innovation-specific social capital), and what you are known for (innovation-specific reputation capital). It gets multiplied by what we call impression amplifiers—actions that get attention and credibility for you and your ideas (see [figure 1-1](#)).

### **FIGURE 1-1**

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**Where innovation capital comes from**



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## The Components of Innovation Capital

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**HUMAN CAPITAL:** forward-thinking, creative problem solving, and persuasion abilities

**SOCIAL CAPITAL:** social connections with those who have valuable resources

**REPUTATION CAPITAL:** a track record and reputation for innovation

**IMPRESSION AMPLIFIERS:** actions that generate attention and credibility for you and your ideas

**INNOVATION CAPITAL:** the capacity to win the resources needed for innovation to flourish

Innovation capital lies at the heart of your ability to convince resource holders to support your ideas. You have to earn and develop innovation capital by practicing specific behaviors and leveraging the right activities at the right time. People aren't born with innovation capital; they must build it. And it's far more critical to innovation than most of us realize (see the sidebar "Who This Book Is For").

The importance of innovation capital first dawned on us when we were interviewing one of the world's most innovative leaders, Marc Benioff, chairman and co-CEO of Salesforce. When discussing his own success as an effective leader of innovation, Benioff emphasized that his ability to champion innovations at Salesforce has increased over time—because he has developed his innovation capital:

My ability to generate innovations for Salesforce has basically built up over time. Over twenty years, I've built up what we might call *innovation capital* that I can spend to try new things—to change the organization, change the products, change what needs to be changed. Whoever comes in and is the next CEO is not going to have as much innovation capital. They're going to have to accrue that on their own . . . They're going to have to earn it by being an innovative leader. That's the only way you can get innovation capital.

Benioff understands that as he has improved his innovation leadership skills (who he is), widened and deepened his social connections both inside and outside Salesforce (who he knows), and advanced his reputation as an innovative leader (what he is known for), he has increased his innovation capital. This type of capital has increased his capacity to influence others to support

and join his innovation initiatives.

## Who This Book Is For

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In our research, consulting, and teaching, many people involved with innovation have repeatedly told us how discouraged they are when their new idea never sees the light of day. Many corporate innovation teams, startup entrepreneurs, and other innovation leaders simply feel unable to win the capital, talent, technical support, or other necessary resources to move forward. We have written this book for people like them and for anyone else who wants to become a more effective leader of innovation, no matter the person's position or project. We wrote this book both for aspiring corporate leaders who need support from bosses and peers across the enterprise for their ideas and for entrepreneurs who need to find investors and collaborators.

In this book, we draw on our research with both managers and entrepreneurs. Because we are writing to these two camps, we include examples of individuals inside organizations as well as entrepreneurs. While the context is somewhat different, the strategies are very similar, and there are critical lessons to be borrowed from each group. Moreover, although we studied the leaders with the greatest innovation capital—people like Bezos or Musk—and we weave in lessons from one-on-one interviews with these legends, most of us are not going to be the next Bezos. So instead we interpret what is relevant from their actions to more typical innovators, and we weave in examples of how more-representative leaders and entrepreneurs have used these same lessons to build innovation capital.

Because our ultimate goal in writing this book is to help you learn how to become an effective leader of innovation—to successfully secure the resources you need to nurture your ideas and launch new initiatives—we have included practical advice, tools, and tips in every chapter. To support and augment these tips, we have developed a free set of digital tools designed to help you develop your innovation capital. You can find these resources at [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital).

We wish you the very best of luck as you embark on your innovation journey, and we look forward to hearing about your adventures!

Innovation capital explains why Elon Musk was able to raise over \$1 billion to enter one of the most historically unattractive (unprofitable) industries in the world (automobiles). It explains

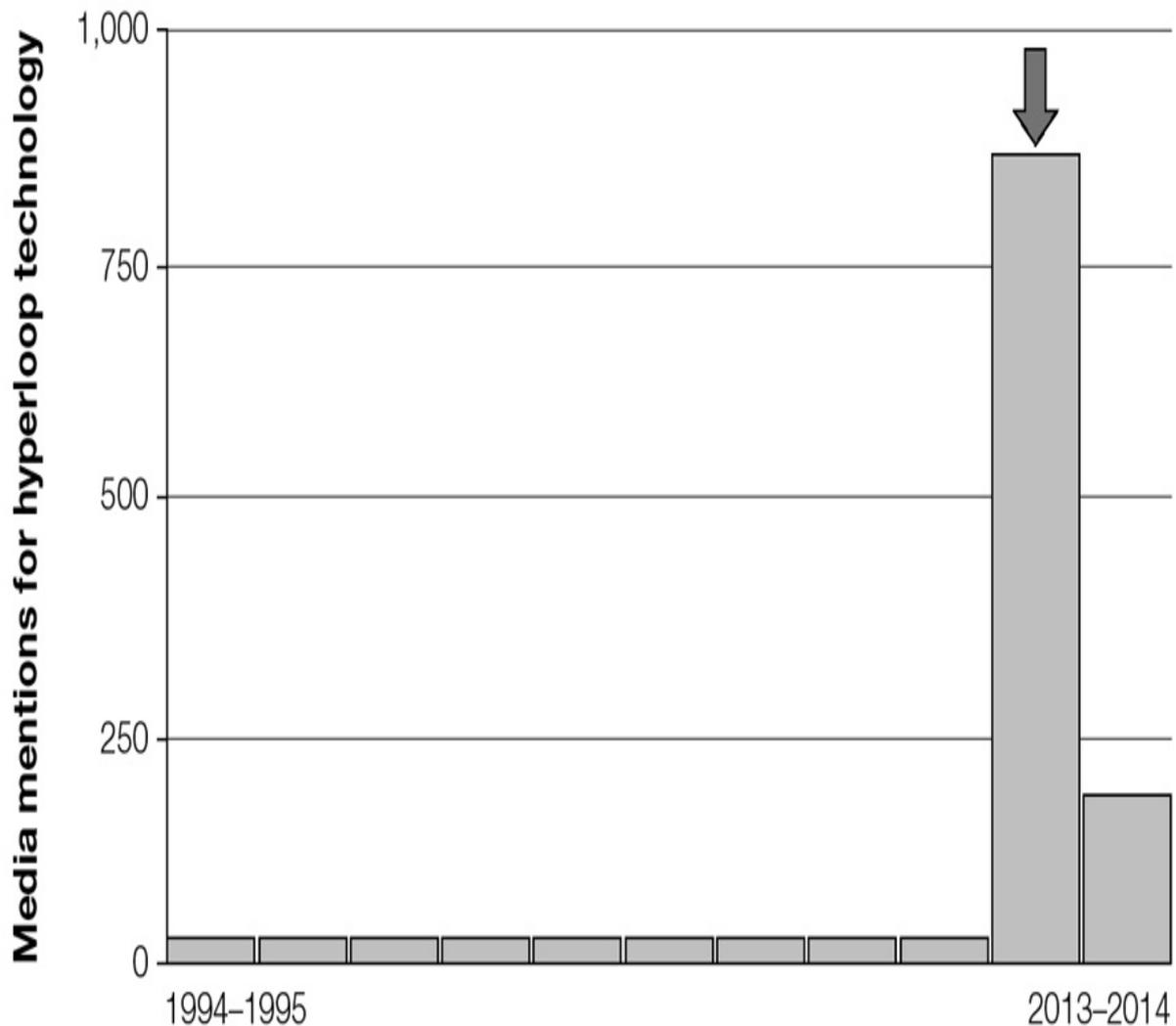
why he can simply mention *hyperloop*, an idea that has been around since the early 1900s, and interest in the idea suddenly explodes as financial backers step in to fund a company and ultimately to seed a new transportation industry (figure 1–2). Innovation capital also explains why talented people rush to work at the companies Musk has founded and why SpaceX president Gwynne Shotwell has said, “We rarely lose a candidate.” And finally, Musk’s innovation capital explains why twenty-two million people follow his every tweet. With this level of innovation capital, he can assemble the resources necessary to convert novel ideas into transformative realities.

**FIGURE 1–2**

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**Hyperloop awareness: the Musk innovation capital effect**

*Elon Musk first mentioned his idea of hyperloop technology in July 2012 (see arrow). Hyperloop technology has been hypothesized, in various forms, since the nineteenth century.*



**Distribution of hyperloop media mentions over time**

*Note: Media mentions are from Factiva database of most popular business sources, 1994–2014.*

## **The Power of Innovation Capital**

Before we introduce our insights about how to build innovation capital, let's consider the dangers of overlooking the importance of innovation capital. These dangers are best illustrated by the battle between two great inventors: Thomas Edison and Nikola

Tesla.

Both Edison and Tesla were considered great inventors. Edison was known more as a practical inventor who produced inventions largely through trial and error. Lacking sophisticated training in mathematics or engineering, Edison instead applied a famous work ethic to produce new ideas through brute trial and error, arguing that invention (or, to use his word, genius) is “one percent inspiration and ninety-nine percent perspiration.” He is credited with inventing the phonograph, the motion picture camera, the alkaline battery, and, most importantly, the electric light bulb and the accompanying distribution system for electric power.

By contrast, Tesla grew up in Europe and showed early signs of genius. His ability to perform integral calculus in his head led his tutors to think he was cheating. He attended Joanneum Polytechnic in Graz, Austria, one of the world’s best technical institutions. After his studies, Tesla briefly worked with Edison early in his career. Although he admired Edison’s work ethic, Tesla had an opinion about Edison’s approach: “His method was inefficient in the extreme . . . I was almost sorry to witness his doings, knowing that just a little theory and calculation would have saved him ninety percent of the labor. But he had a veritable contempt for book learning and mathematical knowledge, trusting himself entirely to his inventor’s instinct and practical American sense.”<sup>1</sup>

Tesla’s genius and education led him to develop the foundations for electric induction motors, wireless telegraphy, radios, neon lamps, and remote control. In fact, his inventions in three-phase electric power and alternating current eventually enabled the global distribution of electricity as we know it.

However, although Tesla’s ideas arguably were more brilliant,

he was unable to commercialize his ideas. He died virtually penniless in a hotel room in New York.<sup>2</sup> In stark contrast, Edison died wealthy in his New Jersey mansion having won the Congressional Medal of Honor and having his birthday, February 11, designated as National Inventor's Day. If Tesla's ideas ultimately had more impact, then why was Edison so much more successful?

One part of the answer is certainly the lessons taught by earlier studies of innovation. For example, Edison learned early in life that inventions are only valuable if someone is willing to pay for them. At the age of twenty, he invented a device that counted the votes in the US House of Representatives in only a minute or two—saving both time and money. But no one would buy it. It turns out that legislators didn't want the voting to be made quicker and more efficient, as the process in place allowed for filibustering and politicking. His first invention taught him an important lesson. "Anything that won't sell, I don't want to invent," he said. "Its sale is proof of utility, and utility is success."<sup>3</sup>

But another underappreciated factor contributing to differences in Edison's and Tesla's success was Edison's ability to win backers, collaborators, and attention for his ideas—his ability to build and leverage innovation capital to turn his ideas into reality. For example, Edison worked purposefully to fashion an image of himself as a hardworking, hands-on inventor (in addition to his constant reference to hard work, he even once reportedly smeared soot on his hands and face before an interview to bolster that reputation).<sup>4</sup> He also worked hard to build his social capital with other talented inventors, but also with wealthy families and financiers like J. P. Morgan, the Vanderbilts, and the Rockefellers. As a result, Edison attracted talented associates like Swiss-born machinist John Kruesi and an

English master mechanic, Charles Batchelor. Then when Edison developed a commercially viable light bulb, he was able to convince Morgan to advance him \$30,000 for the Edison Electric Light Company. When the company began installing electricity in homes, Morgan's home in New York was one of the first to get electricity. The electrification of the financier's home generated further attention for Edison's invention.

But his connections with people and actions to get attention for his ideas weren't accidents; they were practiced habits that the inventor repeated over and over. For example, the morning that his lab developed a working phonograph, Edison took it to New York to the office of the editor of the *Scientific American*. "I said I had something to show him," Edison said. "He asked what it was. I told him I had a machine that would record and reproduce the human voice. I set up the machine and recited 'Mary had a little lamb.' Then I reproduced it so that it could be heard all over the room. They kept me at it until the crowd got so great Mr. Beach [the editor] was afraid the floor would collapse."<sup>5</sup> This demonstration led *Scientific American* staff to take up the cause of his invention, writing about it in newspapers worldwide throughout the next week. He also promoted the phonograph—and all his other inventions—by creating a list of "applications" (what we would call *use cases* today) for it. Phonograph "applications" included reproducing music, making phonographic books, recording teaching lectures, and taking dictation.

By contrast, although Tesla was a brilliant inventor who developed technologies that have shaped our modern world, he lacked Edison's skills at building and employing innovation capital. For example, after he developed his ideas for an induction motor that ran on alternating current (AC), Tesla tried

unsuccessfully for several years to raise funds to commercialize it. He spoke of his frustration: “The utter failure of my attempts to raise capital for development was a major disappointment.”<sup>6</sup> During this period, Tesla developed patents for other useful inventions, such as arc lights and dynamos. But he struggled to find the means to commercialize these ideas until B. A. Vail and Robert Lane approached him with the proposal of forming an arc light company. When Tesla agreed, Vail secured a contract for lighting the streets of his hometown, Rahway, New Jersey. The company installed moonlight white arc lamps around the city, and when the electrification of Rahway was completed, *Electrical Review* featured it on the front page of its August 1886 issue. Tesla was optimistic. He believed that once the lighting of Rahway was complete, his company could get on with the serious business of producing AC induction motors and huge electrical grids. But Vail and Lane had other plans. They maneuvered to dismiss Tesla from the company. And because Tesla lacked the innovation capital to fight them or to restart on his own, he found himself ousted. “It was the hardest blow I ever received,” Tesla said. “I was forced out of the company, losing not only all my interest but my reputation as engineer and inventor.”<sup>7</sup>

But Tesla didn’t give up. He persisted with his AC induction motor technology and eventually published a groundbreaking paper—“A New System of Alternate Current Motors and Transformers.” This work helped him win the financial backing to start the Tesla Electric Light Company—with an eye toward commercializing his AC induction motor technology. But despite Tesla’s inventive ideas, the company was unable to assemble the resources needed to commercialize the technology.

Tesla was a visionary and was even described by Edison as someone whose “ideas are magnificent.”<sup>8</sup> But he was simply

unable to attract the right talent and financial resources to successfully commercialize his ideas. Some have suggested that his personality traits were a contributing factor. He was reclusive and kept rigid habits (he worked each day from 9 a.m. to 6 p.m., ate dinner at the same restaurant each night, and had to be served by the same waiter). Tesla's partners eventually sold Tesla Electric Light Company's patents to George Westinghouse, CEO of the Westinghouse Electric Company. The involvement of Westinghouse is one of the only reasons we know of Tesla today. According to one Tesla biography, "Tesla was a visionary. But without the backing of the great entrepreneur and gifted engineer George Westinghouse, Tesla's revolutionary inventions would probably have come to nothing."<sup>9</sup>

Ultimately, Edison's commercial victories over Tesla were due not to the superior quality of Edison's ideas but to differences in the men's innovation capital. Although Tesla deserved better, his lack of innovation capital hindered his efforts to attract the talent and backing to commercialize his ideas. As a result, he died poor and faded from history until recently, when his invention, the AC motor, and his name became the heart of Tesla Motors.

## **Building Innovation Capital: Lessons from Innovative Leaders**

Creativity is not enough. The Tesla versus Edison comparison illustrates the difference between a great inventor and a great innovative leader. Apple cofounders Steve "Woz" Wozniak and Steve Jobs offer another illustration. Wozniak was a great inventor (and even built solid innovation capital), but Jobs had the ability to lead innovation in a way that Wozniak could not. Edison and Jobs had a broader skill set than did Tesla and

Wozniak, and these skills allowed them to recruit talent, secure financial resources, develop desirable products, and gain attention for themselves and their projects.

Over the last two decades, our research on innovation and our work with hundreds of individual innovators has unpacked many of the better-known lessons about creativity, ideation, and innovation processes. But when we peeled apart stories like Edison versus Tesla, and Jobs versus Wozniak, we repeatedly saw something else that had been missing: innovation capital. To better understand innovation capital, we conducted in-depth research and interviews with the world's most innovative leaders and those who work with them. We ranked these leaders for *Forbes* using proxies of their innovation capital (see the appendix for our ranking methodology).<sup>10</sup> We then studied and conducted exclusive interviews with many of the top twenty-five leaders (table 1-1): CEOs Bezos, Musk, Benioff, Nooyi (PepsiCo), Parker (Nike), Weiner (LinkedIn), Narayen (Adobe), Satya Nadella (Microsoft), Scott Cook and Brad Smith (Intuit), Len Schleifer and George Yancopoulos (Regeneron), Arne Sorenson (Marriott International), and Scott Stephenson (Verisk Analytics).

In addition to these innovation outliers, we interviewed other successful leaders—other large-company CEOs and startup entrepreneurs—who, from a wide variety of industries, had achieved some success in building innovation capital for themselves and their organizations. We assembled historical case studies like the Edison-Tesla example above. And we interviewed dozens of up-and-comers—individuals who aren't yet in senior or visible positions but who are building their innovation capital in a variety of companies and industries. The up-and-comers include startup entrepreneurs, corporate entrepreneurs, mid-level managers, and even recent college or MBA graduates looking for

their first job. In other words, we studied ordinary folks like you and us—people starting to build their innovation capital and learning how to be successful leaders.

**TABLE 1-1**

---

**Top twenty-five most innovative leaders worldwide,  
2018**

Leader and rank	Company	VALUE CREATION		INNOVATION
		Three-year market value creation (in \$ billions)	Three-year stock market gains (%)	Company innovation premium (%)
1. Jeff Bezos	Amazon, Inc.	\$450	366%	71.5%
2. Elon Musk	Tesla Motors, Inc.	48	819	75.3
3. Mark Zuckerberg	Facebook, Inc.	376	563	61.8
4. Timothy Cook	Apple, Inc.	369	123	11.6
5. Satya Nadella	Microsoft Corp.	278	84	31.6
6. Marc Benioff	Salesforce, Inc.	50	143	80.7
7. Shantanu Narayen	Adobe Systems, Inc.	68	365	64.4
8. Reed Hastings	Netflix, Inc.	78	1,351	72.2
9. Jeff Weiner	LinkedIn Corp.	16	96	60.0
10. Larry Page and Sergey Brin	Alphabet, Inc.	491	197	33.9
11. Arne Sorenson	Marriott International, Inc.	38	264	53.7
12. Robert Iger	Disney (Walt) Co.	74	116	26.2
13. James Whitehurst	Red Hat, Inc.	11	127	56.1
14. Jeffrey Leiden	Vertex Pharmaceuticals, Inc.	29	258	58.2
15. Jean-Jacques Bienaime	BioMarin Pharmaceutical, Inc.	9	81	63.6
16. Mark Parker	Nike, Inc.	45	142	34.6
17. Stephen Easterbrook	McDonald's Corp.	29	46	25.8
18. Michael Mahoney	Boston Scientific Corp.	26	333	41.7
19. Scott Cook and Brad Smith	Intuit, Inc.	23	165	45.6
20. Indra Nooyi	PepsiCo, Inc.	65	75	38.5
21. Len Schleifer and George Yancopoulos	Regeneron Pharmaceuticals	23	120	39.5
22. Scott Stephenson	Verisk Analytics, Inc.	5	46	50.6
23. Jeffery Yabuki	Fiserv, Inc.	17	232	37.0
24. Steven Collis	AmerisourceBergen Corp.	10	113	47.4
25. Muhtar Kent	The Coca-Cola Company	33	27	42.8

*Note:* For a detailed description of our methodology, see Jeff Dyer, Nathan Furr, and Mike Hendron, “How We Rank the Most Innovative Leaders,” *Forbes*, September 4, 2018, <https://www.forbes.com/sites/nathanfurrjeffdye/2018/09/04/how-we-rank-the-worlds-most-innovative-leaders/#49de93aa1139>.

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We combine the insights from this research—the innovation outliers, the successful leaders, the historical case studies, and the up-and-comers—spreading examples of each throughout the book, to help you understand how to build your innovation capital, no matter your position or project. These insights are critical for leaders or managers in business, entrepreneurs and change agents, artists and designers, scientists and inventors, or anyone else who has an idea and needs to win support to make it real.

## **The Components of Innovation Capital**

So what convinces people to support an idea, whether the support be their time (e.g., joining your project), money, endorsement, or any other backing to help you and your idea? As we described, our research suggests that people and organizations will be influenced primarily by three interrelated innovation-specific factors:

- Human capital: who you are as a leader of innovation
- Social capital: who you know with expertise and resources
- Reputation capital: what you’ve done to warrant a reputation for innovation

The effect of these three types of capital can be multiplied by *impression amplifiers* that help you gain attention and credibility for your ideas.

How exactly are potential supporters influenced by these factors? In academia, we use what we call a *simultaneous equation model* to describe how these factors work together.<sup>11</sup> Sponsors are simultaneously weighing all these factors together:

whether you have the innovation skills as a leader to pull this off (who you are as a leader of innovation), whether you are well connected with others who will need to support your project (who you know with resources or expertise), and whether you have a track record and reputation for innovation success (what you are known for). Potential sponsors may weigh each of these factors somewhat differently, but they consider all these parts of your innovation capital to decide whether to support you and your ideas.

These combined parts work together like gears in an engine (which is why we have depicted [figure 1-1](#) as a set of gears). As you get each gear moving, it can have a flywheel effect. The *flywheel effect*, first coined by management expert Jim Collins, refers to the process of getting a huge flywheel (say, a massive 5,000-pound metal disk) into motion. Initially, attempts to move the flywheel produce almost no movement—it is almost impossible to imagine the flywheel at speed. Then, slowly, the wheel gathers speed, and suddenly the momentum of the flywheel kicks in your favor. You push no harder than during the first rotation, but the flywheel goes faster and faster. Each turn builds on the work done earlier, compounding your investment of effort. Eventually, the huge, heavy disk flies forward, with almost unstoppable momentum. The innovation-capital engine—with its three gears and the lubricant of impression amplifiers—can propel a person’s innovation capital in a similar way.

This analogy is relevant because building your innovation capital starts with small steps that can eventually have big outcomes. Innovation capital outliers—leaders like Bezos and Musk, who are numbers one and two in our ranking—didn’t start out being that different from the rest of us. They accumulated their innovation capital through small steps and then got

momentum from the flywheel cycle. Today they have more good ideas to champion because more people bring good ideas to them; they develop more social connections because of their reputation—people want to know them. And because they have access to a greater number of good ideas and more social connections, they can build their reputation for innovation by launching more innovations. These components are interrelated in a positive way—more of one component leads to more of another (academics call this relationship *mutual causality*, but you might just think of these components as positively reinforcing each other).<sup>12</sup> Resource holders simultaneously consider all three components when deciding to give someone their time or resources for an innovation project. So let's examine how you can get your innovation capital flywheel started. We'll begin with a brief description of the three components and the impression amplifiers.

## Human Capital: Who You Are as a Leader of Innovation

Not surprisingly your knowledge and skills—your human capital—will play a critical role in building innovation capital. Although who you are has many dimensions, three abilities play a greater role in building innovation capital: forward thinking, creative problem solving, and persuasion. (Creativity obviously plays a role in innovation capital, but we focus on the role of creative problem solving because creativity has the greatest impact on an individual's innovation capital when applied to problem solving rather than random idea generation.) For example, the first skill that helps you build innovation-specific human capital is what we call forward thinking—or the ability to engage in mental time

travel to envision future opportunities before others do. It partly explains why Satya Nadella (number five on our innovative leaders list), a graduate from a mid-tier computer science school, rose from one of tens of thousands of entry-level engineers to become CEO of Microsoft. Nadella attributes his rise in part to his forward thinking. When he joined Microsoft, he believed that the company's future would be in the cloud and artificial intelligence rather than in the cash cow businesses of the day, such as Microsoft Windows or Microsoft Office. So initially he worked as a Windows NT (server operating system) evangelist, led Bing (Microsoft's search engine) and eventually joined the server and tools business (forerunner of the cloud) and developed expertise in areas that he believed would be critical to Microsoft's future success. This forward-focused approach required betting on, and building expertise with, the cloud technologies that would shape the future *before* it arrived.

But it isn't just recognized leaders like Nadella who engage in forward thinking to build their innovation capital. Mary Lombardo, an executive at United Technologies Corporation (UTC) used forward thinking to help both herself and her company build innovation capital and prepare for the future. She realized that UTC's industry would undergo major changes in the 2020s and that, to prosper, the company needed to better understand both the market (demand) and the technological uncertainties facing the company. So she proposed that the company create "scout" positions to provide insights into the market and technological uncertainties facing the company. Company leaders were persuaded by her arguments, and scout positions were created to provide information to help the leadership team better understand how markets and technologies were changing. Lombardo was recognized for her forward

thinking and rewarded with greater responsibility within UTC's innovation function—including having the scouts report to her. Lombardo told us, “I've had people on my team tell me, ‘You're thinking about things it takes people two years to catch up to.’”

In addition to mental time travel, the leaders we studied built their innovation capital through creative problem solving (including so-called first-principles problem solving) to pursue those opportunities and by cultivating their ability to persuade others to join them on the journey. We will return to these skills and how you can develop them in chapter 2.

## Social Capital: Who You Know with Expertise and Resources

It may come as little surprise that your social connections—your social capital—can help build your innovation capital. But what may surprise you is that your strong social ties matter less than your ability to facilitate connections and relationships with weak social ties. We will introduce a social concept called the *Dunbar number* in chapter 3 and explain the limits of your strong social connections. Successful leaders of innovation excel at networking through weak social ties to get the resources they need. We also examine which characteristics, or categories, of people are most valuable to have in your network. The world's most innovative leaders focus largely on networking with five types of people: (1) innovators and entrepreneurs, (2) organization leaders, (3) financial benefactors, (4) influencers, and (5) customers. Individuals from these five categories bring very different, but valuable, resources to innovation projects.

As an example of how to bring resources to a project through social connections, consider how Gavin Christensen, a young

venture capitalist with aspirations to run his own venture fund, built his innovation-specific social capital. Christensen was fortunate to secure an associate position at a venture-capital fund. But he was a long way from running his own fund. He knew that his connections would be important in his becoming a partner or starting his own fund. So with the buy-in of the partners of the firm, he led the creation of an award program within the local venture fund ecosystem. The awards would recognize the top innovators and entrepreneurs and, in an award ceremony, would bring them together to build community. Inside the firm, this program was seen as extra work that was helpful, but not strategic or high visibility to promotion inside the firm. However, the award program was well received and supported within the ecosystem. Fundamentally, people enjoy recognition, particularly the recognition of their peers. Recipients prized this validation because it included an element of peer evaluation and approval. But more importantly, it created a way for Christensen to build relationships with all the top investors and innovators in the region.

When he later went to launch an innovative seed fund, these relationships proved crucial in securing the capital he needed to launch the new fund. As Christensen recalls, “Getting started as an investor is hard. Being the first institutional seed investor in the Rocky Mountain region during the Great Recession added extra degrees of difficulty. How do you get smart people to trust you with millions of dollars of their money to invest when you are in your early thirties? You give them something first. Fundamentally, venture capital is an intangible good. Because I knew all the innovative people in the area and many had a positive relationship with me, it really helped to get the ball rolling, and the recognition program was part of that.”

We examine in more depth how to access and build relationships with individuals across these categories in chapter 3.

## Reputation Capital: What You've Done to Warrant a Reputation for Innovation

Your reputation for innovation—built from your visible track record for innovation—also makes up an important part of your innovation capital. Although at first it may seem a bit of a chicken-and-egg problem (how do you develop a reputation as a successful innovator without the resources to develop this reputation?), there are several pathways to building a reputation for innovation.

First, the most valuable thing you can do is to be a founder—but that doesn't mean you need to be an entrepreneur. Innovators find a way to have an impact, whether that means starting a company or simply launching an initiative. For example, Indra Nooyi, chairman and former CEO at PepsiCo and number twenty on our list, traces some of her innovation capital back to her efforts to identify the key global megatrends affecting PepsiCo's business. She founded a MegaTrends group to identify the trends and propose moves the company needed to make to navigate them successfully. Similarly, Kate O'Keeffe, an executive at Cisco, attributes much of her reputation for innovation to her founding of Cisco Hyper-Innovation Living Labs (CHILL)—a process for innovating with suppliers, customers, and partners. CHILL was cool enough that it was even written about in *Harvard Business Review*—and naturally this attention bolstered O'Keeffe's reputation as an innovator. It doesn't matter whether you are the founder of a new process to recruit and hire the best people, a

new way to reach potential customers, or a new process to reduce defects and improve quality. But be a founder.

You can also build a reputation for innovation by taking on challenging, and visible, assignments or by associating with prestigious individuals or entities in a way that allows you to “borrow” from their reputation. Alternatively, you can build a reputation for innovation by demonstrating strategic judgment or a track record of making the hard calls about where to allocate resources for future growth. A final way to build your brand as an innovator is to exhibit scrappiness, or a dogged spirit that enables you to get a lot done with few resources. Over time, your reputation for scrappiness can build your track record as an innovator. We examine in more detail how to build your reputation for innovation in [chapter 4](#).

## **Gaining Attention and Credibility through Impression Amplifiers**

Even if you currently don't have much innovation capital, there are still things you can do to win buy-in for your innovative idea or project. Our study of innovative leaders revealed that they are masters of persuasion, and they consciously use seven specific techniques to manage the impressions of others. We call these techniques impression amplifiers. We define impression amplifiers as observable actions you can take to get attention and support for your ideas. More specifically, they can be used to sell your idea by making it understandable and appealing or to demonstrate that others believe in and support your idea. Research in esoteric-sounding areas like symbolic management and impression management show that impression amplifiers work as powerful forms of persuasion. Perhaps most importantly,

they are techniques that anyone can use starting today.

For example, Marc Andreessen and Jim Clark were cofounders of Netscape (the web browser), a company that had a huge initial public offering (IPO) of \$2.9 billion in 1995. Before they were eventually beat by Microsoft's strategy of bundling Internet Explorer with Windows, Netscape was the technology company star of its time. Although Clark was the legendary founder behind Silicon Graphics and the brainchild of Netscape, today Andreessen has far greater innovation capital and is much better known. Why? Impression amplifiers. Although both men had strong human capital, the Netscape team worked strategically to leverage impression amplifiers to present Andreessen as the kid prodigy behind Netscape. For months the PR team worked to promote Andreessen, and their coup de grâce came when they landed a cover photo on *Time* magazine, portraying Andreessen, barefoot and sitting on a throne, and labeled "the barefoot genius." The team's tactics worked brilliantly, winning attention and credibility for both Andreessen and Netscape. Andreessen's story illustrates but one of seven impression amplifiers that innovators use to win support for their ideas. We'll expand on these amplifiers in chapters 5 and 6.

Although Andreessen's story may make these techniques seem out of reach (most of us won't be profiled in *Time* magazine), they are actually much more within reach than you realize. For example, Brad Jones, when he was an executive at ANZ Bank in Australia, used broadcasting and committing (another amplifier) to win support for a controversial mobile money platform business, Wing Money, just before the financial crisis of 2008. To win attention and support for his internal venture, Jones reached out through his social network to the head of corporate social responsibility, told her about Wing Money, which serves the

under banked in Cambodia, and convinced her to write about the project in the annual report. This brought valuable attention and legitimacy to the venture. He also applied for, and received, a grant from the government of Australia, which created an irreversible company commitment to the project. Later, when the financial crisis set in and all projects were being cut, Jones' efforts saved Wing Money, a business that has gone on to be very successful today.

Although there are many tactics that can be used to persuade someone to support a course of action, most fall within seven impression amplifier categories: broadcasting, signaling, storytelling, materializing, committing, comparing, and creating scarcity (FOMO). Each impression amplifier works because it is governed by a fundamental psychological principle that influences human behavior and gives the tactics their power. Impression amplifiers are examined in detail in [chapters 5](#) and [6](#).

## **Igniting the Virtuous Cycle of Innovation Leadership**

Our examination of the world's most innovative leaders revealed an interesting leadership pattern that is used by many leaders with innovation capital. We call it the virtuous cycle of innovation leadership. The cycle begins by identifying a lofty vision that attracts others to the project. The vision should create an exciting or inspiring emotional connection. The lofty vision attracts better talent, which produces better products and customer experiences, which attract a larger customer base, which builds a stronger brand, which in turn attracts the best talent. And so on. The cycle repeats.

Musk (number two on our list) has initiated this virtuous cycle

at Tesla, starting with a lofty mission to “create sustainable transportation” and to “reduce carbon emissions” (but also building cars that are beautiful and *fast*). He has started a virtuous cycle at SpaceX with his ambitious concept of traveling to Mars to build a colony that could one day potentially save the human race. And he has created a lofty vision on a smaller scale with products like the Tesla Powerwall, the battery pack that Musk says may “change the fundamental energy structure of the world.”

But it’s not just famous leaders like Musk who set a virtuous cycle in motion. Sterling Anderson, former head of Tesla Autopilot, is doing the same thing at Aurora Innovation, a startup focused on providing a full-stack autopilot solution for major automakers like Volkswagen and Hyundai. Anderson left Tesla to cofound Aurora with Chris Urmson, former head of autonomous driving at Google. Together they have painted a vision of being the “Intel inside” company for autonomous driving. They are targeting the passenger economy, estimated to be worth \$800 billion by 2035 and \$7 trillion by 2050, according to a 2017 study by UK data research firm Strategy Analytics. Using a lofty vision and their own innovation capital, Anderson and Urmson are attracting top engineers (according to a *Fortune* article).<sup>13</sup> They are hoping to ignite the same cycle that has worked for Musk and many others. We examine innovation leadership and the virtuous cycle of innovation leadership in [chapter 7](#).

## **Innovation Capital Matters for Companies, Too**

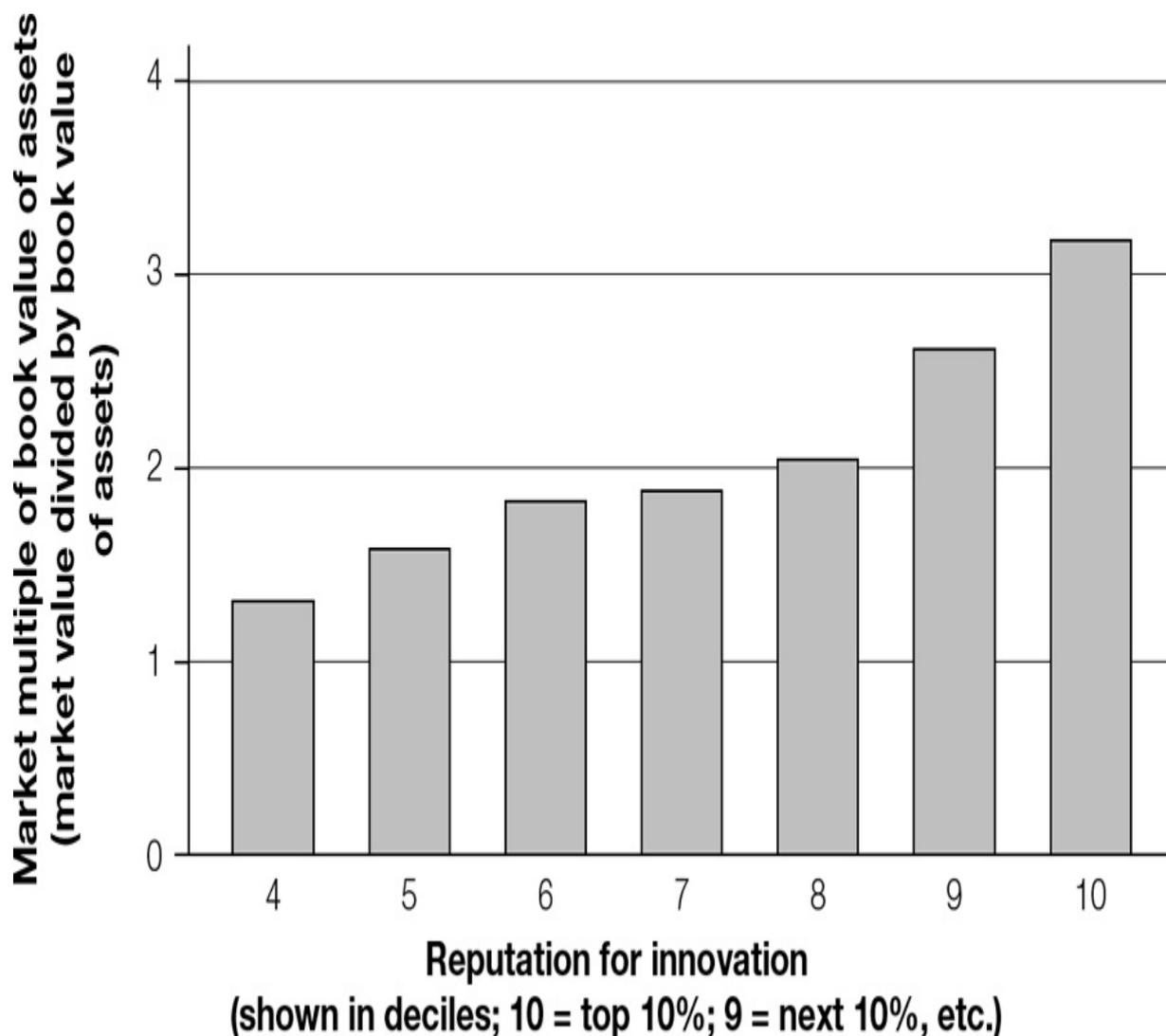
Our research also reveals that innovation capital matters for companies much more than most leaders realize. Stakeholders give companies that build a reputation for innovation more resources and leeway to grow by doing new things. For example,

Amazon has a reputation for innovation whereas Walmart has a reputation for efficiency (as measured by the number of media articles in major business news sources that describe the companies as innovative or efficient). We studied the S&P 500 firms to determine which firms had a reputation for innovation—and whether that reputation influenced the firm’s market value. Specifically, we looked at a company’s market value multiple. (Calculate market value multiple by dividing the company’s market value by the book value of a company’s assets; the greater the multiple, the more investors see value being created beyond the book value of the company’s assets.) We found that a company’s reputation for innovation matters—in a big way. Companies with a strong reputation for innovation (in the top 10 percent) achieved market value multiples that were almost three times higher than firms at or below the fiftieth percentile (figure 1–3).

**FIGURE 1–3**

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**Market value multiple associated with a reputation for innovation**



Source: Compustat financial data and Factiva news articles.

Note:  $N = 1,930$ ; 361 S&P 500 firms from 2000 to 2014; excludes firms in regulated industries as well as firms with zero (null) values for reputation for innovation.

“Reputation for innovation” is measured as business media articles describing the company as innovative.

In the case of Amazon versus Walmart, Amazon’s market multiple was over 5 times the book value of its assets, whereas Walmart’s was only 1.5 times the book value of its assets. Not surprisingly, Amazon’s media reputation for innovation was ten times greater than Walmart’s between 2013 and 2018. Amazon’s reputation for innovation has allowed the company to continue to obtain support from investors and stakeholders while launching dozens of new products and services, often outside its retail business, even as it delivered low or negative profits. In contrast, Walmart has been punished by investors for pursuing innovation

over efficiency. Indeed, when Walmart announced in 2015 that it would cut profits to reinvest in store improvements and innovation, the stock price collapsed nearly 30 percent while the CEO was speaking.

The takeaway is that a reputation for innovation—at the individual or organizational level—helps you obtain resources and gives you the freedom to experiment and try new things. It has a real impact on a company’s market value.<sup>14</sup>

Our research sheds light on how well-known companies like Amazon and Tesla—and even lesser-known companies like the ING Group and Monster Beverage—have built innovation capital. Our research also reveals how companies that historically had low innovation capital, like Walmart, can build their innovation capital. We describe how companies build innovation capital in [chapter 8](#).

## **Building Your Innovation Capital**

Our goal with this book is to help you build your innovation capital. We describe the techniques we have learned from both the world’s great innovators and everyday innovators. To help you evaluate the strength of your innovation-specific human capital, social capital, and reputation capital, we also provide assessments for you to complete at the end of [chapters 2](#) through [4](#). We have structured the book to help you answer questions you may have about how to build and use your own innovation capital, and we offer advice and tips on how to take it to the next level. For example, the book will help you answer the following questions:

- What skills are most likely to convince others that I have what it takes to successfully lead an innovation project? ([chapter 2](#))
- What problem-solving process should I use to increase the probability of

developing a breakthrough (disruptive) solution? ([chapter 2](#))

- How do I create a so-called reality distortion field to persuade others to join or support my innovation projects? ([chapter 2](#))
- How do I network effectively to get resources from the right people for my ideas or projects? Who are the right people to target? ([chapter 3](#))
- How do I get noticed at my organization and build a personal innovation brand? ([chapter 4](#))
- How do I convince my boss, my colleague, an angel investor, or a venture capitalist that my idea has merit? ([chapters 5 and 6](#))
- What does it mean to provide visionary leadership? How do I do that? ([chapter 7](#))
- How can my organization build a reputation for innovation to attract customers, employees, investors, and other key stakeholders? ([chapter 8](#))
- How can I get support from key stakeholders to pursue innovation initiatives in an organization that lacks innovation capital and then build the organization's reputation for innovation? ([chapter 8](#))

As you build your innovation capital, you will become more valuable to your company. As more people in your company develop their innovation capital, your company's reputation for innovation—your company's innovation capital—will also rise. Our research shows that the most valuable reputation that any individual or organization can have is that of innovator.<sup>15</sup> A reputation for innovation carries more prestige, more status, more value than does any other label. You may not be persuaded yet, but perhaps the most important next step in your career is to build your innovation capital. Our research suggests that for most business professionals, this step is critical in becoming an effective leader. Indeed, in today's world, successful leadership is all about being a successful leader of innovation. So read on. Our book will teach you how to build and use your innovation capital so that you can be a rising leadership star.

## Who You Are

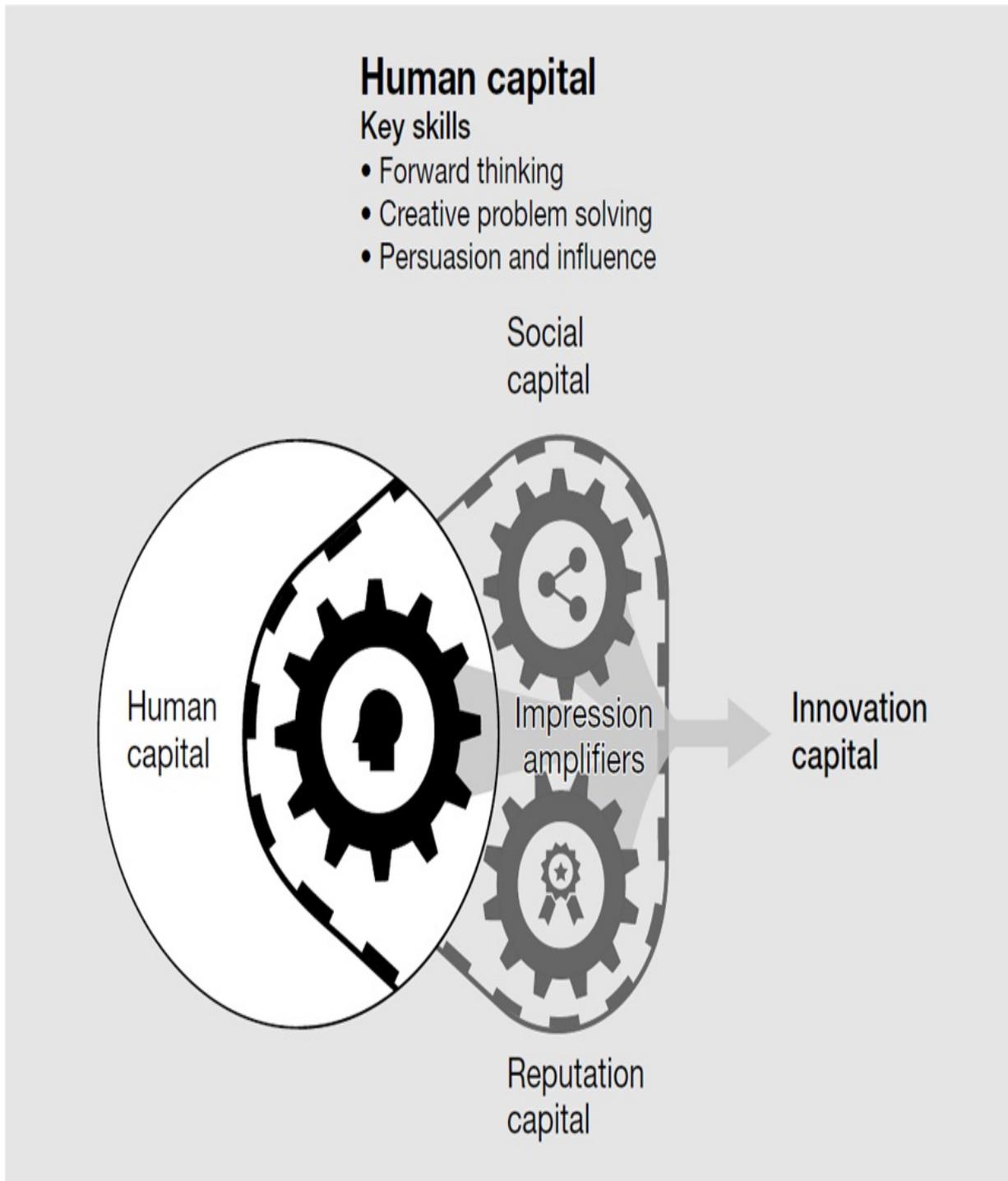
(and What You Can Do to Improve)

Not surprisingly, innovation capital begins with your innovation skills, or your innovation-specific *human capital*. Surprisingly, the skills that go into building innovation capital are more specific and actionable than you might imagine. It isn't nearly enough to just be creative or think big if you want to be a leader of innovation.

In our research on the world's most innovative leaders, we asked them what personal skills have been most important both to their success as innovative leaders and to their ability to win support for their ideas. We also talked to people who worked with these leaders and asked what skills they thought were most important to their leaders' success. We wanted to know why others wanted to join the innovative leaders' teams and why people were willing to give these teams money and other resources for their ventures.

The respondents mentioned a few skills over and over. Before we discuss these skills, we should acknowledge that natural abilities and intelligence (e.g., general intelligence [IQ] or emotional quotient [EQ]) or personality traits (e.g., openness to new experience, extroversion) provide the building blocks of skill or capability. But opportunity and practice (effort) are what make someone capable of achieving a certain level of performance. For

example, someone may have natural musical intelligence, but without the requisite opportunity and practice, the person might never deliver a great musical performance. Likewise, someone may have creative intelligence, but without practice or opportunity, he or she might never become an inventor (see the sidebar “What’s the Difference between Natural Abilities, Natural Intelligence, Personality Traits, and Skills?”).



## Human Capital Skills That Build Innovation Capital

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**FORWARD THINKING:** the ability to see and understand trends in customers or technologies and to envision what will be important—and valuable—before others do

**CREATIVE PROBLEM SOLVING:** the ability to solve ambiguous or complex problems creatively using the five discovery skills, a first-principles approach, or all of these techniques

**PERSUASION:** the ability to promote your ideas by connecting with others in a confident and compelling way that convinces them to support you and your innovation project

As we interviewed and studied the world’s most innovative leaders and what they did to succeed as champions of innovation, three skills stood out:

- **Forward thinking:** the capability to engage in mental time travel—to see and understand trends in customers or technologies and to envision what will be important before others do. This capability builds on natural creative intelligence and an openness to new experience and is critical for nailing the first job of an innovative leader: finding an opportunity, a vision, for creating value.
- **Creative problem solving:** the ability to solve ambiguous or complex problems in a creative way. Jeff Bezos (number one on our innovative leader list) calls it being a “self-reliant problem solver.” LinkedIn CEO Jeff Weiner (number nine on our list) calls it “resourcefulness.” But the bottom line is that if you are going to pursue a vision of the future and do something novel, you will need to solve complex problems creatively. This skill relies on proactivity as well as general and creative intelligence.
- **Persuasion:** the ability to connect with others in a way that convinces them to support you and your innovation project. Sometimes called a reality distortion field, or even charisma, persuasiveness allows you to draw others to you and relate to them in a way that encourages them to pursue an innovative project. This skill builds largely on self-confidence (boldness), extroversion, and emotional intelligence.

## What's the Difference between Natural Abilities, Natural Intelligence, Personality Traits, and Skills?

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Since late in the 20th century, researchers in education and psychology have identified a broad set of natural abilities and personality traits that are the building blocks of who we are—and what we do well. By abilities, we are referring to characteristics, such as people's natural intelligence. Psychologists have empirically validated at least seven types of intelligence. Some people are “smart,” as measured by IQ; these folks can memorize facts and figures, can solve math problems, and are good at structured problem solving. Some have good interpersonal skills, as measured by a high emotional quotient (EQ), or the ability to read, and respond appropriately to, others' emotions. Some people are creative—divergent thinkers who generate novel ideas. Some have the gift of gab, or linguistic intelligence; they can articulate ideas in a way that connects with an audience. Some have the ability to visualize objects in 3-D—using what is called visual-spatial intelligence—to understand how things work (an especially valuable skill for architects, mechanics, designers, and engineers). Still others are athletic (kinesthetic intelligence), while others possess musical intelligence. (Kinesthetic and musical intelligence are primarily valuable in specialized fields of music, entertainment, and athletics.)

Beyond all these types of intelligence, we also differ in our personality traits, which are defined as relatively stable patterns of thoughts, feelings, and behaviors. Our personality traits include the “big five”:

- Extroversion (or introversion)
- Agreeableness (or disagreeableness)
- Openness to new experiences (or not)
- Conscientiousness (e.g., being organized and detail oriented) (or not)
- Being emotional or neurotic (or not)

More recently, proactivity, or assertiveness, has also gained support as a personality trait.

As we studied the world's most innovative leaders, we conducted assessments, whenever possible, to identify elements of their abilities and personality traits that were particularly important to their success as a leader of innovation. We should acknowledge that these leaders all had high IQs, at least according to their performance on standardized tests (e.g., SAT/ACT), on which a high score would

open doors to some of the world's finest educational institutions. But there are throngs of high-IQ folks who lack the chops to be great innovative leaders. So let's just acknowledge that to become a great leader of innovation, you must meet some IQ threshold. However, this level of natural general intelligence need not have been reflected in good grades in school. Some of the world's great innovators struggled in school.

In addition to having a high IQ, those who took our assessment scored higher on creative intelligence (reflected in a propensity to engage in questioning, observing, networking, and experimenting) than did typical organization leaders. Most, especially those who advanced through the ranks at large organizations, also had emotional intelligence; they were good at reading people. Finally, they scored extraordinarily high on the personality traits of proactivity and openness to new experience. These were important building blocks to the skills of forward thinking, creative problem solving, and persuasion. These are labeled as human capital skills because even though your natural abilities and personality traits influence their development, they can—and should—be developed and improved through practiced effort. We observed successful innovative leaders constantly engaging in practiced effort to improve their skills at forward thinking, solving thorny problems creatively, and persuading others to join their projects.

These three human-capital skills are critical to effective innovation leadership and building innovation capital. In the following sections, we describe each of these capabilities and how to develop them yourself.

## **Forward Thinking: Mental Time Travel**

In chapter 1, we briefly introduced the role of forward thinking in Satya Nadella's rise to become one of the most innovative leaders in the world. Let us examine his transformation in greater detail. In the summer of 1988, when Satya Nadella walked off the plane at the Milwaukee, Wisconsin, airport to start his master's degree in computer science at the University of Wisconsin–Milwaukee, there was little evidence to predict that Nadella would someday become the CEO of Microsoft. The University of Wisconsin

program was excellent, but it didn't offer the prestige that would have come with a Stanford or an MIT degree. Moreover, four years later, when Nadella joined Microsoft, he was one of hundreds of software engineers that the company had hired that year. How could Nadella stand out?

When he joined Microsoft, the action—and profits—were centered on the company's premier consumer products, Microsoft Windows and Microsoft Office. But that's not where Nadella chose to work. As he looked to the future—ten, fifteen years ahead—he believed that the next wave of technologies that were going to be critical to Microsoft's future success were in the areas of cloud computing and artificial intelligence. So he avoided the cash cows and accepted a role as an evangelist for Microsoft NT (operating system for workstations and servers)—a risky career move, since it was outside the fast track for promotion in the company. This eventually led to an assignment leading Microsoft's foray into search engine technology with Bing. He then chose to work in the server and tools business (the forerunner of Microsoft's cloud computing business). While his colleagues were winning big bonuses and advancements in the consumer products business, these other businesses were seen as relatively low prestige, not the place to be if you wanted to rise in the ranks of Microsoft. But Nadella believed that these emerging technologies had great potential to deliver customer value in the future. He set to work and learned everything he could about these technologies.

Nadella distinguished himself during the next eighteen years at Microsoft as a hardworking, persistent learner—someone with emerging expertise in online services and cloud service technologies. “In 2008, I moved to lead engineering for Bing, and other online services, one of Microsoft's first businesses born in

the cloud,” Nadella told us. “We knew we weren’t just building a search engine—we were building the foundational technologies that would fuel Microsoft’s future. In spite of having grown up building distributed systems in the client-server era, this new assignment helped me learn about web scale distributed systems and applied machine learning. And so when I moved to run our enterprise business in 2011, I knew that the fundamentals of this business would need to go through a sea change.”

Nadella was rewarded for his forward thinking by being asked to take over Microsoft’s fledgling cloud business in 2011. At the time, Microsoft’s cloud revenues could easily be counted in the millions of dollars, not the billions like Amazon Web Services. “I had to convince my team to shift focus from the big server and tools business that paid everyone’s salary to the tiny cloud business with almost no revenue,” Nadella said. “Their attitude was one of frustration—they were making all this money and now this little squeaky thing called the cloud came along and they didn’t want to bother with it.”<sup>1</sup> When Microsoft CEO Steve Ballmer offered Nadella the job to lead the cloud business, the CEO said, “You should think about it though. This might be your last job at Microsoft, because if you fail there is no parachute. You may just crash with it.”<sup>2</sup>

Nadella was able to see the importance—and potential—of the cloud before others at Microsoft saw it. So he pressed on, leading a transformation of the company’s server business from client services to cloud infrastructure and services. He also pushed to bring Microsoft’s database, Windows server, and developer tools to its Azure cloud. Within two years Microsoft’s cloud business was generating revenues in the billions, and total revenue from the cloud business—including the larger server tools business—had jumped from \$16 billion to more than \$20 billion. Nadella’s

expertise in these important new technologies, and his success in demonstrating that they were critical to Microsoft's future, distinguished him from others who were vying to replace Ballmer as CEO in February 2014.

## What Forward Thinking Is and Why It Is Important

Nadella is what we call a *forward thinker*. He engages in mental time travel to imagine the future. This practice is a choice and a habit. By trying to envision the future, innovative leaders can see what else is possible in their industry and then place smart bets, often risky bets, on the technologies or activities that could be transformative.

How do they become forward thinkers? They start by positioning themselves to learn and develop expertise in the technologies and trends that will shape the future of their companies and industries. Of course, these leaders won't always be right, but if they engage in informed future thinking, they increase their chances of being right more often. "A leader," Nadella said, "must see external opportunities and the internal capability and culture—and all the connections among them—and respond to them *before they become obvious parts of the conventional wisdom*. It's an art form, not a science. And a leader will not always get it right. But the batting average for how well a leader does this is going to define his or her longevity in business."<sup>3</sup>

Elon Musk offers another great example of a forward-thinking mind. Musk is so forward-thinking that he is imagining the day when we need a space colony on Mars to prevent extinction of the human race from an asteroid or some other cosmic event. He is also on a mission to create a world run mostly by sustainable energy. Musk's brother Kimbal describes him: "He's able to see

things more clearly in a way that no one else I know of can understand. There's a thing in chess where you can see 12 moves ahead if you're a grandmaster. And in any particular situation, Elon can see things 12 moves ahead."<sup>4</sup> Bezos is another leader who is very forward-thinking—especially from the customer's point of view. Andrew Jassy, CEO of Amazon Web Services, has worked with Bezos for twenty-one years. He gave us his take on Bezos's approach: "Jeff is very good at looking around corners to see what's next. Even when Amazon was just an online bookstore, Jeff was adamant that we not cement our brand as a bookseller. He had us looking into all sorts of different products and markets where he believed we could provide a better customer experience. He has great empathy for the customer and just seems to know what they will want."

Great leaders of innovation, like Nadella, Musk, and Bezos look to the future to understand what customers will want next, and they investigate emerging technologies to understand new ways of offering value. But it's not just famous people who do this. Kyle Nel, the former head of innovation at Lowe's, displayed forward thinking as he helped the company think about the future of retailing. "What holds big companies back is that they often just can't imagine what they could do," Nel told us. "You have to help people imagine what the future could be." To do this, Nel brought in a panel of science-fiction writers to help a normally conservative executive team imagine how they could take advantage of augmented reality, robotics, and other technologies to transform the future of retail. The science-fiction writers created "speculative organizational fiction," in which they imagined how new technologies could transform retailing. These stories helped Lowe's executives imagine how the world could be different and helped them suspend their disbelief long enough to

do something meaningful about it.<sup>5</sup>

As a result, Lowe's deployed robots in stores that were taking inventory, created some of the first 3-D printing services, created exosuits (external robotic skeletons) that help workers do their jobs, and sold the first augmented-reality phone for remodeling in stores (the phone sold out in four days with no advertising). Largely because of Nel's forward thinking, Lowe's rose to number one in retail innovation on the *Forbes* Most Admired Companies list and number one in augmented reality on *Fast Company's* Most Innovative Companies list.<sup>6</sup>

Finally, forward thinking doesn't have to be just about breakthrough technologies and sweeping futuristic changes. When Steve Easterbrook (seventeenth on our top innovative leaders list) took over as CEO of McDonald's in 2015, same-store sales had been declining for almost two years amid a more general brick-and-mortar retail Armageddon. To address the problem, Easterbrook decided to imagine how to improve the customer experience, using whatever tools possible. Easterbrook asked, Can technology enable us to offer an entirely different experience where customers can order how they like, what they like, pay the way that suits them, and then be served in a manner that suits them? To do so, he introduced the "Experience of the Future" concept, which includes new store prototypes, customer-forward tech platforms like the mobile order and pay app, and a mobile delivery partnership with Uber Eats. McDonald's new stores feature self-ordering kiosks and tablets that give customers more choice in their in-store experience. You can now sit down, order, and have your food delivered to you. The mobile order and pay app offers easy ordering from the comfort of customers' smartphones. Customers can automatically order their "favorite" meal and then pick up their food at the counter, in the drive thru,

or through a new curbside pickup option. The at-home delivery partnership with Uber Eats, meanwhile, has been a hit with customers. Today, customers can get their meal delivered at home from more than 11,500 restaurants in twenty-one countries. While these changes aren't particularly radical, they offer a better customer experience than competitors can offer. These moves, among others, have propelled same-store sales growth from negative 1 percent in 2014 to positive 6 percent in 2017 while the stock price has gone from \$95 to \$165.

## Advice on Becoming a Forward Thinker

Are you a forward thinker? How much time do you spend each week thinking about how our world is changing—and predicting how those changes will affect the things you care about? Forward thinkers try to answer the following types of questions:

- What will customers or other people want next?
- What trends are shaping the world over the next few years?
- What will emerging technologies enable us to do that we couldn't before?

### Bombard Yourself with Customer and Technology Trends

One way to piece together answers to the questions asked above is to bombard yourself with information about (1) what customers and other people are consuming and (2) what new startups are offering. You want to get a sense of where things are headed.

As an example of how leaders watch trends to get a sense of the future, former PepsiCo CEO Indra Nooyi developed a Mega-Trends document to identify significant trends and technologies that would influence PepsiCo's business. Nooyi (number twenty on our top innovative leaders list) had become CEO of PepsiCo just in time for the global financial meltdown in 2008. The

company she inherited was laden with a portfolio full of soda and salty snacks at a time when consumers were shifting toward more nutritious options. But despite an environment of declining soda consumption, Nooyi has doubled PepsiCo's stock price during her tenure. How?

Nooyi identified trends toward more nutritious and more sustainable products early, and she transformed PepsiCo's product portfolio accordingly. In fact, in 2006 the company's Fun for You portfolio (e.g., Pepsi, Mountain Dew, Doritos) was about 70 percent larger than their Good for You (e.g., Quaker, Tropicana, Aquafina) and Better for You (e.g., Pepsi Zero Sugar, Baked Lay's, SunChips) portfolios combined, but by the end of 2017, they were nearly equal in size. She told us she credits her focus on MegaTrends and firsthand observations of customers as being critical to her own forward-thinking capability and PepsiCo's success:

I'm in the marketplace all the time looking at stores and eating places to see what's going on there. I look to my kids, to millennials, to see what their habits are. And to the edgy communities and where the edgy communities are going. Whether it's San Francisco, or Seattle, or Oregon or Boston or New York, these are all lead markets. And in many ways, what happens there—not in the big grocery stores, but in the warehouses converted to stores, the farmers' markets, the Brooklyn or SoHo shops—tells you a lot about where the edges are becoming more mainstream.

So if you keep following the edges and watch what the youngsters are doing, it gives you a pretty good idea of what's coming. And we have to have an open mind. Believe me, there are times when I see my kids doing things, and I go, "What is wrong with you? Why can't you do things like we did it?" And the typical answer is, "Mom, get a life. This is how things are happening today." Then you go, "Oh my God, the world is changing."

In addition to watching lead customers, you can also watch the frontier of startup innovation. It's easier than you might think to familiarize yourself with what fast-moving startups are doing:

simply start reading. Check out websites such as VentureBeat.com, Crunchbase.com, and PitchBook.com, or read up on the companies in most-innovative lists or fastest-growing lists, such as the *Inc.* 100, to identify the edge of innovation and what is getting traction. As you observe, ask yourself, What new value propositions are being offered? With what new technologies? Asking these questions can give you a sense of what entrepreneurs see as opportunities.

But it isn't just about the products and services the startups are supplying. The startups and fastest-growing companies are also shaping demand. They are setting customer expectations about what is possible and desirable in the future. By watching the emergence and rapid growth of Uber and Airbnb, you might have predicted the emergence of other, similar peer-to-peer sharing-economy business models, from recreational vehicles (RVshare.com) to storage (Neighbor.com), flowers (BloomThat), and grocery delivery (Instacart). Understanding the strategies, business models, and technologies behind the fastest-growing startups each year can often provide a window into the future as you look for patterns and trends.

Finally, read . . . *a lot*. Most of the world's most innovative leaders, including Bezos, Nadella, and Nooyi, are voracious readers. They ingest books and other reading material at a staggering rate—perhaps one or two books per week. “I read like a crazy person. I read everything,” Nooyi says. “I read books. I read abstracts. If somebody's read something, I tell them to tell me what that book said. If I don't understand something, I'm always digging deep, going to school on it, questioning.”

Devote Time to Mental Time Travel—Preferably with Others  
Mental time travel takes time. So you have to regularly devote

focused time to synthesize and take stock of what you know. Microsoft founder Bill Gates would regularly take one or two weeks each year to step away from work and read articles, books, product proposals, and technical papers sent to him by Microsoft employees and other leading thinkers. This break eventually became labeled Think Week and was a key technique that Gates used to regularly engage in forward thinking. He would occasionally emerge from Think Week with an important perspective on the future and would share it with company leaders and employees. In fact, in 1995, he wrote an insightful memo at the end of Think Week: “The Internet Tidal Wave,” which foreshadowed how the internet would influence Microsoft and business in general.<sup>7</sup>

Beyond taking time on your own to think deeply about the future, you can benefit by doing it with others. Research shows that forecasting is even more effective as a group activity. Teams do a better job of forecasting the future because there is greater breadth of knowledge and teams are less susceptible to cognitive biases (more on this in the next tip). Gates ended up expanding Think Week to the top fifty to one hundred leaders and technologists at Microsoft so that they could collectively think deeply about the future. Likewise, Indra Nooyi updated her MegaTrends document every two years to make sure it was evergreen.

As an interesting aside, the insights from this process of forward thinking are deeply valued by the rest of the organization. Key stakeholders in the PepsiCo community would wait impatiently to learn what’s coming next. Nooyi says, “I can’t tell you how many people call me and say, ‘Indra, can you just give us a peek under the tent as to the next megatrend?’”

Our research shows that one key to successful forward thinking is cognitive flexibility, or the ability to see different perspectives and change your viewpoint, or mental framework, accordingly. One of us (Nathan) studied cognitive flexibility in his dissertation at Stanford years ago while examining the factors that allowed entrepreneurs to successfully change (pivot) as they created new businesses. He was intrigued by how many times successful entrepreneurs had to pivot, often making dramatic changes, during their journey to success. For example, the founders of PayPal pivoted several times before they discovered the business model that eventually made them successful.

The research suggested that part of maintaining cognitive flexibility is avoiding the cognitive biases that lead you to get stuck in your own perspective. For example, *confirmation bias* is the tendency to look for, or interpret, information that confirms your preconceptions or point of view (and to ignore or dismiss conflicting information). Surprisingly, Nathan's research suggests that expertise actually accentuates rather than ameliorates these biases, causing leaders to persist too long down a blind alley.

What can you do to combat your cognitive inflexibility? For starters, recognize up front that you don't know it all. This is what Tom Kelley, cofounder of IDEO, called an "attitude of wisdom." An attitude of wisdom involves "a healthy balance between confidence in what you know and distrusting what you know just enough that keeps you thirsty for more knowledge."<sup>8</sup>

Bezos understands this principle and has adopted a leadership tenet at Amazon to address it. "Amazon leaders are right, a lot. They have strong judgment and good instincts. They seek diverse perspectives and *work to disconfirm their beliefs.*" One of the keys to being "right, a lot" is to actively work to disconfirm your

beliefs.<sup>9</sup>

Research shows that leaders who develop cognitive flexibility surround themselves with people from a broad range of industry and experiential backgrounds; these people help the leaders see things in new ways. Mentally flexible leaders have an attitude of learning; they are always looking for a beginner’s mindset to solve problems, even problems they had already solved themselves.

Finally, the best way to predict the future is to create it. Rather than simply wait for the future to play out, the innovative leaders we studied took an active stance in creating the future—which leads us to our next human capital skill.

## **Creative Problem Solving**

Bezos had a problem. As a twelve-year-old, he desperately wanted a new device called the Infinity Cube. The Infinity Cube was a set of small motorized mirrors that reflected off one another, so that it felt like looking into infinity. Bezos was fascinated by the gadget. But it was too expensive. Most kids his age would have gone without or would have begged for the money until someone relented. But not Bezos. Instead, he carefully examined the components of the cube and then bought the mirrors and other parts and, without any instructions to follow, he constructed his own version of the Infinity Cube. Bezos credits the annual summers on his grandparents’ farm for helping him become, in his words, “a problem-solving self-reliant”:

A huge influence on me was my creative grandfather who was a rancher in South Texas. I spent my summers on his ranch starting at age four. I really gained confidence in my creative ability by helping my grandfather fix things on his ranch. He was extremely self-reliant. He built his own fences, he laid his

own pipeline, he would build his own barns. He was really focused on problem solving, and he had an optimism that he could solve problems even in areas, like veterinary work, where he had no training. He often didn't have the money to fix things, so we'd have to improvise. One time I helped him fix a Caterpillar tractor using nothing but a three-foot-high stack of mail-order manuals. You learn that when one way doesn't work, you have to regroup and try another approach.

Being a creative, self-reliant problem solver has characterized Bezos and his brand of leadership throughout his career. When he realized that online retailing had unique fulfillment problems that other retailers hadn't solved, he had Amazon build those capabilities internally. When Amazon needed a cloud infrastructure to support its retail operations, it built those capabilities internally (and then offered these services to other companies via Amazon Web Services). When Bezos saw an opportunity to offer an electronic reader (the Kindle)—a software-embedded device with which Amazon had no prior capabilities or experience—he led the effort to build these devices at Amazon.

While Amazon leveraged internally built software capabilities to launch Amazon Web Services, such was not the case with the Kindle, the company's first foray into hardware. Amazon was then essentially a software and fulfillment company. Building devices would require the development of a new set of capabilities that would put the company in direct competition with companies like Apple and Samsung. Jeff Wilke, CEO of Amazon's retail operations, remembers that at the board meeting where Amazon's leaders discussed whether to make the Kindle, he protested to the board: "I spoke up and said, 'I don't agree. I think we're likely to miss our planned delivery date. Our yields are gonna be too low. We're gonna underproduce. We're gonna frustrate customers. Hardware's hard. We're a software

company.’ Jeff [Bezos] responded, ‘Well, I’m willing to concede that all those things will happen, and I still think that the right vision for our company is to be really good at building hardware. So we need to get started learning.’”

And so they did. Today, Wilke says, “Turns out I was right on everything that I called out, and Jeff [Bezos] was still right to say we should do it . . . We’ve created a skill set that we can use to invent new things on behalf of customers.” Amazon took a big risk leaping into devices, but the company has expanded its self-reliant skills to launch other products and services.

## What Creative Problem Solving Is and Why It Is Important

True innovation often requires solving problems that have never been solved before. That’s why innovative leaders must excel at creative problem solving. Bezos may be the poster child for being a proactive, creative problem solver but this was a distinguishing characteristic in all of the world’s most innovative leaders we studied. Psychologists have identified a trait related to this behavior: *proactivity*, or acting in advance of a future situation to make things happen. But what we witnessed among the top innovative leaders went way beyond proactivity. Many of us have the desire, and perhaps even the will, to be assertive and work hard to make things happen. But many of us also lack the desire and willingness to dive in and master new knowledge—becoming semi-experts in new fields—to lead an effort to solve a complex problem. In addition, we often aren’t as creative as we could be in navigating around the obstacles that get in our way.

“You need to have a combination of stubbornness and flexibility,” Bezos says. “And even though those two things seem

at odds with one another, I don't think they are. Because I think you can be stubborn on your vision but flexible on the details of how you get there. When one approach doesn't work, you circle back around and try another, relentlessly trying different angles until you find something that meets your vision. When I see that in somebody, that shows they have real potential.”

Bezos isn't the only leader who looks for creative problem-solving skills in up-and-coming employees. “Resourcefulness is arguably the most important component to successful leadership that we look for at LinkedIn,” Weiner says. “At the end of the day, regardless of whether you're in a small startup and you need funding, or you're in a larger company that needs to navigate a corporate environment, you have to have people who are resourceful. Regardless of how challenges present themselves, regardless of how high and how wide the wall, effective leaders are prepared to go above it, around it, or through it in order to get stuff done. When you have people who possess this quality, they become incredibly valuable.”

## Advice on Becoming a Creative Problem Solver

You can attack problems creatively with a variety of approaches. Two approaches used successfully by top innovative leaders address problems from nearly opposite starting points. One approach, the first-principles method, reduces a problem down to its basic parts and focuses on solving for the constraints. The other approach has you widen your field of knowledge beyond your normal area of expertise. Let's look further at the utility of both these approaches.

### Solve Problems Using First Principles

Musk has been instrumental in building three revolutionary

multibillion-dollar companies in completely different fields—PayPal (financial services), Tesla Motors (automotive) and SpaceX (aerospace)—and is attempting to launch revolutionary technologies in mass transit (Hyperloop) and mobility infrastructure (Boring). His ability to solve seemingly unsolvable problems is essential to his success and he attributes his problem solving success to *first-principles* thinking. “I operate on the physics approach of analysis by first principles,” Musk told us. “The first-principles approach to thinking is where you boil things down to the most fundamental truths in a particular area and then you reason up from there. In most cases, we solve problems by reasoning by analogy, which means copying what other people do, with slight variations.” Musk says that we use reasoning by analogy because it is mentally easier than first-principles reasoning—but it is less effective at producing novel solutions.

In lay terms, first-principles thinking—which was first articulated and named by Aristotle—is the practice of identifying what you think is true and then actively questioning every assumption you have about a given problem or scenario.

First-principles thinking helped Regeneron, the New York-based biopharma company, revolutionize how it develops new therapies. Whereas it costs on average \$4.3 billion for the average company to develop an approved therapy, Regeneron has been estimated to develop therapies for less than \$1 billion per approved therapy, which is 20 percent of the cost of its competitors.<sup>10</sup> How? “We challenge everything,” says Regeneron cofounder, president, and chief scientist George Yancopoulos (number twenty-one on our innovative leaders list). “Every concept. Every scientific principle. Nothing is unchallengeable, and you don’t take anything for granted. Most of what we believe

are facts are not.” The next step is to identify the constraints to achieving what you want to achieve and then start with a blank slate and create solutions that might solve those constraints. “We always try to figure out what’s limiting in a field. What’s the bottleneck?” Yancopoulos says. “Then you look for a game-breaking idea that addresses the limiting factor.”

To illustrate how to apply a first-principles process, consider Musk’s description of how Tesla approached the problem of the high cost of battery packs for automobiles.

Some people say, “Battery packs are really expensive and that’s just the way they will always be . . . Historically, it has cost six hundred dollars per kilowatt hour. It’s not going to be much better than that in the future.” With first principles, you say, “What are the material constituents of the batteries? What is the spot market value of the material constituents?” It’s got cobalt, nickel, aluminum, carbon, some polymers for separation, and a seal can. Break that down on a material basis, and say, “If we bought that on the London Metal Exchange, what would each of those things cost?” It’s, like, eighty dollars per kilowatt hour. So, clearly, you just need to think of clever ways to take those materials and combine them into the shape of a battery cell, and you can have batteries that are much, much cheaper than anyone realizes.<sup>11</sup>

Of course, it isn’t that easy to “think of clever ways” to combine the materials into a battery cell, but first-principles thinking starts with a blank slate, questions every assumption, and considers a wide variety of options. Here is a three-step process for first-principles problem solving:

First, *identify the problem you want to solve*. For example, in the case of Tesla, the key problems the company needed to solve were reducing the cost of the battery pack (to make it affordable) and increasing the range a car could go on a single charge (to reduce range anxiety). At Regeneron, two big delays in the creation of successful new medicines were the time required to create and breed accurate animal models, a necessary step in ensuring safety before clinical-stage testing in humans, and the

time required to develop “fully human” antibody drug candidates that would be accepted in a human immune system.

Second, *break down the problem into its fundamental principles, and list the major constraints to solving this problem.* To illustrate, the main constraint to an affordable battery pack might have been the cost of one or more of the materials. So then you would ask, How could we possibly reduce the cost of that key material? For Tesla, the challenge of creating a lower-cost battery pack had less to do with materials and more to do with the process of combining them into a battery cell at enough scale to reduce the cost (hence the need for the Gigafactory, Tesla’s facility to design and build lower-cost lithium batteries at scale). A major constraint to increasing the range of a Tesla from a single electric charge was the weight of the car body. Thus, Tesla became the first automaker to use a lightweight all-aluminum body. At Regeneron, the limiting factor to rapid, successful drug testing was the time required to carefully test, select, and breed for certain genetic qualities in mice to ensure the closest parallels to future human patients. So Regeneron sped up the process by developing a precision technology capable of directly inserting human immune-system genes in mice, eliminating the need for many generations of breeding to accurately model human diseases and produce antibodies that could be safely introduced into humans. These “fully human” mice have allowed Regeneron to more quickly and accurately identify medicines that will work on humans, thereby reducing the cost of each potential new drug. This breakthrough has contributed to a tenfold increase in the company’s stock price in the ten years since 2010.

Finally, *create new solutions using a blank-slate approach.* Ask yourself, If I could create any solution I desired, what would that

solution be? How would it eliminate the problem or constraint? The point here is to imagine the perfect solution and then consider a wide variety of approaches that might eliminate the greatest bottleneck. At Regeneron, the blank-slate solution was having an animal model respond exactly like a human during early-stage drug testing. Of course, Regeneron needed to figure out how to make this solution a reality, or at least closer to reality.

During this phase, you need to actively engage four behaviors—questioning, observing, networking, and experimenting—as described by one of us (Jeff) and his coauthors in *The Innovator’s DNA*.<sup>12</sup> Creative problem solvers excel at *questioning*, constantly challenging the status quo with “why not” questions to turn things upside down. They also frequently ask “what if” questions to envision a different future. They are also intense *observers*, scrutinizing the environment like anthropologists. They get out of their cubicles to carefully watch the world around them—especially customers, products, services, and processes—with a beginner’s mindset. These observations give them unique insights into new ways of solving problems. Creative problem solvers also stand out at *networking*, talking with diverse people to spark a new way to solve perplexing problems. These innovators seek to regularly talk with people who don’t look, act, or most important, think like them. Finally, they search for new solutions by constantly *experimenting*. They try out new experiences wherever they go. They take apart products or processes to see how things work. And they test their hunches through experiments with pilots and prototypes. These skills have been empirically shown to trigger creative ideas for solving thorny problems.<sup>13</sup>

The more knowledge you possess in more areas, the more problems you can solve. This is especially true when using a first-principles approach. Unfortunately, many of us have developed expertise in only one field (software engineering, information technology [IT], marketing, biotechnology, automobile manufacturing, the food industry, etc.) and we like to stick to our knitting. But the world's most innovative leaders are willing to dive in and develop expertise in new domains if they think doing so will help them solve a problem. For example, Bezos has developed deep expertise in software engineering, robotics, information technology, devices (e.g., Kindle, Alexa) and even rocket technologies (his company Blue Origin competes with SpaceX for space travel). "I've been lucky enough to work with Jeff for a long time now, and I don't know many people who learn at the rate that Jeff does," says Jassy of Amazon Web Services. "If you look at the array and the breadth of activities and disciplines that he interacts with every day, every week, every month, it's incredible. He is an amazing learner."

As an illustration of how one can become an expert quickly, Nooyi told us about one of her most difficult assignments while she was chief financial officer at PepsiCo. During her tenure, she was tasked with overseeing a massive overhaul of PepsiCo's entire IT system. "I was not even an IT person," she told us. "But I said, 'OK, fine. I'm going to have to learn this myself.' So I spent six weeks between Thanksgiving and New Year's becoming a student. I studied everything there was about ERP [enterprise resource planning] systems, what works and what doesn't, data warehousing, the whole thing. I emerged in January as a decent expert on the topic. All of a sudden everyone on the IT team said, 'Wow, this person, once she throws her mind into it, is going to dig deep and then come back and ask us the right questions.' So

we all ended up getting to a better place. There were many, many projects like that, where I had to develop new expertise.”

Unfortunately, many of us are unwilling or afraid to become a student again—to attempt to master new areas of expertise. But you shouldn’t be (especially with all the self-directed learning tools available online). As Musk once commented, “Frankly, I think most people can learn a lot more than they think they can.”

## **Interpersonal Persuasion Skills**

In February 1981, Guy L. “Bud” Tribble, a key software developer on the original Macintosh computer, welcomed new employee Andy Hertzfeld by telling him that Apple was scheduled to ship the Macintosh software in just ten months.

“Ten months?” Hertzfeld remarked. “That’s impossible.”

Rather than argue, Tribble agreed. But then he had to explain to Hertzfeld how Steve Jobs, who was heading the team, had convinced him to try anyway. In retrospect, Tribble described it this way: “The best way to describe the situation is a term from *Star Trek*. Steve Jobs has a reality distortion field.” Tribble was referring to a *Star Trek* episode in which the crew finds a planet called Talos, whose inhabitants can generate virtual realities in the minds of other people—or as Tribble later put it, creating “their own new world through sheer mental force.” Tribble went on to explain Jobs’s ability to use a “reality distortion field” to Hertzfeld: “In Steve’s presence, reality is malleable. He can convince anyone of practically anything.”

Jobs once used his powers of persuasion to convince Corning CEO Wendell Weeks that Corning could fully develop and produce enough crack-resistant glass (branded as Gorilla Glass) for one million iPhones within six months. Jobs wanted to use glass instead of plastic (the original design) for the iPhone’s

screen, but at the time, glass cracked too easily. So in early 2007 Jobs flew to Corning, New York, to meet with Weeks to explain his hopes for the screen. The glass had to be durable, and Jobs needed enough of it within six months to be produced for all the iPhones he was planning to sell.

After listening to Jobs, Weeks told him that Gorilla Glass was just a project, not a product; it was still in development and he wasn't set up to produce it. "I'm sorry; we've actually never made it," Weeks said. "We don't have a factory to make it; this was a process we developed, but we never had a manufacturing plan to do it."

On the spot, Jobs placed a large order for Gorilla Glass anyway, repeatedly telling Weeks, "Don't be afraid. You can do this."

Weeks tried to explain that a false sense of confidence would not overcome engineering challenges. "I just sat there and looked at the guy," Weeks recalled. "He kept saying, 'Don't be afraid. You can do this.'"

In the end, Jobs prevailed. Weeks immediately called his LCD screen glass-making plant in Kentucky and said, "Start the process now, and make Gorilla Glass." Corning not only figured out how to make Gorilla Glass in six months, but in the next ten years, it also sold enough of it to cover more than twenty-eight thousand football fields for the iPhone.<sup>14</sup>

Jobs was known for his powers of persuasion—for his ability to get others to believe *his* reality. Indeed, this is an important skill of innovative leaders because they have to convince others to bring their resources to a novel venture that, by definition, is uncertain and risky. So what makes someone like Jobs capable of convincing others that almost anything is possible? And how can you do the same thing?

## What Persuasion Is and Why It Is Important

There are many reasons why some people have the power to persuade and others do not. One primary reason is *self-confidence and an aura of success*. Individuals who are charismatic leaders project confidence in themselves. Psychologists call this trait *self-efficacy*, or an individual's belief in his or her innate ability to achieve goals. Persuasive people exude confidence in their ability to make things happen and succeed. We all like to be associated with winners. Persuasive people project an aura of success—in the way they dress, talk, and amplify their symbols of success, such as where they've been to school, where they've worked, and what they've accomplished. (We'll discuss how to build a reputation, and how to amplify it, in chapters 4 through 6). This aura naturally draws others to want to associate with persuasive people.

In addition to bold confidence, persuasive people use their linguistic and logic intelligence to convince others. Some of us are just better with words, for example, and are better at telling a compelling story. Harvard's Howard Gardner refers to this as linguistic intelligence and has demonstrated that we have natural differences on this dimension.<sup>15</sup> Some of us are very comfortable speaking with and persuading others, whereas others are not (think of great orators like Martin Luther King Jr. and John F. Kennedy). In addition, some of us are naturally more gifted at creating logical arguments that influence others to our way of thinking.

Together, these and other interpersonal persuasion skills can be put to good use to create a reality distortion field. The term itself—reality distortion field—is quite relevant to persuasion because *perception is reality*. As sociologists will tell you, the idea of reality is socially constructed. It is what people believe and can be

convinced to believe. What if we told you that you can create your own reality distortion field, right now? You have the ability to influence the reality that you project to the world about yourself—and about your projects and ventures. As previously mentioned, we will share later in the book some specific techniques—impression amplifiers—that you can use to persuade and convince others of the reality you want them to see. But above all, you must understand how your personal mindset—your perceptions of yourself and your work projects—can set artificial and limiting boundaries before you even get started. Here are a few examples that may help you understand how perception is, or becomes, reality:

- If you believe that you are not a creative individual, you will not pursue creative activities, and therefore your lack of creativity will be the reality.
- If you are nervous when speaking in public, rest assured that everyone picks up on your lack of ease, and your unpolished speaking skills will be the reality.
- If you are afraid to take a risk and make a bold recommendation about an opportunity you've discovered, you will never stand out or champion a new idea, and your inability to get noticed or get attention will be the reality.

As these examples show, our beliefs about ourselves can become self-fulfilling prophecies. By extension, we each have the ability to influence or inspire our colleagues, but we must persuade ourselves first. Jobs's reality distortion field was a personal refusal to accept limitations that stood in the way of his ideas. This attitude allowed him to convince himself—and others—that any difficulty was surmountable. And using first-principles problem solving with his collaborators, he often achieved the “impossible.” You can do the same.

## Advice on Building Your Own Reality Distortion Field

Here are a handful of tactics and tools you can use to improve

your ability to persuade others. You can find more advice at [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital).

### Paint a Vision That Creates Emotional Connection

Think carefully about how you can make your idea exciting and meaningful to create an emotional connection that will persuade others to follow your lead. And it doesn't have to be something as lofty as reducing global warming or putting a colony on Mars. Nike makes athletic shoes . . . and yet the company's founders, Bill Bowerman and Phil Knight, followed by current CEO Mark Parker, have attracted talent and resources to Nike through its mission "To bring inspiration and innovation to every athlete in the world." The legendary University of Oregon track and field coach Bowerman said, "If you have a body, you are an athlete." Parker (sixteenth on our list) says Nike's focus is to "serve the athlete" and to give these folks the athletic gear and inspiration to "just do it." As a recent example, Matthew Nurse, head of Nike Explore Team Sport Research Lab, and Sandy Bodecker, vice president of special projects, decided to "serve the athlete" by helping one athlete make history by running the marathon in less than two hours (this feat would require a seemingly impossible improvement of three minutes over the world record). They called the project Breaking2, and Bodecker even tattooed 1:59:59 on his wrist to show his commitment. This lofty goal attracted three of the world's top marathoners, plus world-class coaches, nutritionists, physiologists, designers, and engineers to the team—and concluded with Eliud Kipchoge running the fastest time ever recorded: 2:00:05 (more on Breaking2 in [chapter 7](#)).

### Build Self-Confidence and an Aura of Success

There is a wealth of content written on developing self-

confidence, so we won't recap that knowledge here. However, when it comes to innovation, we have found that two elements can consistently lead to the high degree of self-assurance needed to persuade others to join your cause:

- Profound dissatisfaction with the status quo
- Deep-seated conviction of an opportunity (e.g., an insight into a customer need or a new application of a technology) that comes from firsthand, personal experience

Developing both of these perspectives in tandem can give you the assertiveness, motivation, and resilience to persuade others to join you in bringing about real change. And perhaps just as important is doing the homework necessary to know everything possible about the problem you want to solve. If you are prepared, you won't be afraid, and others will sense that.

### Develop Your Linguistic and Logic Intelligence

How often do you try to persuade others—at work, at home, or in other social settings—to accept a course of action or point of view? If you consider yourself ineffective at persuading others, then you may need more practice at both the structure of your logic and your verbal delivery. To improve the structure of your arguments, do a deep dive into structured problem solving and logic pyramids (sometimes called *logic trees*). Management consulting firms like Bain & Company and McKinsey & Company have used structured problem-solving pyramids (like Barbara Minto's "pyramid principle"<sup>16</sup>) to teach consultants how to organize a problem and presentation because their success relies on persuading clients through presentations.

At a high level, applying the pyramid principle means simply putting an assertion or a conclusion at the top of the pyramid (e.g., "Coca-Cola should enter the snack foods business"). Next

you identify all the supporting arguments, analysis, or data for that main assertion (e.g., Coke should enter the snack foods industry because the snack foods industry has high average profitability and because selling both snack foods and beverages will increase bargaining power over grocery retailers). Then you repeat that process a level down (e.g., identify all the arguments and data to support the assertion that the snack foods industry is profitable). The bottom line is that each assertion that you make must be well supported by subassertions, which must also be well supported by assertions that are mutually exclusive and collectively exhaustive.

Create opportunities at work, at home, and with friends to discuss or debate issues while you practice using pyramid logic. One way to get practice is to take or audit a university business school class that uses the case method, because each case is a debate about a business issue. This will give you practice articulating a convincing point of view.

## **Conclusion**

Our examination of the world's most innovative leaders revealed three personal skills that were critical to their success. The leaders are forward thinkers who see opportunities before others do; they proactively, persistently, and creatively problem solve their way to that future; and they persuade others to join them on the journey. These are challenging skills to develop. But with effort and practice, we can each get better at these skills, which are the foundation of innovation capital. In chapter 3, we examine how you can build social connections with others who can provide the resources you need to launch your innovation projects.

## Assess Your Human Capital That Contributes to Innovation Capital

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To take the first step in understanding whether you are good at forward thinking, proactive problem solving, and persuading, take the following brief assessment of your innovation capital. See our website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital) for a full version of the assessment and additional resources.

### Forward Thinking

Using a scale of 1 to 7, where 1 = strongly disagree; 4 = neither agree nor disagree; 7 = strongly agree, rate the following statements. Be honest in your assessment. In fact, also have those who know you best assess you on these items.

1. I can see what is really important before others do.
2. I actively engage in activities (e.g., observations, reading, conversations) that help me understand the latest customer and technology trends.
3. I regularly take time to think deeply about how changes in customer preferences and emerging new technologies will influence business opportunities.

Add up your score. Here's how to interpret your results:

19–21: You are very strong at forward thinking.

16–18: You are strong at forward thinking.

13–15: You are adequate at forward thinking, but such thinking is unlikely to have a strong impact on your career

Below 13: Your forward thinking will not help your career unless you improve.

### Creative Problem Solving

1. I have a strong track record of solving difficult (complex) problems.
2. I frequently acquire knowledge and expertise in new domains so that I can more effectively contribute to solving problems.
3. Wherever I have been, I have been a powerful force for removing obstacles that prevent constructive change.

19–21: Very strong at creative problem solving

16–18: Strong at creative problem solving

13–15: Okay at creative problem solving, but this ability is unlikely to have a strong impact on your career

Below 13: Creative problem solving will not help your career unless you improve

### **Persuasion**

1. I feel that I can inspire others to follow me.

2. I am good at persuading others to see things my way.

3. I am very good with words and can articulate arguments persuasively.

19–21: Very strong at persuading

16–18: Strong at persuading

13–15: Okay at persuading, but this ability is unlikely to have a strong impact on your career

Below 13: Persuading will not help your career unless you improve

## Who You Know

(and Who to Focus On)

Who is more important to you when you are trying to win resources and support for your ideas: people who know you well, or people who hardly know you at all? Most of us would be tempted to say that the people who know us well are the most important providers of resources to pursue an innovative idea. But there are several problems with this intuition. First, the network of people who know and trust you has severe limits. Have you heard of the Dunbar number? Not many people have a number named after them, but Robin Dunbar, director of the Institute of Cognitive and Evolutionary Anthropology at Oxford University, lays claim to the Dunbar Number. He argues that because of the way our brains have developed over the ages, there are cognitive limits to the number of people with whom we can maintain a meaningful social relationship involving trust and obligation. This limit, baked into the size of our brains and how we process social relationships, is roughly 150 people—the Dunbar number. They are the people that Dunbar describes as those “you would not feel embarrassed about joining uninvited for a drink if you happened to bump into them in a bar.”<sup>1</sup>

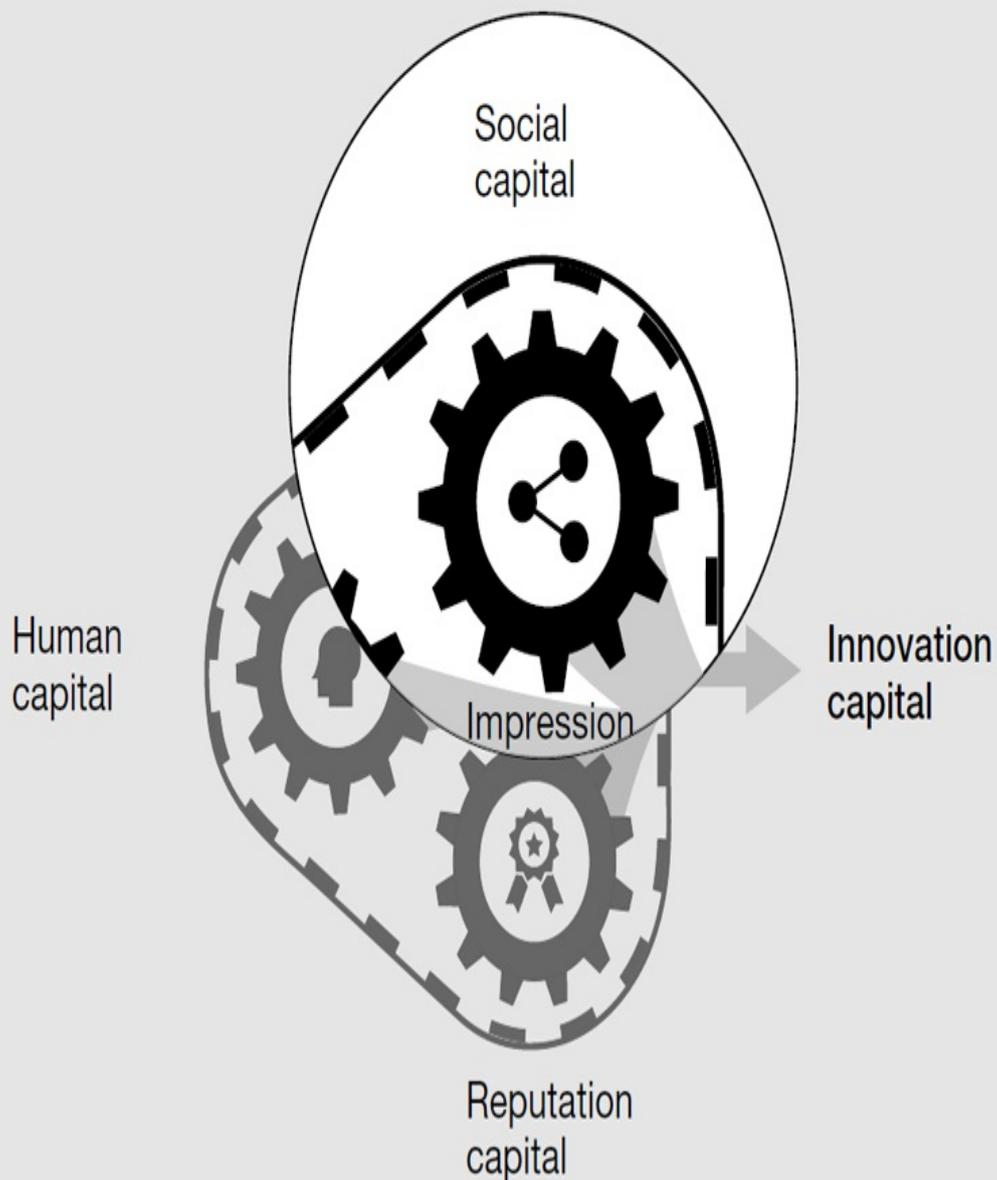
Although you may think you can stretch this number, according to Dunbar, that’s just not possible. As we build close relationships with new people, other people will fall out of our Dunbar

network. (Interestingly even on Facebook, the average [median] number of “friends” is just about 200.<sup>2</sup>) If you were to rely only on your Dunbar number for help, how good would your resulting opportunities really be? Unless you somehow have developed close relationships with 150 of the world’s richest people, top financiers, top innovators, most clever entrepreneurs, and astute executives, your opportunities will be severely limited.

## Social capital

### Key social capital contributors

- Innovators and entrepreneurs
- Organizational leaders
- Financial benefactors and investors
- Influencers
- Customers



### Prized Social Connection Categories

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**INNOVATORS AND ENTREPRENEURS:** individuals who have a track record of innovation (for example, scientist or engineer inventors or entrepreneurs) and who are critical for generating ideas and participating in your projects

**ORGANIZATIONAL LEADERS** (e.g., C-suite executives): leaders with the authority to deploy their organization's resources

**FINANCIAL BENEFACTORS OR INVESTORS** (e.g., angel investors, venture capitalists, bankers): individuals who have or control financial resources

**INFLUENCERS** (e.g., celebrities, prominent networkers): individuals who have achieved prominence within a community and who can leverage their connections

**CUSTOMERS** (e.g., target customers for your innovations): key customers; could be important enterprise customers or prominent retail customers

The second reason your intuition would be wrong is that your weak ties are actually much stronger than you realize. The power of weak social relationships for accessing resources and opportunities was first emphasized by Stanford economic sociologist Mark Granovetter. Granovetter decided to study a simple question: How do people find a new job? He assumed (as did most sociologists) that it's our strong-tie relationships (with family, friends, college roommates, coworkers—our Dunbar network, in other words) that are most valuable for helping us find a new job. This makes intuitive sense because we believe that the people who know us, trust us, and can endorse us will be the most willing to help us. Why would someone we hardly know be able or willing to recommend us?

But in his landmark study of how people in Boston got hired, Granovetter discovered something quite different. Rather than finding a job through their strong ties, people were much more likely to find work through their weak ties: the casual acquaintance, the old associate whom one has lost contact with, the friend of a friend, and even the chance encounter. At first,

Granovetter was surprised at these results. How could weak social ties be so valuable?

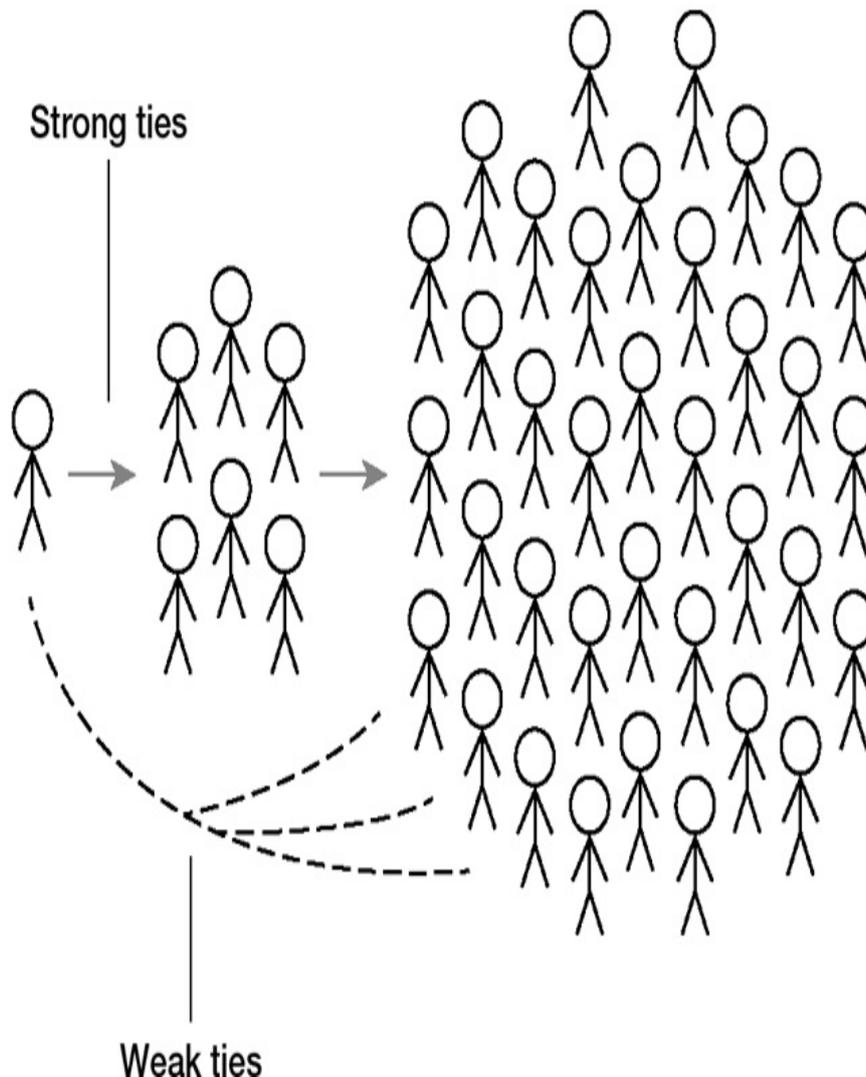
The answer: scale. The scale of your weak-tie network and consequently the number of ties and the volume of resources available through your weak social ties completely dominate the resources available through our strong social ties. Although our Dunbar number may be only 150 people, the number of people with whom we may have a weak social tie can run into the hundreds or thousands. These folks can be the conduit to thousands of other individuals. For example, if you have 1,000 direct ties and they each have 1,000 direct (nonredundant) ties, then you can reach 1 million people through an introduction from someone you know. “When it comes to finding out about new jobs—or, for that matter, new information, or new ideas,” Granovetter says, “weak ties are always more important than strong ties.” Thus when you are trying to win support for your ideas, what really matters is the larger network of people you can access through your weak ties (figure 3-1). As an aside, because of the impact of his observation, Granovetter’s groundbreaking article, “The Strength of Weak Ties,” is one of the most cited articles in the social sciences.<sup>3</sup>

**FIGURE 3-1**

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**Why are weak ties so important to getting resources?**

*Answer: Scale. Because of network effects, the volume of resources available through weak social ties completely dominates the volume of resources available through strong social ties.*



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## **Weak Ties in Action: The Wider Social Network Created by a Smaller One**

Leaders who build innovation capital learn the power of tapping into their weak ties. Take Mark Zuckerberg, for example, the well-known founder of Facebook. Most of us know that Zuckerberg started Facebook in his Harvard dorm room with college friends Dustin Moskovitz, Chris Hughes, Andrew McCollum, and Eduardo Saverin, the last of which he met when

the two were pledging Alpha Epsilon Pi, a selective fraternity for Jewish students. Saverin famously provided \$25,000 to \$30,000 in capital during the first year of Facebook. And then, after a falling out with Zuckerberg, Saverin sued him for reducing his equity share in Facebook (the stock Saverin won in his lawsuit has made him a billionaire). But what most of us don't fully appreciate is that Facebook's success relied critically on ideas and financial and human capital that were accessed through Zuckerberg's weak-tie network.

To illustrate, some of the critical ideas for Facebook probably came from Tyler and Cameron Winklevoss and Divya Narendra. The three Harvard students had heard of Zuckerberg and asked him to write code for their social networking site called Harvard Connection (later named ConnectU). The original idea for Harvard Connection was to create a social networking site to connect students and alumni of Harvard—only individuals with a harvard.edu email address. Zuckerberg used this same approach when launching Facebook. By limiting membership to Harvard and then other high-status universities, Facebook created a premium image relative to the most popular existing social networking sites, Friendster and Myspace. (The Winklevoss twins and Narendra later sued Zuckerberg for stealing some of their ideas and received a reported \$64 million settlement.)

Another likely influence was Aaron Greenspan, a Harvard student who had launched houseSYSTEM, an online service at Harvard. The service had a “universal face book”—a printed book with students' photos—and provided a variety of services, including book buying and selling and course reviews. Zuckerberg invited Greenspan to partner with him on the Facebook project, but Greenspan refused, saying later, “I didn't like the idea of working for someone who had just been

disciplined for ignoring privacy rights.”<sup>4</sup> (Zuckerberg had been disciplined by the Harvard administration for hacking Facebook photos of Harvard students for FaceMash, a site he had built; it randomly pulled photos of Harvard students so that the viewer could vote on which person was more attractive.) Greenspan also later said that some of the key ideas behind Facebook came from him. While Zuckerberg hasn’t commented on what he may have learned from the Winklevoss twins, Narendra, or Greenspan, he has acknowledged the importance of connecting with others to get new ideas. “Ideas typically do not just come to you,” Zuckerberg says. “They happen because you’ve been talking about something and talking to a lot of people about it for a long period of time.”<sup>5</sup>

Facebook was designed to connect college students and alumni with each other. Because of its much broader appeal, it needed greater resources than Zuckerberg’s earlier projects. Eventually, Zuckerberg needed substantial funds to grow Facebook. So he turned to his weak ties. One individual whom Zuckerberg met when launching Facebook was twenty-four-year-old Sean Parker, a cofounder of Napster. Parker was a consummate networker and well connected in Silicon Valley despite his young age. He was polished, spending money (when he had it) on nice meals, haircuts, and stylish clothes.<sup>6</sup> In fact, Parker was the one who, after seeing Facebook, first reached out to Zuckerberg to set up a meeting at a fancy restaurant in New York. (Parker reportedly had to overdraw his bank account to afford the dinner, but he believed that the meeting was worth it; his investment ultimately returned millions to him.) The two men hit it off from the beginning, and Zuckerberg eventually asked Parker to join Facebook. So when Facebook needed a large infusion of cash to keep up with growth, Zuckerberg turned to Parker.

Because Parker had a strong aversion to venture capitalists, he suggested that Zuckerberg look for an angel investor. Parker's first choice was Reid Hoffman, a cofounder of LinkedIn (also a fledgling social networking site at the time) and a friend whom he had met through Plaxo, another of Parker's startups. Hoffman saw personal and business networking as different animals, so he had invested in Friendster (a social networking site that predated Facebook) and had launched LinkedIn (designed for business networking). Given his investment in Friendster, he passed on funding Facebook. But he introduced Zuckerberg to Peter Thiel, who had worked with him at PayPal. Both Thiel and Hoffman are members of a distinct social network—wealthy former employees of PayPal—sometimes called the PayPal Mafia (which includes other successful entrepreneurs like Musk and Max Levchin). Thiel had met Parker and was impressed with both Parker and Zuckerberg. He was also impressed with the data on Facebook's growth and usage: when Facebook launched at a new university, over 80 percent of the student body joined within the first few weeks, and 80 percent of those visited Facebook daily.<sup>7</sup> So he agreed to lend Facebook \$500,000, which would turn into 10.2 percent equity if Facebook hit a million users by the end of the year. (Thiel's investment made him a billionaire.) The real financial resources that launched Facebook came through weak-tie relationships.

Moreover, once Facebook began to expand, it needed to attract key talent. Parker's weak ties proved extremely valuable here as well. The company's first designer, Aaron Sittig, was an early Napster friend who would become Facebook's key product architect. Parker also helped recruit other influential executives to Facebook—people like Chamath Palihapitiya, who was vice president of user growth and was instrumental in growing

Facebook around the globe. Parker also brought in Steve Venuto, his lawyer at Plaxo, and together they helped Zuckerberg create a corporate structure that gave Zuckerberg complete and permanent control of the company he founded. The plan fortified Zuckerberg with supervoting shares that resisted dilution during fund-raising and armed him with enough board seats to stay in power for as long as he wanted. Zuckerberg's success in launching Facebook owes much of its success to the resources that were brought to the venture through the weak-tie relationships of Parker and other early Facebook employees.

## What Innovation-Specific Social Capital Is and How You Build It

Most of us underestimate the importance of building large weak-tie networks. This is not to say that strong ties are unimportant; they definitely are important (more on this later). We often overlook weak-tie networks because we feel uncomfortable reaching out to mere acquaintances to ask for something.” Not so for the world's most innovative leaders. They shrewdly figure out what resources they need to accomplish an innovation initiative—and they intuitively understand, or learn along the way, that those resources are likely to be held by people outside their Dunbar number.

For example, Marc Benioff, founder, chairman, and co-CEO of Salesforce, is one of the world's truly extraordinary networkers—and this has paid big dividends for the company. His focus on networking expanded in 1999 when he was trying to raise money to fund Salesforce, which was based on the novel idea that businesses could run their apps in the cloud, the same way Amazon sold books via the internet. “We're a company that could

never get venture capital,” he says. “All those venture capitalists, when I went to them, would never give us capital. I was thrown out of all the names you know in the Valley—Kleiner Perkins Caufield & Byers, Sequoia, US Venture Partners, on and on. Everyone threw me out, not once, but multiple times. I had to raise money myself from individuals.”<sup>8</sup>

Benioff’s penchant for networking was critical not only for raising capital but also for building customer relationships. There have been six-month periods, Benioff told us, when he has been “mostly on the road with customers and have probably met with more than three hundred CEOs and CIOs [chief information officers].” If you’re counting, that’s roughly 2.5 meetings with different company CIOs *per day*. Networking with customers helps you understand their needs and challenges, which is critical to generating ideas (as described in *The Innovator’s DNA*), testing and validating innovative solutions (as described in *The Innovator’s Method*), and winning resources (sometimes from the customers themselves) to commercialize solutions for them.<sup>9</sup>

Benioff has also built his networks by launching Dreamforce, a Salesforce effort that has become the largest software conference in the world. Every fall, San Francisco is overrun by more than 170,000 salespeople, entrepreneurs, and techies. Hotels book up months in advance. Restaurants prepare for blocks-long lines. All thanks to Dreamforce. Since its humble beginnings with 1,000 attendees in 2003, Salesforce’s annual conference has evolved into a one-of-a-kind spectacle, a star-studded pageant with late-night concerts—an event that makes other industry conferences look like book clubs. This event creates amazing networking opportunities for Benioff and contributes greatly to his social capital.

But it isn’t just the innovation superstars who learn how to

build and leverage their social connections. Leah Busque is the founder and former CEO of TaskRabbit, a transaction platform connecting people who want errands done and those willing to do them. When Busque had the idea for TaskRabbit, she had few connections and little idea of how the startup world worked. But she was willing to talk to people about her ideas wherever she went. One night, she went to dinner with some of her husband's friends from work. Although she didn't know his friends well, she went ahead and described the idea. As Busque argues, "Never worry about being afraid that someone is going to steal your idea. There is so much value in sharing your idea with as many people as possible, getting feedback early on and then developing from there."<sup>10</sup> As it turned out, one of the attendees at dinner was intrigued with her idea and said that her friend Scott would really love this idea. So the woman gave Busque his email. That night Busque shot off a casual email to Scott asking for an hour of his time. On Sunday morning she had a reply from Scott Griffith, the CEO of one of the largest car-sharing networks in the world, Zipcar. He said he would love to talk. Over the next few months they met several times. He introduced Busque to mentors, to investors, and even provided office space at the Zipcar headquarters when she finally quit her job to start TaskRabbit. As Busque recalls, "It was so serendipitous that I got connected to him. You never know where different leads are going to take you. If you can just be really open about what you are working on, open to feedback, open to connecting to people you just never know where that is going to take you."<sup>11</sup> Since then, TaskRabbit has spread to forty-five cities and was acquired by IKEA, a company that is investing to expand TaskRabbit's operations worldwide.

Busque was successful at obtaining the resources for TaskRabbit because she was constantly initiating conversations about

her idea with a wide variety of social connections. As Arne Sorenson, who as CEO has led Marriott International to a tripling in market value between 2014 and 2018, told us: “Partnerships are key to the success of our business model . . . You’ve got to be zealous about creating the opportunity for new conversations.” But who should be the target of those “new conversations”? The trick isn’t just to build the largest network of connections possible; you need to build the largest network of connections possible with individuals who have the resources that can help with your innovation projects. These people fall into five prized social capital categories:

- Innovators and entrepreneurs
- Organizational leaders (e.g., C-suite executives)
- Financial benefactors or investors (e.g., angel investors, venture capitalists, bankers)
- Influencers (e.g., celebrities, prominent networkers)
- Customers (e.g., target customers for your innovations)

You can find more detail on these categories in the sidebar, [“Prized Social Connection Categories,”](#) at the beginning of this chapter.

Individuals from these categories in your social network represent your *innovation-specific social capital*. Ideally, your Dunbar number will be filled with these types of individuals. In other words, you *do* need strong social ties with some individuals in each category because they represent a beachhead that will connect you to others in that category. One of the most consistent findings in research on networking and hiring is homophily—or the idea that as humans, we desire to be around, and hire, others who are like us. If you connect with inventors, they will know other inventors. CEOs will know other CEOs. And celebrities will know other celebrities.

But of course, most of us don't start with such strong connections. In fact, very few of us do. Instead, we have to build these connections first by creating weak ties with the "right" people and then, if we are lucky, eventually turning some of these connections into strong ties.

To illustrate, consider the case of David Bradford, currently CEO of FluentWorlds (Bradford has also been the CEO of HireVue, a successful firm that offers a talent interaction platform, including digital screening and video interviewing of job applicants, and Fusion-io, maker of advanced flash memory technology that had a \$2.0 billion IPO in 2011). Bradford is the poster child for building innovation capital through social ties. He started out lacking any ties to people with resources. But over time, he has created an amazing network of connections that have helped him commercialize products in multiple successful companies.

Bradford says his penchant for networking wasn't ignited until he was graduating from law school and he couldn't find a job. He told us that he had been commiserating with his mother about his predicament when she said, "David, haven't I explained to you that, in life, it is not what you know but who you know?" Bradford hadn't yet learned that lesson. "I came from a small town in Montana," he says. "If there was a lawyer in that town, I did not know him. I had zero connections in the legal world. I was the least connected guy in the universe."

But Bradford took his mother's advice to heart, and since that day, he has been a networking machine. His wife calls him "the human internet." He has thirty thousand LinkedIn connections, the limit allowed by LinkedIn; he has to delete a connection to add one. "On LinkedIn, I have more than five million contacts that are only one degree of separation from me," Bradford says.

“In fact, using LinkedIn, I have the power to contact over thirty million people directly or through a connection. This allows me to search, as I frequently do, for qualified resources and expertise.”

Bradford has developed real relationships with individuals in all five prized innovation capital categories. During his career, he has formed connections with folks in the innovators and entrepreneurs category, like Steve Wozniak (Apple cofounder whom Bradford recruited to become chief scientist at Fusion-io); Ray Noorda (Novell founder and father of modern computer networking); Nolan Bushnell (father of the Atari and computer gaming); Gary Kildall (who wrote the first PC operating system on which MS-DOS was based); Drew Major (co-inventor of PC networking); and David Flynn (inventor of fast solid-state flash memory technology). Bradford also developed weak ties with Steve Jobs, Bill Gates, and others.

Bradford has made connections with numerous organizational leaders, including 339 CEOs and 306 company presidents currently in his LinkedIn contacts. His connections include Eric Schmidt (former CEO of Google and Novell); Dave Checketts (former CEO of the Madison Square Garden Company and Legends Hospitality Management and founder and chairman of Sports Capital Partners [SCP] Worldwide); and Scott McNealy (founder and CEO of Sun Microsystems).

Financial benefactors or investors provide another source of social capital for Bradford, who has more than a thousand of these backers as connections. Mostly angel investors or venture capitalists, the group includes many people at the top venture-capital firms like New Enterprise Associates (NEA), Lightspeed Venture Partners, Sequoia Capital, Kleiner Perkins Caufield & Byers, and Andreessen Horowitz. His connections include Marc

Andreessen (cofounder of Netscape and Andreessen Horowitz); Scott Sandell (of NEA and one of only six investors to be named to the *Forbes* Midas List of top tech investors every year since 2007); Jeremy Liew (Lightspeed Venture Partners); and Doug Leone (a billionaire venture capitalist with Sequoia Capital).

Bradford has also gained social capital from influencers—prominent folks with many connections. Among his connections are National Football League hall of famer Steve Young, writer Malcolm Gladwell, politicians Mitt Romney and Orrin Hatch, talk show host Larry King, and Olympic gold medalist Peter Vidmar. And finally, Bradford has zealously networked with target customers in every business he has worked in.

Bradford readily credits his social relationships as vital to his business success. But how does someone go from being “the least connected guy in the universe” to being one of the most connected people?

## Advice on Building Innovation-Specific Social Capital

So how do you get started building a network that will increase your social capital? Several methods can help you build your own capital.

### Define Your Networking Objectives, and Categorize Your Social Connections

To make the building of social connections as time-efficient as possible, we recommend investing time up front to think through your networking objectives and to categorize the contacts you already have. Leaders who apply this step and the next two steps of our networking advice can stretch the limits of their Dunbar number to well above 150 by allowing technology to stretch the natural limits imposed by their brains (the original Dunbar

number range was 100 to 250, with 150 being the median; technology—and a significant time commitment—may make it possible to nearly double that number). To get started, think about what you are trying to accomplish with your social networking efforts. The following questions can serve as helpful prompts for this exercise:

- What are the top priorities and most critical needs of your current project, venture, or career? Sponsorship? Funding? Knowledge or expertise?
- In which arenas, for example, industries (telecommunications, technology, education, etc.) or technology areas (e.g., fields of expertise or knowledge domains) are you hoping to make your mark? What strong and weak connections do you have with folks in the five key categories in those arenas?
- Within those arenas, what gaps do you have in your current social capital? What type of connections would best fill those holes? Do you need connections with more organization leaders? Innovators and entrepreneurs? Influencers?

Once you have defined your objectives, you'll want to develop an approach to categorize your contacts so that you can make thoughtful efforts to build this network. "An uncategorized contact is a wasted contact," says Bradford. "Every network I create is organized by categories. This is the most efficient way to follow up with people. It is the only way to harness your people, your pool of skills, and your resources in a focused way." Bradford categorizes each new contact using LinkedIn's "network" and "tag" functions (that allow you to assign a self-generated tag to each of your contacts). His categories include *professions* (e.g., accountants, angel investors, attorneys, bankers, entrepreneurs, educators, technologists, government/politicians, venture capitalists), *positions within organizations* (CEOs, CIOs, CMOs [chief marketing officers], sales executives), and *companies* (e.g., IBM, Novell, Fusion-io, HireVue). In the *companies* category, he largely includes companies he has worked for or companies that are customers of

the companies he has worked for. Bradford even uses various *friend* categories (e.g., golf friends, real estate friends, church friends, Google friends).

Other leaders we've studied used a simple Excel spreadsheet to categorize their contacts in similar fashion. It doesn't matter exactly what tools or technologies you use as long as you take the time to organize your relationships in a meaningful and useful way. The value of having these well-organized labels is that you can quickly and easily access them when you need to take action. Use these tools to track how often you interact with your connections. Strategize how you might develop stronger ties with high-priority contacts. Set weekly goals to both deepen key social ties and expand your overall network of relationships.

### Invest the Time to Find Connections Through Scrappy and Resourceful Networking

In our work with hundreds of innovators, both inside and outside large organizations, we've found that their capacity to access resources through social connections requires significant time and the scrappy approach of an entrepreneur. Most of us don't spend nearly enough time building our innovation-specific social capital. Bradford spends one or two hours *per day* (five or six days per week) on building, maintaining, and getting value from his social connections. He does this mostly using various technology platforms like LinkedIn, Facebook, and Twitter to develop weak-tie relationships that eventually, through face-to-face meetings, he can turn into stronger relationships. Over the past thirty years of his career, Bradford has spent roughly fifteen thousand hours, or over eight years of his work life, on building and maintaining relationships. How much time do you spend building and maintaining your own social connections each

week?

Of course, the most effective way to build social relationships does not come through technology. You build relationships most effectively through phone conversations and face-to-face contact. But you have to make these relationships a priority. Marriott CEO Arne Sorenson understands the value of devoting time to networking, so much so that when a recent trip to China was canceled, he decided to use the three free days for face-to-face networking. “I reached out to four CEOs, names you would know, in the Bay Area whom I had met but didn’t know well. I flew out and had conversations with each of them that lasted up to three hours. I just asked, ‘What are you up to? What’s important to you? Are there any things that we can think of that we’d like to do together? I’d love to have your advice; here are some of the things I’m wrestling with.’” Sorenson says that these kinds of conversations are invaluable. “In every one of those conversations, I left with concrete ideas that could be pursued. And I think those folks left the conversations with some useful ideas too. The key is *you have to use those conversations to listen* at least as much as, if not dramatically more than, to speak.” Sorenson could have used his three free days to catch up on work or even relax, but by choosing to network instead, he opened the door to future initiatives that he might otherwise never have found.

Here are a few tools that the individuals and teams we coach have used to great effect to build their social connections. (For more resources and insights on this topic, visit [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital).)

- We’ve mentioned LinkedIn a handful of times now. Two ways we like to use LinkedIn include the following:
  - Upgrade to the premium LinkedIn Sales Navigator, and use its advanced search features (you could also just do a thirty-day trial).

- Use the “Affiliated company” feature to find similar organizations and individuals.
- One of our favorite and lesser-known resources is using the superb search options (entirely free!) provided by AngelList (<https://angel.co>). This social platform connects entrepreneurs, investors, and other people interested in early-stage companies. By late 2018, there were over 4.15 million startups and 7.47 million investors searchable on the site. Set the search criteria to match your interests, and start reaching out to individuals who catch your eye.
- To build your directory of potential contacts, you can identify past or upcoming conferences in your industry or in a targeted domain, search for the roster of presenters at the conference, and reach out to people on that list. You have a much higher chance of meeting high-quality individuals through this approach because they have already been vetted. Bradford met Wozniak at a conference and, after a brief meeting, invited him to join Fusion-io’s advisory board the very next day. Wozniak eventually joined the company as chief science officer, bringing much-needed credibility to the startup.
- Look up popular blogs or discussion forums in your areas of interest, and send out a post describing who you are and the connections you are looking to make. You’ll be surprised at who else has the same interests and desire to connect. Investors need potential startups to fund, entrepreneurs need cofounders, and everyone likes to meet and interact with proactive, respectful individuals.

This is just a short list of potential resources you can use, and new ones pop up all the time. You must think and act like an entrepreneur—continuously be on the lookout for fresh tools that can help you make new connections. Consequently, most of us have to dramatically increase the time we spend developing social connections in the five prized categories, and we need to do it using the latest channels, tools, and resources.

### Develop and Maintain Relationships

Ask yourself the following question: What is the catalyst for building a meaningful, cooperative relationship? Insights into the answer were uncovered by Alvin Gouldner, a sociologist who

studied the formation of norms in villages, other communities, and societies. A norm is an expectation of the “socially appropriate way” to behave within a social group. Gouldner studied numerous communities to determine which norms were identified as universal. Two norms were identified as most common across all social groups: One was the “incest taboo,” the view that incest was inappropriate social behavior in all societies. The second was a “norm of reciprocity,” or the expectation that people should respond favorably to each other by returning benefits for benefits.<sup>12</sup> According to the second norm, when someone does something positive for us, we feel an obligation to repay it (studies show that this type of tit-for-tat behavior starts at age two). Think about it. When a neighbor brings you a gift for a holiday, don’t you feel an obligation to give a gift back? Indeed, Gouldner found that gift giving was the key catalyst—what he called the “starting mechanism”—for initiating a norm of reciprocity between individuals. A gift could take the form of a physical object (e.g., an electronic device, a wristwatch, jewelry), or it could be the gift of time, information, or anything that the receiver would find valuable.

Bradford has built his network by leveraging the law of reciprocity. “The law of reciprocity dictates that when we help others, help will return to us down the road in some form,” he says. But ironically for the law of reciprocity to work, you have to be motivated to give *because you desire to serve, not because you expect a reward*. Ah, there’s the rub.

Bradford has built an incredible network but only because he has been genuine in devoting his time and resources to help those in his network. He kindly offered free lodging to Steve Young when the hall of famer would return to visit Provo, Utah (home of his college alma mater, Brigham Young University), during the

off-season. Later, Young autographed a football that Bradford sent to a Bay Area executive Bradford was recruiting to Fusion-io. The ball had the inscription “Jim. Fusion-io—Go for it! Steve Young.” The executive, who was a sports enthusiast, had previously turned down the job multiple times, but the autographed football gift turned the tide. The executive joined Fusion-io and had a huge influence on the company’s sales.

When radio and TV host Larry King and his wife Shawn invited Bradford to attend an event that they hosted to celebrate the life of Shawn’s uncle Bobby Engemann (a member of the famous singing group the Lettermen), Bradford not only showed up but also came with his camera in tow. “He created a gorgeous photo-book of the evening and gave a number of copies to our family members,” King recalls. “This is a memory that we will treasure forever.”<sup>13</sup> No wonder King was willing to write a foreword to *Up Your Game*, Bradford’s book on networking.<sup>14</sup> Bradford’s kind gestures often come early in developing a relationship because he genuinely asks the question How can I help this person achieve his or her goals?

Gifts, like the ones described above, can only be done with a smaller group of individuals with whom you are wanting to develop a strong relationship—people you want to pull into your Dunbar number. So how can you provide something of value to a large number of folks with whom you share a weak tie? Robin Chase, founder of Zipcar (a startup renting wheels by the hour), has found that a “light touch” connection every six to twelve months keeps the relationship “live.” “I’ll send an email at least once a year with some useful information or real news, saying, ‘I just saw this article or this study and thought you might find it interesting,’” Chase told us. “Then I feel comfortable reaching out to ask them a question when I need to. They respond because I

haven't proven to be a self-interested jerk who is annoying them with useless pages of information and asking for way too much. We are all so busy we don't have time for people who are sending us garbage emails. So just be respectful and find out what they want to know. What are their issues?"

Another option is to take advantage of contacts or knowledge from your company to provide value to a contact. For example, Danaher, a successful maker of industrial products that has increased its stock price threefold between 2008 and 2018, is known for its Danaher business system (DBS)—a set of execution practices based on lean principles that Danaher says are “at the heart” of its success. As we observed the work of individuals and teams at Danaher (and Fortive, a company that spun out from Danaher), we saw them use their knowledge of DBS to connect with customers, partners, and out-of-industry contacts. By simply offering to share insights from an internal set of best practices, Danaher people have gained incredible access to powerful individuals who are keen to learn about DBS.

Providing something of value to others is the key to starting, and maintaining, social connections. So think creatively about taking advantage of what you know, who you know, and what resources you can access to provide value to a contact.

## **Conclusion**

Bradford's mother was right. In life, it is often who you know that makes all the difference to your success. But what she and others typically don't know is that learning how to access resources through weak social ties is critical to accessing the resources you will need to succeed at launching innovative projects and ventures. Moreover, the target of networking should be individuals within five prized categories: innovators and

entrepreneurs, organizational leaders, financial benefactors, influencers, and customers. Building a network filled with valuable strong and weak ties with people in those categories is hard work, but it will provide you with access to resources, mentorship, and opportunities and will be an invaluable step in building your innovation capital. As you build your social network, you should also think about how you can build your credibility and personal reputation for innovation within that network—the topic of chapter 4.

### **Assess Your Social Capital That Contributes to Innovation Capital**

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To take the first step to understanding whether you are good at forward thinking, proactive problem solving, and persuading, take the following brief assessment of your social capital. (See our website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital) for a full version of the social capital assessment and additional resources.)

Answer each of the following items using the numbers 1 through 7. Be honest in your assessment. In fact, when appropriate, have those who know you best assess you on these items.

1. Roughly how many people are in your LinkedIn or other professional network?
  - a. less than 100
  - b. 100–300
  - c. 300–500
  - d. 500–1,000
  - e. 1,000–3,000
  - f. 3,000–10,000
  - g. more than 10,000
  
2. Roughly how many strong-tie relationships do you have with people you would classify as either successful innovators or entrepreneurs; organization

leaders (vice president level and above); financial benefactors (angel investors or venture capitalists); or influencers (prominent individuals with many social connections)?

- a. 5 or fewer
- b. 6–10
- c. 11–25
- d. 26–50
- e. 51–75
- f. 76–100
- g. more than 100

3. On a scale of 1 to 7 (where 1 = one hour or less; 2 = two hours; 3 = three hours; and 7 = seven hours or more), how many hours per week do you spend networking to meet new people to bring them into your network?

4. Using a scale of 1 to 7, where 1 = strongly disagree; 4 = neither agree nor disagree; and 7 = strongly agree, rate the following statement: One of my strengths is networking with others who can bring financial resources or other needed resource support to my innovation projects.

Add up your score. Here's how to interpret your results:

26–28: You have very strong social capital or connections.

23–25: You have strong social capital or connections.

21–22: You have adequate social capital, but it's unlikely to have a strong impact on your career.

Below 21: Your social capital is a weakness and will not help your career unless you improve.

## What You Are Known For

### (and Ways to Become Known)

How can you build a reputation that helps you win support for your ideas? Although we all assume we understand the idea of reputation, did you know there are actually three dimensions, or levels, of reputation? The first level is simply *general reputation*, or being known, which represents the level of awareness that someone (or something like an organization or product) has developed within a community. For example, consider whether you are known in your organization or community. Even just being known has benefits, many of which we don't fully appreciate.

For example, just being known can lead to a *mere-exposure effect*: the psychological phenomenon wherein people develop a preference for something merely because it is familiar. For example, in one study, four people with similar appearance visited a college course with differing frequency (one person visited five times, another ten, another fifteen, and the fourth didn't attend). At the end of the course, although the visitors had had no interaction with the actual students, when the students were shown photos of the visitors, they rated the people who visited the class fifteen times as much more attractive than those who visited less.<sup>1</sup> In other words, without realizing it, we prefer things that we have merely been exposed to. So if you can just get

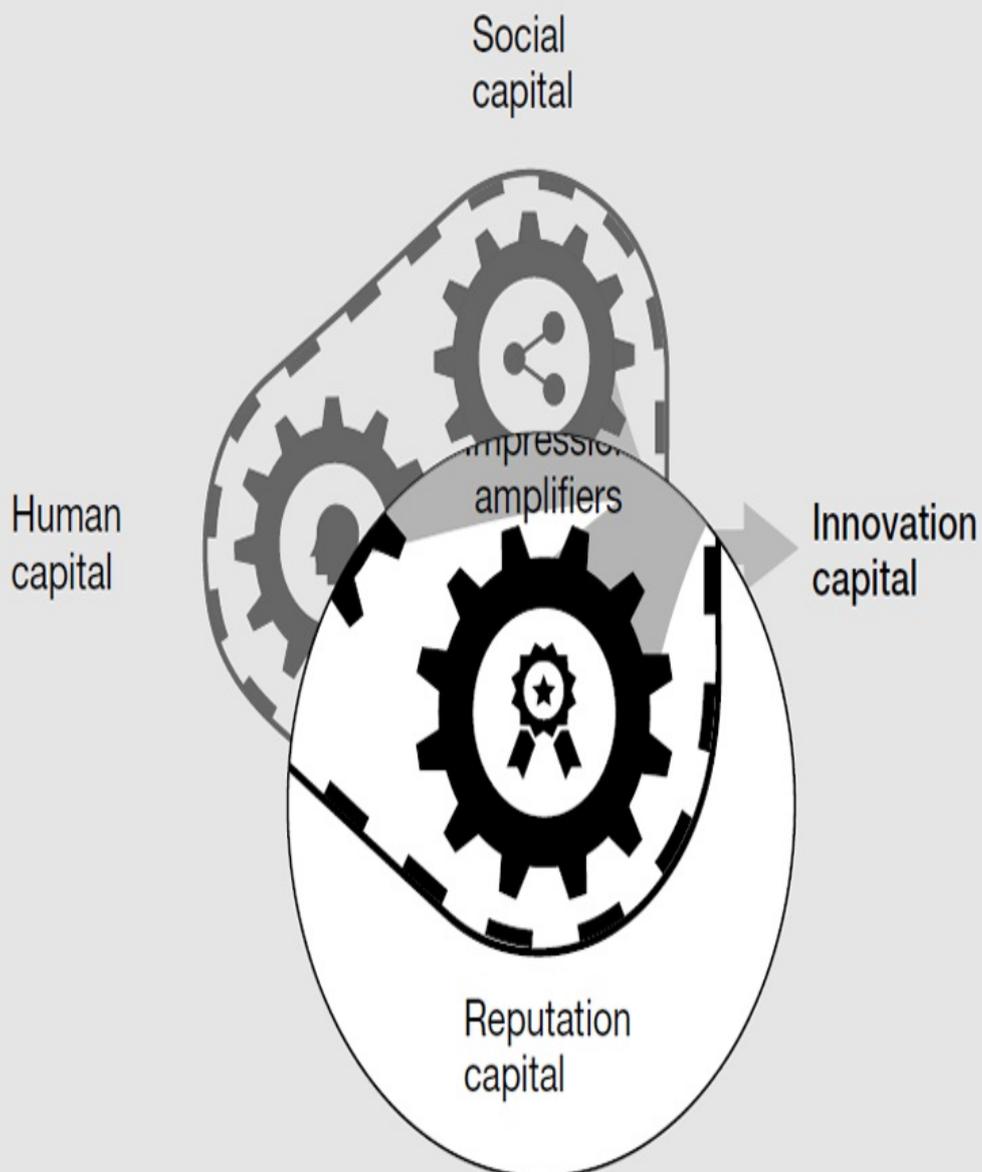
people to become familiar with you and know who you are, then you increase the odds that they will think positively of you.

The second reputation level is *general favorability*, or being seen in a positive (or negative) light. For example, we've all heard comments like "I've heard Sarah is really great" or "I'm glad Anup is on the team." Although Sarah and Anup may not be known for anything in particular, these favorable impressions have a more beneficial effect than does just being known. And of course, the impression can be unfavorable as well. For example, you may have no firsthand experience with Kmart, but when you hear the name, you are likely to have an unfavorable impression because of what you've heard or read.

## Reputation capital

### Reputation capital contributors

- Be a founder
- Take on visible, challenging projects
- Demonstrate strategic judgment
- Borrow reputation
- Exhibit scrappiness



## Ways to Contribute to Innovation-Specific Reputation Capital

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**BEING A FOUNDER:** playing a central role in starting or managing an initiative that will have an impact (preferably visible and large) on an organization or the broader world; can be an internal initiative, an external project, or another activity, not just a startup

**TAKING ON VISIBLE, CHALLENGING PROJECTS:** raising your hand for, and then delivering, honest effort for hard projects, which typically receive more visibility and support inside large organizations; works because difficult projects have the biggest impact on the organization, the world, and, by extension, your reputation capital

**DEMONSTRATING STRATEGIC JUDGMENT:** showing the wisdom to clearly see a situation, make hard decisions, and proactively reallocate time, attention, and resources; builds your reputation capital

**BORROWING REPUTATION:** working for, or affiliating with, organizations or people with a reputation for innovation; works because reputation capital comes from our accomplishments and the people, organizations, and companies we associate with

**EXHIBITING SCRAPPINESS:** doing a lot with very little; if done in every situation, builds your reputation for resourcefulness and convinces supporters to give you more resources

The third level of reputation is *being known for a specific attribute*, like innovation, execution, quality, or integrity. This is the most difficult type of reputation for you to develop, but it is also the most valuable. If someone has a problem that requires innovation, execution, or integrity (or some other attribute), the person will naturally look to you. A reputation for innovation is particularly valuable because it helps supporters reduce the inherent uncertainty they feel when taking a risk. As proof, consider the findings of a study conducted by Harvard professor Joseph Bower to understand what factors were most important for obtaining funding for a new project inside established companies. Surprisingly, Bower found that leaders did not choose projects according to whether the projects addressed the

biggest market opportunity. Nor did they base their decisions on the highest projected internal rate of return or net present value. Instead, leaders chose projects primarily because of the track record and reputation of the person leading the project.<sup>2</sup>

Reputation has a similar impact when you are seeking funding for a startup. When weighing the benefits of who you know versus what you have done, research suggests that although knowing the right people may help you make initial contact with investors, your reputation has a much greater weight on how likely your project is to be funded.<sup>3</sup> As Adobe CEO Shantanu Narayen puts it: “If you look at Sandhill Road [in Silicon Valley] and the venture capital community they look more for the entrepreneur than the ideas, because ideas morph . . . but the entrepreneur is the critical person.” This same principle is known among venture capitalists as betting on the jockey (the entrepreneur) and not the horse (the opportunity). Why would investors prefer to bet on the innovator than on the opportunity? Although a venture might have great financial projections, the reality is almost always different than what is expected, so innovators need to pivot and adapt to the unexpected. Experienced investors almost always prefer to bet on an entrepreneur with a reputation for being able to navigate the twisted path to success.

As it turns out, reputation for innovation also matters for public (and private) companies, not just private individuals. As described in [chapter 1](#), our research on the S&P 500 showed that companies in the top 10 percent in terms of their reputation for innovation had three times higher market capitalization than did firms in the bottom 50 percent of innovation reputation. Moreover, the value of a reputation for innovation persisted even after we controlled for a firm’s general reputation, general

favorability, and actual innovation capabilities. A reputation for innovation was more valuable than other reputations we tested, such as a reputation for efficiency, execution, or quality. Remarkably, then, a *reputation* for innovation is valuable in and of itself—beyond a company’s or person’s actual innovation capabilities. A reputation for innovation will help you win support to pursue new ideas.

## **Building Your Personal Innovation Brand**

So how can you build your own personal innovation brand? For most people, building a reputation is a stepwise process built through small wins over time. We first build a favorable reputation and then get known for something within our reach (efficiency, reliability, etc.). Then we slowly build up a reputation for innovation.

For example, consider how Robin Chase, cofounder of Zipcar, built her reputation for innovation. Founded in 2000, the car-sharing service pioneered a new market category in a space where few people were innovating: mobility. The basic idea was to place cars around cities where people could rent the vehicles by the hour. However, given the novelty and risk associated with Zipcar’s business model, Chase struggled to win the support to turn her idea into reality.

Fortunately, Chase graduated from a prestigious business school: MIT. She admits, “As a woman pioneering a new category, if I hadn’t graduated from MIT, I wouldn’t have had a chance.” In essence, Chase’s reputation of accomplishment, as represented by her graduation from an elite institution, opened the doors for a conversation with potential investors. But that only opened the door to a conversation. Chase continued to struggle to convince investors to commit. She also struggled to

recruit key employees, because of the risk associated with the venture.

Chase describes her moment of awakening to the need to shape her reputation capital more actively. It was the day she attended a Harvard course discussion about Zipcar. Harvard professor Myra Hart had invited Chase to sit in the back row while the students discussed Zipcar's prospects. The plan was that at the end of the discussion, Chase could surprise the students with her insider view of what really happened. As the class discussion began, Hart drew a vertical line on the chalkboard and wrote on one half: "reasons to invest in Zipcar" and on the other half: "reasons not to invest in Zipcar." The students began debating. Chase described her disbelief as the "reasons not to invest" column began to fill up and overwhelm the few entries in the "reasons to invest" column. But what surprised her even more was the nature of the objections in the "reasons not to invest" column: most of the negative reasons related to her own qualifications!

Students pointed out that Chase had never been CEO. She had never been a founder of a startup. She had no experience in the car industry. And on and on. "I sat there stunned," Chase recalls. "I realized I hadn't communicated who I am and the things I have done. I hadn't communicated that every time a CEO or executive I worked with moved to a prestigious new role, they pulled me along as their number two. I hadn't communicated that I had a reputation for getting things done, and for precise thinking. It was an aha moment. After that, I realized I need to be more thoughtful about building and communicating my reputation." Although Chase hadn't been a founder or a CEO, she did have many experiences that could contribute to her personal innovation brand, with a bit of extra attention.

Today, after founding Zipcar (which was sold to Avis for \$500 million), publishing a book on peer-to-peer platforms, and cofounding other innovative for-profit and not-for-profit ventures, Chase has established a strong reputation for innovation. But building that reputation was an incremental process. It began with building a general positive reputation (e.g., leveraging her MIT credentials), then a specific reputation (e.g., someone who gets things done), and finally a reputation for innovation (a leader in innovative startups; someone who writes about innovation). Today her reputation for innovation makes it much easier to win support for her ideas and ventures.

## **Advice on Building Your Reputation for Innovation**

As a first step, you can exploit your present accomplishments to build a general reputation, even if it isn't specifically related to innovation (see the sidebar [“How Reputation Signals Work”](#)). For example, your education can obviously contribute to your general favorability, particularly your education level (e.g., master's degree or PhD); where you received your degree (an Ivy League school, a first-tier research school, etc.); or other distinguishing certifications (e.g., coding certification). Likewise, the companies you have worked for and the positions you have held (e.g., project leader, C-level executive, founder, member of a prestigious project) influence whether you are known favorably. Your past achievements matter as well, such as winning awards or other recognitions. For example, in a business school setting, you might have won a case competition or a business plan or business model competition. These factors all contribute to a generally favorable reputation, which is typically a stepping-stone to a reputation for innovation.

## How Reputation Signals Work

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What is building a reputation all about? Ultimately, you are trying to create reliable signals about your capabilities and share them with those you are trying to convince. Signaling theory proposes that the most effective signals have several characteristics. First, signals that are hard or costly to create are more effective than others (e.g., it is harder to get a job at Google than at the local food retailer). Second, signals are more effective when they are easily observable (otherwise, no one will notice).<sup>4</sup> Third, the more relevant the signal, the greater the impact on your reputation. So, for example, a PhD is a credible signal, since this degree is hard to achieve, particularly if it comes from a good university. But a PhD in autonomous vehicle technologies will give you more credit than a PhD in literature if you are trying to do a technology startup. At the core, supporters—whether they be investors, suppliers, customers, employees, or others—are looking for signals predicting future success based on your past experience and achievements.

The challenge for most of us is that some of the more familiar reputation signals (e.g., education, degree, company positions) are hard to change. If you have already graduated from school, been working for some time, or are midcareer, you have limited latitude to change these signals. For most of us, the real question is, From where you stand today, how do you start building the kind of reputation that contributes to your innovation capital? Most of us have to get more creative! In the next few sections, we describe several of the most effective techniques the innovators we studied employed to build their reputation for innovation:

- Be a founder.
- Take on visible, challenging projects.
- Demonstrate strategic judgment.
- Borrow reputation.
- Exhibit scrappiness.

Be a Founder, but Think Creatively about How to Do It

Jeff Bezos, Elon Musk, and Mark Zuckerberg all sit atop our most innovative leaders list. Why? They are founders of successful companies doing something new and innovative—and full of impact. The most valuable thing you can do to build your reputation for innovation is to be a founder. This observation is so important that it bears repeating: To build a reputation for innovation, the most important thing you can do is to become a founder. But before you dismiss this advice as irrelevant for your situation, let us define a founder: someone who plays a central role in starting and managing an initiative that will have an impact (preferably visible and large) on an organization or the broader world. Note that being an independent startup entrepreneur is only one way to be a founder.

There are many ways to be a founder besides quitting your job to create a startup. Recent research confirms that about half of all new ventures are created by hybrid entrepreneurs—individuals who keep their day jobs and start a venture on the side.<sup>5</sup> Besides trying to found a hybrid venture, you can uncover many other opportunities to create a new venture—launching a new product, service, or business—inside a company as a corporate entrepreneur. Corporate entrepreneurship has a profound effect on both your reputation for innovation and your prospects for leadership opportunities. As part of our research for this book, we studied six hundred business professionals working for established companies over a five- to ten-year period. We found that those who were corporate entrepreneurs received more promotions, received these promotions faster, and were paid more money than were their colleagues.<sup>6</sup> Being a corporate entrepreneur gets you noticed! (However, do read the sidebar “Building a Transferable Reputation” near the end of this chapter for hints at how to take your inside-the-company status and get

noticed outside your company.)

Finally, you can even just lead a project to be a founder. Indra Nooyi, former PepsiCo CEO, founded a process of identifying global megatrends and their implications for PepsiCo—a process that, as described in [chapter 2](#), helped her engage in forward thinking. Similarly, Kate O’Keeffe created Cisco’s Hyper-Innovation Living Labs (CHILL). This initiative brought Cisco together with customers and suppliers to attack big problems and start new ventures. Likewise, Kyle Nel, a former Lowe’s executive, took over the concept for a Lowe’s Innovation Lab and turned it into an explosive center of new ideas. All these executives built their reputation for innovation by being founders, even though they didn’t quit their jobs to found a startup.

Your role as a founder has a profound impact on your career because it provides a relevant, observable, hard-to-imitate signal (the three characteristics of strong reputation signals) of your leadership capabilities. Moreover, being the founder of an innovative product or service requires holistic thinking. You must take into account all aspects of what makes a new venture successful—including its value proposition to the customer (the user), product development, technology integration, cost to deliver, performance metrics, and the resources needed for implementation. What better way to signal that you have leadership capabilities? And it’s hard. “I think the most important thing that I look for [when funding a project] is, really, who’s that champion?” Adobe CEO Shantanu Narayen told us. “I think ideas come from everywhere. But I think of all the great products we’ve developed as being characterized by somebody who is incredibly passionate about that idea.” In sum, whether you are creating an external venture, an internal venture, or simply leading a new

project, being a founder matches the criteria needed for a strong reputation signal: hard to imitate, observable, and relevant.

### Getting Started on Your Path to Founder

How can you become a founder? Start by raising your hand for new projects. Andrew Jassy's journey to become CEO of Amazon Web Services provides an illustration. Jassy joined Amazon in the late 1990s and quickly worked his way up to be a personal technical assistant to Bezos. Because of his assignment, Jassy attended an offsite leadership event at Bezos's home, where the leadership team discussed Amazon's core competencies. At first, the conversation focused on the obvious: Amazon was good at offering customers a broad selection of products and then fulfilling their orders quickly and reliably. But the conversation quickly shifted to Amazon's technical capabilities. To support their massive retail operations and their subsidiary Merchant.com (which sold e-commerce solutions to other B2B partners), Amazon had developed deep technology infrastructure services in data storage, cloud computing, and databases. It had also become highly skilled at running reliable, scalable, cost-effective data centers. As the discussion evolved, Bezos argued that there was an opportunity to sell the technology infrastructure the company was building to other firms via the internet.

“When we thought about what Amazon was good at,” Jassy recalls, “we've always been a technology company at our core. We realized we could provide all of those key components to that internet operating system.” So Jassy raised his hand to be part of the team to explore the opportunity in this new space. It wasn't an easy decision, because he would have to step away from working directly with Bezos. But for Jassy, it was worth the risk

to try his hand at being a founder.

To explore the opportunity, Jassy and several others put together a “vision document,” one of Amazon’s fast-experiment tools to think through new businesses and then test their assumptions with customers quickly (it is now called a *working-backward document*; see [chapter 8](#)). As part of their customer research, Jassy and his group discovered that other companies were experiencing the same challenges that Amazon was facing—challenges for which Amazon was building relevant technology infrastructure and solutions. Because of the depth of the customer need, the project received a green light and Jassy was tapped to lead the effort. His team had to build a suite of cloud computing services as well as new skills at selling to enterprise customers. The effort eventually evolved to become Amazon Web Services, the Amazon business unit that delivers much of Amazon’s operating profits. Because Jassy raised his hand and took the risk of leaving a very comfortable and high-profile role working directly with Bezos, he became a founder of an internal venture. There was no way to predict that Amazon Web Services would become as successful as it did. But Jassy’s role as a founder propelled his career and reputation forward like nothing else could.

Being a founder may also simply be a matter of thinking more creatively about what matters to you. You could, for example, create a venture on the side, while you are working; you could base it on your expertise, a hobby, or an opportunity that you see. As mentioned earlier, half of all new ventures are created by hybrid entrepreneurs who keep their day job and develop a venture on the side, but what is surprising is their success rates.<sup>7</sup> Although there is a stereotype that being a successful entrepreneur requires total commitment and thus the need to

quit your day job and risk it all, in reality, hybrid entrepreneurs have higher survival rates than do entrepreneurs who risk it all.<sup>8</sup> Hybrid entrepreneurs have the chance to learn and adjust, with the cushion of their current income, before deciding to go it alone. Being a founder of a venture outside your organization not only builds your skill set but also signals to those inside the organization that you are entrepreneurial.

Finally, you can think creatively about how to be a founder centered on something you are passionate about. For example, Mary Lombardo, an executive at United Technologies Corporation (UTC), has gained prominence by founding the innovation and research group within the commercial services and Otis Elevator Company business units at UTC. Lombardo was a vice president in engineering at UTC when she saw the need to build stronger innovation capabilities within her team. Because she had a passion for innovation, she started to benchmark and study innovative organizations as a pet project. She even arranged to take her boss, John Galbraith, to visit Procter & Gamble's innovation team to help him see the potential for UTC to take a leap forward in its innovation capabilities. "That benchmarking trip helped him to see that what I was proposing was possible in a large corporation," recalls Lombardo. "That was important, and I think from there, he started to see how I was building our capability and experimenting with different things. It was right after that benchmarking trip that he said, 'Write your job description, write your vision, write your plan.'" From that starting point, Lombardo has built a successful internal innovation project and now leads the eighty members of the innovation and research group at UTC.

Even if You Try and Fail, It Can Have an Upside

As you think about becoming a founder, you may feel anxious about starting something new, because of either the risk involved or the fear of failure. In terms of risk, recall that being a founder doesn't necessarily mean leaving your work. You can lead something new inside or outside your company while still keeping your job. Think creatively about how you can start a new initiative. If you're afraid of failure, then it might help to remember that your project does not necessarily have to be a success for it to build your innovation capital. Randy Komisar, partner at legendary venture-capital firm Kleiner Perkins Caufield & Byers (which invested in Google, Amazon, and Intel), used to ask, "What do you call a failed entrepreneur in Silicon Valley?" The answer? "A serial entrepreneur."<sup>9</sup> Komisar tells the joke on purpose to illustrate a critical point: many of Silicon Valley's most successful companies and most successful entrepreneurs came out of the lessons learned from failure. Silicon Valley respects entrepreneurs who try, even if they fail. Trying to be a founder, even if you fail, can help build your innovation capital. Of course, continuing to found new initiatives until you have a visible success is your ultimate goal.

## Take on Visible, Challenging Projects

A second way that innovators build their reputation and innovation capital is by taking on challenging and visible assignments. In chapter 2, we described how Indra Nooyi took on the difficult assignment of revamping the PepsiCo's IT system when she was chief financial officer (CFO) of the company. When she spoke with us, Nooyi reflected on how she had built her reputation and won innovation capital at PepsiCo: "If I go back to my time since I joined PepsiCo, and even before then, I was always willing to take on the most difficult assignments. I think

that my credibility was built on attacking the most difficult issues; it helped me as I went forward.” She offered advice for others who have high business aspirations: “I would suggest you put your hand up for the most difficult assignments. If you can prove that you can crack a difficult assignment successfully, people sort of look at you with a newfound respect.”

In most companies, hard problems receive more support—and more visibility—than do easy ones. Narayen of Adobe told us how he selects which projects to support: “I look and ask, what is the harder problem to solve? If you have a harder problem to solve, it is a better problem to invest in, because someone can’t compete with you long term. We are looking for hard problems to solve!” Narayen acknowledges that being a champion for a hard problem is a great way to get experience and earn a reputation at Adobe. “Championing change is hard,” he says. “That’s why the champions of change are so valuable.”

Of course, taking on a challenging assignment presents a dilemma, since the hardest projects also often have the highest chance of failure. Should you be worried? Of course, you should carefully consider whether to volunteer for a challenging project, and you should only take on assignments for which you think you have a reasonable chance of success. You should also be careful about overpromoting your project or its success before you have actually achieved it (see the sidebar [“Using, and Losing, Innovation-Specific Reputation Capital”](#)). But we found that when people conducted themselves honorably on a challenging project, even if the project did not succeed as expected, they frequently earned some respect. Microsoft CEO Satya Nadella led the Bing project to take on Google’s search function, and LinkedIn CEO Jeff Weiner had a leading role in a similar project when he was at Yahoo! Competing with Google in search is

clearly a difficult assignment. While both projects realized some limited success, Yahoo! eventually left search, and Google still dominates over Bing. But both Nadella and Weiner felt that it was a valuable learning experience and that they earned respect as a result of their work on the challenging project. McDonald's CEO Steve Easterbrook offers the following advice to business professionals who aspire to be leaders: "I'd start by suggesting you build a track record that reflects the sort of leader you want to be. And the sooner you set out that way, the better. I would encourage taking risks in your career. When in doubt, say 'yes.' Taking on new, challenging assignments gives you the opportunity to be noticed."

### **Using, and Losing, Innovation-Specific Reputation Capital**

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Dean Kamen was a well-known and accomplished inventor when he introduced his "game-changing" invention, the Segway, a two-wheeled, self-balancing electric vehicle. He leveraged his reputation for innovation to get attention for the product and to promote it. But Kamen, and especially the venture capitalists who supported him, were arguably too optimistic and promotional about the product (but then again, Steve Jobs also thought the vehicle would be a smash hit). The Segway was launched in 2001 in a blizzard of publicity. Yet it failed to gain market acceptance and is now something of a curiosity. As a result, Kamen's reputation as a successful inventor took a hit because of the visible failure of the Segway.

In similar fashion, Marissa Mayer left Google and took on the visible and difficult challenge of turning Yahoo! around. Given her success at Google, she promised big changes at Yahoo! and, as she had done at Google, effectively used the press to promote her optimistic agenda (at Google, Mayer reportedly had a group of PR people devoted to promoting her career). But the results simply didn't materialize. Not surprisingly, her reputation as an innovative leader took a hit when her visible tenure as Yahoo!'s CEO didn't produce the desired results.

What can we learn from these examples in light of our advice to take on big, risky projects? Recognize that taking on a hard project is risky business. If you broadcast your success before you achieve it you are essentially taking a big gamble. If you

succeed, it could be a massive win for your innovation capital. But if you fail, you will lose a great deal of innovation capital. An alternate approach we have seen work is to keep a low profile while you are trying to tackle the hard project. If you fail, then no one can hold you accountable for big promises you didn't fulfill. But if you succeed, you can start broadcasting (using one of the impression amplifiers described later) and reap the reputational benefits. Lesson learned? Perhaps humility goes a long way in protecting you from the downsides to your innovation capital.

## Demonstrate Strategic Judgment

Taking on a challenging new project can help you win positive attention that can translate into innovation capital, but so can the courage to make hard strategic judgments. Such strategic judgment includes the hard decision to invest substantial resources to pursue a bold new initiative, but it can also be the courage to stop an initiative or redirect resources away from what had formerly been seen as a high-priority task.

Consider the experience of Scott Stephenson, CEO of data analytics firm Verisk Analytics—a \$20 billion market-cap data analytics firm consistently ranked as one of the world's most innovative companies—and ranked twenty-second on our list of most innovative leaders. When telling us how he developed his reputation for leading innovation while moving up the managerial ranks at Verisk, Stephenson emphasized that he built his reputation over time by focusing resources on what he believed were the high-priority projects for the future of the company. This approach sometimes meant discontinuing activities that others saw as high priority, to put more resources on even higher-priority projects. “I would say that there were specific moments where I identified the need to accumulate resources and focus them on particular things that needed attention,” Stephenson recalls, “and then you actually get a result

and it's a result that everybody can see. That really makes an impression.”

For example, Stephenson describes the hard decision earlier in his career to sell a growing business. As background, Verisk Analytics develops unique data sets and then applies proprietary analytics to generate insights for customers. In general, Verisk focuses on data analysis and avoids building software applications. However, there are two exceptions to the rule: whenever software is required to deliver insights for customers and whenever there are platform opportunities that can generate whole new data sets, Verisk will develop software. Previously, Verisk had entered the insurance industry with a policy administration software platform. When it entered the business, everyone was excited about the opportunity to generate new and valuable data sets with the platform. But three years later, although the business was growing, it was still struggling to become profitable. Everyone wanted the policy administration project to be successful, but Stephenson thought that the software platform business model had limitations that would be difficult to overcome. At the same time, he recognized that one piece of the project was very valuable, a set of algorithms that provided critical calculations.

Because of the business model challenge, Stephenson made the hard decision to exit the growing business. But he decided to keep the rights to the algorithms. Stephenson then focused Verisk's resources on creating a new kind of business based on the algorithms. Specifically, the team created application program interfaces that could make the algorithm reusable by other policy administration platforms. Verisk then started selling the calculation capability, not as a software platform like the old business model, but as a service to multiple platforms (think of it

as kind of like the “Intel inside” approach of selling a key component for a larger system). Although in retrospect the decision made sense, at the time it wasn’t easy. “It was a difficult decision to shed the revenue,” Stephenson recalls, “but by concentrating on the thing that was the real difference maker, and also was the thing that was closest to our capabilities, we found a way to hook us up to everybody’s policy administration system.” In the end, the service became a huge success for Verisk and for Stephenson. Reflecting on how he built the reputation that led to his own innovation capital, Stephenson told us, “It’s the moment when you say, ‘Okay, we’re going to stop doing some things and start doing other things.’ Those moments get noticed.”

Deprioritizing activities and reallocating resources takes courage because you will undoubtedly upset the individuals who have a stake in those activities. When people’s reputation—or their continued employment—seems dependent on the continuation of a project, it can be extraordinarily difficult to help them see that the project should be stopped. How can you do it? Start with the legitimate, honest reasons for a change of course. Then consider celebrating the end! Nicolas Cudré-Mauroux, the head of innovation at the chemicals company Solvay, recalls how he used a technique in an earlier role to make it easier to exit a project. “We used to have a party to celebrate stopping a project and give some kind of reward to the project leader who stopped his own project,” he says. “We wanted to incentivize and celebrate liberating resources for something more important.” Having the courage to change course, to deprioritize activities to create greater impact with other initiatives, is a way to build your reputation as an influential, innovative leader.

## Borrow Reputation

Although much of our reputation is built on the back of our achievements, there are ways to creatively “borrow” reputation by associating yourself with high-prestige individuals, projects, organizations, or educational institutions that lend you credibility. For example, part of Timothy “Tim” Cook’s reputation for innovation comes from his association with both Jobs’s and Apple’s reputation. The same can be said for Sundar Pichai, Google’s CEO, who now leads the business founded by Larry Page and Sergey Brin. Cook and Pichai are, no doubt, talented and innovative leaders. But a great deal of their innovation capital comes from their leadership positions at well-known innovative companies.

The idea of reputation borrowing isn’t new, but few of us actively try to take advantage of it. We previously mentioned the reputation bump that Robin Chase received by attending a prestigious university (MIT). The challenge for most of us is that those big red-letter opportunities have already passed (e.g., you didn’t attend Stanford). So what can you do about it now? In reputation borrowing, you try to be a bit more creative in associating yourself with prestigious institutions or people so that you can share in some of the reputation benefits.

For example, the best approach to building your reputation is to work for a prestigious company (or a fast-growing one), ideally one with a reputation for innovation (see the *Forbes* World’s Most Innovative Companies list).<sup>10</sup> For example, even if Cook and Pichai were employees and not the CEOs of those companies, if you were introduced to them, you would naturally think more highly of them and assume they are innovative like the companies they work for.

Of course, getting a job at a company with an innovation brand is easier said than done, especially if you haven’t attended a

prestigious university. So what can you do? Associate yourself with a prestigious university or company through another channel. To illustrate, we have had numerous individuals volunteer to do research with us at Wharton, INSEAD, or Stanford because they want to be able to talk about “doing research at INSEAD” on their résumés and in interviews. Others volunteer to work with a center or program at the university. Doing so allows them to associate themselves with the prestige of the school, even though they may not have attended full time or graduated there. Alternatively, some executives are always telling us about their time at Harvard—not in a Harvard University degree program, but in an executive or online program. This type of reputation credential isn’t as powerful as graduating from the school, but it still leaves a positive impression and may help you get a job at that prestigious company.

Another approach to building your reputation (and the skills needed to create a startup) is to work for a fast-growing midsize company. Andy Rachleff, a former Benchmark Capital partner who co-teaches entrepreneurship courses at Stanford Graduate School of Business, creates an annual list of the top fifty “career-launching companies” to work for.<sup>11</sup> These are companies with \$20 million to 300 million in revenues and growing at more than 50 percent each year. The 2018 list includes up-and-comers like BuzzFeed (social news and entertainment), Carbon (3-D manufacturing), Health Catalyst (data organizer for health care), and Qualtrics (consumer research and experience software).

One reason to work for these companies is that while people may not have heard of one company today, it may be the star of tomorrow. Moreover, at a fast-growing company, your chances for promotion and leadership are significantly greater than at a large company. “You get more credit than you deserve for being

part of a successful company,” Rachleff writes. “Success will help propel your career . . . When it comes time to leave the successful company, you’ll be able to write your own ticket. No one will remember if you were employee 20 or 120. Everyone wants to recruit people from successful companies because they believe people carry the lessons of success with them . . . [Y]our choice of company trumps everything else. It’s more important than your job title, your pay or your responsibilities.”<sup>12</sup> (See the sidebar “[Building a Transferable Reputation](#)” for tips on how to take your inside-the-company status and get noticed outside your company.)

### **Building a Transferable Reputation**

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Reputations are created within communities. So depending on your aspirations, it’s important to recognize that although you may have invested great effort into developing your reputation inside a company, the status might not transfer to other organizations or communities. Indeed, Gary Crocker, a well-known entrepreneur in the medical-device and life sciences fields, told us that “most reputational capital is specific, meaning specific to the industry, company, or even the activity.” So how do you transfer your reputation beyond your organizational community?

We have found that individuals who are most successful at transferring their reputation across communities have to be their own PR firm and look for opportunities to tell their story to broader audiences. They use their activities or position inside an organization to participate in conferences as a speaker; share ideas as a thought leader or a contributor to a publication; apply for awards in their community or industry; create a video or a blogging platform; and explore other activities to tell their story.

Consider how Kyle Nel, former executive director of Lowe’s Innovation Lab, thoughtfully transferred his innovation capital outside his organization. Although Nel had developed a strong reputation for innovation inside Lowe’s—he led a transformation into new technology areas like augmented-reality-assisted remodeling, inventory robots, and exosuits for workers—he had little status outside the company. To remedy this disadvantage, he thoughtfully explored how to transfer his reputation

to the outside. He started by launching a series of videos to broadcast the innovative work he had been doing at Lowe's (more on this technique in the next chapter). The videos caught the attention of others, and he was invited to do a TEDx talk at Universidad de Navarra. Although it may not have been the biggest TEDx event in the world, the video received lots of views and soon Nel was receiving other invitations to talk about the future of retail. His appearances eventually led to an opportunity to join Singularity University as an adjunct faculty member and then as executive vice president. Over time, Nel's position at this Silicon Valley think tank led to many prestigious and reputation-building relationships. For example, he was asked to be on the advisory board of XPRIZE Innovation Board and other prominent technology companies.

All of this was achieved through a series of small steps designed to transfer his reputation to communities outside Lowe's. You can transfer your reputation to a broader audience, but you must carefully amplify who you are, who you know, and what you've done (we'll discuss amplification in [chapters 5 and 6](#)).

If you are unable to secure a full-time position with a fast-growing or prestigious company, you can still borrow reputation from a company through a part-time assignment. For example, one of our students with a modest résumé reached out to PolarityTE, a fast-growing biotechnology startup, through a social contact to express his enthusiasm for the company's technology and his willingness to do an internship for free. His enthusiasm paid off in a résumé-enhancing, even if unpaid, internship. The internship allowed him to borrow from the reputation of the startup, thereby enhancing his own reputation for future opportunities. In similar fashion, you can volunteer for programs or events—or to work with certain individuals. For example, if you are an artist, say, a screenwriter looking to win support for your ideas, you might volunteer to get involved with a visible event put on by the American Screenwriters Association. You will be surprised at your ability to borrow reputation if you use your creativity.

## Exhibit Scrappiness

Perhaps you haven't had the chance to be a founder or sit in the driver's seat to make hard calls on an important project. How can you build a positive reputation that will help you win support for your ideas? The good news is that you still have a chance to build a reputation for one of the most important characteristics that smart investors and supporters look for: scrappiness. *Scrappiness*, a term commonly used in the entrepreneurial world, means a dogged spirit that enables you to get a lot done with few resources. One investor we interviewed puts it this way: "I've met many entrepreneurs, but what gets me excited is people who are getting a lot done with a little—the entrepreneurs who can take the little bit of kindling they have and they make smoke. Investors who get it look for that."

Although it's easy to tell yourself that you could do something big if you had money, the smartest entrepreneurs find ways to accomplish a lot with the little that they have. There are abundant examples, although perhaps our favorite example may be one of our most humbling moments. Shortly after graduating from Stanford, one of us (Nathan) was invited to host a television series interviewing entrepreneurs. But when the schedule listed a college entrepreneur who had started a hot dog stand as one of the first interviews, Nathan almost backed out. He was used to spending time with the top entrepreneurs and investors in Silicon Valley. What could he learn from a hot dog entrepreneur? What Nathan learned taught him both a lesson in humility and scrappiness.

Jayson Edwards, a college student who had spent time in Chicago eating the city's famous hot dogs, found that he missed the experience when he moved west. He had the idea to start a hot dog stand, but as a college student with literally no money

and no investors, he knew he would have to be scrappy to be successful. To get started, he sat around campus and counted the number of students passing by at different times of the day at different locations to identify the high-traffic areas. Then he started hosting tasting parties, inviting people to try out different styles of hot dogs and sauces, and interviewing them about what they saw as a value or a deal. Finally, knowing student traffic patterns and what the students wanted the most, he scouted out locations. On the edge of campus, he found a tiny shack that had the advantages of high traffic and low fixed costs but the disadvantage of needing renovations to meet code. Rather than hire a contractor to get the work done or buying a truck to haul materials, Edwards hauled sheets of plywood, sinks, and tools from the local Home Depot on the city bus and remodeled the building himself. Then he opened for business. Starting literally from almost nothing, his business J Dawgs expanded to seven locations and provides a nice lifestyle income. Although J Dawgs isn't a tech startup transforming the world, Edwards's scrappiness in starting a successful business illustrates a more general principle: getting a lot done with a little.

We saw similar scrappiness from Jen Hyman, founder of Rent the Runway, a company that rents designer fashions to customers using a Netflix-style business model. Although today the company is valued at over \$1 billion and has well over \$100 million in annual revenue, when Hyman started the company, she did so with no investment. Instead, she ran fast and cheap experiments where she, for example, let students try on borrowed dresses to rent before an event on Harvard campus. Her scrappiness allowed her both to test her business model without having to invest in a website and inventory and to convince investors that she would be a good investment. As another

investor told us, “A successful entrepreneur creates momentum in a petri dish. Yes, it’s small. But it shows what they can do.” You can build your reputation for innovation by demonstrating that you are scrappy—that you can accomplish a lot with limited resources.

How can you be scrappy? When you need resources to accomplish your goals, take every opportunity to borrow rather than buy, to trade rather than purchase, or to design and run cheap experiments to test new ideas rather than initiate expensive product development. Two of us (Nathan and Jeff) describe how to do this in more detail in *The Innovator’s Method*, but the general principle is to creatively speed up the process or lower the cost of anything you are doing.<sup>13</sup>

## Conclusion

Building a favorable reputation—and ideally a reputation for innovation—can turbocharge your leadership opportunities. “Once you establish a reputation,” Gary Crocker says, “you will attract more opportunities by an order of magnitude. But it’s your reputation that is the key to attracting these opportunities.” Crocker built his reputation with small wins over time and has been so successful that former University of Utah president Michael Young describes him as “almost certainly one of the most imaginative entrepreneurial businessmen in the US—maybe the world.” This is the type of ringing endorsement that builds your reputation. Similarly, for most of us, our reputations will be built through a series of small wins, rather than through a supernova event. So start now. As McDonald’s CEO Steve Easterbrook advised, “I’d suggest you start to build a track record that reflects the sort of leader you want to be. And the sooner you set out that way, the better.”

Our focus has been on explaining how you can accumulate those small wins by founding an initiative, taking on challenging assignments, deprioritizing tasks to focus on higher-priority initiatives, and borrowing from the reputation of prestigious entities. By using these techniques, you can create your own personal innovation brand that contributes to your innovation capital.

So far, we have been talking about how you can build your own personal reputation—your personal brand as an innovator. In the next two chapters, we will shift gears slightly to describe impression amplifiers, or actions that can help you win support for your ideas. Impression amplifiers differ slightly from your personal reputation capital because they are less about who you are and more about persuading others to support your ideas and projects. Thus, we now turn to describing how impression amplifiers can be a powerful way to win support for your initiatives.

### **Assess Your Reputation That Contributes to Innovation Capital**

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Rate the following five statements on a numerical scale of 1 to 7. (See our website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital) for additional resources.)

1. Other people are likely to vouch for my ability to lead a successful innovation project (1 = strongly disagree; 4 = neither agree nor disagree; and 7 = strongly agree).
2. I am well known for tackling difficult problems and coming up with innovative solutions (1 = strongly disagree; 4 = neither agree nor disagree; and 7 = strongly agree).
3. I have a degree from a high-status prestigious university (7 = a degree from a highly prestigious university [e.g., an Ivy League university, Stanford, or MIT]; 5–6 = a degree from a strong university that isn't in the preceding top tier; and 4 and below = a degree from a lower-ranked state school or community college).

4. I have worked for a company (or companies) with a strong reputation for innovation (7 = worked for a company ranked in top twenty on the Forbes or Fast Company World's Most Innovative Companies lists or Fortune's Most Admired Companies list; 5–6 = worked for a company in the top hundred on those lists; and 4 and below = have not worked for a company in the top hundred on those lists).

5. I have started or cofounded a number of new businesses (products or services) using my own original idea (1 = one or zero businesses; 2 = two; and 7 = seven or more). (This could be a product or service within an existing business or in a startup.)

Add up your score. Here's how to interpret your results:

28–35: You have a very strong innovation reputation.

25–27: You have a strong innovation reputation.

22–24: Your reputation for innovation is okay but unlikely to have a strong impact on your career.

Below 22: Your reputation for innovation will not help your career unless you strengthen that reputation.

## **Personal Impression Amplifiers**

### **Broadcasting, Signaling, and Storytelling**

Do you know how to make a good impression? Most people feel they do. But what about making a good impression for your ideas? For a moment, consider what advice you would give to a friend trying to raise money for his or her idea or to win the backing of a recalcitrant manager? What would you recommend beyond “have a good idea,” “have a strong business case,” or “be passionate?” And would the advice be effective? Could you share any guidance that has some basis in evidence, more than what has been handed down as common wisdom?

Good impressions are important, of course, but few of us have real evidence about what makes a good impression, particularly when it comes to winning support for your ideas. Despite abundant scientific literature on first impressions and impression management between employees and bosses (and entrepreneurs and investors), most of us know little about how innovators shape impressions to win support for their ideas.<sup>1</sup> But effective innovators use some tactics over and over to do much more than make a good impression. They apply these tactics to get people to join their projects and obtain resources and funding to bring their ideas to life.

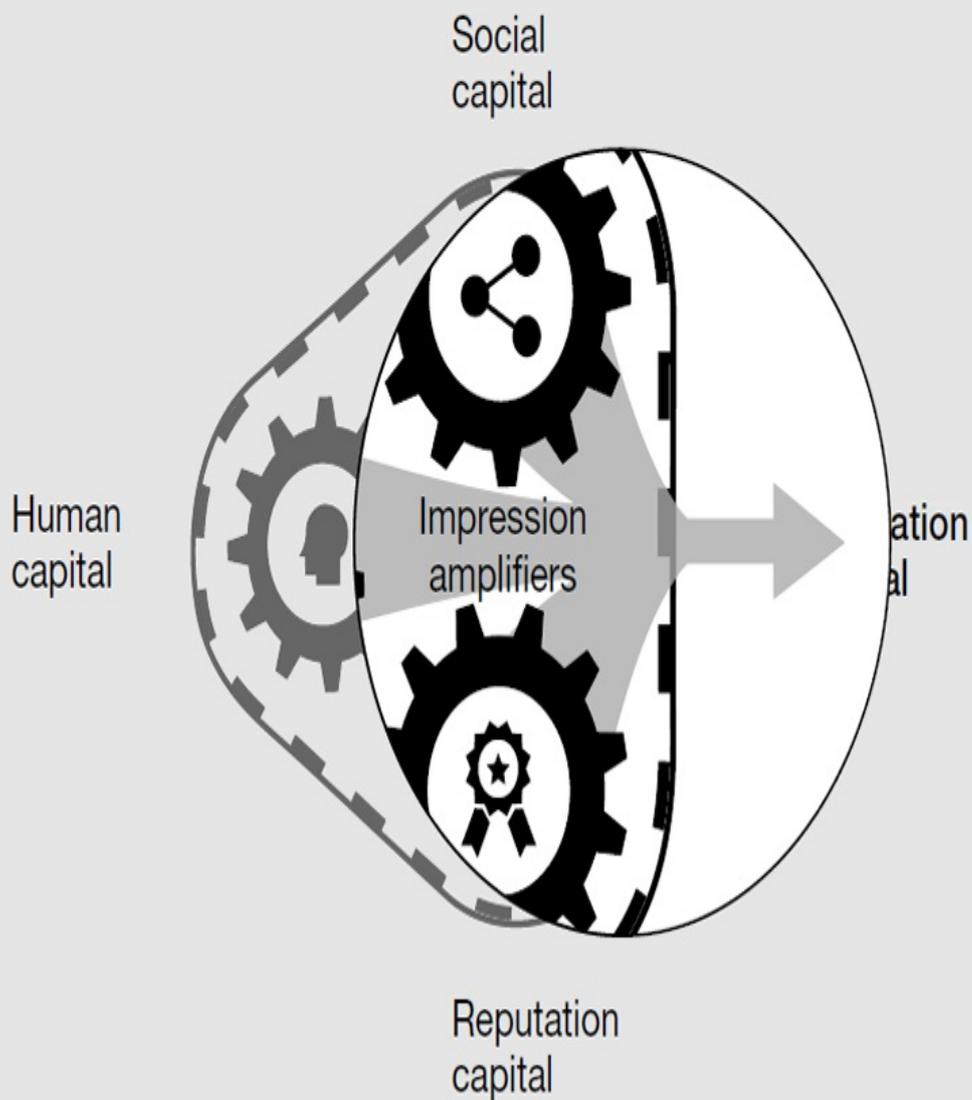
As we studied the world’s most innovative leaders, we learned that they are very good at amplifying the signals they want others

to receive. They utilize what we call *impression amplifiers*, which we define as observable actions to win support for your ideas or to multiply the perceived value of your human, social, or reputation capital. Put simply, impression amplifiers are actions taken to make you and your ideas better known and more credible. They are weapons in the arsenal of your personal marketing strategy. Even better, while human, social, and reputation capital take time to build, you can start using impression amplifiers more quickly to win backing for your ideas.

## Personal impression amplifiers

Visible actions to gain attention and credibility

- Broadcasting
- Signaling
- Storytelling
- Materializing
- Comparing
- Committing
- FOMO (fear of missing out)



**Impression Amplifiers That Strengthen Human, Social, and Reputation Capital**

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**BROADCASTING:** finding ways to visibly communicate who you are (your human capital skills), who you know (your social capital), or what you have accomplished (your innovation reputation capital) to others; works because people are more likely to believe things when they hear it from credible sources and from multiple sources

**SIGNALING:** securing credibility endorsements by creating visible links, other relationships, or achievements that signal an endorsement of the quality of your idea

**STORYTELLING:** creating an emotional connection with the audience you are trying to persuade through narratives, illustrations, or other accounts (often personal); works because an emotional connection can help listeners suspend their disbelief and motivate them to take action

There are two primary categories of amplifier actions: (1) those that strengthen your human, social, and reputation capital and win support for both you and your idea, and (2) those less focused on amplifying who you are and more targeted at persuading others to provide support for a specific idea or project.

In this chapter, we examine impression amplifiers that are primarily used to get positive attention for you and your idea. In [chapter 6](#), we focus on impression amplifiers that work mostly to persuade others to offer support and resources for your idea. As we describe each amplifier, we tell an illustrative story, explain why the amplifier works (including the psychological principle that gives it power), provide an example of how an everyday innovator has applied the technique, and recommend how you might apply it yourself.

Most of us don't spend enough time thinking about marketing ourselves or our projects. But we should. If you can master some of the impression amplifiers we describe, you will find that your personal reputation as an innovator will increase. In turn, you will dramatically increase your odds of getting the resources you

need to launch a project or venture that will have positive impact—for both you and those around you.

## Broadcasting

As described earlier in the book, the Netscape team members worked to carefully create an image of Marc Andreessen as a genius of the internet era. Their moment of triumph came when they landed a cover spot on *Time* magazine depicting Andreessen as the internet's barefoot genius sitting on a throne. The visibility and credibility provided by being on the cover of *Time* transformed Andreessen from a smart guy who worked on an early browser (Mosaic) to a visionary leader of the internet era. This action amplified the value of Andreessen's innovation capital at least a hundredfold. In reflecting on the purposeful effort to build the early Netscape's credibility, one of masterminds behind the *Time* cover recalled, "We really helped him [Andreessen] become a rock star. Our goal was to get him on the cover and get people excited that we had the technical capabilities to transform the internet." Even though Netscape was ultimately defeated by Microsoft's strategy of bundling Internet Explorer with its other software, Andreessen has since used the innovation capital built through this PR campaign to start multiple ventures and investment funds, most notably Andreessen Horowitz. His story illustrates the best known of the impression amplifiers: broadcasting.

### What Broadcasting Is and Why It Works

Broadcasting involves finding ways to visibly communicate who you are, who you know, or what you have accomplished to others. Broadcasting works in part because of the familiarity principle: a

psychological phenomenon by which people tend to develop a preference for things merely because they are familiar with them.<sup>2</sup> People are more likely to believe information when they hear it from *credible sources* and from *multiple sources*. Not surprisingly, broadcasting is most credible when it doesn't come directly from you.

One of the most effective ways to broadcast information is to get some type of media outlet to tell a positive story about you or your project. Kate O'Keeffe, chief innovation architect at Cisco, recalls the moment she had her own cover-of-*Time* moment. After years of creating programs to capture and develop innovative ideas from Cisco engineers, O'Keeffe became convinced that the real opportunity to create disruptive new businesses lay in working more closely with external customers to cocreate industry-transforming solutions. To address this challenge, O'Keeffe came up with an approach she called CHILL: Cisco Hyper-Innovation Living Labs, wherein Cisco could collaborate with uncommon partners (the kinds of partners you might not work with) to create disruptive solutions. Although O'Keeffe found that the idea had intuitive appeal to both internal Cisco executives and external partners, she still had to win support for the initiative. As a strategic thinker, she naturally sought out those leaders likely to be in a position to help her in the future, especially the executives most likely to succeed longtime CEO John Chambers. O'Keeffe invited these executives to be a part of CHILL and to experience multiparty innovation in spaces as divergent as retail, health care, and supply chains. As the executives experienced the power of mutually discovering and creating solutions with powerful partners like Apple, Airbus, Nike, and Costco, they quickly bought into the possibilities.

By the end of the first CHILL event, everything looked aligned

to greenlight CHILL as a major internal initiative. But then Chambers stepped down as CEO and was replaced by Chuck Robbins. The succession surprised many, including O’Keeffe. Moreover, most of the senior executives who had attended CHILL and championed O’Keeffe’s work suddenly left the company with the change of regime. Then, in yet another blow to her work, the business unit where O’Keeffe had been operating was abruptly disbanded.

Fortunately, O’Keeffe had been working to broadcast her activities. For example, she and her team had been creating videos of CHILL projects to show what they were doing. She also collaborated with us (as academics) to study the co-innovation process her team was applying at CHILL. This collaboration ultimately resulted in a coauthored *Harvard Business Review* article on cooperative innovation efforts between groups of firms.<sup>3</sup>

The article was published in the fall of 2016, just as the Cisco shakeup was happening. As support began to dry up for CHILL and the division where it was based was being shut down, O’Keeffe soon found herself starting over, trying to win new supporters for CHILL. “That *HBR* article was my *Time* magazine moment,” she recalls, referring to the Marc Andreessen story. “No one in the new Cisco leadership knew me, and my division was being cut. The future was incredibly uncertain. But others inside of Cisco saw the article and began to talk about what we were doing at CHILL.”

Perhaps best of all, the new CEO, with whom Kate had no relationship, independently started to hear about the CHILL program and the *HBR* article in meetings. Curious, Robbins invited O’Keeffe to speak at Cisco’s annual leadership conference for the world’s top CEOs. O’Keeffe recalls presenting on stage

with other luminaries and then afterward bumping into Robbins. The CEO was engaged in a conversation with David Cameron, former British prime minister. When Robbins saw O’Keeffe out of the corner of his eye, he called her over and introduced her to Cameron, saying, “I keep hearing about this crazy Australian [O’Keeffe is Australian] deep in my organization, but I had no idea how amazing CHILL is and the crazy things you are doing. You cocreate startups from scratch with our partners. That’s amazing.”

Not only did Robbins now know who O’Keeffe was, but he was also broadcasting for her to others. At the next CHILL event, companies were brought together to look for business opportunities using blockchain technologies. Not only did Robbins attend this lab, but he also participated in the entire process. Naturally, both the *Harvard Business Review* article and O’Keeffe’s conference presentation helped broadcast her work and build her reputation as an innovator inside Cisco.

To successfully broadcast your work, you have to find ways to discreetly let others know who you are and what you have accomplished (later in this chapter, we’ll discuss the Goldilocks effect, the balance of just the right amount of self-promotion). Broadcasting discreetly and tastefully is important. If your broadcasts come across as overly self-promotional or even narcissistic, then much of the value is lost.

## Advice for Broadcasting

Not everyone can secure a spot on the cover of *Time* or publish in *Harvard Business Review*. But there are numerous ways to discreetly broadcast who you are and what you are working on to capture others’ attention.

## Think Broadly about Potential Broadcast Outlets and Your Message's Impact

Today there are more ways than ever to broadcast information about yourself and your projects. Finding ways to share information and positive news about the projects you are working on (e.g., project activities, problems solved, innovations developed, milestones achieved) can make a positive difference.

Consider these broadcast outlets and any others that would work for you:

- External traditional media (such as business, trade, and technical journals; magazines; and newspapers)
- Other external media (blogs, social media posts, tweets, and other content written by others)
- Company communications (external press releases, reports, and other media; internal newsletters, blogs, social media posts, etc.)
- Talks and presentations
- Your own press (website, videos, blogs, tweets, retweets, etc.)

The more *credible*, *visible*, and *relevant* the source, the greater the impact. But sometimes you have to start small. One innovator we interviewed got a short story about his project published in the company's annual report—and it paid big dividends for him and his project when the company faced budget cuts.

### Get Surrogates to Talk Positively about You Behind Your Back

Another avenue for broadcasting is to get other people to tell stories about you and what you are working on. Research by professors Ben Galvin and Nathan Washburn shows that “stories told informally by what we call *leader surrogates*—individuals who have developed admiration and respect for you and actively share favorable information about you . . . are more powerful in helping you to inspire your people than the formal

communications you crank out.”<sup>4</sup> Getting people to tell stories about you is powerful because “there’s one form of communication that [people] *don’t* tune out . . . the genuine, spontaneous story about you that employees hear from a peer.”<sup>5</sup>

So how do you get people to talk about you behind your back? First, you can develop close relationships with a variety of colleagues who have reason to support you (perhaps their ship is tied to yours in some way or you’ve done something to start a norm of reciprocity with them, as described in [chapter 3](#)). Also, you are more likely to develop supportive surrogates by finding time to work with others on issues and problems they care about. Hopefully you can find a way to add value to their project, thereby giving them material for a story that they might share about you. Note that surrogate support doesn’t just come from oral stories. Surrogates can also be your advocate by writing positive things about you or your projects in blogs or other social media.

#### Strive for the Goldilocks Effect: Not Too Little or Too Much

Although broadcasting can help you become known, if you broadcast too much and it seems self-promotional or inaccurate, the practice can hurt your reputation. Thus, broadcasting is subject to the *Goldilocks effect*: too little is a problem but so is too much; you are shooting for “just right.” Recent research by psychologists at Carnegie Mellon University suggests that the right balance may be more delicate than we realize: we often overestimate the positive impact of self-promotion and underestimate the negative impact on those who hear it.<sup>6</sup> For example, critics of Elon Musk say that he frequently broadcasts bold and ambitious goals for his ventures; these broadcasts get attention for his ventures, but he often overpromises. Indeed, the

*Wall Street Journal* reported that Tesla missed twenty of Musk’s broadcast goals, rarely hitting ambitious timelines.<sup>7</sup> As a result, the authors reported that “some analysts have begun to worry Mr. Musk’s ambitious prognostications could haunt Tesla.” In short, investors, customers, and other stakeholders are becoming less likely to tune into, and believe, Musk’s announcements, because the statements come so often and are frequently inaccurate.

In defense of Musk, some people argue that ambitious goals keep Tesla moving forward. Musk acknowledges, “In order to have a good outcome, we must strive for a great outcome.”<sup>8</sup> However, the *Wall Street Journal*’s and other media’s discussion of Musk’s “overpromising” in his public announcements suggests that he may be broadcasting a bit too much—and perhaps a bit too aggressively. On the other hand, Musk’s ambitious goals for his companies help make him a compelling leader of innovation, as we will discuss in [chapter 7](#). But reasonable minds can disagree on whether he should publicly broadcast them as frequently as he does.

In sum, broadcasting is important but it can be overdone, particularly when it is focused on you. An alternate path, and one where you are much less likely to fall prey to overpromoting, is to focus on promoting your project and what it has achieved for the company and community. The spotlight may not be shining directly on you, but you will be caught in that light as a natural byproduct, so it won’t seem like you are shamelessly self-promoting.

## **Signaling: Securing Credibility Endorsements**

If you visit the trendy eastern edge of Paris, with its hipster restaurants and bars, you might walk along Avenue Parmentier.

Although the name might not mean much to you, the avenue, named after Antoine-Augustin Parmentier, honors one of the most important innovation heroes of the eighteenth century.<sup>9</sup>

Born in 1737, Parmentier struggled throughout his entire career to convince people of something we take for granted today: that potatoes are food. A pharmacist by training, Parmentier worked tirelessly during the Seven Years War to help injured soldiers and as a result was captured five times during the war. During his fifth imprisonment, Parmentier was forced to eat pig food, or potatoes. At first Parmentier was surprised that he hadn't died. Potatoes were supposed to be poisonous or cause leprosy. Indeed, potatoes were believed to be so dangerous that the French Parliament had outlawed their cultivation in 1748.

But after his release from prison, Parmentier wondered whether potatoes might be a solution to the problem of widespread hunger in France. So he began experimenting with potatoes, growing and eating them, and when he remained healthy, he became convinced that potatoes were safe.

To turn the tide of public opinion, Parmentier tried connecting potatoes to prestigious people, events, and places that would legitimize his claim that potatoes were safe to eat. For example, he published a book about using potatoes as food and embossed "printed by order of the King" prominently on the cover to connect it to the authority of the monarch. He also hosted parties for prestigious individuals, such as Marie Antoinette, queen of France; Benjamin Franklin, ambassador from the newly formed United States; and Antoine Lavoisier, the father of modern chemistry. At the dinners, Parmentier would serve potato dishes and gave Marie Antoinette potato flowers to wear in her hair. He even planted potatoes in a plot near where the Arc de Triomphe stands today, and he hired guards to make the crop seem

valuable. But then Parmentier instructed the guards either to leave the field at night so that peasants could plunder the crops or to take bribes and look the other way.

In the end, Parmentier's actions succeeded in getting attention for potatoes as a food that was safe to eat. By 1785, during a year of particularly poor wheat harvests, potatoes saved the north of France from famine. By 1795, during one of the many sieges on Paris, potatoes grown in the Tuileries Palace garden saved the city itself. Eventually the French government declared potatoes to be food. More importantly, because of his creative actions to legitimize potatoes as a safe food, Parmentier saved millions of people from hunger. Even today, if you visit Parmentier's grave in the Père Lachaise Cemetery, you will see potatoes laid on his grave by those who remember the significance of his contribution to France. For our purposes, Parmentier's story demonstrates the use of one of the impression amplifiers you can leverage to win backing for your ideas: signaling.

## What Signaling Is and Why It Works

*Signaling* involves creating visible links, alliances, relationships, awards, or achievements that represent an endorsement of the quality of your idea. Earlier in the book, we discussed reputation borrowing, which uses the same principles that signaling uses but is focused on borrowing reputation to support *your personal reputation*. Signaling works in part due to the social proof principle, sometimes called herding behavior. Herding behavior represents our tendency to follow or mimic the actions of others, especially those we admire or see as experts. Subconsciously we associate the positive attributes of an endorser with the target person, idea, or project. People assume that if your idea is endorsed by a prestigious institution or individual, has won a

significant award, or achieved a significant milestone, then your idea must be worthwhile.

For example, when Parmentier had “printed by order of the King” stamped on all his books, he was establishing credibility for his idea through the connection to royal authority. Likewise, when he hired guards to protect the potato plot, he was trying to signal that potatoes were a valuable crop. Also, when he served potatoes to famous people like Franklin, Parmentier was making a connection between potatoes and prestigious individuals and thereby secured a “celebrity endorsement” of potatoes.

Signaling is a powerful impression amplifier that can be particularly critical in the early stages of a project, when it is difficult to objectively judge a project’s potential. Recent research examining over a thousand startups across various industries found that signaling had a massive impact on whether newly created startups received any funding at all. The study found that founders with prior experience creating or leading companies had only a 5 percent chance of obtaining funding. But if the founders had prior experience, plus the endorsement of having been selected by a startup development organization (e.g., a startup accelerator), then their chances of funding jumped to 44 percent. Similarly, when startups go public, investors are more willing to invest if the startup has connections with prestigious individuals (e.g., as board members or venture capitalists) or organizations (e.g., as partners or customers) that signal their endorsement of the quality of the startup.<sup>10</sup>

One way the innovators we studied signaled their credibility was by forming relationships and alliances with other prestigious institutions. For example, when the XPRIZE Foundation added board members Richard Branson and Will.i.am to the prize-making committee, the foundation did so because these high-

prestige individuals acted as a credible endorsement of the XPRIZE simply because they agreed to join the board. Similarly, when Mastercard Labs for Financial Inclusion formed a partnership with the Bill & Melinda Gates Foundation, the credit card company did so partly because the connection to the foundation raised the visibility and credibility of initiatives like its 2KUZE platform—an online marketplace allowing small farmers to bypass expensive intermediaries and to sell directly to larger clients.<sup>11</sup>

You can also gather credibility endorsements from awards or by achieving observable milestones. In fact, a recent Stanford study examined how entrepreneurs raise funds.<sup>12</sup> The researchers found that the entrepreneur's social ties to investors (as discussed in [chapter 3](#)) was most beneficial for smaller sums of money at the earliest stages of the venture. However, signals of quality such as awards, product launches, acceptance to incubators, customer endorsements, and other credibility endorsements quickly became more important than did social ties and had an overall greater effect on the funding received by new startups.

## Advice for Signaling

Signaling involves accumulating endorsements from credible people, projects, or organizations that establish credibility for your initiative. You can create credibility signals in a couple of ways.

### Create Working Relationships with High-Status People and Organizations

Endorsements are more effective when they come from high-status individuals or organizations that agree to work with your

organization in some way. But getting those endorsements isn't easy—otherwise, everyone would do it. We recommend two options for getting endorsements: either find an institutional endorsement channel or make a high-status individual or organization excited about your project. An example of an institutional endorsement channel is a grant program, an award (e.g., best business plan, most innovative product), or a program you can participate in that allows you to receive a formal endorsement from a prestigious institution.

Another way to secure an endorsement is to pitch the idea in such a compelling way that the idea itself is exciting enough to acquire an endorsement from a prominent individual or organization. As described in [chapter 3](#), David Bradford managed to bring Steve Wozniak onto the board of advisers at Fusion-io, a startup offering advanced data-storage technology. Bradford met Wozniak at a conference and got enough time with him to pitch the exciting new technology that had been developed at Fusion-io. After Bradford himself received an endorsement from a Wozniak friend who knew Bradford, Wozniak agreed to join the board because of the exciting potential of the Fusion-io technology. Within a few months, Wozniak agreed to join Fusion-io as chief scientist. Shortly after he joined as chief scientist, Fusionio was chosen by *Red Herring* magazine as among the top one hundred startup companies in February 2009.<sup>13</sup> Wozniak's endorsement of Fusion-io and its technology probably contributed to the company's selection by *Red Herring* as a top startup.

### Creatively Pursue Awards and Achievements

Few of us actually seek out opportunities to win awards, endorsements, or achievements. Gathering endorsements starts

with being proactive about searching and applying for these awards. If there are no ways to be recognized, then perhaps you need to create them yourself or with a partner. Napoléon used this trick when he created the Legion of Honor, France's highest honor, given for merit in military or civilian service. Napoléon created it both because prior awards had been based on nobility, rather than merit, but also as a tool to win support for his ideas: "It is with baubles that men are led," he conceded. Although "baubles" sounds pejorative, Napoléon simply meant that awards and distinctions are important motivators for people, influencing their willingness to support something.

Napoléon isn't the only one who can think creatively about awards and endorsements. Many of the innovators we studied also created their own awards and endorsements. As described in [chapter 1](#), Gavin Christensen, founder of the innovative Kickstart Seed Fund, built ties to the innovation ecosystem by running the entrepreneur award program. Marc Benioff did something similar when he created the Dreamforce conference, now one of the largest tech conferences in the world. The conference focuses on cloud-based and software-as-service solutions, with Salesforce positioned right at its center. In summary, think broadly about how to signal your credibility to your supporters.

## **Storytelling: Creating an Emotional Connection**

Although most of the leaders we studied had a lifetime of achievement, what would you recommend to someone with a track record of failure? One leader we studied fit the latter profile exactly. He was born into a family with few connections. He struggled in school, failing his primary school exams twice, his middle school exams thrice, and his college entrance exams twice.<sup>14</sup> On his third attempt on the college entrance exams, he

failed again but, in a stroke of sheer fortune, was admitted to university—the worst university in the city—because it had some extra slots it couldn't fill.<sup>15</sup> When he graduated, he applied for thirty jobs and was rejected from all of them. When he applied for a job at Kentucky Fried Chicken, KFC took twenty-four of the twenty-five applicants. He was the twenty-fifth applicant who wasn't hired. Eventually this person found a teaching job through a friend of his father. Later, he tried to start a translation business, but it struggled to turn a profit. With such limited success and reputation capital, what would be this individual's chances for winning support for a new venture idea?

Higher than you might think. As founder of Alibaba, Jack Ma is one of the wealthiest and most successful innovators in the world. Ma all but introduced the internet to China, founding the e-commerce site Alibaba when less than 1 percent of people in China had access to the internet.<sup>16</sup> How did he convince people to join his team, and investors to fund his efforts, when he was breaking such new territory and had such a horrible track record?

Ma is known to excel at telling a great story that creates an emotional connection and inspires those around him. When Ma pitched the idea for Alibaba, he gathered his friends around him and explained the massive opportunity that internet commerce offered for the team. He compared the Alibaba team and their mission to create China's future to the heroes in popular Kung Fu novels. He even encouraged team members to take on a heroic nickname. Ma himself took the name of Feng Qingyang, a master swordsman in Jin Yong's novels.

Ma also compared the early Alibaba team to the 108 heroes in the well-known Chinese historical novel *Outlaws in the Marsh* and told the early team members they had to fight to reach all 108 employees.<sup>17</sup> Today, Alibaba is much larger, but he still told

the story of how Alibaba will be the company to last 102 years, spanning three centuries. According to Zhang Hong, one of Ma's early employees, Ma's ability to tell a story that inspires people is key to his success. Of his stories, Zhang recalls, "Ma can transform a hopeless situation into an exciting opportunity."<sup>18</sup>

Today Ma has built some of the most valuable internet properties in the world, including Alibaba (B2B e-commerce), Taobao (consumer e-commerce), Alipay (payments), Ant Financial, and dozens of related companies. When Alibaba went public in 2014, the company was valued at \$150 billion, then the largest IPO valuation for a US listed company. Ma was estimated to be the richest person in China, with an estimated net worth of \$40 billion, when he stepped down from leading Alibaba.<sup>19</sup>

## What Storytelling Is and Why It Is Important

Innovators often tell stories to create an emotional connection with the listener to win support for themselves and their ideas. Numerous studies underscore the importance of emotionally connecting stories in winning support for a particular idea.<sup>20</sup> People buy with their hearts and justify with their brains. Psychologically, stories help create believability in the minds of potential supporters, suspending their disbelief and creating excitement about future possibilities. But what characteristics of stories win resources and support for your ideas?

Effective stories emphasize the problem or the opportunity. A long history of research in psychology links motivation and persuasion to two basic categories of emotion: threats or problems and opportunities. When it comes to threats or problems, prior research suggests that people respond more to a story: when the story depicts a severe problem, people feel a connection to the problem, the story proposes a solution, and the

solution works.<sup>21</sup> When it comes to opportunities, people are more responsive to bigger opportunities, their ability to capture the opportunity, and the benefits they will potentially gain from participating in the opportunity. The very best stories integrate elements of the threat or the opportunity into a narrative that creates a reason to believe.<sup>22</sup>

Our research on the most innovative leaders revealed that they often used stories around solving big problems or pursuing exciting opportunities to drum up support for their initiatives. For example, Indra Nooyi used dramatic stories to good advantage with PepsiCo's beverage and snack foods business by introducing Performance with Purpose, a corporate mission to embed sustainability in everything it does. Performance with Purpose focuses on delivering top-tier returns, while making more nutritious products, minimizing the company's impact on the environment (including conserving water, curbing greenhouse gas emissions, and reducing waste), and supporting the people who live and work in its communities.

Nooyi then used stories to underscore the importance of this mission and to persuade people to support it. "I grew up in the city of Madras where there was no water," she says. "Every morning, my mom would get up at three or four in the morning, and she would wait for the taps to start releasing water from the central reservoir, and water would trickle in. And my mom would collect every pot and pan we had so that each of us had three containers of water, which was your quota for the day. You learned how to wash yourself, clean your uniform—everything had to be done with those three containers of water. At the same time, in the same city, I watched large corporations build plants and use a lot of water. You can't have a large corporation using excess water in a town where there is no water to eat and drink

and live.”

Nooyi would tell this story to engage people in her quest to “replenish the planet and leave the world a better place.” Problems are more real, and seemingly more important, when conveyed through a story, particularly one that is your own. Your own personal recollections can be a powerful way to persuade others to support you.

Alternatively, innovators can tell a powerful story by focusing on big opportunities and grand visions. At the heart of Ma’s ability to win support from others, despite his many failures, is his ability to inspire others about the opportunity at hand. Similarly, one of Elon Musk’s core tactics is creating an emotional connection around the opportunities he is pursuing, whether they be space travel or electric cars. Musk openly admits that the Mars Oasis project, in which he intends to build a colony with plants and humans on Mars, was meant to create emotion around the opportunity: “I started with a crazy idea to spur the national will. I called it the Mars Oasis mission,” Musk says.<sup>23</sup> The boldness and audacity of the opportunity Musk describes inspires others to support him and SpaceX. If there was one thing that impressed us most during our discussions with Musk and the teams at Tesla and SpaceX, it was how many employees at all levels of the company, from the factory floor to advanced engineering, believe they are changing the world.

## Advice for Storytelling

The ability to craft and communicate a compelling story is a powerful way to influence people. Investing here will pay dividends over time. Let’s look at some examples of effective storytelling.<sup>24</sup>

## Focus on a Deep, Underlying Need, and Make It Personal

Innovators who win support for their ideas focus on a fundamental human need and then make it personal. Christensen told us about one of the most counterintuitive investment decisions he made. After entrepreneurs Vanessa and Nate Quigley presented their idea for an app that allowed families to share photos with each other, Christensen turned to the rest of the investment committee and spoke candidly: “I hate the product.” Then after a moment’s hesitation, he added, “But I think we should invest anyway.”

How had the entrepreneurs persuaded Christensen to invest in a product he hated? When the Quigleys presented their idea to Christensen, Vanessa Quigley talked about how she had found her five-year-old son in tears over a scrapbook made by his preschool teacher. In that moment, she had a pang of deep guilt that she, the mother, hadn’t created a scrapbook of photos for her son and for herself. She had taken thousands of photos, but they were effectively stuck in her phone. How could she share them?

According to Christensen, the Quigleys’ solution, an app that allowed for photo sharing, had meager uptake and worked poorly. “I tried three different times to get the app to work, and it crashed every time. It was terrible,” says Christensen. “But when she [Vanessa Quigley] talked about the guilt mothers feel and the deep need to capture and share memories, they convinced me there was something meaningful there.” Christensen recalled, “The need was so fundamental, and they made it so personal, I knew that they would figure out how to solve it eventually.” Christensen invested, and the Quigleys soon pivoted to create Chatbooks, a company that enables the automatic creation and printing of scrapbooks from photos. Within two years, the company was doing well over \$30 million in revenue and

expanding to become the “Netflix of memories.”

### Include Characters, Conflict, and Resolution in Your Stories

Too often when we talk about stories in the corporate world, we mean the chronology of events. But motivating stories have characters, conflict, and resolution. In *Leading Transformation*, one of us (Nathan) and his coauthors talk about how they used stories with characters, conflict, and resolution to motivate companies like Lowe’s, PepsiCo, and IKEA to pursue transformative innovations and radical new business models.<sup>25</sup> For example, the Lowe’s Innovation Lab, led by Kyle Nel, used science fiction writers to help the team imagine how to solve a common dilemma: envisioning and then communicating how to remodel your home. Back in 2012, before Oculus Rift virtual-reality headsets or Pokémon Go, the panel of science fiction writers imagined how customers could use virtual and augmented reality to solve the vexing dilemma of envisioning a potential remodel. The story helped the executives at Lowe’s suspend their disbelief (e.g., their beliefs that Lowe’s isn’t a technology company and that virtual reality is too undeveloped to use with customers) and take action. They supported the development of the first retail application of augmented reality and the development of an augmented-reality phone sold in Lowe’s stores. It sold out in four days with no marketing.

## Conclusion

We have discussed three tactics to get positive attention for yourself and your ideas: broadcasting, signaling, and storytelling. While these amplifiers serve the primary function of drawing attention to you and your ideas, they also influence others to think positively about you and your ideas, thereby winning

support. In the next chapter, we describe four amplifiers that primarily persuade others to support your innovation projects and bring resources to them.

See our website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital) for additional resources for the advice provided in this chapter.

## Idea Impression Amplifiers

### Materializing, Comparing, Committing, and FOMO

Have you ever had an entrepreneur tell you about, or even ask you to invest in, his or her innovative startup? Or perhaps a colleague has asked you to support an internal initiative for a new product or service? If not, we recommend that you find an opportunity to hear a pitch from a person or two and see if you are persuaded. As you listen to the pitch, ask yourself, did they convince you? Did they do anything that was persuasive? You might recognize that they used one or more of the impression amplifiers described in chapter 5. For example, did they tell a compelling story that made an emotional connection? Did they have endorsements from credible parties or refer to a prior broadcast? If they did, they were leveraging the amplifiers described in the previous chapter to win support for themselves and their idea.

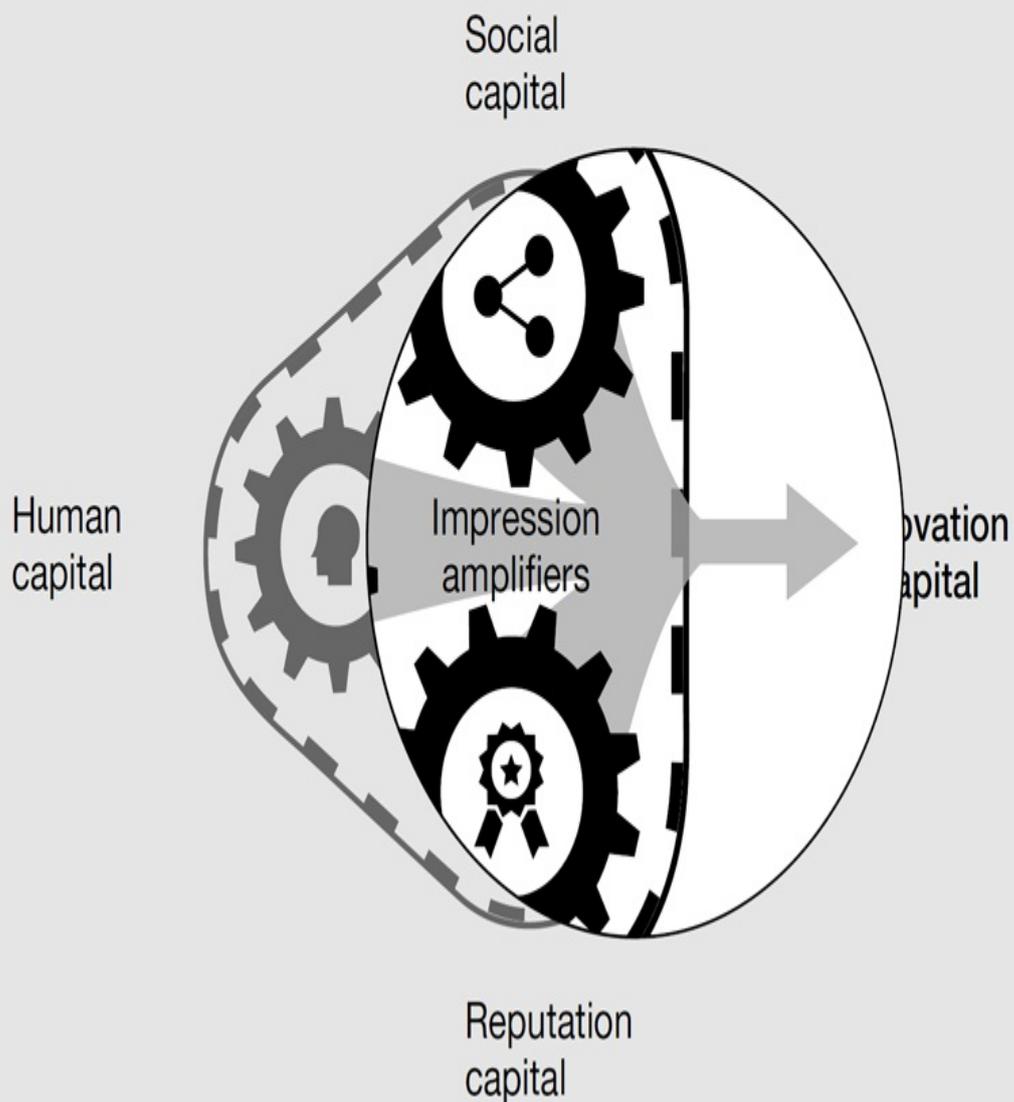
But there is another set of amplifiers that may do less to magnify your own personal qualifications but still do quite a bit to persuade others about your idea. For example, as you listened to the pitch, did they make the idea (of a new product or service) more real by creating some type of visual representation of it, like a storyboard or a working prototype? Did they compare their idea

to something familiar and successful that made it easy for you to understand—and get excited about? For example, they might have said something like “This will be the Google of artificial intelligence” or “Meet the Uber of trucking.” Did the presenters show an unwavering commitment to the project? And finally, did they make you feel as if the opportunity were fleeting—that a window of opportunity was closing and demanding action? If they did, they were leveraging the set of impression amplifiers designed to win support for a project or idea, which we describe in this chapter.

## Idea impression amplifiers

Visible actions to gain attention and credibility

- Broadcasting
- Signaling
- Storytelling
- **Materializing**
- **Comparing**
- **Committing**
- **FOMO (fear of missing out)**



**Impression Amplifiers That Strengthen Support for an Idea or a**

## Project

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**MATERIALIZING:** making abstract ideas tangible; works because people tend to believe in something more when they can see it and touch it than when it is an abstract idea

**COMPARING:** employing relevant analogies, namely, likening your idea to something familiar and successful; works because it gives listeners a reason to believe in your idea in light of something they already understand

**COMMITTING:** creating credible commitments; signals that you believe in your project so much that you are willing to put yourself at a significant, even irreversible, risk or obligation; works because supporters interpret your dedication as a signal that they can believe in your project

**FOMO:** generating a fear of missing out (FOMO); involves creating a sense of urgency, scarcity, or exclusivity that if someone doesn't act quickly, he or she might miss out on the opportunity; works because it switches potential supporters from a critical, evaluative mindset to an acquisitive mindset eager to capture the opportunity

In this chapter, we describe how to use impression amplifiers that create enthusiasm for your project. (In [chapter 5](#), we examined amplifiers that win support for both you and your idea.) We'll consider the practices of materializing, comparing, and committing and the fear of missing out (FOMO). When combined with the amplifiers from [chapter 5](#), these techniques provide you with a full arsenal of ways to persuade others that your idea deserves their support.

### **Materializing: Making Ideas Tangible**

Although many people think of SpaceX as the first startup to challenge the US space industry for decades, it's only because they haven't heard of Beal Aerospace. In fact, Beal Aerospace preceded SpaceX by almost a decade with the equally ambitious

goal of transforming space travel by creating low-cost, disposable rockets. Founded and funded by the self-made billionaire Andrew Beal, the company made significant progress building the largest engine since the original Apollo rockets and even securing land in Guyana to build a private spaceport (the same spaceport that SpaceX later bought from Beal Aerospace).<sup>1</sup> But despite his advances, Beal couldn't get NASA and government officials to pay attention to his company. Ultimately, in October 2000, after spending \$200 million of his own money, Beal quit. As the doors of Beal Aerospace closed, Beal issued a scathing letter to NASA and the US Congress about their failure to pay attention to private industry and companies like his own.<sup>2</sup>

Two years after this warning sign about entering an expensive, bureaucratic, and complex industry, Elon Musk founded SpaceX. Although there are differences between Beal Aerospace and SpaceX (primarily the focus on low-cost disposable rockets versus reusable rockets), Musk and SpaceX almost failed for precisely the same reasons: the difficulty of persuading NASA and others to buy from a private space venture. In those early days, many of the establishment decision makers at NASA, Congress, and large aerospace corporations saw SpaceX as a joke—yet another doomed effort by a rich Silicon Valley tycoon.<sup>3</sup> As a result, Musk's company struggled to get airtime with the decision makers who would buy its services. "At the beginning, we had to beg NASA to even pay attention," recalls Lawrence Williams, a former SpaceX executive.<sup>4</sup> As Musk grew increasingly frustrated with the unwillingness of the establishment to even listen to what he and his team were doing, Musk decided he would just show the doubters.

On December 4, 2003, as the National Air and Space Museum began its centenary celebration of the historic Wright brothers'

first powered flight, Musk loaded the recently completed Falcon 1 rocket onto a custom-made trailer and drove it across the country. When they arrived in Washington, DC, Musk and team drove the giant rocket down Independence Avenue and along the National Mall, accompanied by flashing police lights. Then, in a moment of dramatic flair, he parked the seven-story-tall white rocket in front of the National Air and Space Museum. The rocket was so large it took up an entire lane in the road, slowing traffic and turning heads.<sup>5</sup>

That night, at the museum’s reception, Musk told attendees—Federal Aviation Administration officials, congressional staffers, journalists, and NASA staff—that “the history of launch vehicle development has not been very successful . . . if you define success as making a difference in cost or reliability.” He paused and then added, “We have a shot with SpaceX, I think, for the first time in a long time.”<sup>6</sup> Then Musk invited the audience outside to see the giant rocket sitting in the spotlights in front of the museum. With the gargantuan rocket behind him, Musk announced that not only would the Falcon 1 fly, but they were also working on the next rocket, one with five first-stage rockets, and this new one would be “a new world record for the cost per pound access to space.”<sup>7</sup> This bold action, which made a bold idea tangible, got NASA’s attention. NASA went on to invest \$140 million in SpaceX over the next decade, ultimately saving the agency hundreds of millions by using SpaceX rockets rather than developing its own.<sup>8</sup> By the end of 2018, SpaceX had launched more than seventy flights using low-cost, reusable rockets.<sup>9</sup>

## Materializing: What It Is and Why It Works

To persuade a recalcitrant government to support his risky venture (one where his reputation as a Silicon Valley

entrepreneur may have actually hurt rather than helped him), Musk relied on an impression amplifier we call *materializing*. Materializing involves making an abstract idea visible or tangible—especially to the target of influence. Sometimes, tangibility can mean a physical product or prototype. But ideas can also be made tangible through drawings, videos, and other graphic representations. For example, when a virtually unknown Mark Zuckerberg approached Peter Thiel to invest in a social network, the data about student adoption at Harvard and Stanford is what made the power of social networking tangible to Thiel.

Materializing an idea works because as human beings, we tend to believe in something more when we can see it for ourselves. There are deep psychological foundations for the old adage “Seeing is believing.” Human brains are systematically biased to believe in tangible, visible artifacts over abstract ideas. This bias exists partly because the majority of our brain is dedicated to processing visual imagery over language, which is much more abstract.<sup>10</sup> Not only do we respond more readily to visual objects, but we also remember them longer.<sup>11</sup> Thus, materializing an abstract idea into a tangible format makes the idea not only easier to process and remember, but also more believable. The future appears closer and more realistic when it is visible.

In big companies, materializing can be an especially important tool to win support for products, initiatives, or ideas. This tool can even help a company leader change the course of prevailing opinion. For example, when Ken Smith was head of the heavy-excavator division at Caterpillar, he was tasked by the executive leadership team to build a hybrid diesel-electric excavator as part of the company’s sustainability initiative. In response, Smith and the engineering team developed a best-in-class hybrid excavator and, just a few months before going into global production, took

their design out to get feedback from customers.

What they heard shocked them. Although headquarters had assumed the customers wanted a sustainable solution, the contractors complained about the performance, reliability, and affordability of hybrid diesel-electric excavators in general. One contractor even said, “If you’re building a hybrid excavator, don’t waste my time and don’t waste yours.” The problem with all hybrid excavators lay in the inefficiencies of converting diesel to mechanical to electrical energy, storing that energy, and then converting it back to mechanical energy at the scale of a large excavator. After the meeting with customers, one of the engineers on the team had a radical idea: by capturing and storing mechanical energy directly, they could create a more reliable, affordable hybrid excavator that would also be a sustainable solution.

Smith and his team hurried back to headquarters with the bad news and the alternative approach, but their ideas fell on deaf ears. The executives who hadn’t been in the room with the customer panel believed more in their assumptions about sustainability than they did in the reality that the hybrid didn’t meet customer needs. How could Smith convince them otherwise? He turned to the engineer with the radical idea and said, “We have to show them.” The team worked nights and weekends. As they sprinted, engineers bolted parts to the exterior of the machine rather than integrating them. The resulting prototype excavator was so ugly, the team called it Medusa, because of the masses of hoses and components snaking all over the frame. But it worked. Medusa proved that Caterpillar could create a mechanical hybrid excavator that met all the customer requirements and saved energy.

One by one, Smith brought members of the leadership team

down to the warehouse and put them behind the controls, explaining the benefits, while they used the excavator. And one by one, the executives became convinced. This new hybrid mechanical-diesel excavator (HEX) was a much better match for customer needs. The executives approved a major change of course. The new HEX consumed 25 percent less fuel and was 50 percent to 75 percent more efficient than traditional diesel excavators. It became a major new product line at Caterpillar. Shortly after its launch, over 40 percent of all excavators sold by Caterpillar were the new HEX hybrids. Materializing had allowed Smith to change the tenor of opinion inside the company and win support for his team's idea.

Materializing can help independent entrepreneurs just as much as it helps internal innovators. For example, in 2010, while Dan Blake was a university student, he noticed the incredible sustainability challenges posed by wasted food. Roughly half of all apples and bakery items sold by major grocery stores end up as waste, and almost 70 percent of bagged salads are wasted.<sup>12</sup> To make matters worse, stores and restaurants are paying to haul this spoiled food to landfills, where it creates methane and other gases as it rots.

Through a series of pilots, Blake discovered that instead of paying to have the waste hauled away, retailers could give the food to his new startup, EcoScraps, which would then turn that waste into ecologically friendly compost resold to gardeners. Although Blake believed he had stumbled onto a reasonable value proposition, the real challenge soon revealed itself: how to convince big, risk-averse companies to work with an unproven startup.

Blake decided he needed to show rather than tell. Before the visit of a major retailer, Blake rented out a warehouse, filled it

with rented equipment, and asked family and friends to come in and work. When the potential customer arrived, he found a large operation full of equipment and workers turning food waste into salable compost. The partner toured the facility for about five minutes and then suggested that he and Blake grab lunch to finalize a deal for national distribution. With the deal signed, Blake bought the rented equipment and scaled operations.

Today, EcoScraps works with retailers across North America, processing over fifty million pounds of food waste into compost. Every bag of compost that EcoScraps sells represents thirty-seven pounds of food that would have been in a landfill; each bag also reduces carbon dioxide emissions as much as does taking your car off the road for two weeks.<sup>13</sup> The company itself was acquired by Hawthorne Gardening Company, a subsidiary of Scotts Miracle-Gro Company, and continues to transform food waste for retailers like Target, Walmart, and Costco into sustainable solutions.

## Advice on Materializing

Materializing involves making an idea visible, concrete, or workable. Every step you take to create a more observable, believable solution can increase your ability to win resources and support for your idea.

### Think Broadly about the Tools Available to Materialize an Idea

Whenever we say the word *prototype*, people often think of finished products produced in small scale. We mean something different, however. A prototype means the fastest, cheapest way to make your idea tangible today. You can materialize a product with a drawing, video, or mock-up. You can materialize a service with a storyboard or PowerPoint presentation. You can fake

software with tools like Adobe Flash, wireframe tools, or any number of prototyping applications. Even if it's a prototype, it still has immense persuasive power.

#### Don't Oversell What You've Materialized; Instead Ask for Help

Naturally you want to put your best foot forward when you materialize something, but a mock-up of software is still a mock-up. The point of materializing isn't to deceive people, but instead to show them what something could be. If you approach potential supporters honestly, acknowledging that something is a prototype and asking for advice or help, then they are much more likely to support you.

### **Comparing: Finding Relevant Analogies**

A car-sharing startup is a more familiar idea in today's collaborative consumption economy. However, in the year 2000, it was a new concept. Even the internet was new: in Boston, where Robin Chase started Zipcar (see [chapter 4](#)), only 50 percent of people had internet access, and only 25 percent used mobile phones. Google was still a relatively unknown startup, Facebook wouldn't get started for four more years, and Amazon was a small business located in a sketchy part of Seattle next to a pawn shop.

So when Chase proposed using the internet to create a digital platform to create shared access to cars, which have traditionally been a highly personalized asset, most investors were extremely skeptical. Chase recalls the first time she presented Zipcar, highlighting the massive potential of the internet to unlock the value of underutilized assets. When she finished her inspiring seven-minute pitch, she half expected investors to jump out of their seats in applause. Instead, a gentleman in the front row

scowled and asked, “What happens if I run out of gas?” His wasn’t the first skeptical, banal question. Over and over, Chase found that investors struggled just to understand what the company did, let alone the revolutionary power of platforms. She recalls, “We were the first company in transport innovation. Most investors just kept asking me what type of business it was. When I would talk to venture capitalists, there was nothing to compare it to. They just couldn’t make sense of what we were doing.”

Chase realized that she needed to find a way to help others—investors, customers, suppliers, even employees—understand her idea by comparing it to something they already understood. To do so, she started by writing down her five favorite names and taglines for the company on index cards. She then carried these cards with her everywhere, testing them with everyone she met, including grocery store clerks, friends at dinner, acquaintances at swim meets, and even casual encounters on the street. She then captured people’s responses on the back of the cards and, later, looking at the compiled evidence, evaluated what she had heard. What Chase learned by listening carefully to the nuances around words surprised her. For example, although *car-sharing* is the technically correct term of art to describe Zipcar, most people reacted negatively to the term. *Car-sharing* brought up images of something used, dirty, and inconvenient. Although this response might seem harsh, it’s quite normal. As Chase points out, “Just imagine if we used the term *bed-sharing* to describe hotels.”

Through this careful process of listening and testing, Chase began to stumble on comparisons and language that resonated more effectively. For example, she found that describing Zipcar as like an ATM—which allows you access to cash whenever you need it—seemed to resonate well with people. So she started to use the tagline “Wheels when you want them” to emphasize that,

like an ATM, cars could be available wherever and whenever you needed them. As Chase began to use this new description, people began to understand Zipcar and remember it. With this new tagline, Chase was able to raise capital and build one of the first and most successful sharing startups since the turn of the 21st century. Zipcar was eventually acquired for over \$500 million by Avis and operates in more than five hundred cities. Chase attributes her ability to win support from investors, suppliers, employees, and even customers in part to finding the perfect analogy to help people understand the idea and get them excited about the opportunity.

## Comparing: What It Is and Why It Works

Comparing involves using mental shortcuts through analogies or metaphors to emphasize a similarity between your idea and a familiar concept (success). The psychology of mental shortcuts (or heuristics) emphasizes that analogies and metaphors are efficient mental processes that help humans learn new concepts, form judgments, and make decisions—especially when facing complex problems or incomplete information. Put simply, comparing gives listeners a reason to believe in your idea in light of something they already understand and believe in. Research examining the use of comparison has shown that startups using comparisons in their prospectus reached higher valuations during IPOs.<sup>14</sup> But comparisons need to be simple, accessible, and directly relevant. The same research shows that when startups use overly complicated comparisons during IPOs, their valuations decrease.<sup>15</sup>

Comparisons work best when you use analogies that are familiar and make intuitive sense. For example, when Chase compared Zipcar to ATMs, the analogy made intuitive sense;

investors and customers could easily understand the business. Other examples include companies like Clutter, Trove, and Cubiq describing themselves as the “Uber of storage.” You instantly understand the business model—a peer-to-peer approach for storage. More importantly, because Uber had a great deal of early success, the analogy probably also excites people about the opportunity.

## Advice on Comparing

If done well, comparisons can strengthen your idea’s or product’s impression with potential supporters. A couple of techniques will help you use comparisons to your best advantage.

### Pay Attention to the Comparison and the Words Used

As Chase advises, “Words really matter, and getting the comparisons right is nontrivial.” Finding the right comparisons involves both finding the right analogy or metaphor and the right words to describe it through a process of testing and careful listening with potential supporters. If the comparison sounds too different or complicated, listeners won’t be convinced. Consider the company Ethnamed, which is described on ProductHunt.com as “a chrome plugin—cold wallet for bitcoin (btc), litecoin (ltc), ethereum (eth.) and dash. Allows users to bind email address with crypto addresses. Extends web3 protocol to btc, ltc, dash, eth for developers.” Did you get that? Do you know what Ethnamed does and why it might be valuable? If not, now listen to the tagline analogy: “Ethnamed: Like Venmo, but for cryptocurrencies.” In a five-word analogy, you now better understand Ethnamed’s value proposition—and probably have increased confidence in what they do.

The best comparisons try to strike a balance between familiarity

and novelty.<sup>16</sup> So, for example, when the storage companies describe themselves as the “Uber of storage,” they are emphasizing what is familiar (the Uber platform model to liberate hard-to-share assets). But as the comparison gets overused, it loses power. A better approach might be to find a new analogy or metaphor. For example, Neighbor, one of the competing storage groups, tried to emphasize a different analogy, calling themselves the “Airbnb of storage,” instead of the overused “Uber of storage.”

### Among the Many Potential Comparisons, Choose the Best One for Your Audience

Sometimes the right comparison may vary by audience. Often, new ideas have many potential benefits, and by analyzing the benefits, you can explore the different potential anchors. Then you can select the right anchor for your audience. For example, when Andrew Kvålseth worked in group strategy for one of the world’s leading telecoms in Europe and Asia, he proposed that Telenor launch startup accelerators in each of its thirteen country business units, with each business unit investing in ten startups each. This accelerator program would give the company access to the best global startup talent and an investment base of over a hundred startups per year. To convince others, Kvålseth used what seemed a rather obvious comparison: corporate venture-capital groups like those run by Intel or Microsoft ventures. Although his proposal was initially met with enthusiasm, ultimately some people inside the company felt that the exposure to so many startups would be too great a risk.

Disappointed but not deterred, Kvålseth joined one of Telenor’s business units, DTAC in Thailand, as chief strategy and innovation officer. He thought that creating a start-up accelerator

would benefit the company, but how could he get approval when the idea had already been rejected at the group level? Kvålseth examined the list of potential benefits from the accelerator: access to insight about the changing industry, investments in potentially valuable startups, access to human capital for the company, improved company reputation, and so forth. He astutely realized that winning support might depend less on highlighting all the benefits and more on picking the one benefit—and corresponding comparison—that would resonate most with his audience.

Kvålseth decided to use an analogy of portfolios showing spending on marketing. Most major companies look at their marketing spending as a portfolio of efforts to communicate with customers. Kvålseth argued that in terms of a portfolio of spending, allocating a small amount of the marketing budget to creating a startup accelerator would do more to improve the company's reputation for innovation, would generate free press, and would help the company attract more digital human capital than would buying a few more billboards.

The new analogy made sense to the executives, and he won approval to proceed. Now, many years later, the DTAC accelerator has enjoyed many successful years of operation. It has dramatically raised both Telenor's and DTAC's profile as an innovative company and helped it attract digital talent. Moreover, seeing the success of the program, many of Telenor's other business units have reached out and imitated the program.<sup>17</sup>

## **Committing: Making Credible Commitments**

When Denver Lough (MD, PhD) and Ned Swanson (MD) handed in their resignations at the world-renowned Johns Hopkins

Center for Facial Plastic and Reconstructive Surgery so that they could start their own company, the parting words from the director were, “You realize this is irreversible—right?”

Lough recalls, “It was really hard to walk away. I had put seventeen years into becoming a plastic and reconstructive surgeon and was halfway through the foremost program at the world’s greatest hospital. How could I possibly justify giving that up to everyone who had sacrificed so much for me to get there?” And the sacrifice wasn’t abstract. Lough had already received a request for his services on graduation—a request that would have paid well over \$500,000 per year.

But on December 1, 2016, Lough and Swanson gave up their coveted plastic surgery resident positions to become the CEO and chief operating officer of a biotech startup PolarityTE. The company was formed to test and launch a revolutionary technology for regenerating new tissue—skin, bone, muscle, and other tissue. Before joining the Hopkins program, Lough conceived of an approach to grow new skin at full thickness by taking certain cells from a patient and processing them in a particular way. He had even shown, in an animal study, that his process would grow new skin in mice. But it had never been tested on humans.

Leaving Hopkins was a huge gamble for Lough and Swanson because in the medical community, leaving your residency is a one-way door; once you leave, you can’t go back. But as it turns out, Lough and Swanson’s willingness to take such a huge risk was crucial to their success at attracting investors and key talent. Why? Because the mere fact that they were willing to take such a huge risk and make an irreversible career commitment to the venture was one of the important factors that investors, as well as recruits to the management team considered. “These guys were at

Johns Hopkins, arguably the number one institution for the plastic and reconstructive surgery work they were doing,” said one major investor. “They were willing to get up and leave and lay it all on the line, even when they were so close to finishing that they could see the light at the end of the tunnel. That said a lot.”

Perhaps even more important, Lough and Swanson’s willingness to take this risk enabled them to recruit some amazing talent to the management team, including their former boss at Johns Hopkins, Stephen Milner (director of the Johns Hopkins Burn Center), who joined PolarityTE as chief clinical officer. “The fact that they left Hopkins without a way to return definitely influenced my decision to join PolarityTE,” said Cameron Hoyler, who left a secure and highly paid position at King & Spalding to join as general counsel. “Leaving a secure position to join a fledgling startup is risky. But their willingness to leave Hopkins assured me that they had no doubts they could make this work.”

Of course, Lough and Swanson’s work at Johns Hopkins, a prestigious medical school, was another important consideration for both investors and management recruits (Lough and Swanson had some borrowed reputation capital, as described in [chapter 4](#)). But the doctors’ resolve to walk away from lucrative medical careers spoke volumes about their belief in their tissue engineering technology.

Fortunately for Lough and Swanson—and the investors and management recruits—the technology worked as expected. PolarityTE is growing new skin on patients who suffer from severe wounds and burns.<sup>18</sup> Moreover, the company’s stock price appreciated significantly in value after going public. But Lough and Swanson’s risk could have been a career disaster because the men were taking a huge risk.

## Committing: What It Is and Why It Works

Committing involves generating a signal to potential supporters that you believe in an idea or a project so much that you are willing to put your own skin in the game. When someone makes a credible commitment, it gets our attention and increases our likelihood of sponsorship. Why? Because if they do, it signals their high confidence in success. In the field of business strategy, the term *credible commitment* is defined as a commitment that is costly or irreversible—truly strategic actions are those that involve credible commitments.

Jeff Bezos and other Amazon leaders talk about the idea of irreversible commitments in terms of a “one-way door” (costly to reverse) and a “two-way door” (reversible at low cost). Because one-way-door decisions are hard to reverse, they involve much more risk. To illustrate the difference, imagine you are a real estate investor and have the option of investing in a bowling alley facility or a building configured as office space for an accounting firm. Which is the one door? If the bowling alley fails, what will you do with it? The facility is so customized to a particular use (i.e., bowling) that it can only be reconfigured at considerable cost. It is a one-way-door investment because it requires an investment in assets that cannot be redeployed without significant loss in value. By contrast, if the accounting firm goes out of business, you should be able to easily rent the office space to another firm at similar pricing. The office space is a two-way-door investment.

Walking through a one-way door doesn't make sense unless you are highly confident that walking through that door is the right decision. If others see you taking that risk, your commitment to a risky decision can influence their willingness to support you in that decision. That's why making a credible commitment can be

an effective tactic to persuade others to provide resources for your project. But your commitment has to be easily verifiable by other parties.

There are a variety of ways to make credible commitments. Lough and Swanson did it by forgoing a highly valuable employment option: they stepped away from being Johns Hopkins surgeons. Another way to create a credible commitment is through monetary means. For example, in the winter of the 2008 financial meltdown, Tesla faced an existential crisis that almost ended its run to create electric vehicles. The company was struggling to manufacture its first electric vehicle, the Roadster, and cofounder Martin Eberhard had been forced out under mysterious circumstances. News then leaked that Tesla had only \$9 million in the bank, not enough to even repay the down payments that customers had made on undelivered vehicles. During these dark hours, several of Tesla's prior investors suddenly backed out on funding the company (whether from lack of confidence or in an effort to grab more of the company at a lower valuation remains a debate). For some time, Tesla was in limbo and running out of cash until at the last hour, on Christmas Eve, Musk was able to secure investors, including \$50 million from Daimler Chrysler. How did he manage to secure the financing in such a tough economic environment and for a company in a precarious position? He succeeded because he had made a credible, irreversible commitment. Musk convinced quivering investors by offering to fund the entire round of financing himself. This was no easy feat. It meant gambling most of the rest of his fortune, and Musk was taking a temporary loan from SpaceX to do so. But it worked. In the end, Tesla closed a round of financing that saved the company for the next decade.

Sometimes, a credible commitment can come in the form of

sheer time and effort devoted to a project. Some people credit Norman Borlaug with saving an estimated billion people from starvation through his work developing hybrid wheat. For this work, he won the Nobel Peace Prize, the Presidential Medal of Freedom, and the Congressional Gold Medal. In the 1940s, Borlaug, who was trained as an agronomist, took a US government assignment in Mexico, where disease had dangerously reduced the capacity of crops to feed the population. He believed that he could create new forms of wheat that would resist disease and create higher yields. But progress was hampered because of limited government resources and the slow process of testing new wheat strains with only one growing season each year. Then Borlaug had an idea: What if he could grow wheat twice in one season, first by planting in the central highlands during the summer and then shuttling the resulting seeds to the north, where a lowland valley stayed warm in the fall?

Borlaug's supervisors were against the idea. "Everyone" knew that seeds needed a period of rest between harvest and germination. And the accelerated approach would require more plowing resources, which the supervisors were unwilling to give up. Undeterred, Borlaug pushed ahead, finding an old plow and literally harnessing himself to the plow to till the field in preparation for wheat. Seeing this middle-aged man harnessed to the plow like a mule, a neighboring Mexican farmer offered to let Borlaug use his tractor on weekends. When Borlaug's superiors learned of Borlaug's actions and saw his unwavering devotion to the project, they finally relented and provided additional resources to plow and shuttle his wheat seedlings. With the greater resources, Borlaug eventually developed a shorter-stalk wheat that could resist local disease and produced more grain in

the nutrient-poor soil than did traditional wheat. His wheat turned Mexico from a starving country to a net wheat exporter. He also dispelled the common belief that seeds needed a rest between harvest and germination. His new form of wheat spread to other continents and has since fed billions.

In the end, it was Borlaug's time commitment that won the resources and support for his idea. When you work inside an organization, it may seem hard to leverage credible commitments. But as Borlaug demonstrated, sometimes a willingness to devote time and energy well beyond what others are willing to give can get leaders' attention and persuade them to support your ideas or project.

Finally, your success with a project may sometimes depend on persuading your organization to make a credible commitment to the project. For example, Kvålseth, the aforementioned chief strategy and innovation officer at DTAC, one of Thailand's leading telecoms, envisioned creating a disruptive, low-cost mobile service built around Thailand's leading social network, Line. Although both DTAC and Line expressed initial enthusiasm, anyone working in a big company knows that the winds of support can change quickly. So as Kvålseth put together the project as a joint venture between Line and DTAC, he thought carefully about what resources were needed and how to creatively get irreversible commitments. For example, he knew the venture would require a certain level of sustained spending on marketing over five years—something that headquarters might agree to during good times but decide to cut later if times got tough. Foreseeing this unpredictable pattern of funding, he built the marketing spend commitment into the joint venture contract, with penalties for nonperformance. This and other commitments built into the contract helped Kvålseth get credible commitments

from the two partners and build one of the fastest-growing mobile services in Thailand.

## Advice on Making Credible Commitments

Making a credible commitment to persuade others involves significant, costly actions that signal your belief and devotion to an idea or a project. So by definition, a credible commitment is a risky action. You can take some steps to successfully use this impression amplifier.

### Reduce the Uncertainty Associated with Making a Credible Commitment

One-way doors are only risky if you want to reverse your decision. But often there are clever ways to build an *escape option*—a way to reverse the decision. For example, rather than quit your job to commit to a new venture, figure out a way to take a three- or four-month leave or sabbatical. Alternatively, you could line up another job for a few months in the future. Or make a commitment conditional, perhaps in some nonobvious way. Lough and Swanson didn't quit their positions at Johns Hopkins until they were contractually assured of not only the funding they needed but also complete control of the new venture.

Don't make a credible commitment until you have the resources you need committed as well. And you should always think through your plan B in case things don't work as expected. We certainly don't advocate risking it all without having a thoughtful plan B.

### Create Credible Commitments with Your Abundance Rather Than Your Scarcity

When Musk offered to fund Tesla himself, he was risking

something of which he had an abundance, not a scarcity. Certainly he could have lost his fortune, but he had his experience, friends, and family to fall back on. For many of us, financial resources are scarce, but time, energy, or reputation are abundant. We can create credible commitments as Borlaug did, through our energy and passion.

## **FOMO: Creating a Fear of Missing Out**

Just before the dot-com bubble transformed the scale of how we talk about success, Jerry Sanders performed what might have previously been considered impossible: he took the medical device company X-Cardia, founded a few months earlier for a few thousand dollars, and sold it for \$33 million. In those brief ten months, Sanders leveraged many of the amplifiers we have discussed, such as connecting the company to prestigious investors, scientists, and institutions as well as materializing the concept—a device to measure blood flow in the heart—in a working prototype. But just before the acquisition, Sanders did something that confused many of his friends and investors: he gave away more of his own equity to raise additional funds. Why, when you have an acquisition on the near horizon, would you want to give away the very ownership you were about to cash in on?

But that wasn't all. Immediately after getting the acquisition inquiry, Sanders ran out and started conversations with other potential acquirers, juggling all the conversations in parallel. He also acquired a separate small startup that added a second product to the company's lineup. By the time the potential acquirer had to finally decide whether to acquire X-Cardia, it met an entirely different X-Cardia. Sanders said, he wanted the acquisition team to enter the room and say: “Holy cow, these

guys are really building a company. We've got to get moving because their valuation is going up and up and soon they won't want to sell the company.' We looked like a company on the cusp of an IPO. We were nowhere close. But again, appearances were everything. And if we had to, we could have built a company."<sup>19</sup>

## FOMO: What It Is and Why It Works

FOMO involves creating a sense of urgency, scarcity, or exclusivity that if you don't act quickly, you might miss out on the opportunity. It works because of a psychological principle based on the law of scarcity: human beings crave and desire things that are scarce or difficult to obtain.<sup>20</sup> Think of that person you weren't sure you were interested in until they started dating someone else. Your interest may likely have risen—perhaps enough to motivate you to take action. Creating FOMO also switches potential supporters from a critical, evaluative mindset to an acquisitive one, where they focus on the opportunity that they might miss. Thus, when Sanders introduced more acquirers to the conversation, integrated a second product, and raised additional money, he put pressure on his acquirers that if they didn't act fast, they would miss the chance to purchase the company at all.

Although FOMO can be exploited to win support from investors, it can also be used to win support from others, such as potential employees. For example, when Josh Schwarzapel set out to build the technical team for his startup Cooliris, he thought the process would be easy. Cooliris had both a compelling technical vision to transform how people interact with the internet and funding from a top venture capitalist. But after almost six months of intensive recruiting effort, no new employees had joined the technical team. In response,

Schwarzapel and the Cooliris leadership sat down and took a hard look at its recruiting. The members realized that they were treating recruits as if the team were buying, or picking out, the best candidate off the shelf. To win support from potential recruits, the team needed to create an environment in which it sold itself to candidates—an environment where they felt they would be missing out if they didn't join quickly.

To do this, Schwarzapel and the team redesigned their recruiting process, walking the candidate into their offices, past the desks of famous venture capitalists, and telling about legendary startups they had invested in. Then they introduced the candidate to their grand vision of how to transform how people access the internet. Finally, they created the impression that the recruit was part of a vibrant team, with a special but disappearing slot (they did this by displaying pictures of the team but with a single blank space with the candidate's picture in it). They emphasized that the Cooliris team wanted to change the world and wanted the candidate to be part of it, but that they were moving fast and the opportunity wouldn't last forever.

The technique—which created a sense of urgency and exclusivity—worked. Five of five offers extended were accepted. The Cooliris team then went on to recruit the biggest group of Stanford interns that any startup in Silicon Valley had ever recruited. Cooliris succeeded in creating 3-D imaging tools that have been downloaded more than fifty million times and have received multiple design awards. The company was later acquired by Yahoo!

## Advice on Using FOMO

FOMO works by creating a sense of urgency, scarcity, or exclusivity that encourages supporters to act rather than to wait.

As you try to use FOMO to win support for your ideas, several approaches can be helpful.

### Make Your FOMO Strategy Credible

FOMO isn't high-pressure sales to do something unethical or a fraudulent show of scarcity. Both attempts will fall flat. FOMO is about helping supporters overcome their natural inertia and skepticism and see the value of an opportunity.

### Leverage “Casual Dating” to Manage the Time Dimension

In his research on how entrepreneurs raise funds, Professor Benjamin Hallen found that entrepreneurs frequently use FOMO to raise capital.<sup>21</sup> He argues that the challenge, for entrepreneurs, is that investors have a strong incentive to wait rather than invest immediately. Waiting allows the investor to gather multiple data points on the entrepreneur and possibly jump in at a later date, after the entrepreneur has proven out more untested assumptions and the investment is less risky. This risk aversion by investors is the classic innovators' paradox. For the entrepreneur who needs capital, the wait-and-see approach can be devastating.

How did entrepreneurs counteract wait-and-see tendencies? First, they tried to provide investors multiple data points before the entrepreneur needed the money; Hallen labeled this process “casual dating.” Specifically, entrepreneurs approached a potential supporter, seeking the person's “advice” or “feedback” in advance of when they needed funding. By the time the entrepreneurs approached the investor, that person had enough data points to take action.<sup>22</sup>

### Try to Get Multiple Players Competing against Each Other in Parallel

The other way that entrepreneurs counteracted the wait-and-see tendency was to get multiple players moving in parallel. For example, when Sanders reached out to other potential acquirers, he was trying to get several players involved at the same time so there would be a threat of losing the deal. Similarly, in her study of how makers of low-power mobile games struck deals with high-power players like network operators and handset makers, Pinar Ozcan, professor of strategic management at Warwick Business School, observed that successful startups entertained conversations with these players in parallel.<sup>23</sup> So, for example, the entrepreneur might tell AT&T that he or she was in talks with Verizon and BlackBerry; this technique would signal credibility but would also create scarcity.

In Hallen's research, the entrepreneurs took it even one step further. Not only did they pitch multiple investors, but they also pitched to different kinds of investors, for example, approaching traditional venture capitalists, corporate venture capitalists, and angel investors. Because each investor group operates by a slightly different set of rules and in a slightly different social circle, investors were put off balance by not knowing whether the other investors would also wait and see. Fearing they might miss out, the investors laid their money down earlier. Likewise, entrepreneurs sometimes threatened to fund the idea themselves if investors didn't move quickly; the idea was to increase the FOMO pressure on investors.<sup>24</sup>

## **Conclusion**

Impression amplifiers are the observable actions that you take to win support for your ideas. Unlike human, social, and reputation capital, which are all part of who you are, impression amplifiers are the actions you take to magnify your personal capital or stir

up support for your idea. Generally they fall into two categories, those that amplify your personal capital as well as your idea, and those that help sell your idea. Although there is no particular sequence to using these amplifiers, and they can be used independently, innovators often use them in combination to win support from investors, employees, suppliers, and customers.

In chapters 2 through 6, we have discussed each of the separate components of innovation capital—human capital skills, social capital, reputation capital—and the two types of impression amplifiers. We have provided advice on how to build your innovation capital step-by-step, from your human capital skills, to your strong and weak social tie connections, and then to your track record and reputation for innovation. In chapter 7, we shift gears from your actions as an individual to proposing a pattern of innovation leadership that you can use when attempting to initiate an innovation project or entrepreneurial startup. This pattern, used by many innovative leaders, will not only build your innovation capital but will also increase the chances that your effort will succeed. Perhaps most importantly, we will teach you how visionary leadership for your project can ignite a virtuous cycle of success.

See our website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital) for more resources on the material in this chapter.

## The Virtuous Cycle of Innovation Leadership

Whatever your view of Elon Musk, one thing he did when he helped launch Tesla was articulate a lofty vision for the company. “Our goal [is] . . . to accelerate the advent of sustainable transport by bringing compelling mass market electric cars to market as soon as possible,” he wrote. “In order to get to that end goal, big leaps in technology are required.”<sup>1</sup> Musk then laid out his “master plan”—a strategy for launching desirable electric vehicles at the high end of the market followed by affordable electric vehicles for the mainstream market.

Sterling Anderson, former head of Tesla Model X and Tesla Autopilot and cofounder of Aurora Innovation (a startup that is successfully providing a full-stack self-driving solution for major automakers like Volkswagen and Hyundai), says that Musk’s success as an innovative leader stems largely from a reinforcing cycle of success triggered by an exciting and inspirational vision:

Elon understands people. He understands that a lofty vision, an inspirational vision, attracts world-class people, particularly world-class engineers. With those world-class engineers, he’s able to build a better product. That better product attracts customers and attracts investors, and it’s self-reinforcing. As this feeds on itself, engineers are increasingly inspired to join, not only because of the lofty vision but also because of the increasingly strong brand behind it. These conditions attract increasingly strong talent; it feels good to work there and to be viewed as someone who is helping drive innovation toward that lofty goal.

Without prompting, Anderson independently has described the

same virtuous cycle that we have seen many leaders utilize with positive results (figure 7-1). This cycle includes the following steps:

1. Identify an exciting, lofty, even inspirational vision. The vision needs to solve an important problem, pursue a big opportunity, or just be exciting.
2. The lofty vision attracts talented human capital (e.g., better engineers and scientists) who want to work on something exciting. It also attracts investors and/or resources from organization leaders who provide the resources and senior sponsorship needed to launch a successful innovation project.
3. The talented human capital increases the odds of developing a better product and customer experience. Put simply, talented people going after a lofty vision produces better results for the customer.
4. The better product or customer experience attracts customers. The increase in happy customers leads to the creation of a valuable, hopefully innovative, reputation. Customers of companies or brands with an innovative reputation experience “identification”—which means their personal identity gets tied up with the products and brand which makes them much more loyal and valuable customers.

*The ability to attract customers and build a valuable brand leads to a reinforcing cycle.* Going back to step number two: talented human capital and investors are attracted to companies and projects with a valuable brand and loyal customers. Thus, the cycle repeats.

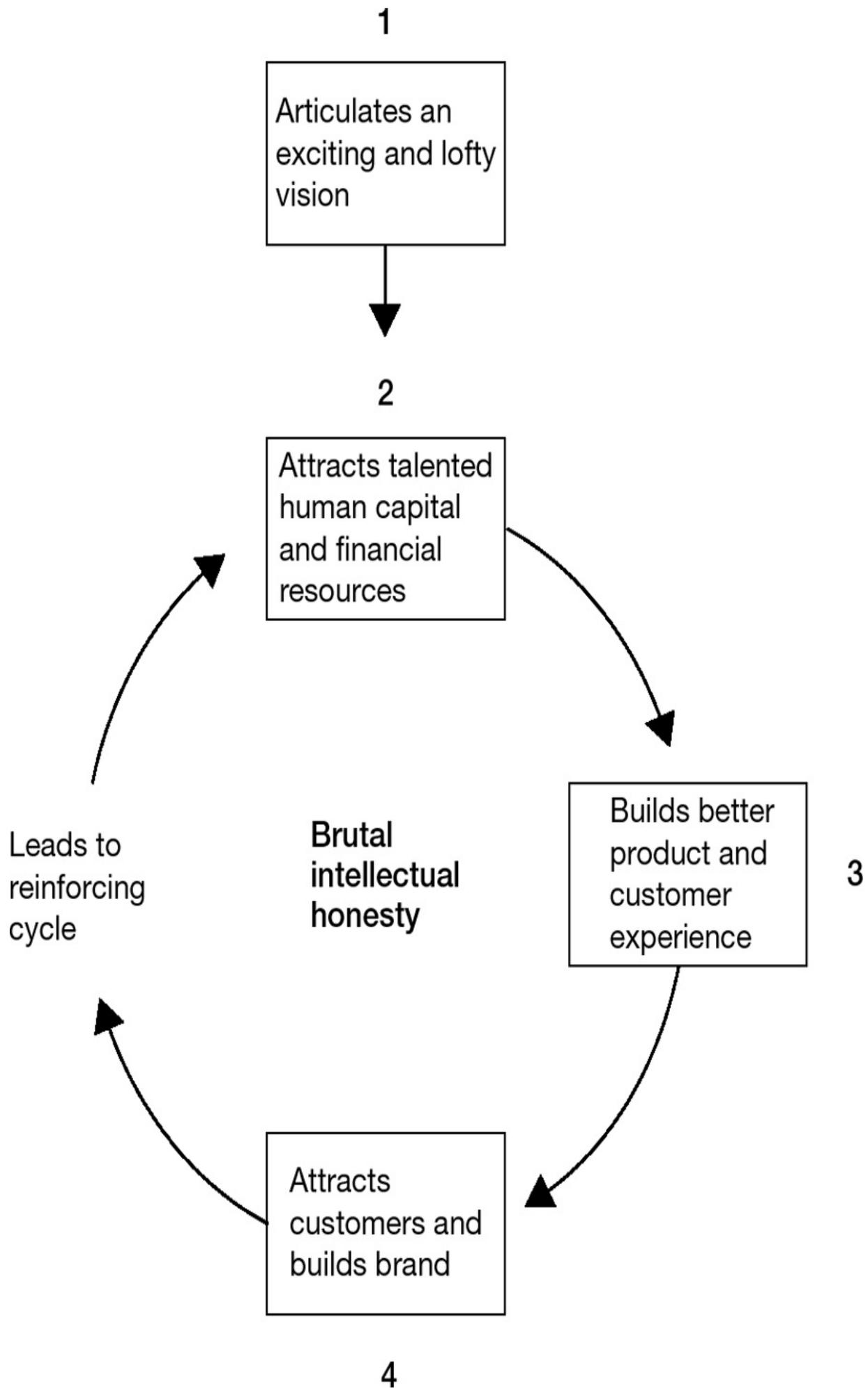
Musk’s history of launching new ventures reveals that he has purposely ignited this cycle in many of them. For example, when founding SpaceX, he established a mission for the company, which was “to revolutionize space technology with the ultimate goal of enabling people to live on other planets.”<sup>2</sup> When Tesla pursued the Powerwall—a product that uses Tesla batteries to power homes and utilities (and, of course, to charge your Tesla vehicle)—Musk announced that “our goal here is to fundamentally change the way the world uses energy.”<sup>3</sup> When he announced his idea for Boring (a transportation infrastructure

company), he articulated a vision of creating a “3D transportation network of tunnel infrastructure for cars and high speed trains”<sup>4</sup> to relieve congestion problems in big cities (see [www.boringcompany.com](http://www.boringcompany.com) for a cool video on how it works). Pursuing big and important problems has been the starting mechanism for a cycle of success that Musk has deftly deployed multiple times. Musk acknowledges that “I like to be involved in things that change the world.”

**FIGURE 7-1**

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**Virtuous cycle of innovation leadership**



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But the cycle isn't unique to Musk. We saw a similar pattern in other innovative leaders we examined. As Jeff Bezos launched Amazon, he said, "What we want to be is something completely new. There is no physical analog for what Amazon.com is becoming."<sup>5</sup> When Marc Benioff launched Salesforce—one of the first enterprise software systems born in the cloud—he boldly proclaimed "The End of Software" as a tagline. Jeff Weiner of LinkedIn talks about the company's mission to connect everyone on the planet and to "create economic opportunity for the global workforce of three billion people." But it wasn't just founders of new companies. We also saw less well-known leaders deploy this strategy effectively.

Painting an exciting vision for a venture was an important first step to innovation leadership for the people we studied; the vision triggered the virtuous cycle of innovation leadership shown in [figure 7-1](#). The leaders weren't always conscious of the cycle but seemed to intuitively understand the wide-ranging benefits of painting a vision for projects that made the ventures seem exciting and important. Of course, some of the painting involves telling stories to make an emotional connection, as described in [chapter 5](#). Paul Polman, former CEO of food products company Unilever, talks about how one in ten people in the world lack clean water, and he describes Unilever's vision of using clean-water technologies to solve this problem. Nike's founders and current CEO Mark Parker have discovered that they can create an exciting vision out of "serving the athlete" (Nike defines every one as an athlete) to inspire athletes to "just do it" and achieve better athletic performance.

In this chapter, we examine effective innovation leadership at the team or project level and, more specifically, the elements of the virtuous cycle of innovation leadership. (In [chapter 8](#), we will

address innovation capability and innovation capital at the organization level.) We'll start by examining *visionary leadership*, a term that you have probably heard many times before. What does it mean to provide visionary leadership? How do you avoid common mistakes that can terrify, rather than inspire, those you lead? We'll then discuss recruiting the human and financial resources you need to pursue the vision and how great leaders design the problem-solving process and culture within the team to build innovative solutions. But it all starts with "the vision thing."

## **Step 1: Provide Visionary Leadership**

By now you've probably heard—multiple times—that great leaders provide visionary leadership. But how do great leaders actually do it? Effective visionary leadership involves three important elements: (1) vision, (2) strategic direction (setting the vectors of opportunity within that vision), and (3) stretch goals.

First, visionary leadership requires a high-level description of a problem to solve or an opportunity to pursue. This vision statement must *create emotional engagement*. It might include declarations such as "revolutionize space travel," "create economic opportunity for the global workforce," or "create sustainable food and water." But the statement could also just be the creation of something fun and exciting (e.g., a theme park that is "the happiest place on earth"). The key is emotional engagement, connecting with the emotional and social desires of supporters so that they want to bring their resources to the project because they think it is important, fun, exciting, or just interesting.

The second step in the vision is to provide the team with strategic direction, or vectors of search, about how they will

achieve the vision. This strategic direction could be described as setting the vectors of opportunity within the grand vision. For example, Musk laid out a strategic direction for Tesla in the “master plan” to revolutionize transportation, notably starting by building *desirable* electric vehicles at the high end of the market before building *affordable* vehicles. This strategic direction provides a vector of search (i.e., sustainable cars, desirable vehicles, starting at the high end of the market). One of the big mistakes we see leaders make is to set a grand vision but no vectors of search. In these situations, people start out excited but then quickly become scared and confused as they ask themselves, What are we supposed to be working on? Can we really succeed?

At the same time, while the strategic direction provides just that—direction—it leaves room for exploration and modification. “One of the things that is important when leading an innovative team is to paint a vision that is clear enough that they can execute,” Anderson told us. “I think one of the things that I see sometimes done poorly is, the vision is either insufficiently painted, or it’s painted with such a level of detail that it’s not inspiring for anyone to go and work on it. Because those who are asked to do it don’t feel like they have the leeway to innovate, but instead feel like their path and deliverables—and even, in many cases, approach—are largely dictated for them.”

Third, once the strategic direction is articulated, leaders need to make the direction even more concrete by establishing some measurable stretch goals that the team will work toward to achieve the strategy and vision. Stretch goals are those that appear unattainable, given current practices, skills, and knowledge; they will require some innovation to achieve. Because most people are deeply uncomfortable with uncertainty, stretch goals are important because they give people more-concrete

aspirations to chase.

Nike's Mark Parker encourages stretch goals. Nike's Breaking2 project—designed to break the two-hour barrier for the marathon—offers an excellent illustration of the power of stretch goals. In the summer of 2014, Matt Nurse, head of Nike Sports Research Lab, decided that he and his colleagues were playing it too safe. Even though Nike's vision was to provide “inspiration and innovation” to every athlete, he believed that Nike wasn't taking enough risks in the strategic vector of long-distance running. During the previous year, designers within the lab had been working on a shoe that would help distance runners improve their performance by up to 3 percent. Nurse realized that although this improvement was a worthy goal, it was a safe one. He wanted to push his team members to devote themselves to an aspiration that would either succeed or fail definitively. So he asked them to imagine how they would make a two-hour marathon a reality. The fastest that the marathon had ever been run was 2:02:57; a sub-two-hour time would require a three-minute (2.4 percent) improvement, which might sound small but represents a giant leap in human performance. “We keep talking about the sub-two,” Nurse recalls saying. “It's time to stop talking about it and actually do it.”<sup>6</sup>

Sandy Bodecker, vice president of special projects, took the challenge to heart—so much so that he signaled his personal commitment to Breaking2 by having 1:59:59 tattooed across his wrist. Under Nurse's guidance, Bodecker pulled together a diverse team of experts in design, engineering, materials, nutrition, physiology, plus three of the world's fastest marathoners, including Eliud Kipchoge, winner of the Rio Olympics and the world's fastest marathoner. Then they set a deadline for the stretch goal: run a sub-two-hour marathon at the

Monza auto track in Italy (chosen for its optimal running and weather conditions) in two years. The designers' goal was to develop the lightest shoes possible while providing cushioning and a design that would propel the body forward. They tested design after design with the three marathoners on the team who told them what they liked and what they disliked (one design eliminated the heel entirely to reduce weight—but the runners hated it). They finally hit on a design with a carbon-fiber plate in the midsole. The plate stores and releases energy with each stride and acts as a kind of slingshot to propel runners forward. They also designed lightweight performance clothing to minimize drag. Nutritionists and physiologists worked with the athletes to ensure that the runners' bodies were in perfect condition. Coaches provided running tips based on careful analysis of the athletes' running techniques.

Then on May 6, 2017, the team held a much-publicized running event that turned out to be a PR coup, as everyone in the running world watched to see whether Kipchoge could break the two-hour marathon. During the first fifteen, seventeen, and even twenty-two miles, Kipchoge was right behind the two-hour pace car. But during the final two miles, he slowed slightly, finishing in a world record 2:00:25. (The time was unofficial because the team had used other runners, called pacemakers, throughout the race to break the wind and push Kipchoge, but one year later, Kipchoge officially broke the world record by more than a minute.)

Ultimately, the project came up short of its goal. But the shoe that the team developed, the Nike Zoom Vaporfly 4%, and the PR that came with it were a huge success. This PR arguably contributed a great deal to Nike's innovation capital (see [chapter 8](#)). “Moments like Breaking2 are very important for our brand,” Parker says. Tests of the shoes demonstrated that they reduced

running times by an average of almost 4 percent, and a *New York Times* article suggested that the “shoes give runners an unfair advantage.”<sup>7</sup> Nike couldn’t buy better press than that. Not surprisingly, when the Nike Zoom Vaporfly 4% was released to the public, the shoes flew off the shelves. The results of the sub-two-hour stretch goal exceeded expectations—despite the fact that the sub-two-hour goal wasn’t actually met.

“I love the ambition of trying to make history,” Mark Parker told us when discussing Breaking2. “When you commit to a stretch goal like that, the whole process can be incredibly uplifting for a team. Stretch goals can also fast-track innovation. Tight timelines with a focused objective really inspire you to be creative. Through the Breaking2 journey, we came up with amazing new concepts, including the industry’s first 3-D-printed performance upper. Success is never guaranteed, and sometimes, you win by just trying.”

Research shows that stretch goals work best when there are clear metrics of achievement, when team members have a track record of success, and when the team is given substantial resources to remove roadblocks to achieving the goal. Moreover, when stretch goals require considerable innovation, success is more likely when the team effectively uses first principles to solve problems (see [chapter 2](#)). Of course, one challenge of stretch goals is that you can push employees so hard that they burn out or are demotivated by pursuing what they perceive as impossible targets. Musk has been criticized for setting impossible stretch goals and burning out employees. He responds by saying that he doesn’t “set targets that I know can’t be met” and that “in order to have a good outcome, we must strive for a great outcome.”<sup>8</sup> Tesla cofounder and chief technical officer J. B. Straubel believes in Musk’s approach, telling us, “Elon is a master at harnessing and

channeling the team to do pretty amazing things that go beyond what the team even thought was possible. If you challenge people to work hard, they achieve more than they think they can. Most leaders don't want to do that.”

LinkedIn's Weiner uses these three components of visionary leadership while guiding the company. As previously mentioned, his grand vision for LinkedIn is to “create economic opportunity for the global workforce of three billion people.” Weiner believes that to achieve this vision, LinkedIn has articulated a strategy to “create a platform for the communication, professional development, and advancement for people around the world.” Thus, the company's strategy goes well beyond simply being an effective tool for managing one's professional networks. The vision aspires to something much more inspiring: creating opportunities for anyone, anywhere, to find jobs, receive training, and anything else that might be helpful for professional communication and development.

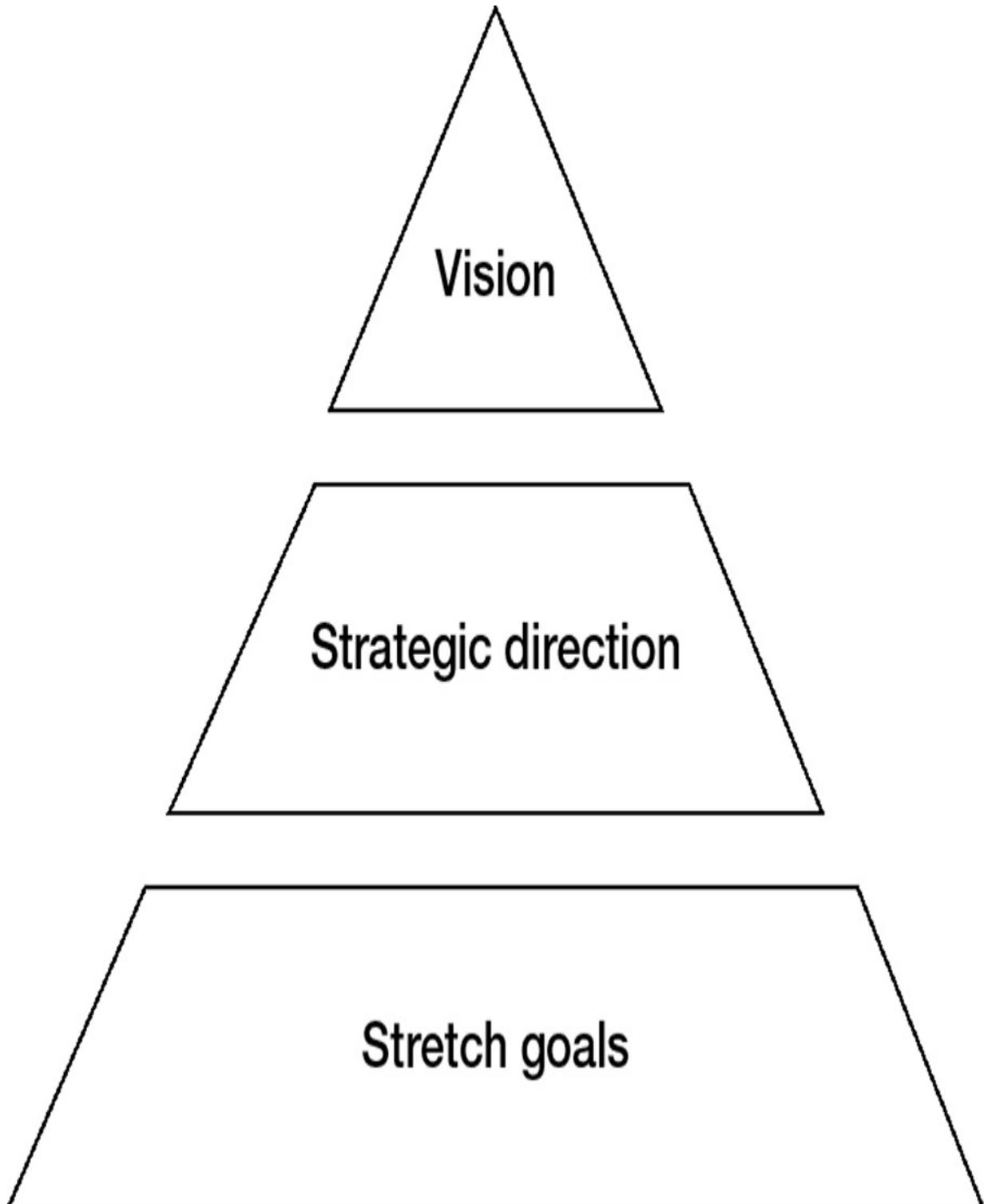
Weiner then set stretch goals toward that mission, starting with connecting the 780 million business professionals in the world. Back in 2010, LinkedIn had a little over 50 million professionals on the site. Since then, in pursuit of its stretch goal, the LinkedIn team has grown that number to more than 590 million users. Weiner also set stretch goals around finding job opportunities through LinkedIn. At the time, around 8,000 jobs were listed on the platform. Weiner set a stretch goal of 350,000 jobs. Within a couple of years, as the team approached that hurdle, Weiner congratulated the team and then raised the ambition to 20 million jobs. Such an order-of-magnitude increase required a fundamental shift in the required resources and strategy for these operations. For example, LinkedIn acquired a company called Bright to help it achieve that objective. Today LinkedIn has more

than 20 million job postings, and the number is growing.

FIGURE 7-2

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Three components of visionary leadership



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Weiner also challenged a team to create the world's first "economic graph" (comparable to a social graph but a map of the

world's interconnecting economic relationships). He told us, "This portrait of the professional world would include a profile for all three billion workers, every company in the world, a digital representation of all jobs, the skills required for those jobs (plus courses to develop those skills), profiles of all universities and schools, and a platform for people to share their knowledge." Weiner's and LinkedIn's success very much comes from developing a lofty vision, a strategic direction or vector, and stretch goals and then leading the company in its pursuit (figure 7-2).

## **Step 2: Attract Talented Team Members and Resources to the Project**

Establishing an exciting vision is an important first step in convincing talented people to join your team. But securing talent takes more than that. Successful leaders attract people to their teams and organizations because *others want to work with them*. Think about it. Why do you want to work for a specific leader on a specific project?

We are typically drawn to work with a certain leader on a particular project for several reasons. First, we are excited by the project work itself. We like the vision and simply want the opportunity to do the work. Second, we believe we will learn important things by working for this leader. We want his or her mentorship. Third, we want to build our own reputation by doing high-profile projects and by developing a relationship with this leader or project. We want to be associated with a winning project, and we want the sponsorship of a successful leader. Fourth, the leader makes us feel as if we are uniquely suited to contribute to the project. We feel needed. And finally, we want to

work with leaders that we “like.” We enjoy being around them and working with them.

So there you have the recipe for attracting the best talent: Paint an exciting project vision. Credibly assure the prospects that they will learn some important things by working with you on the project. Convince them that this will be a stepping-stone to additional opportunities—and that you will proactively help them secure those opportunities. Let the prospects know that they are critical to the project. Finally, be someone who is enjoyable to work with. You just need one of these reasons to resonate with someone to persuade him or her to join your team.

As illustration, consider why Tim Cook, now CEO of Apple, left a comfortable job to take a big risk on a then-struggling company. In 1998, he was content as a senior executive at Compaq, a successful upstart that was dethroning IBM as the top dog of personal computers for businesses. Steve Jobs reached out to recruit Cook, inviting him for an interview. Cook refused at first. He was happy where he was at the helm of a rising star, and Apple had been on the decline for a decade. But Jobs persisted. Finally Cook conceded to an interview. He recalls how it went:

Any purely rational consideration of cost and benefits lined up in Compaq’s favor, and the people who knew me best advised me to stay at Compaq. On that day in early 1998 I listened to my intuition . . . [N]o more than five minutes into my initial interview with Steve, I wanted to throw caution and logic to the wind and join Apple . . . [A]ll of a sudden he’s talking about his strategy and vision, and that what he was doing was going 100 percent into consumer. Everybody else in the industry had decided you couldn’t make any money on consumers so they were headed to services and storage and enterprise. And I thought, I’d always thought that following the herd was not a good thing . . . And he told me a little about the design [of a new consumer computer], enough to get me really interested. And he was describing what later would be called the iMac . . . My intuition already knew that joining Apple was a once in a lifetime opportunity to work for a creative genius, and to be on

the executive team that could resurrect a great American company.<sup>9</sup>

Jobs sold the vision, and Cook leaped in headfirst.

Of course, you have more tools at your disposal than just the vision. You can persuade others as well by using the full arsenal of impression amplifiers described in chapters 5 and 6. Tell stories to sell your vision and use broadcasting to amplify who you are and what you've done. You can use comparisons—through relevant analogies—to communicate why your project will succeed, and you can make your ideas tangible (materializing them) to show that success is possible. And if all else fails, make strong or irreversible commitments and FOMO approaches to show your deep commitment to a project that has a closing window of opportunity.

### **Step 3: Build a Better Product and Customer Experience**

For true innovation, you must recruit talent, because you are doing something that hasn't been done before. And to have real impact, customers (or internal users) must think a new solution is not just okay, but awesome. “The balance of power is shifting toward consumers and away from companies,” Bezos told us. “The right way to respond to this if you are a company is to put the vast majority of your energy, attention, and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it.” As the saying goes, “Build a better mousetrap, and the world will beat a path to your door.”

If you are a leader, a better mousetrap requires that you carefully design the problem-solving process to enhance the probability of a breakthrough solution that customers will love. To be clear, we aren't talking about building a better solution

without a deep understanding of the customer need—doing so is a recipe for failure. We are talking about how you can dramatically improve your solutions to customers’ problems.

As described in chapter 2, a preferred way to increase and improve the solutions you offer is to apply first principles to solving problems. First, you identify the key constraints to achieving a breakthrough in performance, and then you test every option possible for eliminating one or more of those constraints. For example, Musk’s stretch goal at the start of the Boring Company was “increasing tunneling speed and dropping costs by a factor of 10.”<sup>10</sup> Current machine tunneling speeds are three hundred feet per week. But according to Musk’s first-principles analysis, current machines are much slower than physics suggests they could be. So Musk wants to increase that speed to more than one mile per week, a tenfold improvement. Musk says that tunneling speeds have changed little in the last fifty years. “To make it a little better should be easy,” he says. “To make it five times better is not crazy hard. To make it 10 times better is hard, but nobody will need to win the Nobel Prize. We don’t have to change the standard model of physics.”<sup>11</sup> The bottom line is that an important first step to building a better solution is to use first principles and identify the limiting factors that will need to be addressed with a solution.

Once the limiting factors to a breakthrough solution have been identified, the leader’s role in the process of building a better mousetrap is to play the role of “chief experimenter.”<sup>12</sup> Rather than make decisions, the leader’s role shifts to coach and facilitator of experiments designed to test hypotheses about a breakthrough solution. If the manager, or anyone else on the team, says, “I think we should do X” or “I believe X,” that statement is translated into a leap-of-faith assumption or

hypothesis that can be tested with an experiment. Intuit founder Scott Cook (ranked nineteenth, with CEO Brad Smith, on our list) told us, “Brad Smith and I have changed the questions that we ask. We used to ask things like, ‘Well, what’s your answer, and what’s your analysis behind it?’ And now we ask, ‘Okay, what’s the fastest way to get an experiment to test that idea?’” Cook continued: “Brad and I have to live by the same rules. So we end up asking ourselves questions like, ‘I have got a fundamental belief of what we should do. Now, what are the leap-of-faith assumptions on which it is based? And how are we going to test the leap-of-faith assumptions that are crucial to my beliefs?’ We need to do this just like we would do for anyone else. Experiments will be nothing but window dressing until you change who and how decisions are made.”

As a leader and the chief experimenter, you should focus on three activities:

- Forming leap-of-faith assumptions with your team
- Rapidly testing those assumptions through experiments (mostly with customers)
- Revising and retesting your assumptions as you let the data (mostly from customers) make the decisions

Of course, the ultimate goal of the experiments is to develop a solution that customers cannot resist, something awesome. The road to awesome typically begins with a minimum viable product, which is used to test assumptions and hypotheses. Although you should start with the minimum viable product and use it until you have a strong understanding of the user need, the ultimate goal is not just a viable product; it’s an awesome product. We first heard the term *minimum awesome product* while observing an Intuit training session focused on a single issue: what is awesome? The goal of a minimum awesome product is to deliver

a solution that is insanely great on the most important dimension that it inspires delight in your customers. As Cook explains, “You don’t want to be viable in the dimension that matters. You want to be awesome in the dimension that matters, all while maintaining an uncomfortably narrow focus.” In other words, you want to identify the minimum feature set possible and then relentlessly focus on making your solution awesome on those dimensions.

So how do you get to awesome? Customers describe products as awesome when the offerings inspire positive emotions. When a product or service surprises you by doing something you didn’t expect—something you may not have even thought was possible—it can evoke happy surprise and prompt you to say “That is awesome!” As your team seeks to build a better mousetrap, remember that your customers are hiring your solution to do a job for them—and that every job has functional, social, and emotional dimensions. Your solution may inspire awesome by doing the unexpected on any of these three dimensions.

#### **Step 4: Attract Customers and Build a Brand**

Building a better product will not only attract customers but also build a valuable innovation brand. Companies or products with a reputation for innovation are more likely to have customers identify with them at a personal level (think of Tesla or Apple loyalists). In turn, this personal connection leads to increased customer loyalty, repeat purchases, willingness to pay higher prices, and increased tolerance for occasional product failures.<sup>13</sup> The power of an innovation reputation that comes from making great products, services, or experiences is frequently underestimated. This is why Bezos has argued for investing your resources and effort on building a great product rather than

money and resources pushing people into thinking they are buying a great product.

## **Step 5: Recognize That All of the Steps Are Mutually Reinforcing**

Building a valuable brand and attracting customers simply reinforces the innovation leadership and success cycle by attracting additional funding and talent. Particularly astute leaders realize that their personal innovation brand is tied to the innovations their team produces, so they use effective broadcasting to build their personal brand along with their company's brand. "I learned from Elon [Musk] that if possible, it is important to use the press to build a personal brand," Anderson says. "Having a personal brand makes people want to work with you and buy your products; in turn, those good engineers create good products and your star rises. It's all reinforcing. I think those who ignore it, or are not good at it, do so at their own peril. Some innovators do phenomenal work that doesn't get the traction it deserves, because the world never hears about it." As described in [chapter 4](#), building a personal reputation for innovation isn't easy, but it can pay huge dividends.

## **A Culture of Brutal Intellectual Honesty**

Even though our book isn't about creating an innovation culture, the leadership cycle works best in an environment of *brutal intellectual honesty*. We've borrowed the term from Dominic Orr, founder of Aruba Networks, a billion-dollar-plus company. Orr uses the phrase to describe how teams in dynamic environments must work together to win. He argues that brutal honesty was the

secret to building one of his first unicorn companies:

There's too many decisions to make, there's too little time . . . What you want is to get all the facts and opinions and wisdom out on the table, have a really honest debate about it, given a limited period of time. And then at the end of that period of time . . . make a decision and go. In that process, you need people to be very thick-skinned. Because I feel that if you look into a lot of situations, people get bogged down into very emotional arguments or political situations and so on . . . That is incredibly time wasting. And time is the only competitive resource that we have in our hands. We cannot allow that to happen. So what I encourage is people to be thick-skinned about it . . . and don't defend it with your ego, and let intellectual honesty dictate . . . And the brutal part is the tricky part. A lot of people apply it to the other guy. What I really meant when I created the term is to apply it to yourself, that when you really put forward a very passionate argument, when you actually get convinced intellectually, there's a better way to do it. Be brutal to yourself, and say, "Okay. Yeah. You're right. You know, I put my best foot forward . . . [but] I've got to do it your way."<sup>14</sup>

In essence, Orr describes the environment that successful leaders of innovation create. In such an intellectually honest climate, leaders can challenge each other in productive ways that yield meaningful progress.

This environment goes hand-in-hand with an atmosphere of psychological safety, as espoused by Harvard professor Amy Edmonson. In psychologically safe situations, team members are willing to ask questions, express opinions, acknowledge mistakes, and have confidence that they can engage in risky, learning-related behaviors without punishment. But while you want your team members to feel comfortable saying whatever they want, when there is brutal intellectual honesty, it is impossible to avoid the discomfort that comes from real disagreement—something that is often necessary when you are pursuing truly novel outcomes.

Len Schleifer, president and CEO of Regeneron, told us that

brutal honesty is fundamental to the success of his innovative organization. (Schleifer shares twenty-first place with Regeneron cofounder, president, and chief scientist George Yancopoulos on our list of most innovative leaders.) Regeneron has transformed the biopharma industry with its ability to develop new therapies at less than 20 percent of the cost of competitors. “I love this guy,” Schleifer says, referring to Yancopoulos. “But we almost come to blows regularly, and we’re always arguing about things. I think that leads the whole organization to just debating and challenging and questioning everything. I think that if you’re going to try to break molds and if you’re going to try to do new things that haven’t been done before, it’s almost got to start with something that you so passionately almost don’t agree with.”

Yancopoulos agrees: “Len and I have something like five arguments a day. We’re not alone in that it is the culture here. And one of the most important things that we do is establish this notion that nothing is unchallengeable. You don’t take anything for granted, and you test and pressure-test everything.”

Steve Jobs was among the first to advocate for this type of environment, saying, “I’m brutally honest, because the price of admission to being in the room with me is, I get to tell you you’re full of shit if you’re full of shit, and you get to say to me I’m full of shit, and we have some rip-roaring fights, and that keeps the B players, the bozos, from larding the organization. Only the A players survive.”<sup>15</sup> Depending on the leader, this type of environment can be challenging to work in. Creating an environment where individuals feel psychological safety—even while there is brutal intellectual honesty—requires creating a tricky balance. Most of us don’t like confrontation and don’t really like brutal honesty. Some research suggests that leaders who score high on emotional intelligence are far more successful

at creating psychological safety and intellectual honesty. We've seen leaders follow three key practices to create a safe environment where team members can be brutally honest and the team can still function well.

First, legitimize the asking of any question or the challenging of any assumption. This permission to explore intellectually starts with what Bezos calls having a “beginner’s mind”:

To be an inventor you have to be an expert in your domain but still have a beginner’s mind because the problem with being an expert in your domain is that you become numb to all the things that are wrong, you’re so used to it. We humans quickly adapt to things that aren’t as good as they could be. And if you have a beginner’s mind like a child, you’re not an expert, of course, so you’ll ask, “Well, why does that work that way? That doesn’t make any sense.” But the world is so sophisticated that you also can’t just be a beginner. You actually do need domain expertise . . . But they [successful inventors] can put themselves in a place where they can see it as if it’s the first time they’ve ever seen it.

Leaders facilitate a beginner’s mindset and brutal honesty by creating an atmosphere where questions and challenges to assumptions—even those of “experts”—is encouraged. People can feel uncomfortable about being challenged when they are considered experts in a particular knowledge domain.

Second, leaders must help team members know that they are trusted and valued members of the team even when they are challenged and their assumptions or position proves to be incorrect. Orr hired therapists to help his executives feel comfortable enough with themselves to be challenged. But there are other techniques you can apply. Anderson describes a technique that he learned at MIT while earning his PhD in robotics and now uses:

One of the things I actually did with various teams at MIT is, we used to tell each other, “Look, just put your ego in this little box at the door, go in and shut the door, and once we’re in the conference room on the whiteboard, we don’t

want anyone getting their feelings hurt. We may end up saying ‘No, that’s not right, here’s a proof as to why that’s the case.’ We don’t want anyone feeling bad because someone else said that what they just suggested is not right. Treat it like a game if you need to, and feel like it’s just a matter of seeing who ultimately prevails in presenting the evidence that makes their respective case.”

Anderson goes on to describe what the leader is hoping to achieve after a working session where people disagree and are challenged. “I think you need to be able to express the appropriate degree of skepticism about someone’s ideas while still making it clear that you trust the person that you’re questioning,” he says. “You need to trust that they came into this with a reasoned thought process, and you need to trust that they are an intelligent individual. And at the end of the day, even if you disagree on something, you still trust them to see it through and to bring the product to fruition.”

Finally, building an environment of psychological safety where team members can be brutally honest requires that the leader be the cheerleader for team members’ innovative behaviors (e.g., questioning, observing, networking, and experimenting) more than outcomes. Building psychological safety happens interaction by interaction, moment by moment, one-on-one as well as with the entire team. It involves being as excited about others’ ideas as you are about your own. And sometimes, you might not even have the great ideas, as we discuss in the sidebar “Do You Have to Be an Innovator to Be a Great Leader of Innovation?” Research suggests that out of one hundred new products launched in the market, only about ten to twenty percent of them will succeed.<sup>16</sup> Failure is a common experience of teams that are trying to innovate. Thus, the leader must continually encourage and support those who try new ideas, even when they are not successful.

In the end, leaders need to make sure the collective knowledge of the team is effectively deployed to produce insights with impact. Arne Sorenson, CEO of Marriott International, emphasized the importance of creating an environment where new ideas can be brought up and successfully pursued. When he described why Marriott had bought Starwood Hotels and Resorts Worldwide, he noted that a couple of Starwood's innovations helped tip the scales: the Heavenly Bed (an extremely comfortable bed covered entirely in clean linens rather than blankets) and the W Hotels Worldwide franchise. Ironically, the idea to reinvent the bed had come up much earlier at Marriott. But the idea never received the needed attention from leadership to mature. As a result, Marriott paid a great deal of money to later acquire it.

### **Do You Have to Be an Innovator to Be a Great Leader of Innovation?**

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Can you be a great leader of innovation even if you aren't necessarily a great inventor yourself? Jeff Bezos, who sits at the top of our list of most innovative leaders, clearly is a good inventor and acknowledges his desire and penchant for innovating. "Well, that's something that, for whatever reason, I've been good at my whole life," Bezos told us. "I can't explain that I'm inventive; I come up with ideas. We could sit here and brainstorm, and I could help you fill this whiteboard in an hour with a hundred ideas. My favorite meeting is brainstorming. Really, if I have a week with no brainstorming meetings, I complain to my office staff. I'm like, 'Come on, guys, help me here,' because I love it so much."

But despite Bezos's natural talent for inventive ideas, at Amazon he preaches that you don't necessarily have to be a great inventor to be an effective leader of innovation. He uses a coaching analogy from sports: "You don't have to be the best basketball player in the world to be the best basketball coach . . . The football coach doesn't need to be able to throw, and a film director doesn't need to be able to act." But, he adds, "An inventor's mindset, I think, is incredibly important. I would say

that the CEO of the company doesn't have to be the one who does that necessarily. I happen to be it, and that's my number one thing—inventing. But I don't think that would be essential for the CEO. I think the CEO would have to value it immensely, though, and find it in other people, and recognize it. So I hesitate to say that an innovative company needs to be led by an inventor, but it certainly needs to be led by somebody who makes that a gigantic priority.”

This unfortunate result would be unlikely to happen today under Sorenson's leadership. In our interview with Sorenson, he said, “My job is to make sure ideas like that get heard, that they come to the top, and that we do something about it. So we have been communicating to the organization, ‘You have permission to innovate. We're going to reward you for innovating. We're not going to penalize you for mistakes, and we're going to find a way collectively to cut through the bureaucracy and allow those great ideas to be green-lighted and to be embraced.’” The organization has responded, and Marriott has successfully launched new brands in a crowded market such as EDITION, AC Hotels, and Moxy—in some cases disrupting some of the company's own existing brands. But Sorenson has green-lighted them anyway, saying, “We're much better off disrupting ourselves than having somebody else disrupt us; so let's embrace that.”

## **Conclusion**

Our examination of the world's most innovative leaders revealed that many ignited what we call the virtuous cycle of innovation leadership. It begins when a leader identifies an exciting and lofty vision that attracts others to the project, and this step ignites a reinforcing cycle of activities that increases the probability of successful innovation. As Weiner told us, “I define leadership as the ability to inspire people to achieve a shared objective. Managers tell people what to do. Leaders inspire people.”

To set the virtuous cycle of innovation leadership in motion, you may need to win support for your organization to do something new. Obtaining this support may require that you build innovation capital at your organization. Not only can individuals build their personal innovation capital, but they can also take actions to develop their organization's innovation capital. Helping your organization build a reputation for innovation is often critical for launching innovation initiatives or important organizational transformations. In chapter 8, we describe how you can build your organizational innovation capital. You begin by developing organization-level innovation capabilities (bringing Silicon Valley inside) that are the foundation for innovation capital for your organization. We also examine how to transform or reposition your team or organization—when organizational innovation capital is low—to carefully build support with key supporters and stakeholders, thereby enhancing your firm's innovation capital.

See our website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital) for additional resources on the topics covered in this chapter.

## Innovation Capital as a Source of Organizational Competitive Advantage

In chapter 1, we discussed Amazon's battle with Walmart for dominance in retailing and observed that it's not a fair fight. While Walmart has to deliver consistent quarterly profits to shareholders or the company's stock price gets punished, Amazon has gotten away with delivering limited profit for two decades and then somehow has permission from stakeholders to pursue wild ideas like using drones to deliver products and suspending warehouses in the air with airships. Over this period, Amazon has launched dozens of businesses, including Amazon Prime, Amazon Fresh, Amazon Auctions, Amazon Video, Amazon Music, Amazon Publishing, Amazon Web Services, and devices like the Kindle, Fire Phone, and Echo. Many of these businesses were visible failures, and many were not even related to 6 core retail business when they were launched. Skeptics could ask: What business does a consumer retail website have launching complex enterprise cloud services like Amazon Web Services or building hardware like the Kindle? Nonetheless, shareholders have supported, and rewarded, Amazon. Using a statistical analysis technique that isolates the returns to a stock because of an acquisition (the *event-study method*), we found that over the past ten years Amazon added, on average, almost \$1 billion of market value with each acquisition, whereas each new Walmart acquisition did nothing to boost the company's stock price.

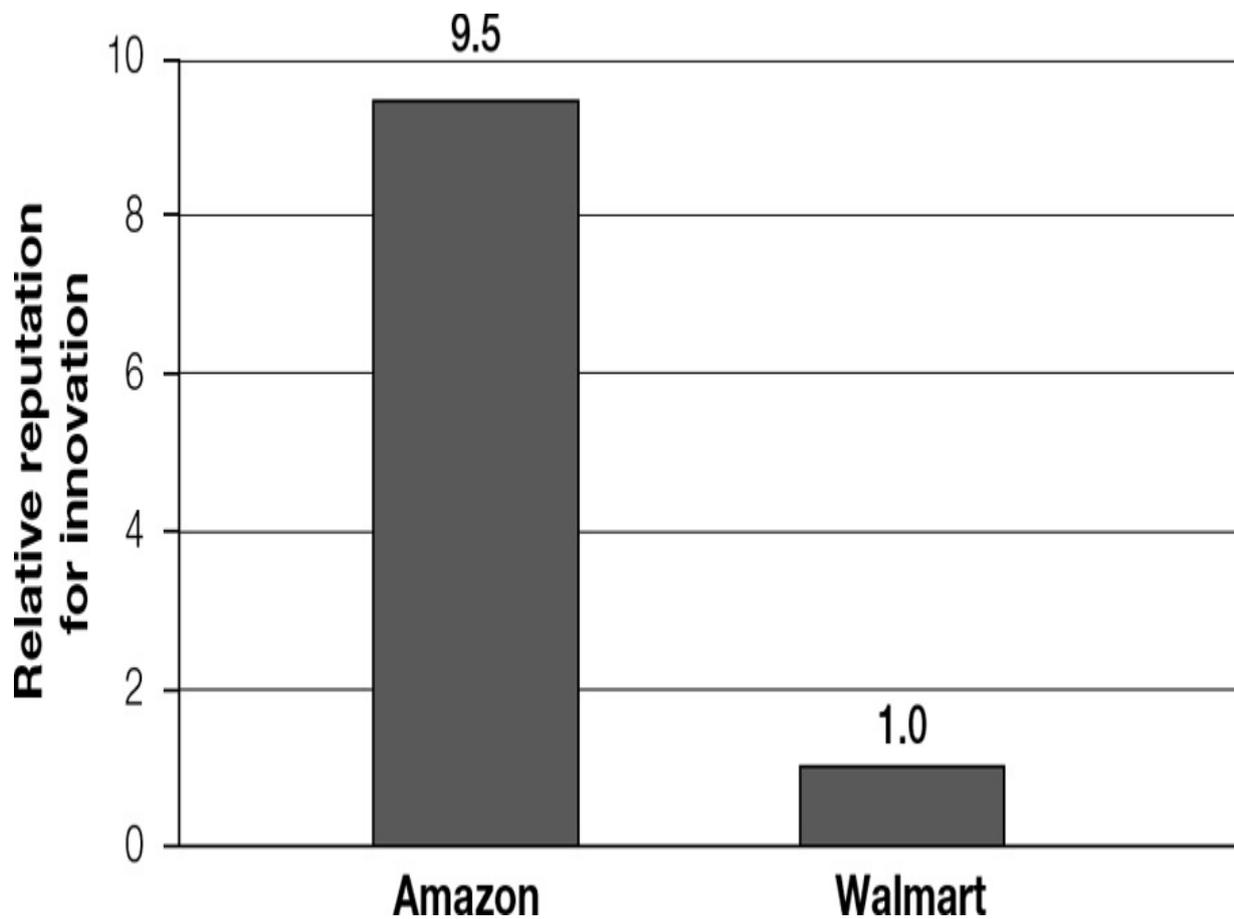
Shareholders rewarded Amazon for doing new things, but Walmart was ignored or punished. Why?

The answer is innovation capital. Like individuals, organizations can acquire innovation capital. To illustrate, as reported in chapter 1, Amazon had almost seven times more mentions of innovations in major news publications than Walmart had (figure 8-1). Moreover, the articles describing the company as innovative do so with far greater detail and intensity. Not surprisingly, Amazon has been ranked number one (or in the top five) on numerous World's Most Innovative Company lists at *Forbes* and *Fast Company*. Moreover, Amazon's innovation capital is boosted by Jeff Bezos's personal innovation capital and the innovation capital of its other top leaders, such as Jeff Wilke, CEO of retailing; Andy Jassy, CEO of Amazon Web Services; and David Limp, head of devices. The collective reputation of Amazon leaders and employees as well as their social connections all contribute to Amazon's ability to garner the resources and support necessary to experiment and innovate. The bottom line: Amazon has an impressive reputation for innovation and has significant innovation capital. The advantages help explain why Amazon's market-to-book value ratio of 5.3 is much larger than Walmart's (1.6 multiple).

**FIGURE 8-1**

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**Amazon versus Walmart: differences in their reputation for innovation**



Source: Factiva database, 2013–2018.

Note: Reputation for innovation is measured as the number of media mentions of each company engaging in innovative initiatives from major news sources in the Factiva database and in Google searches.

The effect of innovation capital on the value of an organization isn't just an Amazon phenomenon. We studied the impact of a firm's reputation for innovation among the population of S&P 500 firms. We identified several factors that might influence a firm's media reputation for innovation. We then developed measures of a firm's innovation capability, such as investment in innovation (R&D intensity), innovation outputs (e.g., patents), quality of patents (e.g., patent citations), advertising spending, press releases, and even whether the CEO had a reputation for innovation. As you might predict, a company's actual innovation capability—its capability to create new knowledge and new products and services—strongly predicted both the value of the company and whether the company had a reputation for

innovation. Similarly, the CEO or founder's reputation for innovation had a strong impact on the company's reputation for innovation and value. But even when accounting for the reputation of the CEO and the actual innovation capabilities of the firm, the firm's reputation for innovation had a separate and profound impact on the value of the firm (as reported in chapter 1). Companies in the top ten percent of the reputation for innovation scale had three times higher market-to-book valuations than did firms in the bottom 40 percent. In other words, innovation capabilities and innovation reputation matter a great deal to market performance.

Considering how an organization's innovation capital allows it to go after new ideas and ventures, we'll now explore how to build this type of capital. The best way to build a company's innovation capital is to increase its innovation output. We start with an in-depth analysis of how Amazon essentially replicates a Silicon Valley startup environment within a very large organization (Amazon had over 600,000 employees, 40 subsidiaries, and \$177 billion in revenue in 2018).<sup>1</sup> This raw innovation capability allows Amazon to generate new innovations that build innovation capital. We then turn to the problem of acquiring the resources and support to transform a company from a less innovative organization to a more innovative one, and we look at how the bank ING has successfully navigated several transformations, building innovation capital over time.

## **Developing Innovation Capabilities in Your Organization**

How has Amazon successfully launched so many new businesses? How has it absorbed many of its failures so gracefully? Visit the

office of Dave Limp, Amazon's head of devices, and you may get a peek into a piece of corporate history: the original short documents drafted by an internal team in 2011 to propose the development of Alexa, the intelligent personal assistant Amazon launched in late 2014. Call it an electronic memento; Limp hasn't deleted it. And it's hardly the only memento he has stored. He can also call up dozens of other documents, amazingly similar in format, setting forth the initial visions for what would become blockbuster products and services.

And if you keep looking, you might catch a glimpse of the new proposals he's considering, again all taking the same form. Each consists of a one-page press release (for an offering that doesn't even exist and might never be commercialized); a six-page set of FAQs (frequently asked questions that customers can be anticipated to have about the offering, the straightforward answers, and sometimes a bit of additional descriptive material or even a mock-up or prototype) and a description of the expected customer response. (For details on these three parts, see the sidebar ["Working Backward from the Launch."](#)) More than a hundred of these ideas arrive in Limp's in-box every year. The same goes for leaders of other Amazon businesses, such as Wilke and Jassy. And these senior leaders see only a fraction of the total number being circulated through the company.

If you wonder how Amazon keeps up its torrid pace of launching new products and services, you're looking at the heart of it. The center of Amazon's renowned innovation prowess, *working backward*, takes its cue from Amazon's first leadership principle: "Customer obsession. Leaders start with the customer and work backward." Following that principle, these documents constitute a visualization mechanism. They force a person or team with an inventive idea to get very clear on the objective and

to describe it through a written narrative in a way that others can also grasp the objective without ambiguity. If the idea wows its audience—a manager or group of managers in a position to allocate resources to develop it further—the idea receives startup funding, much as a startup does in Silicon Valley. If the idea doesn't wow its audience . . . well, the proposal hasn't necessarily failed. The “founders” of the document can revise it and pitch the updated idea to the same managers, or they could take it to any other manager with resources at Amazon.

## Working Backward from the Launch

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Amazon has institutionalized a working-backward process that includes three short documents that pitch the idea to leaders with resources:

1. **Press release** (one page). The press release announces something new and valuable with a name that target customers will understand. It communicates in a compelling way what the offering is and who will be well served by it. The press release evokes the problems that customers have been experiencing in the absence of such a solution, and makes clear how the new offering overcomes these difficulties. Like a real press release, it anticipates the kind of positive coverage that might appear in a media outlet impressed enough to share the news.
2. **FAQ list** (six pages). In the format of the familiar FAQ section, this document lays out details about the solution as they would be presented to customers starting to use the offering. To draft these questions and answers, a team has to put itself in the shoes of busy nonexpert users who are trying to solve a problem. The team must anticipate the issues customers might encounter. To help the teams draft these FAQs, Amazon provides prompts, including “What will customers be most disappointed about in version one of the offering?”
3. **A portrayal of the customer experience.** Additional material, sometimes including screen-display mock-ups or even rough prototypes, makes it easier to envision just how the customers will access and work with the new offering. The material might describe use cases, include code snippets, or describe how the

product fits into broader processes or customer situations. At its best, this information tells a story about customers facing problems and having a better way to solve them.

The format creates a simple, standard interface for putting ideas in play. Once everyone becomes familiar with it, barriers to participation fall. Anyone in the ranks knows the process for proposing an idea. Wilke told us that well down into the organization, “these working-backward documents are written by individual contributors with a passion.”

## **Amazon: Replicating Silicon Valley Inside an Established Company**

Although Amazon isn't the only model of how to develop innovation capabilities, the company has been particularly successful. It bears exploring how Amazon achieves this success. Bezos has consciously attempted to create an environment that replicates Silicon Valley, thereby creating a culture of entrepreneurship and innovation (see the sidebar [“Amazon’s Silicon Valley Model, in Brief,”](#) later in this chapter, for a quick overview of the approaches). “You need the scale and scope of a large company but with the heart and spirit of a startup company,” Bezos told us. “And how do you do that? Well, you ask yourself, what are those characteristics of a startup company that make them effective?” Amazon has attempted to replicate what it sees as several important ingredients of Silicon Valley:

- The entrepreneur or venture-capitalist funding process, in which an entrepreneur can pitch to multiple people to get funding for a new idea
- The speed of decision making possible within a small startup team
- The dispensing of additional resources dependent on hitting milestones that show the idea has promise to create significant value
- Tolerance for failure at a project and an individual level

## Entrepreneur or Venture-Capitalist Funding: Multiple Paths to Yes

Most companies encourage their employees to pitch innovative ideas to corporate leaders. But pitching these ideas in most companies is constrained by a corporate hierarchy that tends to restrict and downgrade ideas from radical to incremental. Why? Bezos explains:

A corporate hierarchy is an obstacle if you want to continue to be inventive. A corporate hierarchy is typically a path of gates. So let's say a junior executive comes up with a new idea that they want to try. They have to convince their boss, and their boss's boss, and their boss's boss's boss, and so on. And any no in that chain can kill the whole idea. Alternatively, think about the startup model that we were just mentioning. I go to Sand Hill Road [in Silicon Valley], I go to the first VC [venture capitalist]; they say no. I go to the next VC. They say no. I can get nineteen nos and one yes, and I'm in business. And so the VC model is multiple paths to yes. The nineteen nos don't matter. And so you need to also have multiple paths to yes inside of a larger company. I'm a huge proponent of that. And I often will disagree and commit, and I encourage other people to do this. I'm like, "This idea doesn't make sense to me." I'll be totally honest about it. And I'll give them all my reasons. But I'll say, "Look, you're a high-judgment person. Go try this." This is what multiple paths to yes means.

Amazon provides multiple paths to yes by allowing working-backward documents to be presented to any leader who can provide seed funding for the idea. To proceed, you only need the yes from that one leader. And the format creates a simple, standard interface for putting ideas in play. Once everyone becomes familiar with it, barriers to participation fall. Anyone in the ranks knows the process for proposing an idea.

Amazon also provides guidelines to help leaders decide whether to fund proposals. First, the funding must be sufficient to support a "single-threaded leader" for the project and a small team. A

single-threaded leader works on the project full time. “We empower the single-threaded leader,” Limp says, “to go off and make great things.” The term (coined and used exclusively at Amazon, as far as we know) is a nod to programming and means that the leader isn’t expected to multitask. In Wilke’s words, this is “someone who wakes up and just worries about that thing.” That’s “super important to how we invent,” Limp insists, because “the best way to fail at inventing something is by making it somebody’s part-time job.” The leader is then able to hire a team, usually beginning with one or two technical people—just enough capacity to get started and begin building the thing.

Second, leaders with funding are taught the difference between two-way-door decisions (low risk) and one-way-door decisions (high risk), as described in [chapter 6](#). “I’m totally happy with people saying yes and making two-way-door mistakes,” Wilke says. Bezos believes that some decision makers are too timid because they mistake two-way doors for one-way doors. Wilke says that as a result, “we try to teach this distinction to everyone that can say yes.”

Finally, Amazon uses some basic criteria that decision makers are taught to think about when they evaluate an idea. Does it have the potential to get big? An invention can be perfectly workable, but if you can’t imagine it ever becoming a large-scale success, the idea is probably not worth the effort. Could we really manage to build it? Even without existing capabilities in-house, it should be clear that Amazon has a chance building the skills necessary for success. And the most important criterion of all: Would customers love it?

## Making Fast Decisions Like a Startup Team

Besides replicating a startup funding process by creating multiple

paths to yes, Amazon also attempts to imitate other basic characteristics of a startup team. As Amazon paints it, a startup is small and dedicated, focuses on meeting specific milestones (as stipulated with the funding agreement), and makes fast decisions because it is empowered. Bezos thinks that there are many advantages to small teams, but “number one is velocity”—the speed of decision making. “Startup companies make decisions very quickly,” says Bezos. “There are very small numbers of people that need to be informed, and convinced, and all of those things. So the decision making process can be very streamlined.” The focus and speed of decision making allows the team to rapidly test and validate whether the idea has merit. For this reason, Amazon mandates the now-famous “two-pizza team,” meaning that no project should begin with a team larger than you can feed with two pizzas.

## Dispensing Resources in Tranches Based on Milestones

In the corporate world, leaders typically raise and receive the full budget for a new project. But in the startup world, if an investor agrees to give you \$5 million, he or she doesn’t write a check for \$5 million. Instead the investor gives you a small tranche—the French word for slice—to prove out a particular assumption or uncertainty. Likewise, at Amazon, teams don’t receive budget-cycle funding but receive tranches based on the milestones they achieve.

As the team succeeds at demonstrating that the idea has merit, it receives greater funding to pursue the idea. And the idea only has merit if customers love the solution. “The fate of a startup is whether customers are interested in the product that they produce,” says Wilke. “The customers decide. That’s the same for every single-threaded team at Amazon.” If the team can’t get

customers to love the invention, then funding is pulled and the team's resources are allocated to other projects.

## Tolerating Failure at the Project and Individual Level

Finally, Amazon also replicates Silicon Valley by tolerating failure and rewarding success. In Silicon Valley, people understand that any serial entrepreneur has had failures. If a project initiative ends up falling short, the project leader doesn't suffer from that failure. "Any of us who have built things that operate for a while with any great success know that you don't usually get it right in the first iteration," Jassy notes. "It usually takes time, iterations, listening to customers, and building to have something that succeeds." And certainly, Amazon has had its share of ideas that didn't work, including Amazon Auctions, Amazon Local, and the visible Fire Phone flameout. The failure that is valued at Amazon is the kind that comes when someone takes the initiative to pursue something that is far from a sure thing. Wilke took pains to stress this point: "I've said this a couple of times and in different ways, but perhaps not emphatically enough: We work really hard to create an environment where it is completely accepted to take a risk, try hard, and fail." Of course, those who do succeed receive the financial rewards that go with promotions (and that come by owning Amazon's fast-appreciating stock) and other leadership opportunities. Moreover, "they get rewarded by being part of a growing, vibrant, innovative company," Wilke says.

## Lessons Learned: More At Bats, More Home Runs, More Innovation Capital

Bezos understands that innovation is a numbers game, by which

most attempts end up going nowhere but are redeemed by the few projects that pay off big. Quantity tends to yield quality. The analogy that comes to mind is the baseball player who would never expect to hit every ball out of the park, but still can become a home-run star. The key is to have a lot of at bats—repeatedly stepping up to the plate and learning with every pitch.

Amazon has created an environment with very high throughput of inventive ideas. It enjoys that extraordinary number of at bats because it achieves high engagement by employees through the working-backward process. The plethora of ideas is especially important to Bezos because the game of business differs from baseball on one important dimension: “Everybody knows if you swing for the fences, you hit more home runs, but you also strike out more,” he says. “But with baseball, no matter how well you connect with the ball, you can still only get four runs. Your success is capped at four runs. But in business, every once in a while, you step up to the plate and you hit the ball so hard you get a thousand runs. When you have that kind of asymmetric payoff, where one at bat can get you a thousand runs, it encourages you to experiment more.”<sup>2</sup>

### Amazon’s Silicon Valley Model, in Brief

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- 1. Replicating the Silicon Valley entrepreneur or venture-capitalist funding process:** Amazon provides multiple paths to yes by allowing numerous leaders to provide seed funding for a new product, service, or process idea. The working-backward template creates a simple, standard interface for putting ideas in play. The company uses several criteria to evaluate an idea: Does it have the potential to get big? Could we really manage to build it? Would customers love it?
- 2. Replicating the speed of decision making of a startup team:** Small two-pizza startup teams are empowered to pursue objectives to test and validate the

idea. These teams are allowed to make fast decisions just like a typical startup.

**3. Dispensing resources in tranches based on milestones:** Startup teams typically don't receive budget-cycle funding but receive funds in tranches based on the milestones they achieve. But Amazon leaders have a long-term view and will continue providing funding if they believe there is a big opportunity.

**4. Tolerating failure at the project and individual level:** Individuals who take risk and fail are respected. Individuals who succeed are rewarded. Failure is accepted as part of doing new things by focusing on what you learned from the experience.

Amazon's innovation record speaks for itself. At Amazon's inception, Bezos announced it was "day one" for the business and started selling books via the web. By 2002, Amazon was the world's biggest online store, with revenues growing more than 50 percent per year. Over the next sixteen years, Bezos and his team have launched a dizzying array of new products and services to boost retail sales to consumers, including Fulfillment by Amazon; Amazon Auctions (an eBay-like auction site); Amazon Local (a Groupon-like service); Amazon Flex (a delivery service that uses independent businesses to provide two-hour delivery of Prime Now products and restaurant deliveries like Uber Eats); Amazon Fresh; and, perhaps most importantly, Amazon Prime. But Amazon has moved far beyond being just an internet retailer. It has entered the electronic devices business, with its Kindle, Kindle Fire (tablet), Fire Phone, Fire TV, dash buttons, and most recently Alexa and Echo.

Moving beyond consumer retailing, Amazon has entered into business services with Amazon Web Services (an on-demand cloud computing platform) and Amazon Mechanical Turk (giving businesses access to an on-demand scalable workforce for human intelligence tasks). And now Amazon has added Amazon Music, Amazon Video, Amazon Publishing, Amazon Home Services (for

things like iPhone repair at home). The company now includes brick-and-mortar retail offerings such as Amazon Books, Amazon's Whole Foods Market, and Amazon Go (a new kind of store with no checkout required; shoppers simply use an app to enter the store, take the products they want, and leave with them as the goods are automatically scanned).

As the company's types of customers keep expanding and the technologies it uses keep advancing, Amazon will never lack for problems to address. And with its customer-obsessed working backward, it will continue to run hundreds of new experiments each year to find the products and services that solve customer problems. These days, it seems every company out there is looking over its shoulder, sizing up Amazon as a competitor.

Remarkably, none of the capabilities that drive Amazon's innovation capital are kept under wraps. In the recipe for managing, there is no secret sauce. Every time Bezos writes a shareholder letter or grants an interview, he takes the opportunity to give away his best thinking on how to keep a company inventing new solutions for customers. You might call it open-source-code management. It's almost as if Bezos wishes every company were full of customer-obsessed inventors. We're betting he probably does. After all, if you truly dedicated yourself to being the most customer-centric company on earth, isn't that what you would do?

## **Developing Innovation Capital in Your Organization**

Most of us don't work for Amazon. But we can learn principles from how it has successfully built its innovation prowess, and we can take the first steps to building innovation capabilities within

our own organizations. But to take that first step, we may need to win resources and support for transformational solutions from key stakeholders. This challenge can be particularly difficult in public companies whose shareholders and other key stakeholders tend to be conservative. But senior executives at companies that need a strategic reorientation, including public companies with long histories and established shareholder bases, can win support to do new things. Doing so, however, requires a thoughtful approach to both transformation and innovation capital.

For more information on how to think about transformation, we recommend *Leading Transformation* (Harvard Business Review Press, 2018). We will now use a case study of ING Group to explore how an organization builds innovation capital. ING, currently a top-thirty global bank operating in forty countries, has won support for three major strategic transformations. Under the leadership of CEO Ralph Hamers, ING has successfully evolved from a bancassurance (combination bank and insurance) company to a bank, then from a traditional bank to a digital bank, and finally from a digital bank to a technology platforms company. The ING journey provides lessons on how to build the innovation capital needed to do new things.

## ING: Winning Support for Three Transformations

How did ING accomplish three major transformations? To lead each transformation, Hamers ignited the virtuous innovation leadership cycle. As described in [chapter 7](#), this cycle begins with the vision, which can be broken down further into strategic direction (or vectors of search), and then made even more granular with stretch goals.

To determine the vision, Hamers went back to the original values of the company: “I went back to our DNA of what had

made ING successful over a century,” Hamers recalls. “There were two things: innovation . . . and simplicity, or low-entry barriers to banking. I just had to touch it to activate it and everyone recognized it. It was not a new story that some consultant made up.”

Using these fundamental elements, Hamers crafted a story that articulated the grand vision of the bank of the future, the strategic direction, and the stretch goals the company would try to achieve. He told us, “A good story does tell the horizon where you are going [the vision], but can be translated into milestones for a period of up to three or four years [strategic direction], which can be made even more concrete in examples [stretch goals] that can be delivered.”

Although Hamers’s vision ignited the innovation leadership cycle we described earlier, and helped ING make these transformations internally, Hamers still had to win support from shareholders to make these major changes. How did he go about winning the support? For the first transformation, from insurance company to traditional bank, Hamers recounted actively working to reshape shareholder expectations: “You have to actively reposition your company with shareholders.” He elaborates:

You need a new set of shareholders to make the transformation. Your existing shareholders bought your stock with certain expectations. Given the fact that you are going through a transformation, you have to take your shareholders along in that transformation with you. To begin, you need different coverage with different analysts. The first transformation required transitioning from insurance analysts to banking analysts, because they are all specialized. If banking analysts are covering you, then banking funds will buy you. Either growth or dividend funds will buy your stock.

Although this repositioning sounds easy, when we asked Hamers how he managed to convince analysts, he gave a hearty

laugh and explained: “It required a lot of communication, a lot of traveling and presenting. I had to be out telling the story and repeatedly interacting with analysts.” Moreover, shareholders don’t change quickly; they take time to adjust to the new vision. Hamers says, “You need to be patient with your shareholders. They won’t be convinced in just two quarters. You have to keep telling the story and making progress.”

Hamers emphasizes that he also works hard to tell the ING story to other stakeholders and the broader community that extends well beyond active shareholders. For example, he and his team attended conferences, such as Money 20/20, to talk about the bank of the future. They also attended fintech events focused on startups transforming the industry. “In the early days, ING would be the only traditional bank at a fintech conference,” Hamers recalls.

When asked why he spent precious time with non-shareholders, Hamers speaks of the value of telling ING’s vision to the broader world as part of building the company’s innovation capital: “You have to go to other places to tell your story. You have to get others talking about you . . . get a buzz going. Not just the financial newspapers, but get the *Economist* talking about you and saying, ‘ING is really making a difference, really changing the industry.’”

In addition to communication, Hamers also changed how the company reported progress and performance. For the first transition, from insurance company to bank, ING shifted from reporting financial metrics alone to also reporting nonfinancial results. It also increased the frequency of reporting from annually to quarterly. But it did so to increase its ability to show progress on the transformation, not to increase scrutiny on the financials. “Every quarter,” Hamers says, “we emphasized the nonfinancial results, for example, units sold, capital generated, and other

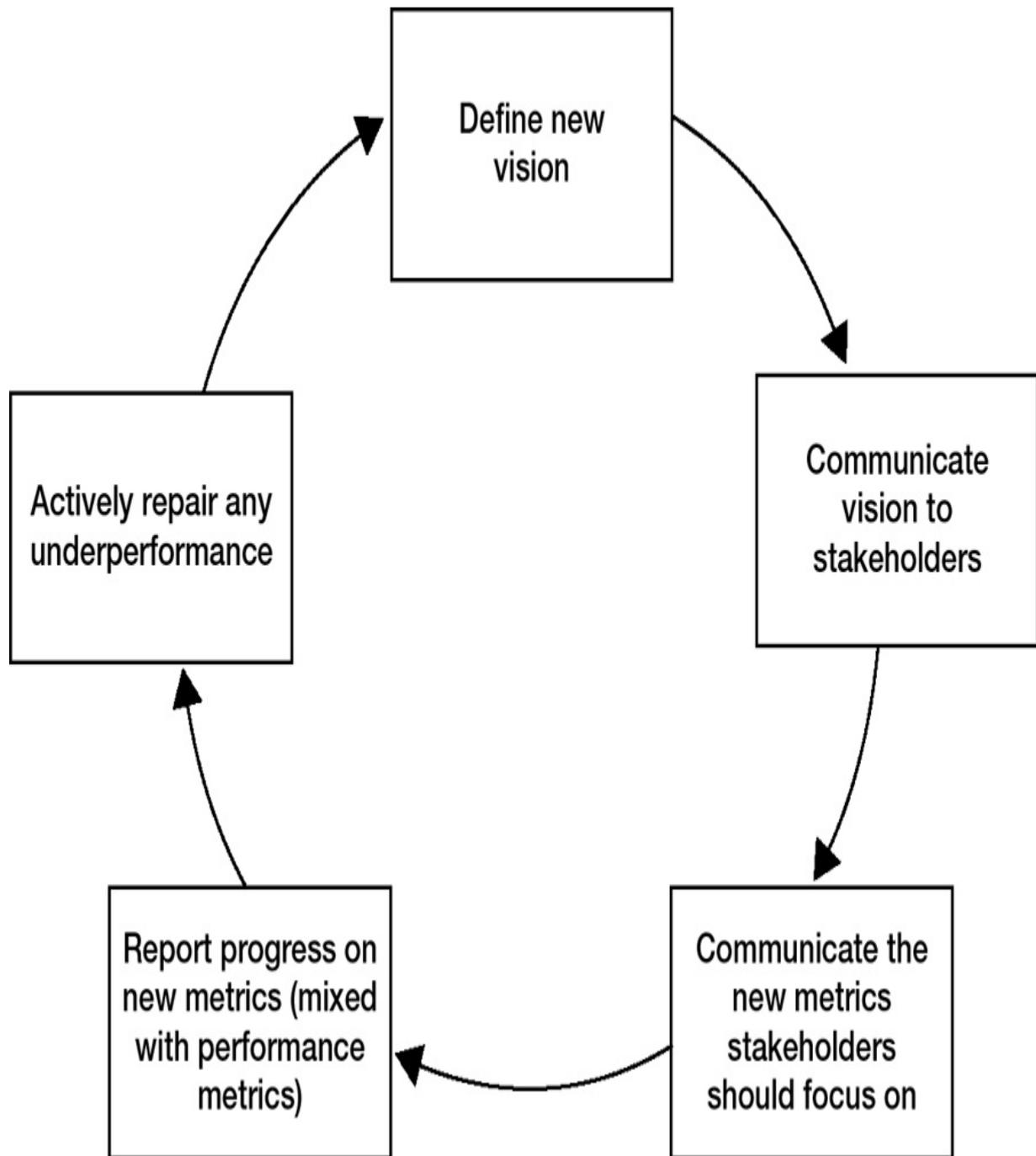
measures of progress in our transformation. The financials came second.” Figure 8-2 outlines the cycle of setting a new vision and reporting on new metrics openly.

For the second transformation, from traditional bank to digital bank (a change that Hamers suggested was more ambiguous than the prior one), Hamers says that ING had to “go even deeper” in how it reported nonfinancial metrics. Hamers first reported nonfinancial metrics showing progress on the transformation. For example, he reported how quickly the company was acquiring new customers and was cross-selling products (e.g., savings customers were becoming mortgage customers); he reported on net promoter scores and the success of ING’s innovations. “When we report results,” he says, “we never report financial metrics at the beginning. Instead, you have to tell a strong story and show how you are progressing. You have to teach your shareholders what metrics to pay attention to, and then you have to deliver on those metrics. Then and only then, after reporting on the nonfinancial metrics, did we report on the financial metrics.”<sup>3</sup>

**FIGURE 8-2**

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**ING’s cycle of openly transforming its vision for  
maximum innovation capital**



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When we asked Hamers if the shareholders let him get away with growth metrics alone, he admitted that he always blends the metrics he wants investors to pay attention to with more-familiar metrics: “When I talk about platforms, I also emphasize the efficiency gains. That helps shareholders get on board and to understand it. And more generally, I always mix showing progress on traditional financial metrics, like return on equity, or efficiency, with our growth metrics.” Using the analogy of a large

ship, Hamers explains: “You can’t turn a ship unless you have some speed. First you need speed, then you can set direction. For us in the early days, the cost-reductions provided the speed.”

Finally, Hamers emphasizes that if you fail to deliver on the transformation metrics you have set out, you have to admit the misstep and address it: “You have to repair it. You have to admit that you failed to deliver and tell a new story or you won’t be credible.” As part of his transparency policy, Hamers makes a point of actively reporting on the company’s failures. This practice arises from a deeper philosophy about learning from failure, he says:

At ING, we have areas where failure is utterly unacceptable, especially when regulation and compliance are involved. Over time, we had developed a very risk-averse culture. But if you want to create the future, you are going to make mistakes. No one wants to make a mistake with regulation and compliance, but when it comes to the other parts of the business, if you want to fail fast, you have to first convince people internally that it’s okay to make mistakes, as long as something can be learned from those mistakes. Then you have to celebrate it internally. Otherwise, people won’t believe you. So we started by telling a story of why we needed to try and be okay with mistakes. Then we had to actually celebrate mistakes internally. But we also reported our mistakes externally. We explain to shareholders that we invested, we tried, but we failed. But we emphasize that we learned in eighteen months what a competitor might have spent twenty million and five years to understand. We emphasize how we are learning faster than our competitors about how to create the company of the future.

Today, ING is in the middle of another major transition, from digital bank to a technology platforms company (think Google or Amazon). The vision is to revolutionize the industry by developing the platform architecture to deliver both ING’s own banking products and those of partners and even competitors. The vision is audacious and, if it plays out, could represent a huge opportunity to become the Amazon of banking. To make the

transition, Hamers has to both educate shareholders about the value of platforms and convince them that ING can do it. “If I talk about a platform future,” he says, “and I lose half the audience in terms of talking about platforms and platform economics, I go back to explaining to them what it entails to be a platform, what the power of a platform is, and why it is so valuable. I have to compare the opportunity to other platforms, like Amazon or Uber.” With this explanation, Hamers is clearly employing the impression-amplifier technique of anchoring and using relevant analogies. He continues: “Then I show them what kind of platform ING could be and show them actual products we have in the market or actual apps . . . and what they do.” He says that after making the new offerings tangible in this way (materializing them), the shareholders “come back to understand [that] this is what he means and how it works.”

## ING’s Lessons for Strategic Transformations and Building Innovation Capital

There are several important lessons in the ING case study about how to build innovation capital for organizations that can be applied by others:

1. Build a credible reputation for innovation, and support the reputation with real capabilities.
2. Actively reshape your shareholder base to go along with you on your journey.
3. Communicate your vision externally, and deliver both growth and traditional metrics.

ING’s approach isn’t the only approach for building organizational innovation capital; not all companies transform themselves the same way (see the sidebar [“Using the Leader’s Reputation: Another Route to Organization Innovation Capital”](#)).

For example, some companies found sources of momentum in secret, successful innovations that they could show stakeholders, or they found other performance metrics, such as performance in a cost-cutting transformation, as evidence that they could deliver on a future innovation agenda. In contrast, less successful companies trumpeted their success before the innovations they were developing had a chance to mature, which often led to unwanted scrutiny and the loss of innovation capital if they could not deliver.

Moreover, different leaders adopted different approaches for communicating with shareholders. For example, Paul Polman, former CEO of Unilever, told us that he aggressively seeks out long-term shareholders: “If you want investors who care about social responsibility or about international development or whatever it is, then you have to go out and find them. You have to present to those funds that invest in that area, to the conferences that address those areas, and to analysts who cover those areas.” Almost all our interviewees emphasized actively reshaping the shareholder base as part of winning permission to pursue new ideas. They also emphasized patience in doing so.

Finally, the leaders we interviewed said that you have to educate your stakeholders about which metrics to pay attention to. But then you have to deliver on those metrics. Part of meeting the standards you’ve set usually involved blending growth metrics with more familiar performance metrics. Admittedly it is a tough challenge to convince your stakeholders to change with you, but one well worth the rewards if you can bear them out.

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**Using the Leader’s Reputation: Another Route to Organization  
Innovation Capital**

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An alternative approach to winning permission and support is to exploit the innovation capital of a leader. For example, earlier in this book, we told the story of how David Bradford networked his way to meet Apple cofounder Steve Wozniak at a conference to enlist his help with the startup Fusion-io. Fusion-io had developed some cutting-edge storage technology, but Wozniak's involvement created visibility for the company within the tech community. Shortly after Wozniak joined as chief scientist, Fusion-io was chosen by Red Herring magazine as one of the top one hundred startups in February 2009. Bradford's success connecting with Wozniak not only helped his own career (bringing Wozniak to the advisory board made Bradford a more attractive CEO candidate) but also allowed the company to borrow from Wozniak's reputation to gain needed visibility. Naturally, this association with Wozniak built Fusion-io's innovation capital.

Similarly, when Sterling Anderson, former Tesla Autopilot program director; Chris Urmson, former head of Google's self-driving car project; and Drew Bagnell, former head of self-driving cars at Uber, teamed up to form Aurora Innovation, the self-driving car startup had instant credibility. On recruiting engineers to the startup, Kirsten Korosec of Fortune magazine writes, "Aurora can afford to be picky. The company's three cofounders are considered to be some of the best minds in self-driving cars."<sup>4</sup> The pedigree of the three founders has also attracted customers. "Aurora's pedigree and technology have attracted prominent partners," Korosec writes. "In January, the company announced collaborations with Volkswagen Group and Hyundai—two of the world's largest automakers—to accelerate the development of fully autonomous vehicles for the masses."

Likewise, when Yahoo recruited Google's Marissa Mayer to be CEO, the company was clearly hoping it could leverage Mayer's Google experience and her reputation for innovation. Mayer was known to be great with the press and was well liked by the media. Google even reportedly had a group of PR people devoted to promoting her career.<sup>5</sup> Yahoo hoped that her reputation for innovation would allow her to recruit top engineers to the company and that her reputation might have a halo effect on the company. In fact, one Yahoo employee substituted Mayer's face for Barack Obama's on Obama's iconic "Hope" poster. While Mayer was unable to turn around a sinking ship (Yahoo was eventually sold to Verizon), her innovation capital clearly brought attention to Yahoo.

In summary, one way to bring an organization's innovation capital up to speed quickly is to bring in leaders who have already developed a high level of innovation capital themselves.

## **Walmart versus Amazon Revisited: Building Innovation Capital from a Weak Position**

Let's return to Walmart's dilemma in competing with Amazon. Does Walmart have a chance against Amazon, especially given how constrained the big-box retailer is by shareholders? It does! But even getting that chance required some dramatic moves. As described earlier, in 2015 Walmart announced that it was lowering profit expectations to reinvest in store improvements and innovation. Through an insider interview, we learned the story behind the announcement. In essence, Walmart realized that if it wanted to have a chance against Amazon, it needed to find a way to carve out the resources to pursue innovation, particularly in the online retail space. But the hour was late—Amazon had already become dominant in so many categories. Many observers had already written Walmart off as a brick-and-mortar dinosaur doomed for extinction. In desperation, the executive team adopted what might be called a fall-on-the-sword approach. The tactic included the 2015 announcement about the retailer's reinvestment in future innovation. The CFO (who was going to retire anyway) took the blame as a sacrificial scapegoat, arguing that Walmart had underinvested in the future. The stock price plummeted 30 percent while the CEO and CFO were speaking ([figure 8-3](#)).

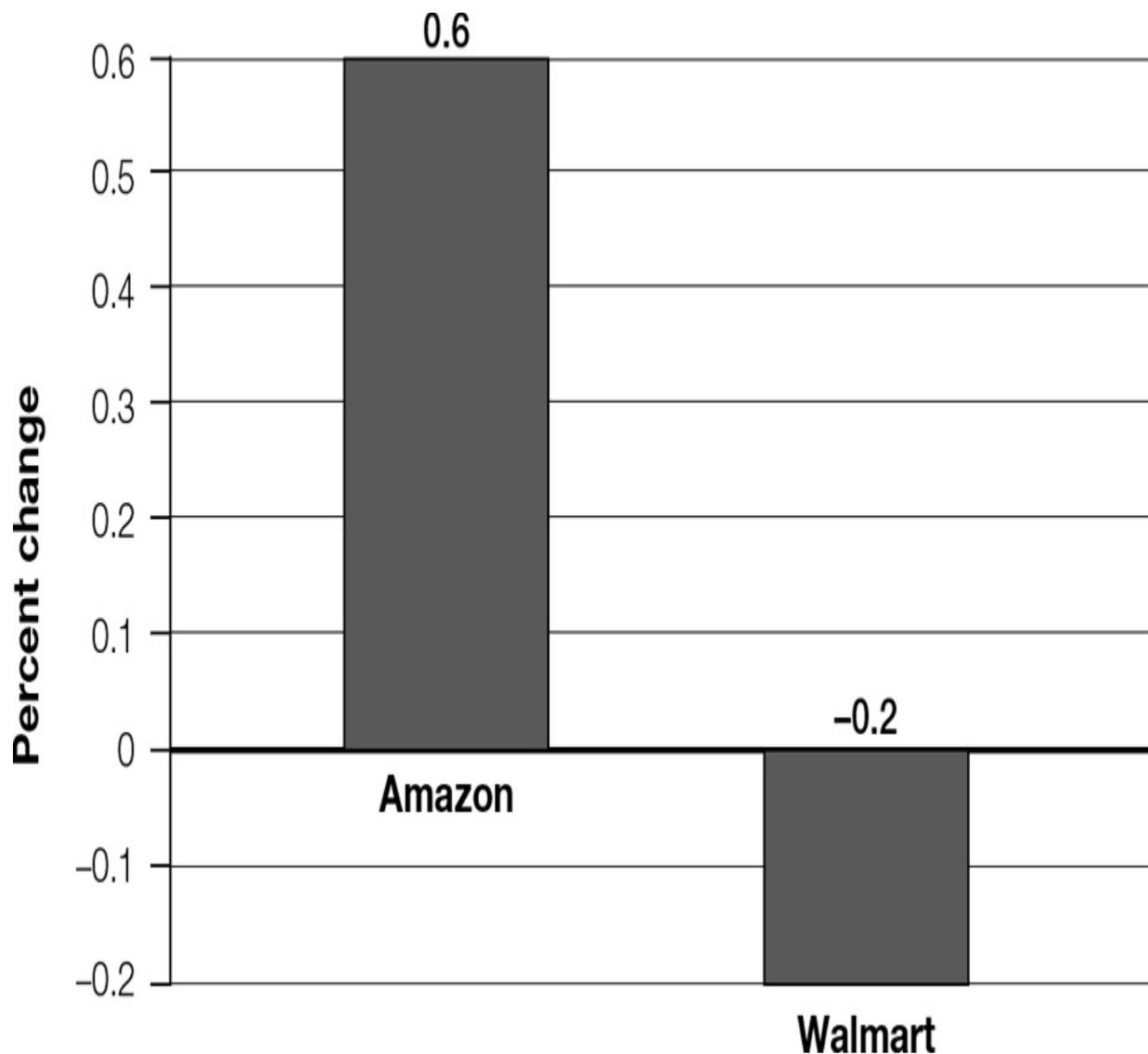
Although the drop in stock price created pressure on the one hand, the announcement that Walmart would reduce profits to invest in innovation carved out resources to do new things in the online space. For example, Walmart acquired successful e-commerce startup Jet for \$3.3 billion in 2016 and appointed Jet's founder, Marc Lore, head of e-commerce. Walmart has arguably boosted its innovation reputation through the acquisition,

leveraging Jet and Lore’s innovation capital to win support for its e-commerce initiatives. Walmart then expanded into other e-commerce niches, including ModCloth, Moosejaw, and Bonobos. Although small, some of these acquisitions, particularly Bonobos, have played a central role in redefining e-commerce through a new “phygital” experience—a hybrid of small physical stores that create positive experiences for customers trying products and then deliver through an e-commerce back end.<sup>6</sup> Walmart has borrowed these lessons both to improve its e-commerce position and to explore how to use its physical retail assets to its advantage. As it did so, e-commerce at Walmart exploded, growing 60 percent year over year. Then Walmart acquired a majority stake in Flipkart, India’s largest online retailer, in the largest e-commerce deal to date.

**FIGURE 8-3**

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**Amazon versus Walmart: average change in company market value in response to acquisition announcements**



*Source:* Eventus database for event studies.

*Note:* Percent change is the average cumulative abnormal stock market response to announcements of all acquisitions above \$100 million after 2005.

Although Walmart clearly lags Amazon in e-commerce and in innovation capital, by 2018 many expert observers had suggested that Walmart at least had a fighting chance against Amazon, whereas before, it had had none. How the final battle plays out has yet to be determined. But by the start of 2018, not only had Walmart's stock price recovered from its 2015 trough but it had also reached an almost 50 percent premium over the price before the company had made the dramatic announcement.

## Conclusion

We have argued that organizations, like individuals, can also develop innovation capital. This capital allows organizations to win the resources and support to pursue new ideas just as much as individuals can use innovation capital. There is no one way to do it right. You could actively reposition the company, as Ralph Hamers did with ING. Or you could work under the radar to deliver results that later turn into innovation capital, as Andrew Kvålseth did at DTAC (see [chapter 6](#)). A company could also announce a major reorientation or repositioning (fall on the sword), as Walmart did, or start with a grand vision that wins innovation capital from the beginning, as Tesla and Amazon did. It may also even be possible to develop a great reputation as an executor and transform that reputation into innovation capital to do new things.

Regardless of the particular approach, in each case, winning resources and support requires careful attention to building innovation capital with your stakeholders, whether they be investors or employees. In many ways, firms applied the same model we described for individuals to develop innovation capital. Although big companies may not have personal human capital, social capital, or reputation capital, they still can develop innovation capabilities and create a reputation for innovation.

In many ways, when Hamers describes the transformation at ING, he talks in organizational terms about building the organizational equivalent of human capital (i.e., organizational innovation capabilities); social capital (positioning ING among the ecosystem of fintech companies and the larger conversation about the future of banking); and reputation capital (delivering consistently and honestly on innovation initiatives). But even more importantly, Hamers applied the impression amplifiers described in [chapters 5](#) and [6](#). For example, he worked

aggressively to *broadcast* ING's vision and successes. He also worked to *materialize* the vision, showing off specific apps the company had already built to demonstrate the potential for ING as a platform company in the future. Hamers thoughtfully used *comparing*, by likening ING to Amazon and Uber. He also used *storytelling* with stakeholders and employees to help them understand the vision for the company.

In short, the model described in this book applies not only to people but also to organizations. The techniques only need to be modified appropriately for what these forces mean in an organizational context and for the different kinds of audiences an organization faces. Companies that pay attention to their innovation capital create a virtuous cycle that allows them to win more resources and support to pursue new ideas, which in turn increase the firms' ability to win yet more resources and support. But like individuals seeking innovation capital, companies aren't born with this kind of capital; it is accrued over time. We have shared how several leaders of established companies, including public companies, purposely built their innovation capital using the ideas described in this book. Their example provides hope that other organizations can do it as well. Innovation capital isn't built overnight. Instead it requires patience, investment, and real capability development. But leaders can transform the future of their organization, and the value of their company, by investing in innovation capital.

# Conclusion: Concrete Steps for Putting It All Together

In chapter 1, we introduced innovation capital by examining the lives of Thomas Edison and Nikola Tesla, two extraordinary inventors who experienced very different outcomes with regard to commercializing innovations with impact. Their example illustrates the differences between a great inventor and a great innovator. Innovative leaders need some creative chops like those of inventors, but they also need the ability to win resources and support for their ideas by building and utilizing innovation capital. In this conclusion, we provide some advice on how to get started right away building your innovation capital. Before we do, however, we acknowledge the importance of not just innovation capital, but also a broad base of skills to commercialize innovation. “I think to drive innovation you have to do both flag planting and you have to do road building,” Adobe CEO Shantanu Narayen (number seven on our list) told us. “I think that what has become clearer to me as we’ve grown the company is the importance of both of these activities. There is a whole set of employees that really get motivated and excited about what’s the next hill to climb. What’s the vision for where we are planting the next flag? But you also have to build the road toward that next hill. Successful leadership requires both the vision setting and the execution.” One thing that is clear from our research: creativity is not enough.

Tinker Hatfield, a design legend at Nike, having designed the Air Jordan, the first cross-trainer shoes, and the Nike HTM Flyknit Racer, made this observation of CEO Mark Parker: “I fall

to pieces when the numbers start flying, but he is able to decipher all those things as a businessman and a marketing person and a merchandiser, yet he is equally adept at talking about design.”<sup>1</sup> Parker, who started his career in R&D and design at Nike and designed the Flyknit Racer with Hatfield, acknowledges:

Ideas are easy in many ways, and there’s no shortage of great ideas. It’s the ability to bring those to life and at scale at some point that becomes important. You need to be able to communicate with a range of people on a team, from those who are wildly creative, to pragmatic engineering problem solvers, and then eventually those in finance and manufacturing and supply chain and merchandising and all the other elements of business . . . I think the ability to bridge the gap between right brain and left brain, to live in both worlds, to get them to understand each other, to talk to each other, is critical.

One reason Parker is an effective leader of innovation is his curiosity. He is curious not only about the challenges of developing creative product designs at Nike but also about the challenges associated with engineering, manufacturing, marketing, and selling products. He is eager to develop expertise in a wide range of areas, and this greater breadth of experience is valuable in helping him spot opportunities and problems. It also helps him develop a broader network of relationships with a greater range of resources. In turn, his wide network and the accompanying resources help him build his innovation capital, which, in a virtuous cycle, helps him secure more resources to pursue new ideas.

If you really want to have impact as a leader of innovation, you must start now building the broad skill set required to succeed. If you are currently only engaged in the idea generation phase of innovation, you need to develop some knowledge and expertise in all the business fundamentals that are relevant to successful implementation of an idea (see the sidebar [“How Innovative Leaders Differ from Inventors and Typical Leaders”](#)). If acquiring

business knowledge simply doesn't interest you, then you might just make peace with being an inventor or an idea person. If this is the case, recognize that either you need to find someone to complement you or your ideas may not have as much impact as they otherwise could. Many talented innovators realize the need for complementary execution skills in other arenas and wisely find others to provide that balance. There's nothing wrong with that. Many founders of companies and individuals in R&D, design, marketing, and other fields just enjoy the creation aspect of innovation. But building innovation capital and being an innovative leader requires broader interests and a broader skill set. Creativity is not enough.

### **How Innovative Leaders Differ from Inventors and Typical Leaders**

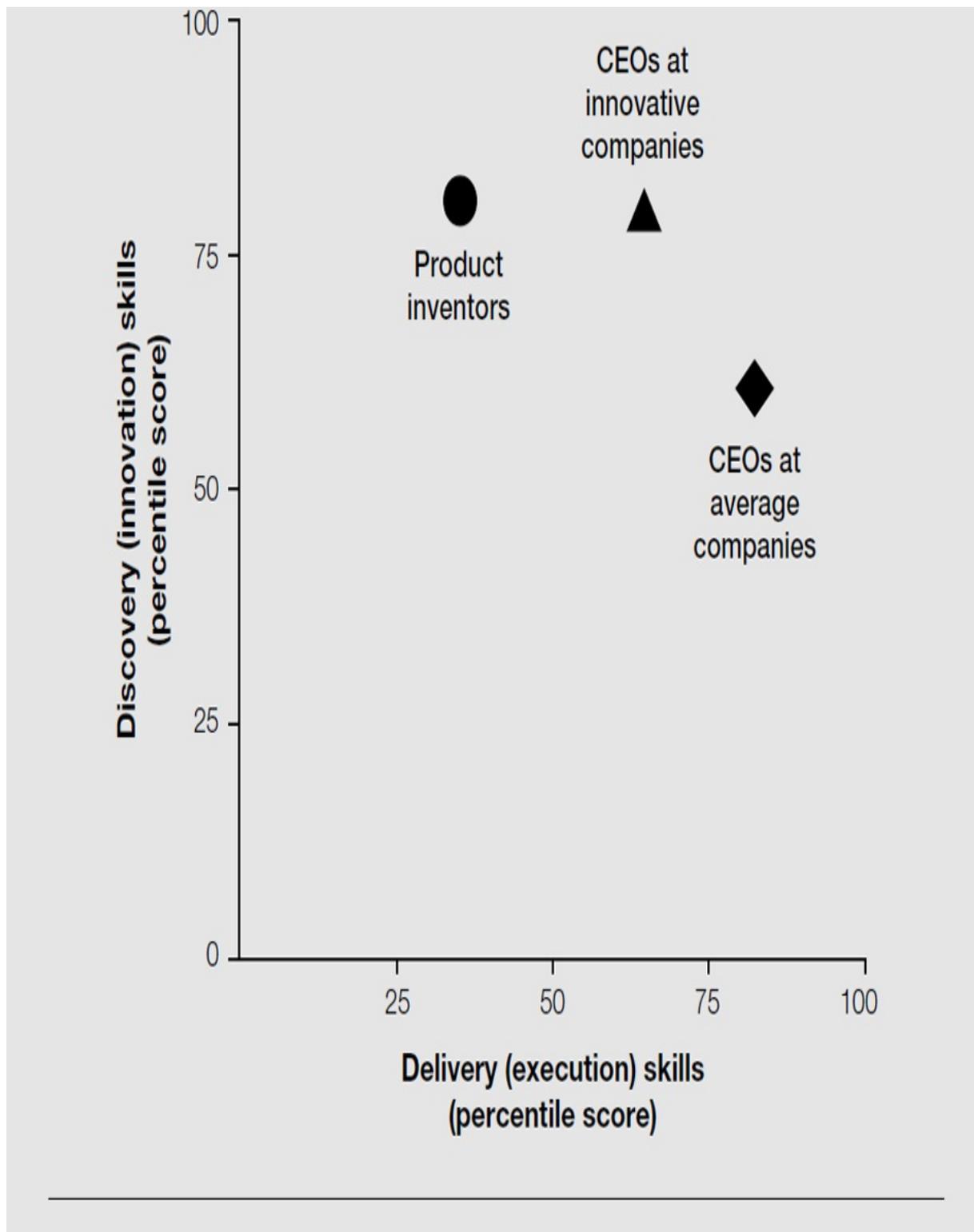
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Our research on a sample of the world's most innovative leaders confirms that innovative leaders have a broader skill set than do inventors. In particular, they engage in activities and behaviors that help them excel at both innovation and execution—they have more of a balance between imagination and pragmatism. In fact, our Innovator's DNA assessment (which one of us [Jeff] developed with coauthors when writing *The Innovator's DNA*; it can be accessed at the website [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital)) compares an individual's propensity to engage in innovation (the discovery skills of questioning, observing, networking and experimenting) and execution (the delivery skills of organizing, analyzing, detailed implementing, and self-disciplined executing). We see that innovative leaders are strong at both innovation and execution. They have a balanced portfolio of skills that is weighted somewhat toward innovation. This distribution of skills differs from that of product inventors, whose skill set is heavily weighted toward innovation (see the figure). The assessment also sheds light on the difference between CEOs leading innovative companies (firms consistently ranked in the top one hundred of the Forbes World's Most Innovative Companies list) and executives leading more-typical companies (those not on the Forbes list). Leaders of innovative companies have skills and expertise that is more strongly weighted toward innovation than do typical CEOs,

whose skills are more strongly weighted toward execution.

The skill set of a great leader of innovation differs from that of both a creative inventor and a typical leader. Effective leaders of innovation have a broader skill set and stronger execution skills than inventors do. They are better equipped to see through all the steps—all the things that need to be done—to ensure that a creative idea is implemented in a way that creates value for customers or internal users. And compared with typical leaders, they have the desire and willingness to generate and pursue novel ideas that have high risk, but also high potential returns.

**Innovative leaders have a balance of innovation and execution skills**



## Getting Started

So how do you get started building the skill set and innovation capital needed to propel your career forward as an effective leader of innovation? We've shared many ideas in this book about how to build your innovation capital and how to be a better

leader of innovation. So you might be wondering, where do I start? Let us propose the following first steps.

## Step 1: Self-Assess

We recommend you start by taking the self-assessments at the end of chapters 2 through 4 to determine your innovation capital strengths and weaknesses on each of the three components: your human capital skills; social capital; and reputation capital (for a more comprehensive assessment with guidance and coaching, go to [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital)).

Unlike some assessments, for which you can take a strengths-based approach and just utilize your natural strengths, to build your innovation capital you will need a development plan that helps you not only build on your strengths but also overcome your weaknesses. Start by building your human capital skills. What specific activities can you engage in and habits can you develop to help you be better at forward thinking? Creative problem solving? Persuasion? Use the advice and tips provided in chapter 2 (and for more comprehensive materials, go to [www.innovatorsdna.com/innovation-capital](http://www.innovatorsdna.com/innovation-capital)). Do the same for building your social connections with individuals in several prized categories: innovators and entrepreneurs, organizational leaders, financial benefactors, influencers, and customers. Develop a plan to build new connections, both strong and weak ties, to the social network category (or categories) that you think will provide the most resources for any new initiatives you envision. But your attempts to build relationships *must be genuine*. Remember the norm of reciprocity as described in chapter 3: you must give in order to receive. Set a goal for what you want your social network to look like one year from now, and work to meet that goal.

The last component for assessment is your reputation for innovation. What are you currently known for, and what do you want to be known for? If you want to be known for innovation, you need to look for opportunities to do your tasks creatively. Being known as an innovator means you constantly challenge the status quo and suggest novel ways of getting things done. Also, look for opportunities to work for innovative leaders or on innovative projects.

## Step 2: Join an Innovation Project, or Take on a Risky, Broadening Assignment

The second step in building your innovation capital is to find and join (perhaps volunteer for) an innovation project. Or take on a new, risky assignment that will build your skill set and network of contacts. When we asked Steve Easterbrook, CEO of McDonald's, what advice he had for business professionals with aspirations to be innovative leaders, he commented, "I'd start by suggesting you build a track record that reflects the sort of leader you want to be. And the sooner you set out that way, the better. I would encourage taking risks in your career. When in doubt, say yes. Taking on new, challenging assignments gives you the opportunity to be noticed."

Easterbrook then described how, early in his career, he was trained as an accountant at Price Waterhouse and joined McDonald's in a functional role as a financial reporting manager in London. The job was secure, comfortable, and easy. But when McDonald's asked for volunteers from the various functional areas to try their hand at an operational role, Easterbrook raised his hand. "At the time, I was thirty years old, and we were about to have our first child," Easterbrook says. "I moved from a very

secure, stable, predictable lifestyle to one where I had to learn the realities of operating a business. I went through all the training courses and became an assistant manager and a manager, working from early mornings to closing at two a.m., working weekends and holidays. There were no guaranteed promotions or opportunities coming out of that experience. But it helped give me a foundation for how our business operates.” The lesson: be willing to take risks with the assignments and projects you take on. Choose opportunities that will broaden your skill set and get you noticed.

Later in his career, Easterbrook volunteered to serve as a visiting fellow at the Oxford University Centre for Corporate Reputation. This experience helped him develop knowledge and expertise in corporate reputations; in turn, the additional expertise prepared and positioned him to be selected as McDonald’s chief brand officer (five years later). His position as chief brand officer broadened his experience even more, further preparing him for the CEO seat at McDonald’s.

But you don’t have to change positions or accept new assignments to take your next step in building innovation capital. Easterbrook says young people get noticed when they “get the job done but do it more effectively, or quicker, or creatively than just doing their jobs.” So even if you currently have what might seem to be a predictable or even boring job, you can get noticed if you can figure out a way to do it better—quicker, with fewer resources, more creatively. Being a scrappy innovator with every assignment can be the starting point for building your innovation capital.

### Step 3: Initiate an Innovation Project

Once you have some experience working on an innovation project

(and hopefully under an innovative leader who can be a mentor), it's time for you to initiate your own innovation. What does your organization need (in terms of process, product, service, or internal initiatives) that it doesn't have today? What frustrates you as a member of your organization? Use your forward-thinking skills to identify emerging problems or opportunities related to current trends and technologies. Perhaps you could organize an internal summit or external conference on a key issue that you think will influence the future. How about a new process to speed work flow? Perhaps you could help your organization with a digital transformation initiative or activity. Or you could launch a product or service that is complementary to the ones offered by your organization. It doesn't have to be just your idea. Search both inside and outside your current organization for ideas and opportunities, and collaborate with others on proposing your initiative.

Once you have identified the initiative you would like to propose, identify the stakeholders with the resources that might be important to launching your innovation project. Think of each sponsor or stakeholder as your customer—the sponsor is buying your project, and you need to sell the individual on it. Think about how you can employ your social connections, your reputation, and the impression amplifiers to convince sponsors to support your project. Start with the resource holder whom you think you have the best chance of convincing (even if it's not the final decision maker within an organization). Consider for a moment, what are that person's motivations? How could you help the individual achieve his or her goals with your efforts? Then create a campaign to convince that one person to support your initiative. Once you get that key person on board with your initiative, you can leverage the endorsement to sequentially

convince others to support your initiative. This sequential approach is sometimes referred to as creating a bowling-pin social-network map of key resource holders; when you knock the first pins (sponsors) over, they help you knock the rest of the pins over. You may want to convince five or ten people who know the key resource holder and have influence on him or her to support the initiative before you approach the key person. As you convince the less important sponsors, you will learn how to refine your pitch. In this way, you build a coalition of support and endorsements that may be critical when you finally try to convince the key resource holder to support your initiative.

Finally, as you launch your project, think about how you could use the virtuous cycle of innovation leadership to your advantage. Even though you may not have the reins of a company, you can still apply the ideas behind the cycle to your project. For example, frame your project initiative to be as interesting, exciting, and lofty as possible to attract talented individuals to help make your project a reality. Use this lofty vision to start attracting talented people to your project, and from there, work to follow the innovation leadership cycle described in [chapter 7](#). It's time to be a founder. You can do it. Even if you fail, if you operate openly and honestly, it can still build your innovation capital.

## **You Can Do This: Have Ambition and Dream Bigger**

None of the innovative leaders we interviewed expected to have the success that they have had. Jeff Bezos, Elon Musk, Indra Nooyi, Satya Nadella, Marc Benioff, Shantanu Narayen, Mark Parker, Arne Sorenson, and the other successful leaders we studied started out just like the rest of us. But they proactively

engaged in building their innovation-specific human capital skills (forward thinking, creative problem solving, and persuasion) and their social connections (willingness to reach out to their weak ties), and they gradually built their track record for innovation. The same can be said of the “everyday” innovative leaders we studied: Mary Lombardo, Kyle Nel, Gavin Christensen, Kate O’Keeffe, Denver Lough, Dan Blake, and many others. They didn’t necessarily expect to have success with their founding initiatives. But these leaders proactively engaged in the same activities that the famous innovative leaders did—and achieved similar results but on a smaller scale.

You can do it too. We’ve provided the rough formula for how to proceed. Now it’s up to you. You need to be proactive and have the ambition to do something important. You need to think, and dream, bigger.

Great leaders have ambition. They dream big. They push their teams to think big and avoid the trap of incremental thinking. Scott Stephenson, CEO of Verisk Analytics (number twenty-two in our ranking of innovative leaders), observes, “I’ll call it a syndrome that I think can happen in larger companies. Even when you ask for innovation, the people that you’re looking to champion the innovation will start to constrain it as they bring it forward. I don’t know if . . . people don’t want to be burdened with a huge expectation or [they assume] that there’s only so much money the company is willing to spend. But I’ve seen this pattern over and over again.”

Part of the innovation magic we saw at Amazon comes from how Bezos pushes people to think bigger. Andrew Jassy, CEO of Amazon Web Services, says, “A lot of times, people come to the table with very clever, inventive ideas, and Jeff will look at them and say, ‘Well, this is really interesting and exciting, but have you

thought about extending it this way and this way?’ in a way that the team hasn’t necessarily thought about. This is how he pushes them to make the idea even bigger and, again, encourages and reinforces the culture to think as big as you can imagine, even if it may take you several years to realize your vision.”

Amazon Echo (Alexa) is a good example. When Amazon introduced Echo back in 2014, it was pitched primarily as a smart speaker, promising a way to ask for basic information and control your music with your voice and little else. But Bezos and David Limp, head of Amazon devices, pushed the team to think bigger. Today, the Alexa virtual voice assistant has evolved into a smart-home hub that allows you to control your appliances with your voice. Thermostats, humidifiers, sprinkler systems, IKEA light bulbs, and even salt shakers are all controllable with Alexa. And of course, you can now order whatever you want from Amazon using Alexa. The individuals who first developed the idea for the Alexa technology were willing, and were pushed, to think big and dream bigger. They simply started with a little forward thinking, and the rest unfolded as they took one step at a time.

You will achieve greater success as an organizational leader if you will proactively and ambitiously follow the advice provided here for building your innovation capital. You may just be getting your innovation capital flywheel started. But with continued skill building and focused efforts to build social connections and a track record of innovation, you can make that flywheel spin. And like the world’s most innovative leaders, you too can win the needed resources to launch innovations with impact.

## Appendix

### How We Rank the World's Most Innovative Leaders

Creating any type of ranking requires a thoughtful methodology, and none is perfect. We understand this concept quite well, having created the *Forbes* World's Most Innovative Companies ranking. We set out to create something very different with the *Forbes* list, using the wisdom of the crowd. Companies are ranked by their innovation premium: the difference between their market capitalization (value) and the net present value of cash flows from existing businesses. The difference between a company's current market value and the net present value of its existing businesses is the premium given by equity investors, betting with their wallets, that the company will generate profitable new growth. Companies with higher innovation premiums receive a higher ranking.<sup>1</sup>

We approached our *Forbes* World's Most Innovative Leaders ranking with similar rigor. Since we couldn't rank every leader, our sample of leaders includes the founders or CEOs (or founder-CEOs) of firms with greater than \$10 billion market value plus the fifty largest private firms to go public from 2013 to 2018. We co-ranked leaders of firms if they were cofounders and if both had visible top-management positions (e.g., cofounders of Alphabet are CEO Larry Page and president Sergey Brin; cofounders of Regeneron are CEO Leonard Schleifer and president and chief science officer George Yancopoulos). We

thought it was appropriate to co-rank these individuals, because their scores were identical on firm-level measures.

A leader's ability to successfully drive innovation largely boils down to something we call *innovation capital*, a multifaceted set of characteristics that allow the leader to acquire and effectively deploy the human and financial resources required to turn a risky and novel idea into an innovation with impact. The individuals we studied have innovation leadership skills that are difficult to measure; these skills are thus not a component of our ranking. However, we did use a composite of four measures that we believe represent important qualities of a leader with innovation capital: (1) a media reputation for innovation, (2) social connections and social capital related to innovation, (3) a track record of market value creation at the leader's company, and (4) investors who anticipate future growth and innovation at the firm as represented by the company's innovation premium (the same metric we use to rank the *Forbes* World's Most Innovative Companies list). These components are outlined in further detail in the following sections.

## **Media Reputation for Innovation**

We've done research that empirically shows that a leader's media reputation for innovation has a significant positive relationship on his or her company's subsequent innovation reputation and market value. Indeed, leaders and companies with an innovation brand can attract more-talented employees and are more likely to have customers identify with them at a personal level. These benefits in turn lead to increased customer loyalty, repeat purchases, customer willingness to pay higher prices, and increased tolerance for occasional product failures.

We measure a leader's media reputation for innovation over a

four-year period using the absolute number of articles and the percentage of a CEO's total coverage in the top business news sources (e.g., *Forbes*, the *Wall Street Journal*, the *Financial Times*, the *New York Times*, the *Washington Post*, and *USA Today*) that discuss the leader and mention innovation activities. The person with the highest media reputation is given a score of 100, and others are given scores below 100, according to their percentage of media attention and coverage relative to whoever is number one on the list.

## **Social Connections and Capital**

Social capital implies a strong public following, which can translate into a leader's greater influence and persuasion when he or she is attempting to promote innovative ideas in the market. We measure social capital by using current data from LinkedIn and Twitter about the social connections of the individual CEOs. For LinkedIn, social capital was quantified using several measures or indicators, including number of followers, presence of a Newlines page (indicating extremely high level of social influence), and a simple count of contacts where neither of the other criteria were relevant. Twitter follower counts served as a second measure of social capital to augment LinkedIn. The person with the highest number of social connections from the composite of metrics is given a score of 100, and others are given scores below 100, according to their relative social connections.

## **Track Record for Value Creation**

Value creation reflects the returns that investors in each CEO's company have realized during recent years. We measure a leader's track record for value creation through the absolute, and

percentage, market value increase of the company (or companies) the person leads. We gathered year-end market capitalization data for each firm over the past three years. We also incorporated stock-price appreciation (split adjusted) over the past three years as another indicator of value creation for investors. The leader with the highest composite score on value creation is given a score of 100, and others are given scores below 100, according to their relative composite score on value creation.

### **Investor Expectations of Future Value Creation**

We use our innovation premium metric to capture investor expectations of whether the leader's company is likely to innovate and grow new income streams in the future. This composite score measures the difference between a company's market capitalization and its net present value of cash flows from existing businesses. One of us (Jeff) and his colleague Hal Gregerson explain our methodology in more detail in a separate *Forbes* article.<sup>2</sup> The leader whose company has the highest innovation premium is given a score of 100, and others are scaled below 100, according to their relative innovation premium.

# NOTES

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**From JEFF DYER**

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