Better Simpler Strategy

A Value-Based Guide to Exceptional Performance

Felix Oberholzer-Gee

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Strategy

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What difference is there between us, save a restless dream

that follows my soul but fears to come near you?

—Khalil Gibran

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PREFACE

Strategy is simple.

I am not sure this is the right sentence to begin this book. You—my reader—and I do not know each other, and I am concerned I may be creating a poor first impression. So let me assure you, I am not prone to making grand statements. My world—the world of rigorous academic research that helps improve management practice—is all about careful reasoning. Our sentences begin with "probably," and our numbers come with 95 percent confidence intervals.

And yet, it is true: strategy is simple.

Seeing the simplicity in strategy is not easy. It took me many years and the guidance of great teachers and patient colleagues. Sharing the insight is possibly even harder. Fortunately, I have had much practice. I have been teaching at Harvard Business School for almost 20 years. It is a rare week when I do not have the opportunity to explore questions of strategy with executives and MBA students from around the world. What I have learned in these conversations is that it is liberating to discover the simplicity in strategy. As if by magic, you see past inscrutable business jargon and incongruent frameworks. All of a sudden, you understand how the very best companies achieve their exceptional performance and why many others fail to live up to their potential. This experience, the freedom that comes with clarity, is what I hope to share with you in this book. It is a book about the (financial) performance of companies, yes, but I have no interest in proffering a collection of success stories. Instead, my goal is to provide you with a powerful yet simple *way of thinking* about business and the role of strategic management.

Most books have many more authors than their covers lead us to believe. This one is no exception. I owe an immense debt of gratitude to Adam Brandenburger and Harborne W. Stuart, who developed the intellectual foundations for a theory of value-based competition.[1]

What author could make progress without close friends who patiently read early drafts and generously share insights? I am deeply grateful to Youngme Moon, who helped me to capture the key ideas embedded in the core framework and find my voice for the book; Frances Frei, who collaborated on an early pamphlet on value-based strategy; as well as Mihir Desai, Hong Luo, and Dennis Yao, whose analytical brilliance can sharpen any argument.[2] Amy Bernstein, Claudio Fernández-Aráoz, Rebecca Henderson, Hubert Jolie, Raffaella Sadun, David Yoffie, and many of my colleagues in the strategy unit at Harvard Business School provided helpful comments. I also benefited from the help of the executive directors and researchers in the HBS Global Initiative centers around the world. Pippa Tubman Armerding, Esel Çekin, Rachna Chawla, Carla Larangeira, Pedro Levindo, Fernanda Miguel, Anjali Raina, Nobuo Sato, Rachna Tahilyani, and Patricia Thome all provided global insights and many examples of value-based strategy at work.

This book would not have been possible without the hundreds of conversations I held with executives and MBA students in my courses, in particular the participants in the General Management Program. You taught me how to think, ever more simply and effectively, about strategy and exceptional business performance. I would also like to thank Peggy Alptekin, my copy editor, who read the manuscript with exceptional care; Scott Berinato, the visual genius who brought my illustrations to life; and my editor, Jeff Kehoe, who was instrumental in moving the project across the finishing line.

Are you ready? Prepared to think? Dream? Let us begin.

PART ONE

Exceptional Performance

1

Simpler, Better

In the past few decades, strategy has become increasingly sophisticated. If you work for a sizable organization, chances are your company has a marketing strategy (to track and shape consumer tastes), a corporate strategy (to benefit from synergies), a global strategy (to capture worldwide business opportunities), an innovation strategy (to pull ahead of the competition), an intellectual property strategy (to defend the spoils of innovation), a digital strategy (to exploit the internet), a social strategy (to interact with communities online), and a talent strategy (to attract individuals with extraordinary skills). And in each of these domains, talented people work on long lists of urgent initiatives.

Companies are right, of course, to consider all these challenges. Rapid technological change, global competition, supply chain disruptions due to climate change and worldwide health emergencies, as well as ever-evolving consumer tastes, do conspire to upend traditional ways of doing business. As the world's economies became more integrated, firms needed a global strategy. As technology altered consumer tastes and ways to satisfy them, it was imperative to rethink innovation and marketing. As the cost and utter unfairness of limiting workplace diversity became impossible to ignore, companies needed to find ways to build more inclusive talent pools and career paths. By responding to each of the new challenges, however, we asked ever more of our organizations, had even higher expectations of employees, and required our complex strategies to bring about sheer miracles.

I see evidence of such increased expectations everywhere. They manifest themselves in outstanding products, unbelievable experiences, and "deals of a lifetime"—but also in long working hours, seemingly impossible stretch goals, and harried lives. When I visit companies to do research and write cases, I rarely leave without being impressed by how much people accomplish in short periods of time, often with limited resources. But here is what surprises me most: given the sophistication of firm strategies and the intensity of our work lives, I would expect to see impressive firm profitability at most companies and more-than-generous compensation packages for nearly everyone. I see neither. Take firm profitability: one-fourth of the firms included in the S&P 500 fail to earn long-term returns in excess of their cost of capital. In China, this fraction is even higher, closer to one-third.

Think about it. How can it be that so many companies, their ranks filled with talented and highly engaged employees, have so little to show for so much effort? Why do hard work and sophisticated strategy lead to enduring financial success for some companies but not for others? We have the most educated workforce in human history and incredibly talented corporate leaders. Why does enduring success so often seem elusive? If you've ever wondered about these questions, this book is for you.

When our companies fall short of expectations, we often suspect that we are missing some key ingredient. If only we had a better talent strategy. If only we had a more robust supply chain. If only we had a richer innovation pipeline. If only . . . And so we develop a talent strategy, invest in business resilience, accelerate innovation cycles. As our strategic initiatives multiply, something unforeseen happens. In concentrating on all the trees, we lose sight of the forest. In a profusion of activities, an overall direction, a guiding principle, is hard to see. Any promising idea is an idea that seems worth pursuing. In the end, common sense rules, and strategy loses much of its ability to steer our businesses. In this world, strategic planning becomes an annual ritual that feels bureaucratic and less than helpful in resolving critical issues. In fact, it is not difficult to find firms that have no strategy at all. In many others, it consists of an 80-page deck that is rich in data but short on insights, fabulous at listing considerations but of little help in actual decision-making.[1] When I review companies' strategic plans, I often see a plethora of frameworks—many of them inconsistent with each other—but few guideposts for effective management. If the hallmark of a great strategy is its telling you what not to do, what not to worry about, which developments to disregard, many of today's efforts fall short.[2]

In this book, I argue that strategic management faces an attractive back-to-basics opportunity. By simplifying strategy, we can make it more powerful. By using an overarching, easy-to-grasp framework that is tied to financial success, we gain a common language that allows us to evaluate and pull together the many activities that take place in our organizations today.

I have seen the effect of simpler thinking in hundreds of executives I have taught at Harvard Business School. These managers were familiar with popular strategy frameworks, and their firms had often implemented laborious planning processes to guide investment decisions and managerial attention. Yet in many instances, it was difficult, even for these accomplished professionals, to recognize how specific projects were linked to their firm's strategy. At best, strategy provided smart arguments for and against business propositions, but it offered little guidance on how to choose and where to focus. As a result, initiatives and activities proliferated. When no one knows when to say no, most ideas (brought forward by talented and ambitious employees) seem like good ideas. And when most ideas seem like good ideas, we end up in the hyperactivity that pervades the business world today.[3]

I honed my approach to strategy in response to the challenges that I observed in the classroom and in my capacity as an adviser to companies.

In my experience, value-based strategy, the approach I describe in this book, is well suited to cutting through complexities and evaluating strategic initiatives. The framework provides a powerful tool that will allow you to see how your digital strategy is (or is not) related to your global ambitions, and how your marketing strategy is (or is not) consistent with the way you compete in the market for talent. Value-based strategy helps inform your decisions about where to focus and how to deepen your firm's competitive advantage.

The basic intuition underlying value-based strategy could not be simpler: companies that achieve enduring financial success create substantial value for their customers, their employees, or their suppliers. The idea is best captured in a simple graph, which I call a *value stick* (figure 1-1).

Willingness-to-pay (WTP) sits at the top end of the value stick. It represents the customer's point of view. More specifically, it is *the most* a customer would ever pay for a product or service. If companies find ways to improve their product, WTP will increase.

Willingness-to-sell (WTS), at the bottom end of the value stick, refers to employees and suppliers. For employees, WTS is the *minimum compensation* they require to accept a job offer. If companies make work

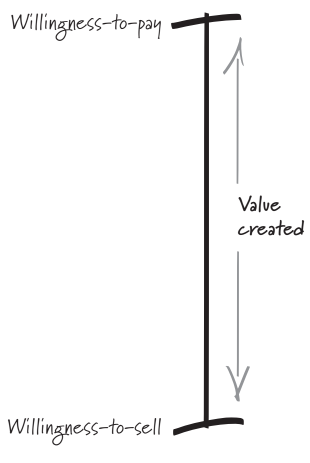

Figure 1-1 How businesses create value

more attractive, WTS declines. If a job is particularly dangerous, WTS increases and workers require more compensation.[4] In the case of suppliers, WTS is the *lowest price* at which they are willing to sell products and services. If companies make it easier for their suppliers to produce and ship products, supplier WTS will fall.

The difference between WTP and WTS, the length of the stick, is the *value* that a firm creates. Research shows that extraordinary financial performance (returns in excess of a firm's cost of capital) is rooted in greater value creation.[5] And there are *only two ways* to create additional value: increase WTP, or lower WTS.[6] Strategy is conceptually simple, and simpler strategic thinking, I am convinced, will lead to better outcomes.

Renew Blue

An example of the power of this approach is Best Buy, America's biggest consumer electronics and appliances retailer. In late 2012, the company was looking for a new CEO. Imagine yourself taking on this role. It seemed impossible to succeed. Best Buy, most of us thought, was doomed. Amazon had successfully grown its electronics business at the expense of Best Buy, offering consumers a broad selection of products and aggressive pricing. At the same time, Walmart and other big-box retailers stole market share by focusing on the most popular devices and appliances that could be sold at high volumes. Worst, perhaps, was the growing trend among customers to "showroom," that is, to visit stores to decide which products they liked and then buy them online. Having endured this onslaught, it is no surprise that Best Buy performed poorly. In 2012, the company lost $1.7 billion in a single quarter. Its return on invested capital (ROIC), which had long been in decline but was still in the upper teens, plunged to minus 16.7 percent.[7] "It was as if Best Buy was coming to a gunfight with a knife," said Colin McGranahan, an analyst at Sanford C. Bernstein. "Best Buy Should Be Dead," titled *Business Insider.*

Hubert Joly, a former strategy consultant and most recently CEO of Carlson, a hotel and travel conglomerate, took on the challenge. Recognizing the dire circumstances, Joly and his team devised a plan they dubbed Renew Blue. The core idea was to create more customer value by increasing WTP and improving price perception. Rather than thinking of Best Buy's more than 1,000 stores as a liability that made it difficult to compete, the company reimagined their role and turned them into assets. Going forward, the stores would serve four functions: points of sale (the traditional role), showrooms for brands that built stores-within-a-store, pickup locations, and mini-warehouses.

Best Buy had allowed Apple to operate its own showrooms in Best Buy stores starting in 2007. Joly expanded the program, adding Samsung Experience Shops and Windows Stores in 2013 and the Sony Experience a year later. Even Amazon eventually opened kiosks in Best Buy stores. The store-within-a-store concept provided the company with a fresh source of revenue and an enhanced shopper experience. Sharon McCollam, then CFO, explained, "When you look at the investments that our vendors have made in our stores, it is incredible. It is literally hundreds of millions of dollars."[8] Vendors also subsidized the salaries of Best Buy employees who worked in their showrooms. Perhaps more importantly, Best Buy was now able to offer deeper sales expertise because the company's staff, dressed in vendor-branded shirts and supported by consultants, each focused on a specific brand. Not only did the store-within-a-store program benefit Best Buy, the company's vendors were also better off. By creating a more cost-effective way to reach customers—operating a store-within-a-store is less expensive than running your own store, and vendors can benefit from increased traffic—Best Buy lowered vendors' operating cost and, as a result, vendors' WTS.[9]

Using Best Buy's stores as mini warehouses proved similarly effective. Joly's team understood that the speed at which customers received new products was an important driver of their WTP. It is hard to beat instant gratification. Traditionally, the company had shipped from large distribution centers. These were closed on weekends, and the inventory management software was decades old, leading to frequent stockouts and snail-speed shipping.[10] Under the Renew Blue plan, products were shipped from the location that provided the quickest delivery—sometimes a distribution center but often a store down the road. By 2013, Best Buy shipped from 400 stores. A year later, that number rose to 1,400, helping the company beat Amazon's shipping times for the first time.[11] Customers also loved the idea of ordering online and picking up the products in Best Buy stores. Within a few years, 40 percent of Best Buy's online orders were either shipped from or picked up from a store.[12]

Joly and his team also reassessed the company's online presence. Like many traditional retailers, Best Buy management had perceived the internet primarily as a threat, a substitute for established ways of doing business. Best Buy had built an online sales channel, but it had done so half-heartedly. BestBuy.com provided sparse product descriptions, few customer reviews, poor search capability, and no integration with the company's loyalty program. Frustrated customers complained that the site often promoted products that were out of stock. All this changed under Joly. Rather than seeing the internet as a substitute, the company now regarded it as a complement, an investment that would increase the value of Best Buy's physical stores. Although most customer journeys begin online, many consumers want to touch and feel the products before they make a purchase. Joly banked on converting store visitors into paying customers by matching, for the first time, online and offline prices. Even customers who completed their transactions online added value to the stores; when they picked up their purchases, they often ended up buying additional products and service plans. Recognizing that Best Buy's online presence was supporting store activity, the company accelerated its investment in BestBuy.com. In just a few years, the site came to rival leading e-commerce sites, and online sales boomed. By 2019, the company derived one-fifth of its revenue from e-commerce.

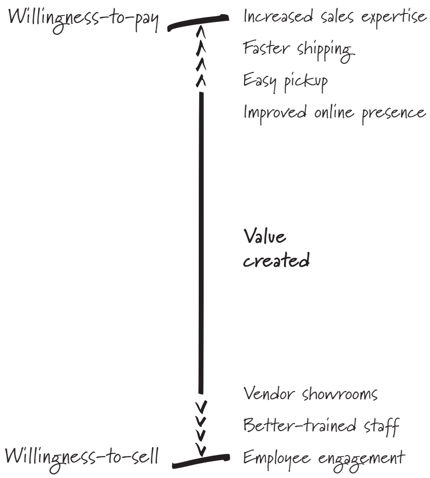

Figure 1-2 Value creation under Renew Blue

Renew Blue provided Best Buy a new lease on life. Look at all the ways in which Joly and his team managed to increase customer WTP and decrease vendor and staff WTS (figure 1-2).

By 2016, when Joly declared that Renew Blue had achieved it goals, Best Buy's ROIC had climbed from negative territory to 22.7 percent, and EBT margins had doubled. The company's share price quadrupled in only six years.*

The Best Buy turnaround illustrates some of the key principles of value-based strategy.

- ***Companies that excel at creating value focus squarely on WTP and WTS.*** Every significant initiative is designed to either enhance the customer experience—that is, increase consumers' WTP—or make it more attractive for vendors and employees to work with the company, in other words,

*The broader market doubled over this time period. Best Buy continued to outperform its competitors following the implementation of the Renew Blue strategy. From 2016 to early 2020, its share price grew more than twice as fast as the share price of companies in the S&P 500.

decrease their WTS. Initiatives that fail to meet this test are cut. For example, Best Buy eliminated its Amazon-like marketplace—an exchange that allowed third-party vendors to sell their own products—because it failed to create value.

- *Companies that outperform their peers increase WTP or decrease WTS in ways that are difficult to imitate.* Best Buy's most distinctive asset is its large network of stores. Skillful, impartial service provided in a brick-and-mortar environment is difficult for Best Buy's competitors to match. Amazon lacks a similar physical presence. Walmart is not known for high-touch service. Apple is disinclined to give impartial advice.
- *Simplicity opens up room for creativity and broad engagement.* Joly describes the Renew Blue strategy in the simplest of terms: "Our mission is to be the destination and authority for technology products and services. We are here to help our customers discover, choose, purchase, finance, activate, enjoy, and eventually replace their technology products. We also help our vendor partners market their products by providing them the best showroom for technology products, both online and in our stores."[13] No PhD required. It is plain to see, all that matters is customer WTP and vendor and employee WTS. Looking at Best Buy's turnaround, it is astounding how fast the company moved, how quickly it created and implemented dozens of initiatives—many more than I am able to describe here. The simplicity of the strategy is key if one is to execute at breakneck speed. Every executive, every store manager, every employee with an idea about ways to raise WTP or lower WTS can be sure that they are helping move the company in the right direction.
- *Many of the most successful companies focus on their competitive position inside an industry, as opposed to the* **average performance** *of their segment of the economy.* Joly explains, "If you remember, [in the past] the message from this company was all

> about the headwinds in our industry. [Today,] we never talk about the headwinds. . . . What we do has more impact, we think, than the overall environment." There are three reasons why this type of thinking is prevalent in companies that create exceptional value. A first is that in most industries, variation in profitability inside the industry exceeds the profitability differences across industries.[14] In other words, your best opportunities are almost always *in your current industry*, even if it is considered a difficult place for business. A second reason to focus on competitive positions inside an industry (versus industry attractiveness) is that positive industry fundamentals will simply be reflected in the multiples that companies need to pay to enter an attractive industry. Finally, for companies that happen to be in struggling industries, a focus on headwinds is demoralizing, and it likely contributes to decreases in productivity. "It's a virtuous cycle," says Joly. "Once you start winning, people get more excited, more confident." Best Buy's internal data show that by 2013, staff engagement was higher than at any point since 2006.[15]

Many questions linger about Best Buy's future, of course.

- ***Was Best Buy lucky?*** No doubt. I don't know any organization whose stellar performance does not, in part, reflect good fortune. Hugely popular electronics products such as new generations of iPhones and video game consoles surely played a role in Best Buy's turnaround. So did the lessened competition after Circuit City, RadioShack, H. H. Gregg, and other smaller electronics retailers closed their stores. Sheer luck, however, rarely leads to exceptional long-term value creation. The best firms build on their circumstances, whatever those may be. Value-based strategy is not about the hand that you are dealt. It is about better ways to play.

- ***Will Best Buy be a long-term success?*** Time is generally not kind to high-performing organizations. When I examine companies

> that have created exceptional value, I find that the average firm loses about half of its competitive advantage over a ten-year period. In Best Buy's markets, Amazon (in consumer electronics) and home improvement companies like Lowe's (in appliances) continue to grow market share. In 2018, Amazon, for the first time, narrowly beat Best Buy to become the largest US consumer electronics retailer. Relative market share is important in an industry where 80 percent of cost is the cost of goods sold. The larger a company's market share, the better positioned it is to bargain with its vendors. "To win, we have to lead," acknowledges Joly.[16] While these dynamics are challenging, he is characteristically upbeat: "We get 26 percent of our consumers' electronic spending. That's embarrassing. If we get a third, it would still be embarrassing, but the growth for the company would be tremendous."[17] Value-based strategy provides clear guidance on the potential sources of growth and the opportunities that promise to be of greatest value.

A Preview

In the pages that follow, I will take the principal idea that animated Best Buy's strategy—long-term financial success reflects superior value creation—and explore how firms in different industries and business contexts have applied this approach in practice. Think of this book as a journey along the value stick (figure 1-3).

Part one ("Exceptional Performance")—We ask why some companies are so much more successful than others. For example, aren't the home improvement retailers Lowe's and Home Depot essentially clones? How can it be that one, Home Depot, is far more profitable than the other? The answer, it turns out, has much to do with how companies create value for their customers, their employees, and their suppliers. It is surprising, perhaps, but true nevertheless: the companies that perform best do not think about themselves first and foremost. They dream up ever

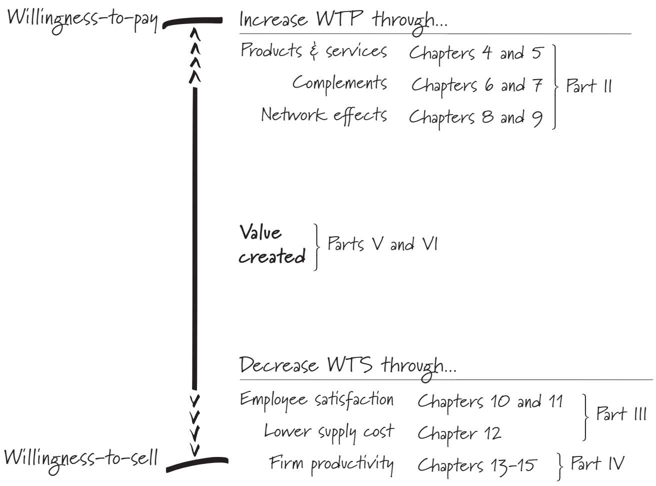

Figure 1-3 Key value drivers

better ways to create value for others. Think value, not profit, and profit will follow.

Part two ("Value for Customers")—Do you tend to root for the underdog? If so, you will love the story about the ways Amazon gained a toehold in the market for consumer electronics in fierce competition with then-dominant Sony. Sony had it all: the best e-reader technology, a stellar brand in consumer electronics, and a marketing budget the size of a small country's GDP. Amazon's edge? A better way to think about value for customers. Early in my research, I had an intuition that sales-driven organizations (like Sony) and companies that focus on WTP (like Amazon) would show similar performance. But this intuition turned out to be wrong. Companies that train their lens on WTP have a significant long-term competitive advantage.

Some approaches to raising WTP are obvious: increase the quality of your products, enhance their brand image, innovate. But even strategies that are often overlooked can be exceptionally powerful. For instance, it is fascinating to observe how some companies leverage the power of *complements*: products and services whose presence raises the WTP for other products and services. Think printer and toner, cars and gasoline.

Michelin and Alibaba Group rely on complements to supercharge their entry into new industries. Apple uses them defensively to soften the blow from declining prices. Harkins Theatres cleverly offers complements to fill seats in its movie theaters. If you compete on the basis of your products and services alone, if you fail to recognize your complements, there is a good chance your business is already in trouble.

Speaking of trouble, are you surprised that ride-sharing companies such as Uber, Grab, and DiDi have such difficulty attaining profitability? Shocked that investors loved the companies at first, only to sour on them subsequently? The swing in sentiment reflects how we think about *network effects*. Network effects create a positive feedback loop: more passengers attract more drivers, which, in turn, attracts more passengers. Many of the leading tech companies rely on network effects to drive WTP. At an extreme, network effects can create so much customer value that markets tip; we are left with a single firm. As the ride-sharing market illustrates, however, winner-take-all outcomes are rare. More important than knowing that your company benefits from network effects is your ability to gauge their strength. What are the forces that enhance them? When do they fade?

The companies that we encounter in part two could not be more different from one another. They range from cosmetics to pharmaceuticals, from publicly traded to family owned, from global champions to regional upstarts. And yet they all rely on the same trio of levers to increase WTP and create greater customer value: more attractive products, complements, and network effects.

***Part three ("Value for Talent and Suppliers")*—**Our attention will swing to the bottom of the value stick. We will meet companies that gain a competitive advantage by decreasing the WTS of their employees and their suppliers. In competition for talent, firms pursue two approaches to gain leverage: offer more generous compensation or make work more attractive. While the two strategies seem similar at first—they both create greater employee engagement and satisfaction—they have vastly different consequences. Increases in pay shift value from the company to its employees; there is no value creation, only redistribution.

By contrast, more attractive working conditions create more value. I find it astonishing to see how smart companies find ever new ways to create value for their workforce and how they share that value with their employees. Because leading companies are so adept at reducing WTS, it is not unusual to see that they enjoy labor cost advantages of 20 percent or more. If your organization competes for employees solely by offering more generous compensation, you can of course attract highly capable and engaged individuals. But you will have missed an incredible opportunity—boosting productivity by creating value for your workforce.

Strategies that lower WTS also pay off in improved supplier relationships. Even prior to the Covid-19 pandemic and the increasingly frequent disruptions of global supply chains as a result of climate change, experts readily recognized the value of close and adaptable collaborations with suppliers. If you find ways to reduce a supplier's cost of working with your company, you can capture a part of the value that you helped create. However, what is straightforward in theory is often difficult in practice. Many buyer-supplier relationships do not live up to their potential, not because it is challenging to see how one might create value but because we fear the other party will capture most of the benefits from a successful collaboration.

It is highly instructive to observe how companies navigate this tension. We will see how Tata Group liberated Bosch to pursue breakthrough innovation, even in a situation with strict cost constraints. We will learn from Nike how to break suppliers' addiction to volume. Dell will teach us how to leverage supplier capabilities in order to pursue projects for which there is little internal support and funding.

In my conversations with executives, I regularly meet managers who describe their products and services as being commoditized; there is no way to raise customer WTP. (I confess I am usually skeptical. I never quite know if "commoditization" reflects an incontrovertible industry fact or a lack of imagination.) Even if opportunities to raise WTP are truly scarce, however, most companies have rich prospects of attaining stellar performance by creating more value for their employees and their suppliers.

Part four ("Productivity")—If you had to guess, how wide do you think the productivity gap is between an industry's bottom 10 percent of companies and the top 10 percent? It is substantial. In the United States, leading companies are twice as productive as the weakest organizations. In emerging markets, top performers best the least efficient by a factor of five. Imagine—a company that produces five times as many products with exactly the same inputs! Whenever firms increase their productivity, cost and WTS fall at one and the same time. In this part of the book, we will explore three mechanisms that raise productivity: economies of scale, learning effects, and the quality of management.

If you wonder why JPMorgan Chase doubled in size after the Great Recession in 2008, when we were questioning if some financial institutions were "too big to fail," look to economies of scale as one important reason. A classic in the strategist's playbook, scale economies remain an influential means of lowering cost and WTS. And so is learning—the idea that costs decline with cumulative output. In fact, in the age of machine learning and advanced analytics, learning has become even more important. Anomaly detection algorithms, for instance, can result in substantial cost reductions because faulty parts are sorted out before they enter production workflows. While steeper learning curves promise considerable efficiency gains, the strategic effects of learning can be surprising. Consider the value of being the first to detect a better way of working. When everyone learns at the speed of light, being early means very little. Your competitors will catch up quickly. Paradoxically, the strategic effects of learning are most valuable if learning reduces cost at an intermediate pace—not too fast and not too slowly.

Scale and learning are on the evergreen list of productivity-enhancing strategies. By contrast, research on the importance of basic management tools is fairly recent. When asked how well their company is managed on a scale from 1 to 10, most managers rate their organization about a 7. Surprisingly, these ratings tell us very little about the chances that a company actually implements modern management techniques that help drive productivity. And I am not thinking of next-generation ideas. Across many industries and countries, companies fail to adopt basic tools such as goal setting, performance tracking, and frequent feedback. If you are searching for ways to substantially raise the productivity of your team or your company, chances are these management techniques are among the most promising opportunities to raise your game.

***Part five ("Implementation")*—**As the first parts of this book show, strategies that lead to exceptional performance are built on three ideas: value for customers (raising WTP), value for employees and suppliers (reducing WTS), and increases in productivity (lowering cost and WTS). Building on this insight, in part five ("Implementation"), we will explore how companies move from conceiving a strategy to putting it into practice. Observing brilliant strategists at work is an incredible experience. I see them making three critical choices.

First, among many options, they invest in *a small number of value drivers* to pull ahead of the competition. Value drivers are the criteria that make up WTP and WTS. They are the product and service attributes that are important to your customers. For instance, when choosing a hotel, consumers typically consider value drivers such as location, room size, staff, and friendliness, as well as the hotel brand. Accomplished strategists are comfortable promoting only a few value drivers and withholding resources from many others. How did Paul Buchheit, Gmail's lead developer, express this idea? "If your product is great, it doesn't need to be good."[18]

Second, for each of the critical value drivers, accomplished strategists develop a deep understanding of *how* they influence WTP or WTS. For example, they know that scale is no panacea. (Comparing size or market share across the firms in the S&P 500, for instance, tells you exactly nothing about their profitability.) But strategists also know that scale can be all-decisive in some situations—for example, in the presence of network effects or scale economies. In each instance, they understand deeply how a value driver increases WTP or lowers WTS.

Third, successful companies often use *smart visuals* to cascade their strategy throughout the organization. I will discuss one such visual, *value maps*, to illustrate how ideas about value get connected to specific key performance indicators (KPIs) and projects that increase the performance of the organization.

***Part six ("Value")*—**Strategy is conceptually simple, because it serves a single purpose: creating value. Companies that do this well end up leading their industries. We will see how Tommy Hilfiger did just that for an often-disadvantaged group of people, persons with disabilities. Imagine what this must be like, showing up at work every day with the single ambition of making life better for a group of customers, the people who work for your organization, the suppliers with whom you collaborate. Value *or* profit is a false choice. Exceptional financial performance reflects value creation. Let me say it one more time: think value, and profits will follow.

This insight is important for reasons that go beyond the performance of companies. Unless you have been hiding in some faraway castle, you know that business does not enjoy the best of reputations these days. In recent surveys, only about a quarter of participants say they believe that their organization "will always choose to do the right thing over an immediate profit or benefit."[19] Fifty percent of the population now agrees that "capitalism, as it exists today, does more harm than good in the world."[20] Even corporate leaders seem to agree. The Business Roundtable, a club of large US companies, disavowed shareholder capitalism in 2019, arguing that it is the responsibility of corporations to deliver value to all stakeholders: customers, employees, suppliers, as well as shareholders. But wait—isn't this what (successful) businesses have always done? How, if at all, do corporate leaders and companies have to change?

Value-based strategy is uniquely suited to help us see a way forward. To make progress, value must sit at the very core of every business. Even the most vexing problems can bend when we apply enough creativity and imagination to create more value for customers, employees, and suppliers. As far as value creation is concerned, there is no difference between shareholder and stakeholder capitalism. Creating more value—increasing WTP and lowering WTS—is simply good business. But value-based thinking also shows that we have considerable degrees of freedom to decide *how to share* the value that we create. Companies *can* balance multiple interests; there is no reason to believe that firms need to be beholden to shareholders alone. As we debate how value is best distributed, value-based thinking can serve as a helpful guide. Building on the ideas in the pages that follow, my hope is that we will bring to these conversations rich imagination and our most noble instincts.

2

A Sea of Opportunities

I know it is probably poor storytelling, but I am tempted to share the good news right up front. I am incredibly optimistic about the potential of most companies to create more value and substantially improve their financial performance. And no, this is not just wishful thinking. My optimism is grounded in careful analysis of the data. Select any segment of the economy, and you will see that the very best companies in that segment dramatically outperform other firms. If the average company made even modest advances, value created and profits would soar.

But let's back up. Our topic in this chapter is the broad patterns of long-term financial success. There is no one metric that captures all facets of financial performance. But if I had to pick a single one, I would choose return on invested capital (ROIC). ROIC compares the profit realized from business operations (operating income) with the capital (equity and debt) that is employed to generate that profit. In other words, ROIC tells us how good a business is at turning investors' funds into income from operations.[1]

I am grateful to James Zeitler, senior information research specialist at Baker Research Services, Harvard Business School, who expertly compiled the financial data in this chapter.

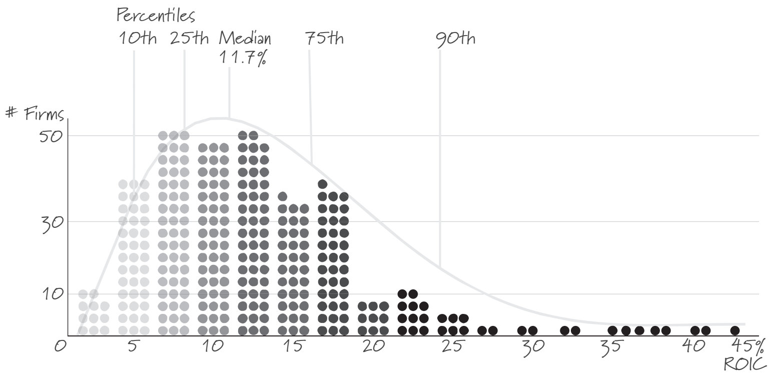

Figure 2-1 Return on invested capital (ROIC) of S&P 500 companies, 2009–2018

Figure 2-1 shows the distribution of ROIC for companies in the S&P 500 from 2009 to 2018.[2]

When I first studied this type of data, I was surprised by the large differences in performance. These are all large, well-known companies—think Microsoft, Boeing, CBS, FedEx, and Twitter. Yet it is remarkable how much an average firm (ROIC of 13.1 percent) could improve if it moved closer to the very best performers, companies like AutoZone (average ROIC of 41.9 percent), Colgate-Palmolive (37.6 percent), and Apple (32 percent).

To see true value creation, we need to compare the returns in figure 2-1 with the firm's cost of capital.* An ROIC of 12 percent might seem quite attractive for a large firm with a steady cash flow. But it is probably insufficient to justify an investment in a risky startup. Looking at the *difference* between ROIC and the cost of capital, our insight remains unchanged. If the best performers—companies like Mastercard (whose ROIC exceeds the cost of capital by 23.5 percentage points), TJX Companies (23.2 percent), and Yum! Brands (19.5 percent)—provide any indication of what is possible, most firms have incredible opportunities for greater financial success.[3]

*The cost of capital reflects the returns that investors expect when they invest in the company. Firms that exceed these expectations create true value for their investors.

If these comparisons strike you as too optimistic, you are not alone. Can the average company really catch up to leading organizations? Do low performers truly have the potential to become at least average? In some instances, poor returns do reflect hard-to-change circumstances and factors that are beyond the control of executives. Your firm might be stuck in an industry with intense competition. You might do business in a country with less-affluent consumers and low prices. But it is all too easy to conclude that external conditions limit your potential. Even poorer countries show the same wide variation in performance that we observed for the United States (figure 2-2).[4] True, India is less affluent than the United States, but India has a large number of companies with stellar financial performance. China's markets are highly competitive, yet there are numerous firms whose returns far exceed their cost of capital. In every country I have studied, the data suggest that

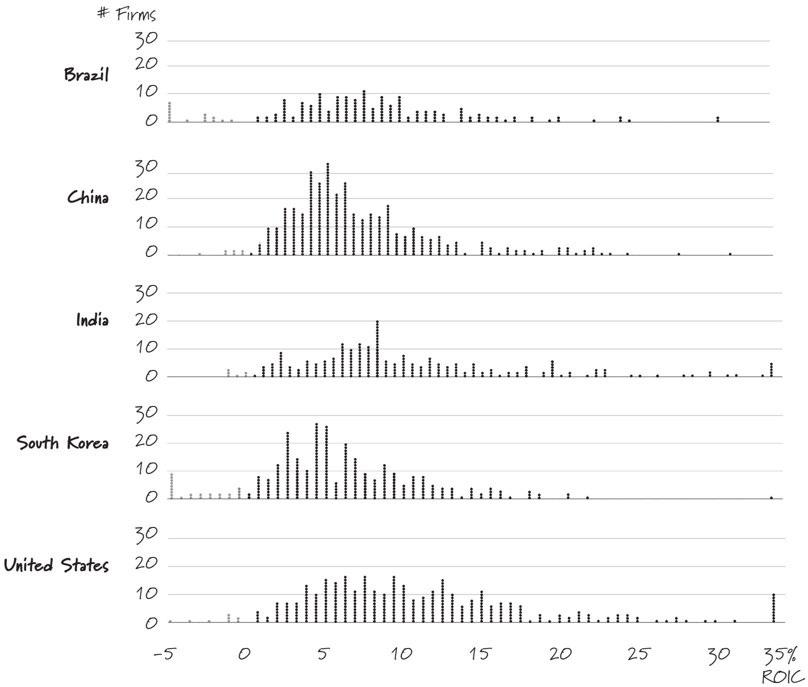

Figure 2-2 Return on invested capital (ROIC) in various countries, 2009–2018

companies can earn exceptional returns even in the most challenging business environments.

When I meet with executives whose companies achieve less-than-stellar performance, the typical conversation quickly turns to industry dynamics. They explain that their industry is disrupted by digital technology, how they face tough import competition, and why talent is difficult to hire and retain. The executives are right. Profitability can indeed change substantially from one industry to the next. Some industries are blessed with high average returns, others decidedly less so. Take, for instance, US insurance, a highly competitive industry (figure 2-3).[5] Mean returns are close to zero (1.2 percent); the median insurance company destroys substantial value.*

But even in an industry as challenging as insurance, we observe stark differences in financial performance. Somehow it is possible to do well, and the best companies achieve remarkable returns in excess of 20 percent.

Insurance is not an exception. In industry after industry, the leading companies outperform their weaker siblings by substantial margins. Remember how Best Buy's Hubert Joly paid more attention to

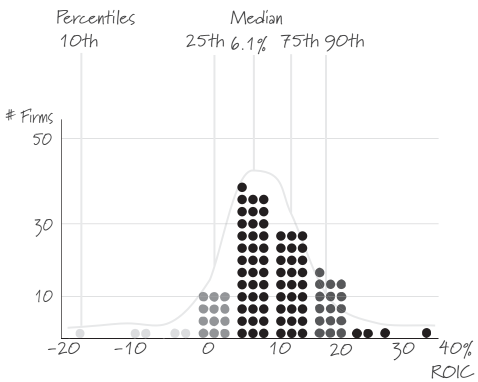

Figure 2-3 Return on invested capital (ROIC) in the US insurance industry, 2009–2018

*In our time period, the cost of capital fluctuated between 7 percent and 11 percent for the median insurance company.

differences in profitability *in* his industry than to differences *across* industries? There is a good reason for Joly's focus. Figure 2-4 shows differences in ROIC within and across industries.[6] The difference between leading and lagging companies in the same industry is typically far greater than the variation across industries.

The industries shown in figure 2-4 are ordered from high variance (health care and software) to low variance (banks and utilities). To better understand Joly's insight, let's do a thought experiment using the financial data in figure 2-4. Take an average industry with 100 companies and rank them from most profitable (rank number one) to least profitable (rank number 100). Suppose your company is positioned 75th and you manage to jump to 25th place. With this advance, your ROIC would increase by 10.8 percentage points. Now imagine 100 *industries*, again ranked from most to least profitable. If your company were to leave the industry ranked 75th and join the industry ranked 25th, your ROIC

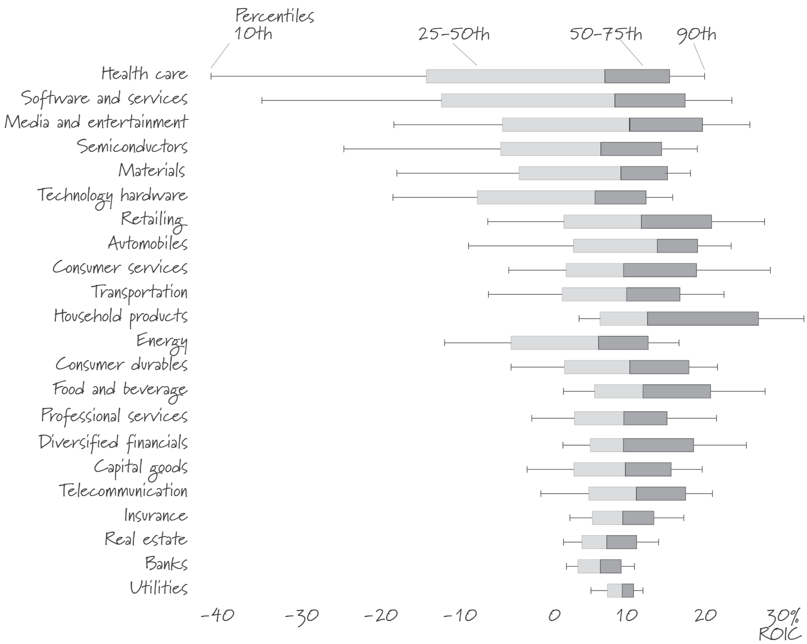

Figure 2-4 Return on invested capital (ROIC) in various US industries, 2009–2018

would increase by a mere 4.5 percentage points.[7] In other words, there is more than twice as much room to grow profitability *inside* an industry as opposed to *across* industries. From the standpoint of profitability, industries are fairly similar. Companies inside an industry, however, tend to be very different.

As interesting as it is to examine these measures of profitability, the figures tell us little about how well companies perform over time. To see whether firms can maintain a competitive advantage, I selected the best-performing companies in 2009—the top one-third of firms in figure 2-1—and tracked their financial results year after year (figure 2-5).

Looking at star performers over time yields a glass half-full/glass half-empty story. The good news is that the most successful companies continue to outperform their rivals. Microsoft is a prime example. Long after the advent of personal computing, the company continues to deliver better than average results. In fact, Microsoft has been among the ten most valuable US companies every year for the past 20 years.[8] By 2020, investors valued the firm at more than $1 trillion. On a more somber note, however, figure 2-5 shows that time is not kind to stellar companies (including Microsoft). Their ROIC declines year after year.

When I discuss these numbers with executives, few are surprised. Many believe that it has become far more difficult these days to hold

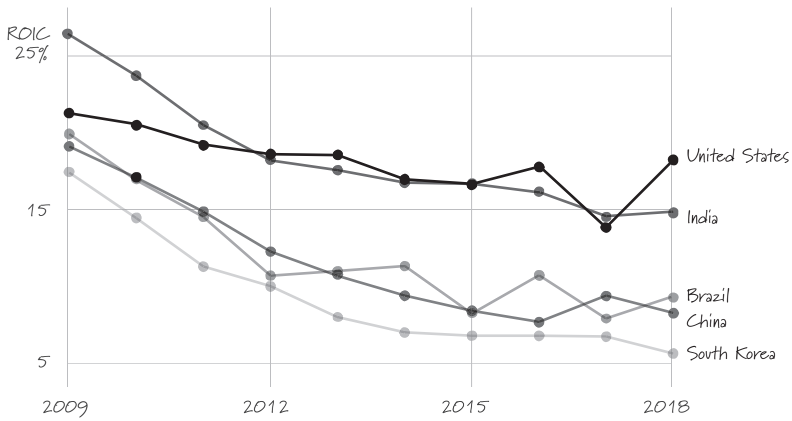

Figure 2-5 Return on invested capital (ROIC) for companies in the top third of the S&P 500 in 2009

on to a competitive advantage. Some even argue that it is quite pointless to make long-term plans in a hypercompetitive economy such as ours. Strategy, the argument goes, was useful in stable environments. But today, it is naive to think that you can successfully anticipate customer needs, technological breakthroughs, and competitive moves over long periods of time. In hypercompetitive environments, executives are resigned to aggressive short-term maneuvering, a practice that leads to fleeting competitive advantages—if you are lucky![9]

The perception that competition is more heated than before is real, no doubt. But is it true? We can test this view by examining the speed of decline in financial performance in different periods of time. Do the curves in figure 2-5 decline more steeply than similar curves for earlier decades? They do not. Looking at changes in ROIC, I find little indication of hypercompetition. The performance of leading companies suffers over time, but the trend is no more pronounced today than it was at earlier points in time. More-sophisticated research comes to similar conclusions. Professor Gerry McNamara, who studies high-velocity markets, and his colleagues Paul Vaaler and Cynthia Devers conclude, "Managers today face markets no more dynamic and opportunities to gain and sustain competitive advantage no more challenging than in the past."[10]

Seeing these broad patterns of financial performance, I hope you walk away as optimistic as I am. For nearly every company, substantial improvements in performance are within reach. Here is what I have learned from exploring the data.

- *In every corner of the world economy, it is easy to find firms that are far more financially successful than others.*
- *Even after accounting for the influence of business cycles and country environments, we are left with significant differences in profitability across companies that operate in the same industry.*

If the financial success of leading firms provides any guidance, nearly every company can do better.

- ***Even modest advances have dramatic financial implications.*** If the US firm that ranked 50th (out of 100) jumped to rank 40, its ROIC would surge by 21 percent. If a Chinese firm improved in this way, its ROIC would grow by 16 percent.
- ***The potential for performance gains inside your industry is usually greater than the gains you should expect from entering a different industry.*** In a sea of opportunities, the most attractive prospects sit close to home.
- ***There is little evidence in the data that attaining stellar financial results over long periods has become more difficult.***

So where do these differences in financial performance come from? What can we do to move up in the performance rankings? In the chapters that follow, we will look at a simple framework to guide our decisions.

3

Think Value, Not Profit

There are few better places to observe value creation than outside the entrance of an Apple store. Watch customers as they exit with their elegant, beautifully packaged devices in hand. Sure, they paid a hefty price for the superb design, but just look at their faces, beaming with pride and anticipation! Or online, head over to Facebook and Instagram, where you will see other instances of value creation. Look at the pictures and videos your friends post when they receive a coveted job offer or earn a promotion. Happy faces again.

Apple competes at the top of the value stick by raising customer willingness-to-pay (WTP). Companies that offer exceptionally engaging work create value by lowering willingness-to-sell (WTS) (figure 3-1).

Think of WTP and WTS as walk-away points. WTP is the maximum a customer would ever pay for a product. Charge one cent more, and the customer is better off walking away from the transaction. As the Apple example illustrates, many factors enter into WTP, including product attributes, quality, and the prestige a product might confer. At the bottom of the value stick, employee WTS is the lowest compensation a person is willing to accept for performing a particular type of work. Pay an employee less than his WTS, and he will walk away from the job.

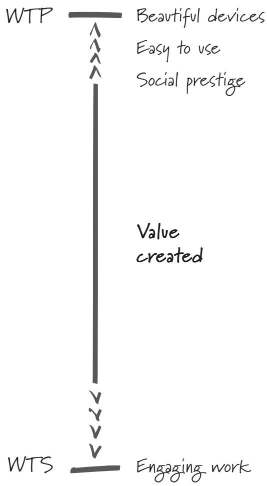

Figure 3-1 Modes of value creation: Increases in WTP and decreases in WTS

As with WTP, many concerns flow into WTS. They include the nature of the work and its intensity as well as career concerns, social considerations, and the attractiveness of other job opportunities.

Value Capture

Companies *create* value by increasing WTP and decreasing WTS. They *capture* value by setting prices and compensation. The overall value that a business creates gets divided three ways (figure 3-2).

The difference between WTP and price is value for the customer. Apple's products may be expensive, but customer appreciation for the devices is even higher. The happy faces at the Apple store mirror the degree to which WTP exceeds the price. In value-based thinking, price is not a determining factor of WTP. We often use WTP and price interchangeably. But it is useful to keep them separate.

At the lower end of the value stick, the difference between an employee's compensation and her WTS is the satisfaction that she derives from work.

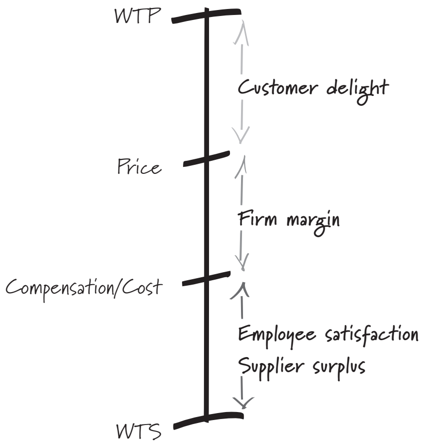

Figure 3-2 Sharing value with customers, employees, and suppliers

The idea is simple. If compensation were set exactly at WTS, she would be indifferent between work and her next best opportunity—perhaps another job, perhaps leisure. If the firm pays more than WTS, employee satisfaction increases. A similar logic applies to suppliers. Their share of value is the difference between how much they get paid by the firm (the firm's cost) and their WTS. Think of it as a surplus that the suppliers earn from the transaction. For example, a supplier might want to earn a minimum margin of 25 percent. This margin determines his WTS, the minimum price that he will accept. If the firm ends up paying more, the supplier earns a surplus.

The final portion of value—the difference between price and cost—accrues to the firm. Think back to chapter 2 and the dramatic differences in profitability that we observed. If we want to understand why some companies are much more profitable than others, a useful starting point is to identify the reasons why the middle section of the value stick—the firm's margins—is slim for some companies and fat for others.

Value sticks are drawn for specific products and specific customers, employees, and suppliers. The WTP for Apple devices tends to be high for customers who adore sleek design and appreciate ease of use. Apple has a distinct advantage with this group: it can charge high prices *and* create significant customer delight at one and the same time. Apple also enjoys advantages with some of its suppliers. For example, shopping malls give Apple a special break. The company pays no more than 2 percent of its sales per square foot in rent, compared with 15 percent for a typical tenant.

Why are mall owners so generous to Apple? As figure 3-3 illustrates, malls have a particularly low WTS in their relationship with Apple; this is because the company increases foot traffic by about 10 percent for all the other stores in the mall.[1] And, as the figure suggests, a busier mall allows owners to increase the rent for all the other stores to about 15 percent of sales.

Value sticks illustrate that there are only two avenues for companies to create value: increase WTP or decrease WTS. Every strategic initiative needs to be evaluated against these two metrics. Unless an activity increases WTP or decreases WTS, it will not contribute to the firm's competitive standing. When I visit companies, I am always impressed by the myriad of activities I observe. At the same time, I often find myself at a loss to see

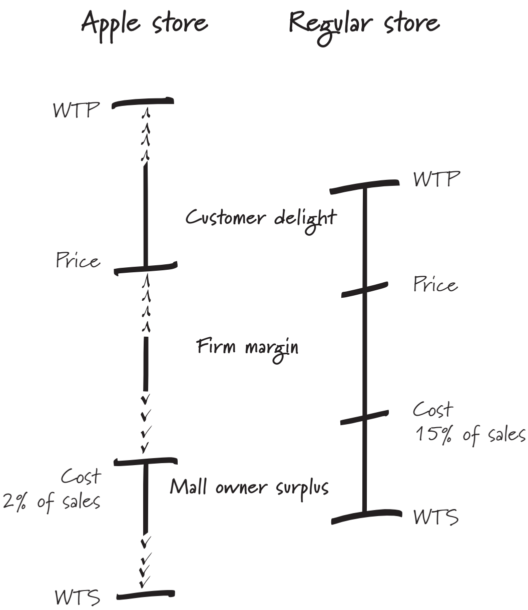

Figure 3-3 Apple benefiting from high WTP and low WTS

how certain initiatives will help increase WTP or decrease WTS. If your organization feels overburdened, if you feel unreasonably stretched, here is your chance to cut back. Unless an initiative promises to increase WTP or decrease WTS, it is not worth pursuing.

Competition

Once a company has created significant value, what allows it to capture some part of that value? The question is not rhetorical. No one doubts that US insurance companies create significant value. Yet, as we saw in chapter 2, little of that value stays with the carriers; most of it flows to their customers. To see how much value companies manage to capture, it is helpful to take into account competitive forces.

Imagine you are going to book a round-trip flight from Boston to Los Angeles. Expedia offers a variety of options. The three lowest-priced flights are on American Airlines, Alaska Airlines, and Delta Air Lines. They are all priced similarly (figure 3-4). (Delta is a smidgen less expensive.) Expedia

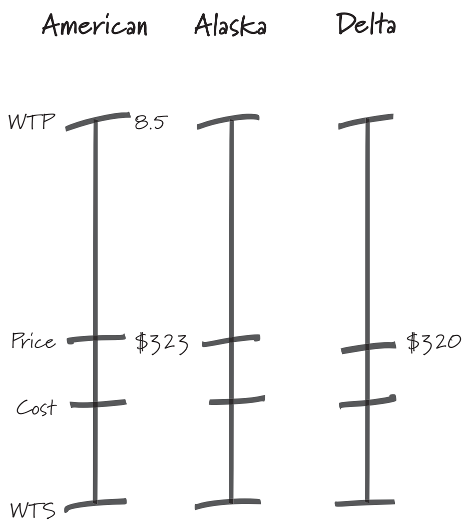

Figure 3-4 Competition among airlines

rates all three flights 8.5 out of 10, suggesting that your travel experience will be quite similar. How would you choose between the three options?

The price of the flight, I am sure, will loom large in your decision. Why? Simply because there is nothing else to consider. The more similar the three value sticks, the greater is the tendency for passengers to focus on price. In fact, it is no coincidence that the prices for these flights are so close. Lacking meaningful differentiation, the three airlines are forced to compete on price.

At times, I meet businesspeople who complain about their customers' price sensitivity. But heightened sensitivity simply reflects a firm's competitive position. If the value stick of a business closely resembles the value stick of other businesses, how do you suppose customers choose? They will focus on price, putting pressure on margins and reducing the firm's ability to capture the value it creates.

By contrast, firms that create superior value enjoy an increased ability to charge premium prices. Expedia rates JetBlue's least expensive Boston to Los Angeles flight an 8.7. Not surprisingly, it is priced higher ($411); passengers expect a better experience (figure 3-5).

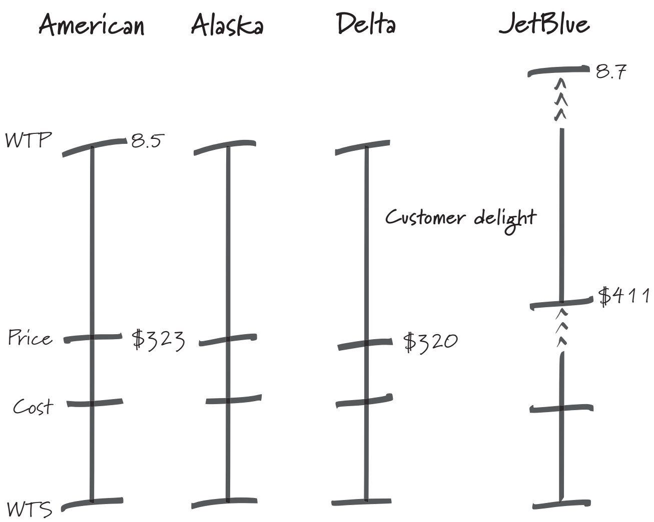

Figure 3-5 Differences in WTP and differences in customer delight

Will customers choose the JetBlue flight? The answer is not obvious. If JetBlue offers superior customer delight, passengers will flock to its service. But if the difference between WTP for American and \$323 (American's customer delight) is larger than the difference between WTP for JetBlue and \$411 (JetBlue's customer delight), American is in a better competitive position. Companies compete for customers by creating superior customer delight. Many companies strive to be best in class. But having better quality and higher WTP is no guarantee for success. What matters is the *difference* between WTP and price—in other words, customer delight.

Differences

As this discussion illustrates, all ability to capture value depends on *differences in value creation*. In their quest for exceptional performance, many executives ask themselves what they might do to increase their firm's returns. This is the wrong question to set out from. To begin your journey toward increased financial performance, create differentiated value and profits will follow. Fail to do so, and no amount of business acumen will generate exceptional results. The greater the similarity between two value sticks, the greater the pressure to compete on price.

As you know from your own experience, thinking in differences is not easy. When Lyft, a ride-sharing firm, announced it would provide discounted fares to transport voters to and from the polls in late 2018, how did its chief rival, Uber, respond? You guessed it: it copied Lyft's initiative.[2] Imitation of this sort has two effects. It creates value for the imitator; Uber's leadership was convinced that the discounted fares were an effective marketing initiative. But at the same time, copying reduces the ability to capture value, because greater similarity across firms leads to downward pressure on prices.

When I ask executives who apply value-based strategy in their business what they perceive as particularly useful about this type of thinking, they often make the following points.

- ***We live in a complicated world. Value-based strategy helps us see how we can create value.*** There are only two levers: WTP and WTS.
- ***In competition, more generous margins (and greater profitability) reflect an ability to create superior customer delight, greater employee satisfaction, and more generous supplier surplus.*** Value creation comes before value capture.
- ***Strategists think in differences.*** Exceptional product quality and outstanding working conditions do not confer a lasting advantage if they can be matched easily by rival firms.

A profound question to ask is the following: If your company were to disappear tomorrow, who would miss it? Perhaps your customers, who found supreme delight in your products and services? Perhaps your staff, who cherished working in your company? Perhaps the suppliers, who enjoyed a special relationship with your firm? Someone needs to miss you. If no one misses you, if your value stick resembles everybody else's, you are not making a difference. And without a meaningful difference, your company has little chance of earning returns in excess of your cost of capital.

PART TWO

Value for Customers

4

Claps and Cheers

Creating Customer Delight

What do the Rubik's Cube, the cholesterol drug Lipitor, the Switch game console, Super Mario Bros., the Toyota Corolla, and Lady Gaga's Fame perfume have in common? They are all products that flew off the shelves as soon as they were launched. The Rubik's Cube sold 2 million units in the first two years. Nintendo's Switch racked up 1.3 million unit sales in a single week. In each of their respective categories, these are among the most successful product launches of all time.

A common thread to these products and services is that their creators found ways to significantly increase customer willingness-to-pay (WTP). Lipitor, one of the bestselling prescription drugs of all time, was not the first statin that lowered LDL, the "bad cholesterol," but it was far more effective than its rivals. Bruce D. Roth, Lipitor's inventor, explains, "[Lipitor] tremendously, incredibly outperformed the other statins. It was as good at its lowest dose as the other statins were at their highest."[1] Similarly, Shigeru Miyamoto, the Nintendo designer who introduced the world to Super Mario Bros., found ways to transform the experience of playing video games. Miyamoto, not a programmer himself, was already famous when he created Super Mario Bros., but with the new game, he hit it out of the park.[2] The *Economist* gushed, "The game took place under a clear blue sky at a time when most games were played on a space-y black background. Mario ate magic mushrooms that made him bigger, or 'super,' and jaunted from place to place through green pipes. 'Super Mario Bros.' offered an entire world to explore, replete with mushroom traitors ('Goombas'), turtle soldiers ('Koopa Troopas') and man-eating flora ('Piranha Plants'). It was full of hidden tricks and levels. It was like nothing anybody had ever seen."[3]

As these examples illustrate, there are innumerable ways to raise the WTP for products and services. Think of WTP as a wide-open construct. It is influenced by the utility of products, the pleasures they evoke, the status they confer, the joy they bring, and even by social considerations that have little to do with the characteristics of the products themselves. Lady Gaga's perfume Fame was novel, for sure—a black liquid that sprays clear—but it is safe to assume that part of its success was the association with the artist, the promise, as Gaga put it, that wearing her perfume would give customers "a sense of having me on your skin."[4] (This, by the way, also goes to show how radically WTP varies from person to person; wearing Gaga on your skin, definitely not everybody's idea of a desirable sensation.)

Of course, these descriptions of ways to increase WTP tell you nothing that you do not already know. It is common sense to develop products and services that meet the needs of customers. In fact, I don't know of any company that does not claim to serve customer needs, to be customer centric. So what's new? Isn't aspiring to raise WTP and customer delight the same as thinking about fabulous products and services?

The distinction between focusing on product and focusing on WTP is subtle—but important. A product-centric manager asks, "How can I sell more?" A person concerned with WTP wants to see her customers clap and cheer. She will seek ways to improve customers' experience even after they have committed to a purchase (figure 4-1). A product-centric manager deeply understands purchase decisions and is interested in ways to sway the customer. Managers who pay attention to WTP

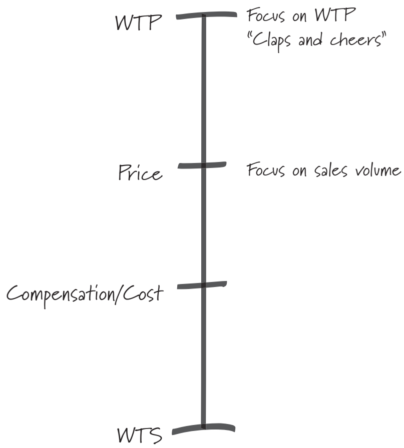

Figure 4-1 Many companies pay more attention to sales than customer WTP

consider the entire customer journey and search for opportunities to create value at every step along the way.

A few years ago, I had an interaction with a salesperson that illustrates the difference. I meant to send flowers to a friend for her birthday. Her day came and went, and somehow I forgot. A few days later, I remembered and called a shop to order flowers. It was late afternoon, and the salesperson asked whether I wanted to have the flowers delivered that day or the next. I confessed to being late for my friend's birthday and urged the salesperson to send the flowers as quickly as possible. Her response caught me by surprise: "Should we take the blame for the late delivery?" I didn't want her to lie for me, of course. But even in that brief conversation, I saw that this salesperson did not see her job as simply selling flowers; she did not suffer from a narrow product-centric mindset. Her job was to increase her customers' WTP. (The story has a perfectly predictable ending, by the way. I now receive a reminder a few days ahead of my friend's birthday, and I order my flowers, perhaps at inflated prices. But I have never even considered using another flower shop.)

Companies that focus on WTP enjoy a long-term competitive advantage for several reasons. One is that we trust companies that have our best interests at heart. In addition, these organizations are often better at identifying opportunities for value creation. They also tend to be more skillful at recognizing the needs of multiple groups of customers and intermediaries, paying attention to instances where raising the WTP for one group lowers the WTP for others. Finally, companies that raise WTP substantially benefit from customer selection effects. Let me illustrate each of these factors with an example.

Customers' Best Interests

John C. Bogle founded the Vanguard Group, today one of the world's largest investment companies, after he was fired "with enthusiasm" from his first position at Wellington Management Company. In an industry riddled with conflicts of interest—one recent US government estimate put the cost of deceptive advice from commission-hungry broker-dealers at $17 billion annually—Bogle (and Vanguard) became known as the "mutual fund investor's best friend."[5] "Our challenge at the time," he recalled, "was to build . . . a new and better way of running a mutual fund . . . and to do so in a manner that would directly benefit [our clients]."[6] Under his leadership, the company introduced no-load funds, and it brought low-cost index investing to the individual investor, long before passive investing became fashionable. First ridiculed as "un-American" and "a sure path to mediocrity," passive funds now account for almost 45 percent of all equity assets in US mutual funds and exchange-traded products.[7]

Throughout his career, the outspoken Bogle criticized his industry for high prices, misleading advertising practices, and product proliferation that creates little value for investors. In his 2010 book *Enough: True Measures of Money, Business, and Life*, he summarized Vanguard's goal and his own personal aspiration: "What I'm battling for—[giving] our citizen/investors a fair shake—is right. Mathematically right. Philosophically right. Ethically right." For Bogle, clients' WTP and customer delight always came first. It was this principle that enabled him to build one of the most successful and widely admired companies in a fiercely competitive industry. His clients always knew that Bogle had their best interests at heart.

Identifying Novel Opportunities

E-readers were the hot consumer electronics product of the late 2000s. Only a decade after they were introduced in 2004, one-third of Americans owned one.[8] A billion-dollar market had been born. Sony, the leading consumer electronics company at the time, was first to offer an e-reader, the Librie, and it was Sony that set the industry standard by adopting electronic ink, microcapsules that contain dark and white pigments that can each be stimulated to flow to the top and display one or the other color. The Librie offered an unparalleled reading experience on an electronic device.[9]

Amazon was keen to enter this fast-growing market, but its prospects seemed limited. Sony had adopted the leading technology, was first to market, and spent twice as much on marketing as its rivals.[10] Despite these advantages, Amazon beat Sony handily. By 2012, Amazon's Kindle, introduced in 2007, commanded a 62 percent market share. Sony's e-reader stood at a measly 2 percent.[11] What made the difference? Wireless access. Sony customers had to download books to their PCs (from a hard-to-navigate store with a limited selection of titles) and then transfer their purchase to the reader. When Sony upgraded its device to make PDF and ePub documents accessible, customers had to send their readers to Sony service centers to update the firmware.[12] By contrast, Amazon's Kindle offered free 3G internet access, a feature that turned books into an impulse purchase. When it was first launched, the Kindle sold out in five hours.[13]

Product-centric companies like Sony pay close attention to the quality of their devices. Sony created a wonderful reading experience, which it knew was an important factor in a customer's decision to buy the novel device. Amazon, by contrast, focused on WTP. With that broader notion, it offered convenience throughout the customer journey. By the time Sony got around to introducing wireless, it was too late. The market had tipped in Amazon's favor.

Once you start thinking in terms of WTP, new opportunities to create customer delight arise all the time, and all kinds of "obvious" decisions become a little less evident. For example, where would you install ticket vending machines in a subway? In front of the turnstile entrance, or on the platform? The question seems like a no-brainer. The machine cannot be on the platform; customers need to purchase their tickets before they go through the turnstiles. Correct! And yet, you might wonder if we would create a better customer experience if we placed machines in both places. If you watch customers waiting in line to buy a ticket or top up their subway cards today, you will see frantic activity, riders frustrated by long lines, all of them desperately trying to get their ticket as quickly as possible so as not to miss their train. Once they are on the platform, these same customers then wait patiently for the next train to arrive. How much value would we add by placing a vending machine on the platform? Would customers appreciate the opportunity to use their wait time more productively? Could we, in fact, increase WTP by allowing riders to top up their subway cards in a more leisurely fashion? Before you know it, the "obvious" placement of vending machines is a little less evident. Paying close attention to WTP throughout the customer journey allows you to see opportunities for increasing customer delight in a myriad of ways. Motivating consumers to purchase a product and facilitating its sale (by placing vending machines before the turnstiles) is a far narrower concern than the ambition to create a great customer experience.

Recognizing the Needs of Customers and Intermediaries

Bigbelly produces solar-powered trash bins (figure 4-2).[14] The bins compact trash automatically, and they alert sanitation staff when the compactors need to be emptied. The company estimates that trash collection efforts using these bins can be reduced by as much as 80 percent, saving staff time and travel cost for the sanitation department. The bins also promise an end to overflowing trash cans. When Bigbelly entered the

Figure 4-2 Bigbelly trash compactors—original model

market in 2003, cities everywhere were eager to sign on. The city of Philadelphia alone ordered close to 1,000 units.

Once installed, however, the bins quickly revealed a near-fatal flaw. Online reviews were scathing, even by the standards of today's foul-mouthed internet. One (polite) user remarked, "[The Bigbelly compactors] quickly became even more disgusting than regular trash cans. . . . You actually have to touch a handle to open the slot. Just think of all the germs passed from person to person on that grimy handle. *shudder* I can't think of a more unsanitary design for an outdoor trash can."[15] Another said, "[My wife] will only open the trash can if she has a napkin or a paper sack handy so that she never actually touches the handle with her skin. . . . I noticed that a lot of other people do the same. Sometimes people put trash on top of the container, presumably because they don't want to touch it. I don't really blame them, either: some of the trash cans look pretty grimy these days."[16]

Bigbelly had produced a near-perfect solution for one group of customers, the sanitation departments, but it paid little mind to a second group, the people who actually use the bins. Seeing the negative

Figure 4-3 Bigbelly trash compactors—new model with foot pedal

reactions to the compactors, the city of Philadelphia asked the company to replace one-quarter of its bins free of charge and develop an improved design.[17] Fortunately, Bigbelly found a simple but effective solution: it added foot pedals to the bins, re-creating the hands-free experience that people appreciate in traditional trash cans (figure 4-3).[18]

It is natural to think of your company's customers as the organizations and individuals who pay you. Bigbelly therefore focused on sanitation departments in the same way that insurance companies pay attention to brokers and consumer product organizations work closely with supermarkets. In each case, the final customer is one step removed. For a company whose sole focus is on sales and on the entity that pays the bills, it is all too easy to neglect the customer it ultimately serves. By contrast, organizations that rely on a broader yardstick—the WTP of the intermediary and the final customer—are often at a competitive advantage.

In fact, if managers universally focused on WTP, I would not have the following story to tell you. In 1997, two bright but inexperienced graduate students visited the offices of Excite, a company that had built a popular internet search engine.[19] The students met with Excite's CEO, George Bell, hoping to sell their engine, an obscure piece of software they called Backrub, for $1.6 million. To demonstrate Backrub's superiority, they searched the term *internet* on both engines. Excite prominently displayed Chinese web pages on which the word *internet* stood out. Backrub, on the other hand, provided precisely the kinds of links that users might be interested in.

How excited was Bell? Not at all. In his view, Backrub was *too* good! You see, Excite's business model was advertising. For its purposes, the longer users spent on Excite's site, and the more often they returned, the more money the company would make. In Bell's world, it was a terrible idea to quickly send users elsewhere by providing highly relevant search results. To optimize revenue, Bell explained, he wanted Excite's engine to be 80 percent as good as other engines. The Backrub deal never took place. You guessed it, of course. Those two students were Sergey Brin and Larry Page, the founders of Google. Imagine you had bought Google, now valued at more than $1 trillion, for a pittance.

Business models describe how companies capture value. Without value creation, however, the question of how you capture value is moot. Even worse, an obsession with business models can easily undermine value creation, as the Google story illustrates. From the 20th-century Phoebus cartel, which purposely limited the life of incandescent light bulbs, to today's ink cartridges whose smart chips disable printing in any color when only one of the colors falls below a certain level, history provides countless examples of firms that strengthen their ability to capture value at the expense of creating it. Is it wrong to take solace in the fact that history is generally unkind to firms that pursue these kinds of strategies? Does anyone remember Excite?

Benefiting from Customer Selection Effects

Companies that focus on WTP also perform better because they get to serve the "right" customers. Depending on how your company raises WTP, specific groups will find your product extra appealing. Consider

Discovery, a South African life and health insurance company whose ambition is to improve the health of its customers.[20] Its trademark Vitality program provides preferential access to fitness clubs; wearables allow customers to earn Vitality points by tracking their exercise; and Discovery even partners with grocery stores to offer its members healthier food. With millions of members, Discovery bills itself as "the world's largest platform for behavioral change." Founder and CEO Adrian Gore explains, "The beauty of it is the shared value it creates. . . . Our customers are given an incentive to become healthier . . . and we are able to operate with better actuarial dynamics and profitability."[21] Selection effects are critical for Discovery's success. The company increases the WTP for individuals who are health conscious. With a substantial advantage in WTP, you get to serve (often at a lower cost) the very customers for whom your value proposition is particularly attractive.

WTP as Your North Star

The difference between a product-centric mindset that is motivated mostly by sales and a mindset that focuses on WTP may seem like a fine distinction at first. The stories of Vanguard, the Kindle, Bigbelly, and Discovery show, however, how seeing the world through the lens of customer WTP can confer significant advantage.

Taking value creation seriously can have dramatic strategic consequences. Kaspi.kz, Kazakhstan's leading fintech company, abandoned its thriving credit card business because it was unable to see a way to create significant value for its customers. Chairman Mikhail Lomtadze explains, "I was giving management presentations saying how many months it takes us to make $100 million—initially, it was 18 months, but it quickly became 12 months and then 6 months. This was our metric. I was really pushing the idea [of] being efficient and profitable . . . but we ended up where most financial services end up: with customers just hating us."[22] Kaspi turned from credit cards to the seemingly humdrum business of bill payments, a serious pain point in the Kazakh economy. "There is this famous story about a university in Russia," says Lomtadze. "First, they built the buildings. But instead of paving the roads on campus, they allowed people to find their own way. Once the trails were formed, they laid the concrete. This is how we think about our process." With a beloved bill payment service at its core, Goldman Sachs–backed Kaspi went on to build an ecosystem of products that is now valued in the billions of dollars. Having learned the difference between value created and value captured in credit cards, never again did Kaspi let customers' WTP drop out of sight.

Making It Stick

Even in organizations whose culture is firmly centered on customer WTP, it is helpful to develop practices that periodically remind everyone of their firm's focus. Think of it as the organizational equivalent of Post-it Notes on your refrigerator. It is not that you don't know that your family needs a fresh carton of milk. But seeing that little pastel note on your fridge is a useful reminder nevertheless. At Harvard Business School, there is seldom a week—and rarely an important meeting—when no one mentions the mission of the school. It is not news to anyone, of course, and it can feel overly rehearsed. And yet, hearing the mission mentioned one more time, the conversation often takes on a different tone, as if by magic.

Amazon is well known for a set of practices that encourage the organization to think in terms of WTP. In Amazon meetings, there is always an empty chair. It is reserved for the customer, whom the meeting ostensibly serves.[23] When Amazon managers build a new service, they begin by writing an internal press release that announces the launch of the (not-yet-existing) service.[24] Take a look at the internal press release that Andy Jassy, CEO of AWS, wrote for Amazon's S3 storage service.[25] (This is Jassy's 31st draft, by the way.)[26]

Amazon Web Services Launches

SEATTLE—(BUSINESS WIRE)—March 14, 2006—S3 Provides Application Programming Interface for Highly Scalable, Reliable, Low-Latency Storage at Very Low Costs

Amazon Web Services today announced "Amazon S3™," a simple storage service that offers software developers a highly scalable, reliable, and low-latency data storage infrastructure at very low costs. Amazon S3 is available today at http://aws.amazon.com/s3.

Amazon S3 is storage for the Internet. It's designed to make web-scale computing easier for developers. Amazon S3 provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web. It gives any developer access to the same highly scalable, reliable, fast, inexpensive data storage infrastructure that Amazon uses to run its own global network of web sites. The service aims to maximize benefits of scale and to pass those benefits on to developers.

This practice—"working backwards" in Amazon-speak—encourages employees to determine a target audience first and then describe the appeal of the new service.[27] This exercise forces them to use language that customers understand. Ian McAllister, a former general manager at the company, explains, "If the benefits listed don't sound very interesting or exciting to customers, then perhaps they're not (and [the product] shouldn't be built). Instead, the product manager should keep iterating on the press release until they've come up with benefits that actually sound like benefits. Iterating on a press release is a lot less expensive than iterating on the product itself (and quicker!)."[28]

As this chapter illustrates, companies that center their strategy on WTP find a rich set of opportunities. The concept is so simple: increase the maximum amount that a customer would ever be willing to pay for your product. The resulting opportunities, however, are extraordinary. As you begin to use the value stick and WTP to formulate your company's strategy, keep these considerations in mind.

- ***A sales-focused mindset risks ignoring opportunities to raise customer WTP.*** In a product-centric organization, you thrive when you increase transaction volume. Organizations that train their lens on WTP have a richer set of avenues to create value and are often more successful for exactly this reason.
- ***An obsession with business models—how you capture value—is particularly risky, because value capture is a zero-sum game:*** from the very beginning, you accept that your success makes customers worse off.
- ***Interdependence is the rule, not the exception.*** WTP, price, cost, and willingness-to-sell (WTS) are all connected. When you increase WTP, the other elements that make up the value stick will typically move as well. The WTP for Apple products is truly remarkable, but the company incurs extra cost to lift its WTP. Despite its value as a strategic guide, do not consider WTP in isolation. It is important to keep in mind the insight from chapter 3: the ultimate arbiter of strategic success is an increase in customer delight, not WTP per se.
- ***Leading need not mean winning.*** Because companies compete for business by offering greater customer delight, having the best quality in the market or being the most admired organization is no guarantee of success. Even companies with middling products can delight customers in extraordinary ways. The Toyota Corolla, one of the entries on my list of stellar product launches, is a good example. By all accounts, the Corolla, first built in 1966, was a modest vehicle. To increase its appeal and raise WTP, the Corolla's designer, Tatsuo Hasegawa, provided drivers with splashes of excellence: separate bucket-type seats, a sporty floor-mounted

Figure 4-4 The 1966 Toyota Corolla (left) and the 1966 Pontiac Bonneville

gearshift, and aluminum headlight enclosures (figure 4-4).[29] Yet in the late 1960s, no one would have placed the Corolla in a lineup of cool cars with high WTP. After all, who would drive a Corolla if you could race a Pontiac Bonneville? So how did the Corolla manage to outsell the Bonneville? Customer delight! At ¥432,000 ($1,200 in 1966, $9,560 in current dollars), the Corolla was a steal. When Corollas were introduced in America in the late 1960s, customers found them to be so simple and reliable that they quickly became a favorite among first-time buyers and middle-income Americans who purchased a second car.[30] Toyota built its North American beachhead not by beating Detroit in terms of WTP; the company was second to none when it came to customer delight.

- ***What do executives love best about customer delight? The fact that it is highly contagious.*** Just ask David Vélez, CEO of Brazil's Nubank, the world's largest independent digital bank. Nubank gains more than 40,000 customers each day, 80 percent of them through referrals from existing customers. "Nubank has not had to spend a dollar on customer acquisition," says Vélez.[31] When the neobank announced its credit card for Mexico in 2020, 30,000 people joined the wait-list. Nubank's secret? "We want customers to love us fanatically."[32]

5

Hiding in Plain Sight

Near-Customers

In the early 2000s, Meg Whitman, CEO of eBay, was thrilled about her company's prospects in the burgeoning Chinese market: "We think China has tremendous long-term potential and we want to do everything we can to maintain our No. 1 position. . . . Ten to 15 years from now, China can be eBay's largest market on a global basis."[1] Whitman's enthusiasm was not difficult to understand. In 2002, eBay had entered China by investing US$30 million in a local company called EachNet, a Chinese C2C marketplace founded by two HBS graduates: Tan Haiyin and Shao Yibo. A year later, eBay acquired EachNet outright. The company's future seemed exceptionally bright; it commanded an 85 percent market share, and 62 percent of its customers reported they were *very satisfied* or *satisfied* with the company's services.[2] Although shopping online was still novel at the time, the market potential was enormous. By 2004, China had 90 million internet users, nearly half of whom had broadband access.

Enter Taobao ("hunting for treasures"), a small startup launched by Alibaba founder Jack Ma. Alibaba was a B2B business that helped small and medium-sized Chinese companies sell products online and export to distant markets. Ma, concerned that eBay's most active users, its "power sellers," would eventually come to compete with Alibaba, had launched Taobao as a means of slowing down eBay's ascent. However, rather than stealing eBay's current customers—a prospect that seemed daunting given the company's stellar performance—Taobao focused on a different segment: *near-customers*, a group of consumers who liked the idea of shopping online but who were wary about actually making a purchase.

Everything about Taobao was targeted at these near-customers. The site provided an escrow service, Alipay, which made sure that anxious customers had to pay only if sellers did in fact ship a product. Porter Erisman, Alibaba's vice president of international corporate affairs at the time, explained, "Alipay was critical to Taobao's development. Even when buyers see a seller with high ratings, a lack of trust still creates a big challenge. Alipay eliminates the settlement risk. The payment mechanism itself is not important. Payment is easy in China, but banks cannot address the settlement risk. This is where Alipay comes in."[3] A second critical feature was Wang Wang, an instant messaging service that allowed hesitant buyers to speak to sellers and haggle for better prices. The website design, initially an uninspired knockoff of eBay's US site, eventually came to resemble the layout of a brick-and-mortar department store, so customers felt comfortable in the familiar surroundings. Taobao also asked sellers to use their national identity card to register with the site, providing buyers with the assurance that the true identity of sellers was known. In contrast to eBay, which targeted the tech-savvy early adopters of online shopping, Taobao focused on a segment of near-customers who were not (yet) in the market.

As it turned out, Taobao's group of near-customers grew far more rapidly than eBay's clientele. By 2007, eBay's market share had fallen to 7 percent; Taobao's stood at 84 percent. With its hopes for market leadership dashed, eBay abandoned the Chinese market in 2006.

I have no doubt that your company is intimately familiar with its customers. Every successful business is. The internet provides firms with the ability to follow customers' every step and develop a deep understanding of the people they serve. You probably also know quite a bit about the customers of rival firms. Competitive intelligence reports, in particular, can give you a good sense of the overall market, including prospective customers who shop elsewhere. But how much do you know about individuals (or businesses) who are *not* currently active in your market? Is it really true that they would never, ever purchase your product? Are you perhaps just a small twist away from turning them into customers (figure 5-1)?

Most managers pay scant attention to consumers who are not in the market. Once the addressable market is defined, the conventional thinking goes, why waste time chasing unlikely prospects? But as Taobao's success illustrates, attractive business opportunities may hide in plain sight, in the very near-customer segments that we tend to write off. Drastic misperceptions are one reason why these segments may seem impenetrable. Recall that willingness-to-pay (WTP) and customer delight reflect opinions and impressions, not facts and figures. If near-customers hold misguided views, it is challenging to see their true demand for a product or a service. Take life insurance as an example. In the United States,

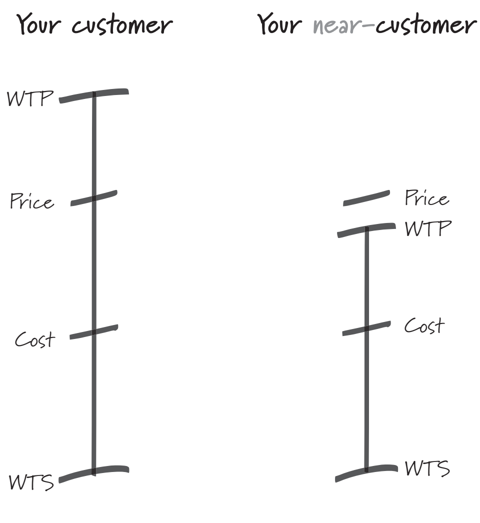

Figure 5-1 Near-customers

large segments of the population do not own life insurance. It is natural to suspect that the split between customers and non-customers occurs largely along income lines. While there is some truth to this, the reality is more complex (figure 5-2).[4]

Even among households with an annual income of more than $125,000, 41 percent do not own life insurance. Misperceptions are often the root cause. For example, 44 percent of millennials and one-quarter of the overall population believe that insurance for a healthy 30-year-old costs more than $1,000 annually (versus the true cost, $160). Almost four in ten millennials believe they are unlikely to qualify for coverage. (In fact, younger persons are highly likely to qualify.) And more than 50 percent say they don't know what type or how much life insurance to purchase.[5] Misperceptions such as these can easily create a vicious cycle. If near-customers express little interest, marketing campaigns and salespeople are unlikely to address them, and so the misconceptions persist. In fact, the overwhelming majority of people who lack a good understanding of life insurance report that they have never been approached by an insurance company.

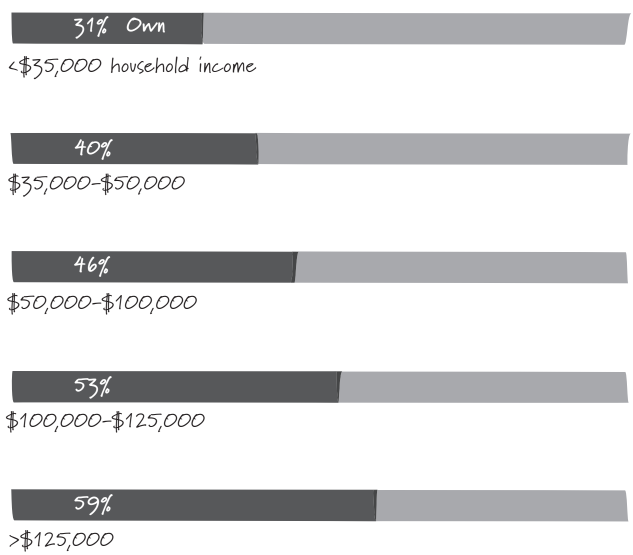

Figure 5-2 US life insurance penetration

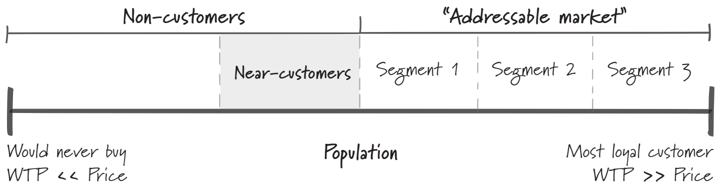

Figure 5-3 Customers and near-customers

Of course, not every customer who is not in the market represents an attractive target. Think of a continuum of individuals ranging from those who would never buy your product to the most loyal group (figure 5-3).

Near-customers are the ones whose WTP is fairly close to the level that is required to make a purchase. Understanding the determinants of this group's WTP can reveal substantial business opportunities. It is useful to ask, Why are your near-customers not in the market for your product? Do they misperceive its value? How might you tweak your offering to boost their WTP and turn them into buyers?

Studies of customer journeys often reveal why near-customers do not buy. For instance, the reasons why people abandon online shopping carts suggest multiple ways to boost WTP. As figure 5-4 shows, even a simple feature that auto-fills shipping address information can make a difference.[6]

Figure 5-4 also suggests that serving near-customers can be complex and expensive. Expedited shipping and safe storage of credit card information, for example, are certainly not trivial matters. But the more general notion that catering to the tastes of near-customers is always complicated and expensive is mistaken. Take the market for wine storage cabinets, for example. EuroCave, a French company founded by a group of wine enthusiasts in 1976, is the leading producer of these storage cabinets. Its products are anything but ordinary. High-precision sensors ensure a perfect temperature, humidity controls prevent corks from drying out, and thermal barriers provide insulation that is as effective as almost two meters of earth.

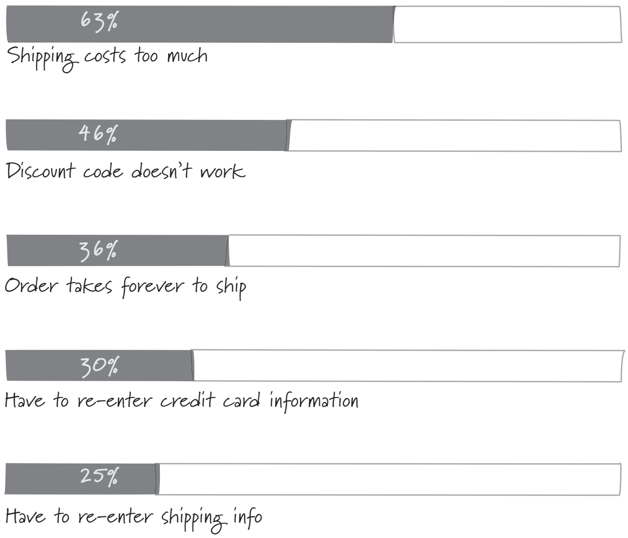

Figure 5-4 Primary reason for digital shoppers to abandon their cart

When Haier, a Chinese manufacturer of household appliances, entered the market for wine storage, experts and aficionados were skeptical. Would the Haier products live up to the exacting demands of long-term storage? In their early days, they did not. As one disappointed customer remarked, "After running a Haier wine cellar for about 4 years, I lost my entire wine collection. Why? Vibrations. After pulling bottle after bottle of wine and finding that they had gone off, I began investigating why. At first I thought it was temperature fluctuations, or the fact that the tinted glass may not be UV-resistant. However, the final answer came when I tested for vibrations. And there are *a lot* of vibrations in the interior. I lost 60+ bottles of premium wine; don't make the same mistake."[7]

Subsequent tests showed that EuroCave's cabinet had vibration levels that were six times lower than those of competing products. To the surprise of many, however, Haier's wine storage cabinets went on to become a significant commercial success. The company's share in the market for wine storage cabinets and coolers stands now at close to 20 percent.* Who buys a vibrating cabinet that can ruin a prized collection of wine?

In hindsight, the answer is simple. Haier's products appeal to customers who consume their wine quickly. EuroCave cabinets are optimized for collectors; they offer (costly) features that have little value to casual consumers. Even in France, where the average person stores 68 bottles, more than 40 percent of all wine is consumed within a short period of time.[8] Near-customers present an even greater opportunity in other countries, where wine maturation is less common. While our intuition often leads us to believe that we need to offer more to win over near-customers, Haier (and many other companies) have succeeded by offering less.

When seeking business success with near-customers in mind, ask the following questions.

- ***Do you have a deep understanding of the reasons why some individuals do not consider your products or services?*** Near-customers can represent a significant business opportunity, but they are easy to overlook because addressable-market analyses and existing marketing initiatives typically provide little information about these groups.

- ***Do stereotypes prevent your organization from learning more about near-customers?*** Inaccurate beliefs about groups are not uncommon, and they can easily obscure the business potential of near-customers.[9]

*Haier produces storage cabinets with compressors and smaller units with thermoelectric cooling. The latter have a more limited capacity to achieve the lower temperatures that are ideal for long-term storage of wine.

- *Do you* **assume** *that serving near-customers will require significant investments in product or service?* As the Haier example shows, offering less can be attractive. Keep in mind that near-customers are new to your category and brand. Keeping it simple is usually an advantage.[10]
- *Do your incentive systems discourage interactions with near-customers?* An emphasis on quick wins drives current success, exploring opportunities with near-customers is an investment. Incentives help determine how your organization trades off these considerations.

6

Looking for Helpers

Winning with Complements

Suppose you are planning a trip to Paris and would like to spend one evening at a great restaurant. How do you know where to go? Ask a friend? Search LaFourchette or Le Fooding? Browse Tripadvisor or Eater? If you were interested in the very best, chances are you would ask a producer of automobile tires. Yes, automobile tires! I am thinking of Michelin and its famous restaurant guide, of course. But isn't this strange? How did a company that produces tires end up creating an influential restaurant rating system? Why does Michelin even have a guide?

To find out, let's travel back in time. We meet Édouard and André, the two Michelin brothers, on a warm summer day in 1891.[1] One of their customers, a fellow called Grand Pierre, pushes his velocipede into Édouard's workshop in Clermont-Ferrand, a city in central France. The shop keeps a few spare tires in stock, but neither brother knows much about tires or the tire business. The only rubber product that Michelin produces at this point is a brake shoe for horse-drawn carriages. Inspecting the velocipede, they quickly discover that it uses one of these newfangled pneumatic tires that had been invented in England. The miserable road conditions of the 19th century make air-filled tires a dream come true—riders are much more comfortable when they are cushioned by shock-absorbing tires—and, at the same time, a nightmare. These tires blow out all the time!

Much to Édouard's surprise, changing Grand Pierre's tires turns out to be a major undertaking. It takes his crew hours to replace them, because they are glued to the wooden rim of the wheel. Édouard keeps the velocipede overnight—the glue takes time to dry—and, curious what it is like to ride on pneumatic tires, he takes the bike for a spin the next day. Minutes later, he is back at the shop. The tires are flat again. Recollecting this experience, Édouard says he learned two things: "Number one, tires are the future. Number two, Grand Pierre's tires are beneath contempt." Air-filled tires are here to stay, he tells his chief engineer, "but we've got to find a way to replace an inner tube in fifteen minutes without calling in a specialist."[2]

And they succeeded. Michelin's first contribution to the nascent pneumatic tire industry was a design that used nuts and bolts to hold the tires in place instead of glue, shortening the time to change a tire from hours to minutes. To promote their new product, the brothers organized a bike race from Paris to Clermont-Ferrand. Just outside Nevers, Édouard seeded the road with nails, thus making sure every rider had an opportunity to experience how easy it was to change a flat Michelin tire.[3] In a leading sports magazine, the brothers explained, "We hope that after this race no one will try to tell us that nails are an insurmountable obstacle for tires, at least for air-filled Michelins."[4]

The brothers' timing was fortuitous. Not only did pneumatic tires become popular among cyclists, but the company also found eager customers among early automobile enthusiasts. By 1898, Michelin had become the exclusive supplier to many of the leading carmakers of the time: Bollé, DeDion & Bouton, Peugeot, and Panhard & Levassor. The brothers faced one significant challenge. The market for cars was tiny, limiting the company's growth prospects. At the time, driving an automobile was considered primarily a sport. Cars delivered exciting races, not people or packages. In 1900, France had only 5,600 drivers (but 619 companies that built cars). Handcrafted automobiles were a hobby for the rich, not yet a mass market. Faced with limited demand, the Michelin brothers made it their business to encourage driving and expand the use of cars. Thus was born the idea for the now-famous Michelin guide. When it was first published in 1900, it included hundreds of maps. Cars were more useful, the brothers recognized, if drivers knew where to go and how to enjoy themselves along the road.[5]

Products and services that raise the willingness-to-pay (WTP) for another product are called *complements*. These (easily overlooked) helpers contribute substantially to the WTP of just about every product ever created. Just think of all the complements without which cars would be far less valuable: roads, parking garages, gas stations, repair shops, GPS, and driving schools (figure 6-1).

The purpose of the Michelin guide was to provide comprehensive information about the availability and the price of complements for cars and tires. Its maps showed which roads were paved (indicating "tedious" routes and those that were "picturesque"); where to find gas stations (in 1900, all of France had fewer than 4,000 shops that sold gasoline, many

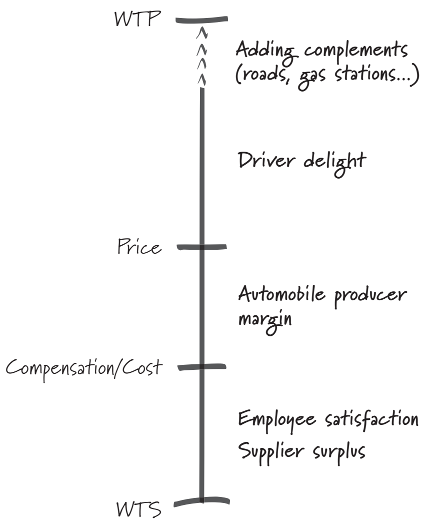

Figure 6-1 Complements for automobiles

of them pharmacies); how to locate charging stations (batteries needed to be recharged often back then); which repair shops to trust (they all stocked Michelin tires, of course); where to eat well (hence the stars!) and stay overnight. Michelin also lobbied the government to put up road signs, another complement, and company employees installed some signs themselves.[6]

It is difficult to overestimate the importance of complements. Without them, the WTP for many products and services would be far lower, sometimes even zero. Smartphones and applications, printers and cartridges, coffee machines and capsules, ebooks and tablets, razors and blades, sandals and pedicures, electric cars and charging stations, soup and bowls, chips and salsa, left shoes and right shoes, a second chopstick: complements are everywhere. In Édouard's imagination, even nails served as a complement for pneumatic tires.* Think about your own business. What complements raise the WTP for your products and services?

Michelin is not unusual inasmuch as it entered a seemingly unrelated industry—travel guides—because that industry produced a complement. Why did Amazon, not a company known for consumer electronics, produce the Kindle? (It wanted to raise the WTP for ebooks.) Why did Alibaba, not a financial-services firm, create Alipay? (The escrow service built trust and raised buyers' WTP to transact on the platform.) Why did Microsoft, not an entertainment company, invest in the Minecraft video game? (It wanted to raise the WTP for its virtual reality headsets.) Why does Dunkin' Donuts sell coffee? (You got it.)

Complements are particularly powerful if they raise the WTP for your product specifically. Apple's FaceTime application raises the WTP for iPhones but not for Android devices, creating an advantage for Apple. Nespresso capsules exclusively enhance the value of Nespresso-compatible coffee machines. Tesla Superchargers supply power only to Tesla's cars.[7]

*The use of nails was actually more insidious. Nails lowered the WTP for tires in general, but less so for the easy-to-change Michelin tires, creating a competitive advantage for the company.

This type of exclusivity has two effects. It raises the WTP for a firm's product—Tesla drivers benefit from the extensive charging network—but it also slows the adoption of battery-powered vehicles more generally. The Michelin guide, by contrast, benefited every tire producer. With a market share of close to 70 percent, Michelin had the strongest incentive to produce this complement. But Dunlop and Continental, Michelin's closest competitors, reaped the benefits of the guide as well. The exclusivity decision is particularly important for emerging industries and product categories. Ask yourself how your company benefits most. If you want to grow the category—a rising tide lifts all boats—non-proprietary, industry-level complements suit your needs best. If your goal is to gain market share, proprietary complements are more powerful.

Did your company choose this latter option? If so, watch out for entrepreneurs who create value by breaking exclusivity and creating industrywide complements. For example, Nigerian digital payments firm Interswitch, now one of Africa's most valuable fintech companies, built its business by connecting ATMs and points of sale across banks. More convenient access to one's account created substantial customer delight, carrying large sums of cash was no longer necessary. Interconnected ATMs also raised overall demand for banking services and contributed to bank profitability.[8] However, not every bank benefited to the same extent. Financial institutions with the largest number of ATMs lost that competitive edge once the machines became interchangeable. How did Interswitch founder Mitchell Elegbe convince even the large players to join his network? By sharing the value he created: "Though Interswitch was my idea, I gave up [some] ownership," he says. "It was more important to see the vision come to fruition than owning the [entire] organization."[9]

As the Michelin story illustrates, complements are not a new phenomenon. In the past few decades, however, companies have become increasingly sophisticated in creating value through complements. In the rest of this chapter, I will describe how the best companies discover, price, and measure the effects of complements.

Discovering Complements

Companies are often counseled to focus on a limited set of products and services. As a rule, this is good advice. Mastering new activities is challenging, and collaborating with companies that possess specialized knowledge often beats in-house production. But focus must not be taken to mean that you overlook factors that help lift the WTP for your products. In chapter 4, we saw how Amazon beat Sony in the market for e-readers by incorporating wireless capability into its Kindle. More generally, I have encouraged you to focus not on the sale of your current product but on customer WTP. Now I will ask you to adopt an even wider lens and take on a perspective that includes complements, many of which may seem completely unrelated to your business.

When I introduce the concept of complements in my courses, I often ask participants how they would increase the WTP for a moviegoing experience. The most common suggestions I receive are installing more comfortable seats, improving sound, and enabling online seat reservations. Note that all of these ideas improve the WTP for the experience itself. This is how we usually think about creating value; we focus on making the products themselves more attractive. When I push for complements, I often hear popcorn, sometimes alcoholic beverages. Seldom does anyone mention parking.

What I learn from such responses is that it is not easy to discover complements. We know they are important, but seeing them is not straightforward. Take, for example, Harkins Theatres, an Arizona-based chain of movie theaters. Harkins offers its patrons childcare services so that parents can go to the movies without having to organize a babysitter. Each Harkins PlayCenter is staffed with trained childcare workers who look after the children while the parents enjoy their movie night. Each parent carries a pager so that Harkins can reach them in case of emergency. How did Harkins discover this attractive complement? Introspection! CEO Mike Bowers remembers, "We opened the first PlayCenter in 2001. At that time, my three kids were very small, and even I, as an executive in the industry, was not able to be spontaneous and go to the movies when I wanted to. I asked myself, 'How many people are in my situation? If I can't go to the movies—for free—how do I expect other people in my situation to go?'"[10]

Parents pay $8.50 (the cost of a children's movie ticket) to drop off a child at a PlayCenter. As Bowers explains, the service breaks even: "There are many factors to consider. How much do the parents spend when they come to the theater? How often do they come? How many others do they bring? The PlayCenters are such an amenity; they provide such esprit de corps for the guest. Even guests who don't utilize them appreciate that they exist. No one in the auditorium has to be concerned about a child interrupting the show. The centers contribute to loyalty and feel good more broadly."

Harkins was fortunate in that Bowers was able to rely on his personal experience to identify childcare services as a valuable complement to seeing a movie. Other techniques to discover complements include detailed customer journey analyses and focus groups. It is often helpful to ask what customers do *before* they interact with your business. Is there a step that is difficult to take? Are there moments when many customers give up?

The Harkins childcare service exhibits many of the features that are typical of complements. It increases the WTP for another product (seeing a movie), and it allows businesses to shift value from one service (taking care of children) to others (sales at the concession stand, revenue from tickets). Let's take a closer look at ways to compete across bundles of products and services.

Shifting Value

In the early 2010s, the world of renewable energy experienced a sunny revolution. Within a few years, the price of photovoltaic cells fell dramatically, making solar energy far more competitive than before. For residential systems, the price of a kilowatt of installed capacity tumbled

Figure 6-2 Price of photovoltaic systems in the United States

from $7,045 in 2010 to $3,054 in 2013.[11] Commercial applications delivered even lower costs (figure 6-2).[12]

Greater cell efficiency, larger installations, and economies of scale all contributed to the stunning price decline.[13] A closer inspection of the data reveals an interesting pattern. The cost of a photovoltaic system includes the cost of the modules and what experts call *soft costs*: installation, permits, and taxes.[14] And while hardware costs fell dramatically, the price of the soft components actually increased (or held steady, in the case of residential applications), allowing the firms that install solar panels to make a profit.[15]

What you see in figure 6-3 is the reflection of a mechanism with profound strategic implications. Solar panels and installation services are complements, of course. Whenever the price of a complement declines, the WTP for the other product increases.* In our example, cheaper panels raised the WTP for installation services, which, in turn, allowed solar installers to increase their margins (figure 6-4).

*This is, in fact, the formal definition of a complement. If a drop in the price of one product increases the WTP of another, the two products are complements.

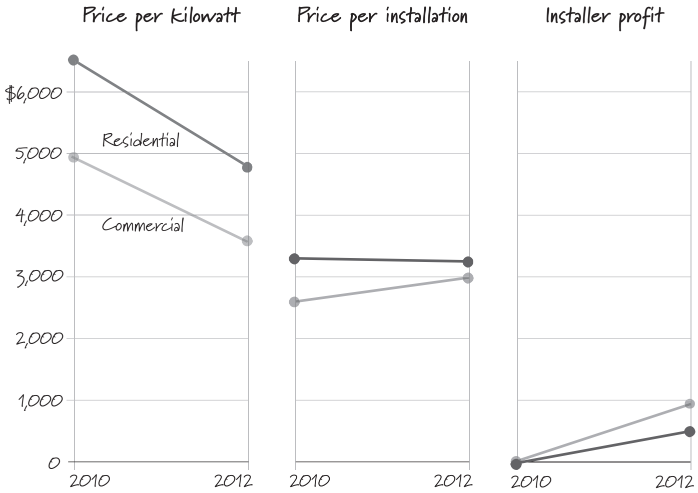

Figure 6-3 Photovoltaic systems installer prices and profits

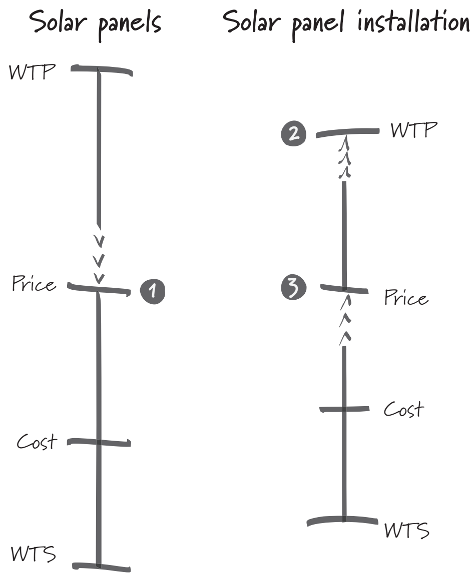

Figure 6-4 Price dynamics with complements

You are already familiar with many instances where this mechanism is at play. Consumers purchase bigger cars when gasoline is less expensive. We don't mind spending hundreds of dollars on smartphones so long as there are lots of free (or cheap) applications available. Concert prices rose quickly once recorded music was freely available on the internet.[16] In each of these instances, falling prices for one product raised the WTP for a complement. In business, we typically treat falling prices as bad news because it is more difficult to be profitable when pricing pressures mount. This view is incomplete, however. What really happens is more subtle. When prices fall, value shifts; it moves from the less-expensive product to its complements.

Frenemies

In early 2019, Daniel Ek, CEO of the music streaming company Spotify, received an unpleasant, bitter-sounding letter. It was from a group of songwriters and producers complaining about Spotify's attempt to roll back the more generous royalty rate that the writers had been granted by the Copyright Royalty Board: "You created a songwriter relations team and ingratiated Spotify into our community. . . . You are the only provider that made us feel we were working to build a modern music industry together. Now we can see the real reason for your songwriter outreach. You have used us and tried to divide us."[17]

The songwriters' collaboration with Spotify ended in disappointment because they had misunderstood their relationship with the company. True, songwriting and streaming are complements. Songwriting skills are more valuable when streaming technology allows millions of people to listen to tracks, and Spotify benefits from the broad availability of popular music. But a complementor is not your friend. Complementors appreciate each other because they jointly create value. And they quarrel over how to share that value. Spotify, for instance, organizes the annual Secret Genius Awards, an event that showcases songwriters.[18] The awards are a wonderful event for talented writers who rarely get to take center stage, and they are great PR for Spotify. This is the value-creating part of the relationship. But if the writers thought that a friendly Spotify would allow them to easily cash in on their newfound prominence, they were dead wrong. The company pushed back hard when the writers sought higher royalties for themselves. We see in their dispute how complementors battle for their share of a common pool of value.

Spotify is not unusually greedy. Complementors always hope to grab more value from their partner. Intel wants Windows to be inexpensive. Sony loves to see price competition among video game producers. Boatbuilders benefit when the price of sails declines. Car manufacturers hope that car insurance rates drop. Complementors are frenemies: friends because they collaborate to create value, enemies because each wishes to lower the price of the other's product.

In battles between complementors, there is more at stake than in ordinary negotiations between companies and their suppliers. If a skilled negotiator manages to procure a product at a 10 percent discount, the benefit to her company is that discount. But if you manage to lower the price of a complement, two things happen. You receive a discount and, in addition, an increase in the WTP for your product, giving you greater pricing flexibility. No wonder disputes between complementors are particularly heated!

As you explore the importance of complements for your organization, remember that working with complementors can be difficult emotionally. Feeling bitter and disappointed when they seek to capture value will make it more challenging for you to see the next set of opportunities for collaboration. At the same time, a naive attitude that sees complementors as friends can leave your business with little protection from value-grabbing complementors. The most successful executives maintain a delicate emotional balance in their relationship with complementors: optimistic with regard to the promise of collaboration and, at the same time, realistic about the need to share (and occasionally fight for) their slice of the pie.

Profit Pools

Some companies don't have to worry about frenemy-complementors; they offer their own complements. Michelin has tires and guides. Gillette manufactures blades and razors. Apple created portables and iTunes. Some companies use their own complements to differentiate a core service in which they enjoy little advantage. For example, Indian ride-sharing company Ola Cabs offers a suite of payment options, including OlaMoney Prepaid and Postpaid (customers pay for all their in-app purchases every other week) and even OlaMoney Hospicash, which covers travel to hospitals and post-discharge expenditures. An important strategic advantage of all these companies is that they get to shift profits from one complement to another. If you are Gillette, you can decide whether you want to make money with razors, with blades, or with both products. How do the smartest companies make this decision?

A common recommendation is to give away the "core product" and increase the price of the complement.[19] Gillette does exactly this. It keeps the price of razors low, and it earns substantial margins on blades. But how do we know which product is "core"? Why didn't Gillette think of the blades as being core? It is the blades, really, that contain much of Gillette's sophisticated technology.

Technology companies face similar questions. Some underprice their hardware and make money on software. This is the path Amazon follows. It gives away its Kindle at cost, and that raises readers' WTP for ebooks. Phil Spencer, who leads gaming at Microsoft, explains his approach to pricing: "In aggregate, you should think the hardware part of the console business is not the money-making part of the business. The money-making part is in selling games."[20]

But then there is Apple. It follows exactly the opposite strategy. It sells hardware at a premium and gives away software. When the company introduced iTunes, not only was the software free, but Apple also gave away the entire value of music. After paying music labels about 70 cents for each song downloaded from iTunes, the 99-cent price tag barely covered the cost of credit card processing and Apple's own operations.[21]

Rather than thinking about the type of product to determine how it should be priced—core versus peripheral, software versus hardware—it is more useful to see the pricing decision as guided by concerns about competition. Apple's history teaches this lesson beautifully. When it first launched iTunes in 2001 and the App Store in 2008, neither service generated significant profit. Apple kept the prices of music and applications low to generate exceptional margins on the sale of iPods (introduced in 2001), iPhones (2007), and iPads (2010). How did these margins change over time? To give an apples-to-apples comparison, I have created an index that sets the gross profit for hardware (say, an iPhone) and the gross profit for a typical application to 100 in 2009 (figure 6-5).[22] Look at the dramatic shift in profit pools!

While Apple's gross margins on hardware fell over time—they dropped from an estimated 62 percent to 38 percent for the iPhone between 2009 and 2018—the company turned the App Store into a formidable engine of profitable growth. By the way, you should take the numbers in figure 6-5 with a grain of salt. Calculating Apple's gross margins is tricky.* But thanks to the remarkable detective work of analysts Horace Dediu and Kulbinder Garcha—figure 6-5 is based on their analyses—the

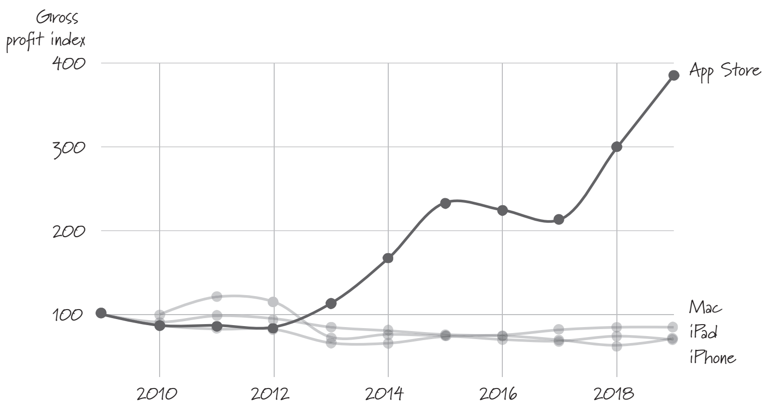

Figure 6-5 Unit gross profit for Apple products, 2009–2019

*Even learning how much customers spend on applications is not easy. Apple reports actual spending if it sets the price of an application, but only its revenue share if the developer determines the price.

overall story is clear. In a dramatic strategic move, Apple shifted its profit pool from hardware to software. Not surprisingly, the company is now in a battle with the Coalition for App Fairness, a group of complementors that includes Epic Games, Spotify, Match.com, and Basecamp. The Coalition wants Apple to reduce its store commissions and refrain from using its control over iOS to favor its own services.[23]

What prompted Apple's reorientation? Competition. Shortly after their release, neither the iPod nor the iPhone had any serious competitors. Now, however, customers can select phones from a long list of products with similar functionality and performance.[24] Even your next phone is no longer so different from your old phone these days. By offering a value stick that is minimally differentiated in hardware, Apple is moving its profit pool to complements (figure 6-6). Hardware prices are falling, the WTP for applications is being pushed up, and profits are shifting to services.

The ability to move pools of profit from intensely competitive domains to calmer waters is one of the great benefits of producing complements

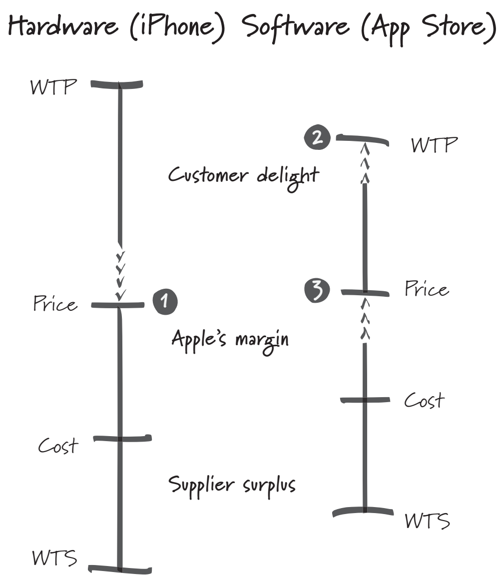

Figure 6-6 Apple's shift in profit pools

in-house and controlling their supply, as Apple does.* The moment competition heats up, you see companies shelter profits by dropping prices in competitive arenas, which raises WTP in better-protected domains and permits the shift in profit.[25]

As you think about how to price complements, it is helpful to consider the two extreme options. What if you made the bulk of profits with your main product and gave away the complements? What if you were to do the reverse? For both scenarios, you need to know how much competition you would face. Will customers turn to substitutes the moment you raise prices? Will powerful suppliers increase the cost of inputs once they see your impressive margins? The greater the difference in competition across your main product and its complements, the more attractive it will be to shift your profits away from hotly contested markets.

Competition is the most important but not the only factor that guides the monetization of complements. Product variety and the timing of consumer purchases also help you decide how to shift profits. Consider product variety first. If complements vary dramatically in the degree to which they create customer delight, shifting the profit pool toward these complements makes it easier to share value with your customers. For example, the most elaborate Xbox games run in the hundreds of dollars, but many games cost less than $20. Because the size of the value pool differs from game to game to such a great extent, Microsoft keeps the price of the Xbox low and shifts profits from the console to the games.

The timing of purchase decisions is another factor to consider. The sale of many complements occurs over time. You buy the razor today, and many blades over a substantial period of time. If consumers don't anticipate perfectly how much they will spend on blades when buying the razor, shifting the profit pool to the blades makes sense. But be careful! An obvious downside of this pricing strategy is that it will not endear

*Apple does not directly control the price of many applications. However, the company approves new apps, and it controls which apps users see when they search for software. In fact, Apple's influence, which some see as anticompetitive, is now the target of an antitrust lawsuit.

you to your customers. They will feel trapped by their initial purchase of the inexpensive razor and will be on the lookout for products that create greater value. As Gillette learned the hard way when Dollar Shave Club and Harry's entered the market with lower-cost blade-subscription models, this pricing strategy can easily backfire.

As I think about complements, the following observations strike me as particularly important.

- *Complements help raise WTP.* The currency that counts in competition is customer delight, and complements are a powerful means of increasing WTP and, as a result, creating more value for customers.
- *Complements often seem unrelated to the core of your business.* Identifying them requires you to think creatively about customer journeys.
- *We want complements to be inexpensive (unless we sell them).* A drop in the price of a complement increases the WTP for the other product.
- *Complementors are frenemies.* They jointly create value, and they haggle, sometimes bitterly, over its division.
- *Companies that produce their own complements get to shift profit pools from one complement to another.*

7

Friend or Foe?

Distinguishing between complements and substitutes is straightforward—in hindsight. When new technologies and business models first emerge, however, it is often hard to differentiate the two. If you are a banker, is blockchain your friend? A foe? The technology might be a complement if it makes financial transactions faster and more secure. It could be a *substitute* if it displaces traditional payment services with cryptocurrencies and fundraising through coin offerings.

Consider food delivery services such as China's Ele.me, Brazil's iFood, and America's DoorDash: Are they complements or substitutes for restaurants? They are complements if customers rely on delivery services to discover new restaurants they hope to visit. They are substitutes if tables remain empty because people order out. Is India's BYJU'S, a leader in personalized online learning, a substitute or a complement to traditional in-person instruction?[1] In all of these cases, it isn't entirely clear if we are seeing a complement or a substitute (figure 7-1).

Business history provides numerous examples that illustrate how difficult it is to recognize complements. When radio became popular in the 1920s, the American Society of Composers, Authors and Publishers (ASCAP) battled the new medium, convinced that radio would reduce

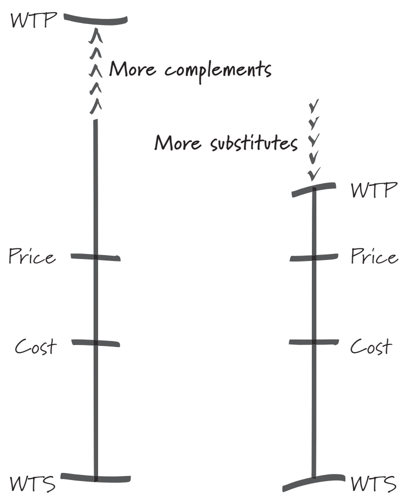

Figure 7-1 Difficult to distinguish: Complements and substitutes

record sales and, more important at the time, shrink revenue from sheet music. To choke off radio, ASCAP raised its licensing fees by 70 percent in the late 1930s and again in 1940. Broadcasters responded with a boycott. For almost a year, radio audiences in the United States heard virtually no copyright-protected music. All of a sudden, Stephen Foster's long-forgotten "Jeannie with the Light Brown Hair," a song in the public domain, filled the airwaves again.[2]

By the 1950s, however, ASCAP's mistake was readily apparent. Radio was not a substitute for records; it was a complement, a means to advertise music and raise listeners' appreciation for particular songs. Now the payment streams reversed: instead of charging astronomical licensing fees, record companies paid DJs to play particular songs.* The first type of mistake businesses often make is that they misjudge the relationship between two products, seeing them as substitutes when they are, in fact, complements. In hindsight, we see things more clearly, of course. But at

*Some industry players even triggered payola scandals by not properly disclosing these arrangements.

the time, the mistake was completely understandable. Wouldn't you have thought that playing music for free would reduce the demand for records?

In other instances, it is difficult to predict how the relationship between two products will evolve over time. Computers and paper are a good example. Look around your office. Has the paperless office arrived yet? If my cluttered desk is any indication, it has not. When *Businessweek* asked experts in 1975 what an office would be like in 1990, George E. Pake, then head of the famous Xerox Palo Alto Research Center (PARC), was eerily accurate in many of his predictions: "There is absolutely no question that there will be a revolution in the office over the next 20 years," he explained. "[Technology] will change the office like the jet plane revolutionized travel and the way that TV has altered family life. I'll be able to call up documents from my files on the screen, or by pressing a button. I can get my mail or any messages." But even a genius like Pake failed to see the effect of technology on paper. His prediction at the time: "I don't know how much hard copy I'll want in this world."[3]

Computers arrived, as predicted, and the consumption of paper exploded. Computers and printers proved to be complements, not substitutes. From 1980 to 2000, office paper consumption in the United States almost doubled.[4] PCs made printing much easier, and people loved reviewing printed documents, at least for a short while (45 percent of paper printed in offices is trashed by the end of the day).[5] To some extent, the surprising complementarity between computers and paper reflected the state of technology.[6] Early PCs often crashed—better have a backup copy—and software was often unable to accurately render documents produced in other applications. Add the low cost of printing and the general human reluctance to adopt change, and you end up with a strong complementarity between computers, printers, and paper.

More recently, however, the complementarity has weakened and perhaps even reversed. Since 2000, US office paper consumption has declined by 40 percent. "The explanation seems to be sociological rather than technological," argues the *Economist*. "A new generation of workers, who have grown up with e-mail, word processing and the internet, feel less of a need to print documents out than their older colleagues did."[7] Even if computers and paper turn out to be substitutes in the long run, predicting the timing of substitution was difficult. The second commonly made mistake is that we expect substitutes to arrive much earlier than they actually do.

The advent of ATMs provides a third, even more complicated example. Barclays in London and Chemical Bank in New York were the first to install ATMs in the late 1960s. Using these machines was awkward, and they were prone to breaking down. There was no PIN code. To activate the ATM, customers fed the machine a plastic token. Once the transaction was recorded, the bank returned the token—by snail mail![8] Despite these humble beginnings, the number of ATMs in the United States grew rapidly from 100,000 machines in 1995 to 400,000 in 2010. One consequence: the future of bank tellers, whose main job was to hand out cash, appeared to be bleak. Ben Craig, a researcher at the Federal Reserve Bank of Cleveland, observed, "While some people bemoan the loss of their weekly visits to a friendly teller who greets them by name, most are unwilling to pay for this service with higher fees and a greater time commitment. Instead, they opt for the convenience and cheapness of the ATM."[9] Tellers appeared to be in deep trouble.

Except they were not. Between 1980 and 2010, US bank teller employment *grew* by about 45,000 positions (figure 7-2).[10]

Three effects converged to produce this surprising outcome. First, banks did reduce the number of tellers in each branch.[11] In this narrow

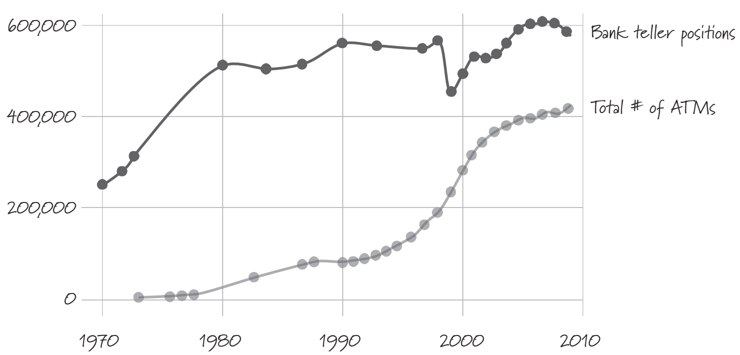

Figure 7-2 Bank teller positions and ATMs, 1970–2009

sense, ATMs and tellers are substitutes. But the story did not end there. With branches becoming less expensive to operate, banks opened many more locations, and they hired tellers to staff them. Third, these tellers now offered customers advice, and they sold products—activities that were far more valuable than handing out cash. As a result, hiring tellers became an even more attractive proposition. The net result: ATMs turned out to be a complement to these re-fashioned teller services.

A straightforward failure to recognize a complement (NASCAP), the difficulty of predicting the timing of substitution (computers and paper), and hard-to-see second-order effects of technological change (ATMs) all contribute to the difficulty of spotting complementarities. Our errors in judgment, however, are not random. Did you notice the pattern in the three examples? In each instance, we predicted substitution when in fact the new technology turned out to increase the willingness-to-pay (WTP) for existing products and activities. This type of bias is the norm. We fear change; potential losses loom larger than similar gains, a phenomenon that psychologists Amos Tversky and Daniel Kahneman call *loss aversion*.[12] Loss aversion keeps us preoccupied with the risk of substitution even when we look at complementarities.

History teaches two lessons: When you are asked to predict the influence of a new technology or a novel business model, don't trust your intuition too much. This is a difficult task. Carefully thinking through the timing of the likely consequences and considering second-order effects can help you get it right. Second, never forget that you are more inclined to see substitution than complementarity. For all their importance, complements are difficult to spot.

Measuring Complementarity

Studying history is useful because it helps us see broad patterns of technological progress and executive judgment. Unfortunately, in our day jobs we cannot afford to watch history unfold to reveal complementarities and substitution effects. We need to press ahead.

24-hour window	Didn't read post.com	Read post.com
Didn't read *Post*	8,771	622
Read *Post*	5,829	877
5-day window	**Didn't read post.com**	**Read post.com**
Didn't read *Post*	6,012	680
Read *Post*	7,203	2,204

Figure 7-3 Print and online readership of the Washington Post

Turning to data is a natural response. Couldn't careful analysis tell us whether a new technology is a substitute or a complement? Here is an example. In the past three decades, many businesses have added online activities to their operations. The *Washington Post*, for instance, established an online version in 1996. Is washingtonpost.com a complement or a substitute for the *Post*, the printed newspaper? Here is what a reader survey showed (figure 7-3).[13]

Look at all the readers who read the online version *and* the printed paper. Doesn't this suggest complementarity? Or should we worry about the 680 readers who read the online version but not the printed paper? While it is tempting to draw conclusions from this survey, it is impossible to tell the true relationship between the two products from a snapshot in time. What we really want to know—what the 680 readers would have done if the online version did not exist—is not in the data. If they would have read the printed paper in the absence of an online version, the online version is a substitute. How many of the 2,204 readers who read both would not have bought the printed paper if the online version had not been available? If this is a large number, the two products are complements.

This is a first insight. If you examine customer data to find complementarities, you would like to see that nonexistent world in which the online product is not available. If we could somehow compare that world with the world that includes online purchases, we would be able to discern the true relationship between the two products. The most sophisticated businesses use three approaches to get closer to the truth: pattern recognition, trend analysis, and experiments.

Analyzing purchasing patterns is the simplest technique, and it uses data that you already have. If two products are complements, you will see that they are often consumed together, like french fries and ketchup. Does a customer who visits your brick-and-mortar store often make online purchases right afterward? Do readers tell you that they are more likely to read the printed paper in the evening on days when they browsed the online version during work hours? These patterns imply complementarities. While straightforward, this type of analysis is not foolproof. Specifically, it cannot easily distinguish between complementarities and customers with intense preferences. Perhaps the person who reads both printed and online papers is a news junkie. The customer who visits your store and buys online might really love your brand.

To gain further insight, you can study time trends. Did the readership of printed products collapse right after you launched the online version? How did the beginning of e-commerce operations influence same-store sales? As you study time trends, keep the computer-and-paper example in mind. The relationship between products is not set in stone; it evolves with customer preferences and habits. As a result, time trend analyses need to be updated frequently.

Time trends are more difficult to read—and perhaps even useless—if there are strong preexisting trends in your industry. Look at paid newspaper readership in the United States, shown in figure 7-4.[14]

In the 1950s, US households subscribed to an average of 1.2 newspapers. By 2020, fewer than 20 percent of households had a daily paper. Clearly, newspapers are not a thriving industry. But where is the effect of the internet? From the data in figure 7-4, it is hard to see. Perhaps the long-term trend would have softened by the late 1990s if it had not been for online journalism and the launch of Google News. In this case, as in many others, time trend analysis provides no obvious answer.

The most powerful way to study complementarities is by experimenting and A/B testing. This approach provides deep insights,

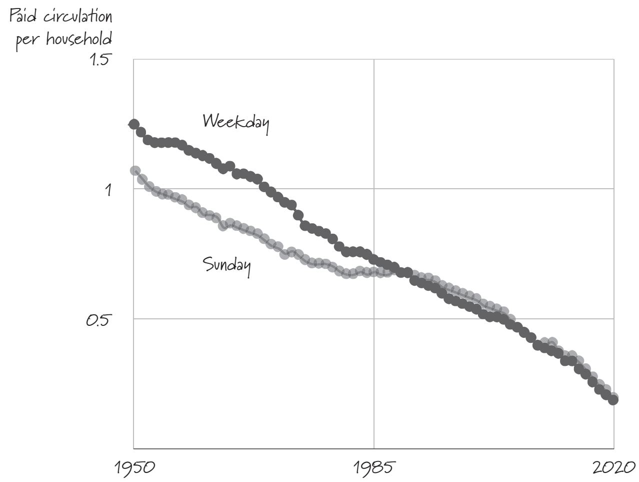

Figure 7-4 Paid newspaper circulation, 1950–2020

because it directly simulates the world that we cannot see. Here is an example. On June 25, 2009, London's Royal National Theatre became the world's first stage to broadcast a play to movie theaters worldwide. On the surface, the experiment was a big success. That night 50,000 people saw the performance of Racine's *Phèdre*, only 1,100 of whom were in the theater. Naturally, you would be nervous about whether or not the ability to watch a play in a movie theater acted as a substitute for seeing the show live in London. The Royal National Theatre devised an experiment to find out. It decided to broadcast *Phèdre*, but it withheld Howard Brenton's *Never So Good* and Michael Frayn's *Afterlife*, two plays that management expected would draw similar audiences. In addition, *Phèdre* was shown in some cinemas but not in others. When researchers Hasan Bakhshi and David Throsby studied the results, they found that digital broadcasts acted as a weak complement to the onstage performance.[15] The publicity surrounding the widespread availability of the show had enticed some customers to buy a ticket for the performance in London.

Distinguishing complements from substitutes is often surprisingly difficult. When I study companies that have developed a sophisticated approach to telling them apart, I see the following.

- ***These organizations are aware of a built-in bias to mistake complements for substitutes.*** They always ask, What is the best case you can make to argue that a new technology or a new product might be a complement?
- ***Pattern recognition and trend analyses are quick, inexpensive ways to identify complements.*** They are useful but not foolproof.
- ***The most advanced firms run experiments to guide their intuition about complementarities.***

8

Tipping Points

For the past decade, I have served as faculty chair of the Senior Executive Program for China, a flagship HBS program for Chinese managers. In this role I visit China often, and I am used to seeing dramatic changes from one visit to the next. Nevertheless, a recent experience in Shanghai left me dumbfounded. I love dumplings—who doesn't?—and I make it a point to find restaurants that specialize in this delicacy. On this trip, I found just my kind of spot not too far from Hongqiao train station: a few tables, rickety chairs, and the most delicious dumplings in this part of the universe. At the end of the meal, I handed the cashier my credit card. She shook her head and said the restaurant did not accept cards. I should have known, of course. Not many small establishments do. I apologized and gave her a 50-yuan bill, only to be rejected again: "No card, no cash," she said and pointed to a QR code displayed at the top of the apparently defunct register. "We only take Alipay or WeChat Pay."

The restaurant, it turned out, had gone cashless. And it is not alone. Everywhere in China, cash is falling out of favor faster than you can say, "Check, please." How did this happen? Card-based transactions, it seemed to me, had just gained prominence. And now, a minute-and-a-half later, cash was dead? Supplanted entirely by mobile payments?

Rapid changes such as this one are emblematic of markets that have strong *network effects*. In these markets, customer willingness-to-pay (WTP) for a product or service (or even the use of money) rises as the adoption of the product or service increases (figure 8-1). At the outset, it is challenging to convince restaurants to accept mobile payments because few customers use the service. Similarly, customers are reluctant to install Alipay on their devices because few stores accept it. As adoption increases, however, the WTP of stores and restaurants grows. And as more establishments accept mobile payments, the number of customers who use these applications rises quickly.

Network effects are a positive feedback loop: as more retailers attract a larger number of customers, additional retailers are drawn in. Network effects can cause markets to reach a *tipping point*: to spring from very low adoption to universal acceptance in no time at all. And the reverse is true as well. As fewer people use cash, the number of establishments that can make change drops and fewer stores are willing to accept cash. This situation gives customers an incentive to move to mobile payments.

China and other countries—Sweden, for example—are well on their way to becoming cashless societies. In 2010, mobile payment services were

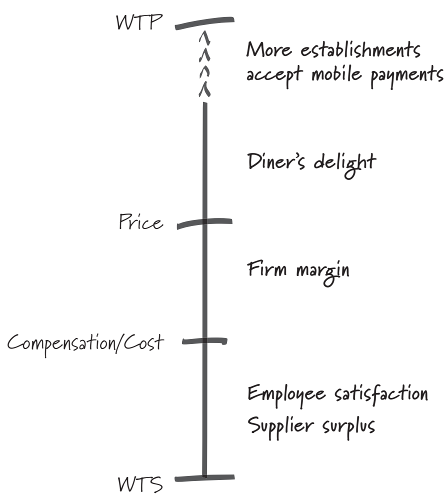

Figure 8-1 Network effects: Adoption increases WTP

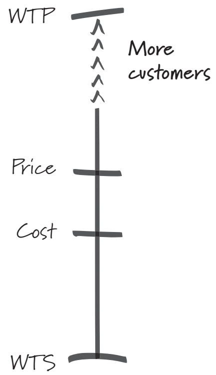

Figure 8-2a Direct network effect

not on the top ten list of apps in China. Only a decade later, three-quarters of the Chinese population prefers mobile payments to cash.[1] When Alibaba opened its futuristic supermarket, Hema, a few years ago, cash registers were not featured as part of the design. The People's Bank of China, the country's central bank, now has to intervene to protect the use of cash. The authorities regularly crack down on the hundreds of retailers that have stopped accepting cash.[2] If history is any guide, the central bank faces an uphill battle. Network effects move WTP in a powerful fashion.

(Are you wondering how I solved my dumpling problem? While I was not able to pay for the meal, it turned out that the restaurant's employees were happy to accept the price of the dumplings as tips—in cash!)

Three Flavors

It is useful to distinguish three types of network effects. They all raise WTP as adoption of a product increases, but the mechanism by which this occurs differs.

Direct network effects increase WTP whenever additional customers purchase a product (figure 8-2a). Any communication device is a good example. Think of the very first person who bought a fax machine.

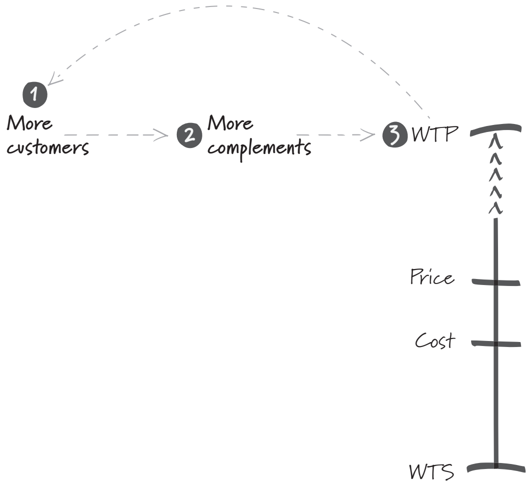

Figure 8-2b Indirect network effect

The device had no value; there was no one with whom to exchange fax messages. As the machines proliferated, the WTP for fax machines increased with the number of businesses and individuals who owned one. Think of a product you own. Would it become more useful or valuable if a larger number of people had that same product? If the answer is yes, there is a direct network effect.

Indirect network effects raise customer WTP with the help of a complement (figure 8-2b). Game consoles and games, cars and repair shops, and smartphones and applications are all examples of markets with indirect network effects. As more customers purchase smartphones, developers will create more apps. And the availability of a greater number of useful apps raises the WTP for smartphones, thereby attracting additional customers. Indirect network effects often create chicken-and-egg dynamics. If we had more charging stations, more people would drive electric cars. But we lack charging stations because so few people own electric vehicles. To break the impasse, companies often invest in complements that have limited demand, hoping to spur indirect network effects.

The third type of network effect is characteristic of platform businesses (see figure 8-2c). These companies attract more than one type of

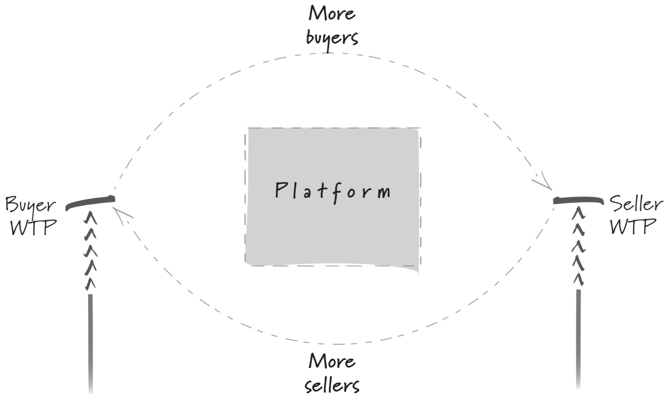

Figure 8-2c Platform network effect

customer (or supplier), and WTP increases for one group as the other grows larger. Think of online travel agencies. Hotels find it more advantageous to list their properties on Expedia as more people book on the platform, and having a choice among a greater number of hotels draws additional customers. Many businesses create value by bringing together different types of customers. The *New York Times*, for instance, attracts readers and advertisers. Uber matches passengers and drivers. Amazon's marketplace appeals to shoppers and merchants. In each of these cases, the WTP of one group of customers (advertisers, drivers, merchants) increases as the other group (readers, passengers, shoppers) grows in size.

In this chapter, we will explore how network effects contribute to outsized business success, how they can lead to dramatic failures, and how they contribute to the creation of an economy that is increasingly dominated by very large (and exceptionally profitable) companies.

Sometimes, Winners Take All

Fifteen years after its founding, Facebook dominates social media. With 2.4 billion monthly active users, the company is the leading social network in more than 90 percent of all countries. Its share of social media page views is 50 percent in the United States, 70 percent in Africa, and 80 percent in Asia*, Europe, and South America.[3] While successful historically, the company is now under enormous competitive and political pressure. Younger users flock to Snapchat and TikTok; Pinterest is gaining stature in e-commerce; and Amazon has started competing with Facebook for advertising dollars. To make matters worse, data and privacy scandals have nurtured cynicism about the organization's motives and leadership. Facebook is now the least trusted among US social networks.[4] Politicians and regulators speak openly about ways to break up the company.

How well is Facebook doing in these times of extraordinary challenges? Its performance is stellar. The company added more than 100 million users in 2019, 1 million of those in the mature US market alone. The same year, revenue rose by 29 percent, and shares were up by more than 50 percent.[5] What explains this extraordinary staying power? Shouldn't Facebook have fallen apart?

Facebook's performance is testament to the remarkable power of network effects. The company benefits from all three types. As Facebook adds users, joining the network to socialize with friends and acquaintances becomes more attractive (direct network effect); brands and users have greater incentives to create and post content (indirect network effect); and the site becomes more desirable for advertisers (platform network effect). It is true that the tired-looking design and the loss of user trust have lowered WTP.[6] At the same time, network effects lock in the company's market position, and they keep WTP more than competitive with other social media.

At their most powerful, network effects provide formidable advantages, and markets tip in favor of a few companies. Google and Baidu (in search), Amazon and Alibaba (in e-commerce), Sony and Microsoft (in game consoles), Verizon and AT&T (in mobile services), and Visa and Mastercard (in credit cards): every one of these companies benefits from significant network effects.

*Facebook is banned in China.

The Geography of Network Effects

One of my morning rituals is to check my messaging apps. I usually begin with text messages, continue with WhatsApp, quickly check WeChat, and end with LINE. I had to install all these apps because network effects are often regional or even local in nature. WhatsApp is by far the largest messaging app globally, but it is close to useless in Japan, where LINE is leading. In China, everybody with a phone is on WeChat. If I had acquaintances in Ethiopia, Iran, South Korea, Uzbekistan, or Vietnam, I would need to install Viber, Telegram, Kakao, imo, and Zalo, the leading messaging apps in those countries.[7]

The strength of network effects depends on the number of users, but the relevant number is rarely the global one. Think of a company like Uber. Platform network effects play in its favor. Passengers benefit if the number of drivers increases, and drivers are more likely to join Uber if there are more passengers. But for Uber, the relevant number of users is entirely local. If I order an Uber in Boston, a larger number of drivers in San Francisco does not change my WTP.

The geography of network effects limits the attractiveness of many large platforms. Uber has 3 million drivers globally, but the company needs to start from scratch when it enters a new market, almost as if its business elsewhere did not exist. The result is a patchwork of local champions. Uber leads in the United States, DiDi dominates China, Gojek is ahead in Indonesia, and BlaBlaCar is number one in Germany. Regional network effects still produce powerful first-mover advantages. Once DiDi pulled ahead in China, that market tipped and Uber stood no chance. But Uber's defeat in China had little effect on its standing in other markets.

Local Competition

How many different ride-sharing apps do you use? If I had to guess, I would say more than one. If you live in San Francisco, you probably have apps for Uber and Lyft. If Jakarta is home, I would guess you use Gojek and Grab. In Seoul, I would expect to see Kakao, TMap, and perhaps even TADA. Not only do network effects rarely lead to Facebook-style global dominance, even at the local level, winner-take-all outcomes are the exception. Different platforms often compete side by side. How many companies can survive in a local market? For example, what are the chances that Poolus, the fourth-positioned ride-sharing company in Seoul, will be a sustainable business?

To get a sense of how competitive a market will be, it is helpful to be specific about the mechanism by which network effects raise WTP. From a passenger's perspective, arguably the most important benefit is proximity.[8] A service with more drivers can offer shorter wait times (figure 8-3).

As wait times fall, the incremental benefit to passengers gets progressively smaller. Few people care whether their car arrives in a minute or in 30 seconds. To be competitive in wait times, a service needs to have the number of drivers indicated by the dashed line in figure 8-3. If Seoul is sufficiently large to allow four companies to each assemble this

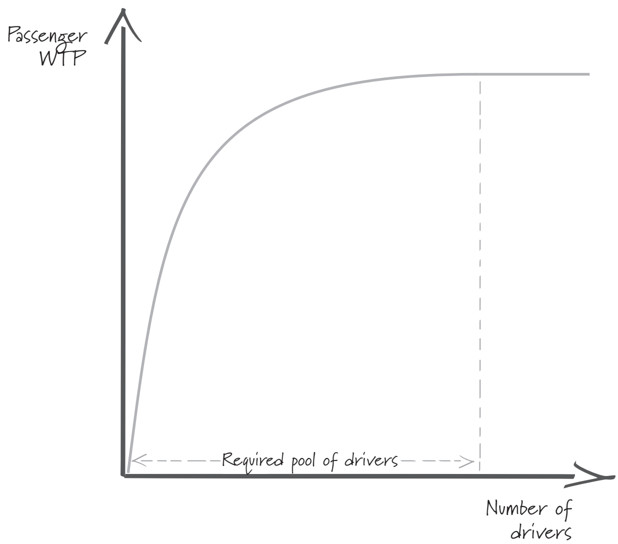

Figure 8-3 Competition in ride-sharing services

required pool of drivers, Poolus can survive. If only a single company can assemble the required pool, the local market is winner-take-all.

I hear you objecting—and you are correct, of course. What I just said is not quite right. One complication is that adding drivers to a market will have three effects, not one: as passenger wait times fall, more passengers will use ride-sharing services, because they like the shorter wait times, and, for a given number of passengers, drivers will have to wait longer. If the latter effect dominates, the market will never be able to reach the maximum passenger WTP shown in figure 8-3 because drivers exit as their wait times increase. A further complication is that ride-sharing companies typically treat drivers as independent contractors, not employees. This saves cost, but it also allows drivers to work for multiple ride-sharing organizations. In effect, a new entrant will not have to assemble a new pool of drivers. The entrepreneur can simply "borrow" the drivers already in the pool. This makes ride sharing far more competitive. Are you surprised that companies like Uber find it so difficult to reach profitability?

Ride sharing teaches a critical lesson. It is wonderful to know that your business benefits from network effects. It is even more important, however, to have a thorough understanding of how the number of customers will influence WTP. Knowing the mechanism by which adoption raises WTP helps you assess how competitive a market will be.

Let's look at e-commerce platforms as another example. Clearly, people love shopping online. With a bit of work, you can always find a good deal. If lower prices are the key to the customer's heart, e-commerce will be highly competitive. In figure 8-4, the line labeled "Low prices" shows how customer delight changes as an e-commerce business adds vendors. Initially, customer satisfaction rises because there is more price competition. The incremental effect wears off quickly, though. You only need a handful of vendors to be price competitive.

Fortunately, customers are not exclusively concerned about low prices. Many also care about a great selection. Amazon and Taobao lead in their respective markets, in good part because they offer unprecedented

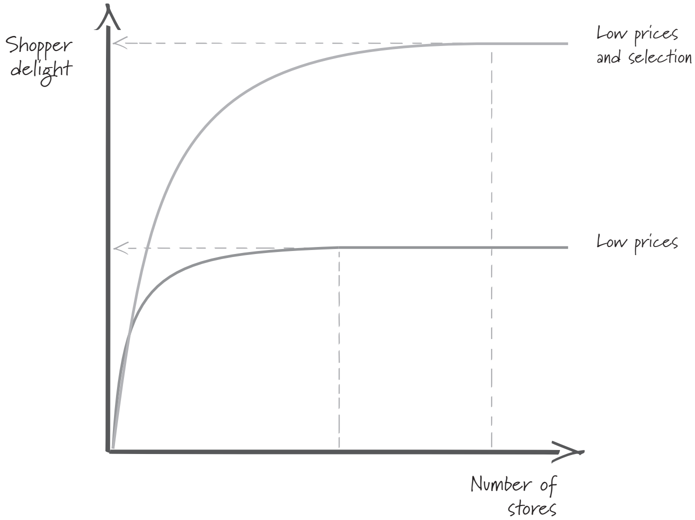

Figure 8-4 Competition in e-commerce

variety. If selection is critical because customers like the idea of one-stop shopping, e-commerce sites need a far greater number of stores to be competitive in customer delight, and winner-take-most outcomes are more likely. Amazon's market share in US e-commerce stands at more than 50 percent. Tmall's share in China is even greater.

Similar dynamics are at play at Rappi, a Colombian instant-delivery startup that competes heavily on its broad scope of services. In addition to delivering meals and groceries, *Rappitenderos* make ATM visits, walk your dog, stand in as the 11th player in a soccer match, purchase your concert tickets, and exchange, in person, the oversized shirt you bought on Zara.com. Rappi's model builds network effects that benefit workers (who fear being idle) and customers (who greatly value the near-instant provision of an extraordinary selection of services).

In all these examples, it is key to think about the *incremental* customer delight and supplier surplus that is created as you broaden the scope of platform services. Do you really strengthen your network effects—even at your current scale?

The Price of Exclusivity

It was to be the most memorable welcome-back party ever. In the summer of 1997, thousands of Apple loyalists traveled to MacWorld Boston to celebrate the return of their hero, Steve Jobs. Forced in 1985 to resign from the company he had cofounded, Jobs had returned to Apple earlier that year. He found a company in shambles. Low on cash and short on a vision for its future, Apple was teetering on the brink of bankruptcy.[9] Mary Meeker and Gillian Munson, then analysts at Morgan Stanley, summarized the firm's dire prospects at the time: "Apple, in our view, is a deeply troubled company—revenue has declined between 15 percent and 32 percent year-to-year in each of the last six quarters. . . . Using medical analogies, we have written this patient off as dead."[10] Newspapers and magazines feverishly followed the steep decline and widely anticipated the failure of the world-renowned company (figure 8-5).[11]

Figure 8-5 Apple's touch with failure

The crowd in Boston's convention center was giddy with expectation. What announcement would Jobs make? What surprise did he have in store for them?

Jobs did not disappoint. In fact, his surprise was bigger and more profound than his audience had anticipated: "Apple lives in an ecosystem, and it needs help from partners," Jobs explained. "I'd like to announce one of our first partnerships today, a very meaningful one, and that is . . ." The screen behind Jobs lit up, and the stunned crowd saw—Bill Gates! Jobs announced a collaboration with Microsoft, Apple's archrival, its despised, decidedly uncool (and wickedly successful) nemesis.[12]

How had it come to this moment? How had Apple, the most profitable computer company of the 1980s, sunk so low? Direct and indirect network effects are an important part of the story. Throughout the 1990s, customer WTP for Microsoft's Windows operating system increased as adoption, fueled by the low prices of PCs, grew rapidly. Thanks to the growing number of Windows users, it was easier to exchange documents and ask for help with pesky software. Even more important than this direct network effect was an indirect effect: the incentive to develop, maintain, and update software written for Windows.

In the early history of computers Apple had been a force to be reckoned with. Its global market share stood at 16 percent in 1980, but that changed with the subsequent onslaught of significantly less expensive PCs built on Windows software and Intel microprocessors. By the time Jobs returned to the company in 1985, the difference in scale was astounding. That year, Intel shipped 76 million processors, and Microsoft had an installed base of nearly 350 million machines. Apple, on the other hand, shipped fewer than 5 million units, and its installed base was a mere 10 percent of Microsoft's.[13] Suppose you were a developer with a great idea for a novel type of software. Would you write for Windows, or for Apple? As Jobs explained in 1996, "The key is to convince developers of innovative new software products that they can make those products run best or only on your operating system."[14] By the summer of 1997, Apple had lost this ability.

A key element of Apple's collaboration with Microsoft was Gates's promise to continue developing Office—the popular suite of productivity software—for the Mac platform. In the past, Microsoft's releases of the Mac version of Office had been sporadic, which led many Apple customers to switch to Windows. Now Gates promised timely releases, the same number of Office versions for PCs and Macs, and, better still, features that would exploit the unique capabilities of Apple's OS.[15]

Apple's brush with bankruptcy illustrates the dual role of premium prices. They generate a sense of exclusivity and enviable margins, and they keep the number of customers limited. Such niche strategies can be highly successful and sustainable in the long term, think of Porsche or Hermès, for example. In markets with strong indirect network effects, however, premium prices reduce the incentives of companies to provide the very ingredient for business success: complements. In this environment, premium prices are difficult to sustain. In fact, they cost Apple the chance to be the leading player in personal computing.*

Apple's difficulties reflected more than a lack of compelling software, of course. The 1995 product shortages, a poorly designed licensing program, the confusing reorganization of the marketing function, and miserable inventory management all conspired to weaken the company.[16] Add competitors with powerful network effects, however, and the company was in serious trouble. Jobs remembered that Gil Amelio, a former CEO of Apple, was fond of saying, "Apple is like a ship with a hole in the bottom leaking water."[17] That hole was the missing network effects. Sadly, Amelio thought his job was "to point the ship in the right direction." How could he have left the hole unplugged?

Fast-Forward

It is interesting to apply the lessons of 1997 to Apple's current situation. Figure 8-6 shows the company's market share in mobile operating systems.[18] Is Apple in trouble once again?

*Even now, Apple's share in PC unit shipments hovers around 12 percent.

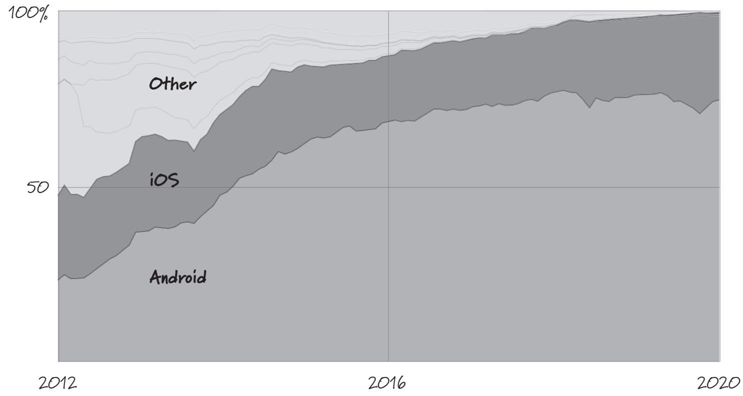

Figure 8-6 Global market share of mobile operating systems

It is easy to see that same scenario. The company sells expensive phones, and it generates a precious sense of exclusivity. Meanwhile, the competing platform, Google's Android, is the default operating system on less-expensive devices that dominate the global market. Isn't this a replay of the 1980s and 1990s? Is Android the new Windows?

There are indeed similarities. Operating systems with a small number of users are unsustainable. Windows phones, for example, never caught on, and Microsoft abandoned its mobile phone platform in 2020. Microsoft's failure in phones, however, was not due to network effects. These do not play a significant role in this market because users can easily connect with one another irrespective of their mobile operating systems. Moreover, the same mobile phone applications are available on every platform, because developing apps tends to be far less expensive than developing the feature-rich software for personal computers.[19] Even Microsoft, with its minuscule market share, had an app store that boasted more than 500,000 products.[20]

For Apple, the key question is whether complementors will continue to develop products and services for an operating system with a 20 percent market share. If complements are not too expensive to produce, the answer is yes, and Apple will thrive. If complements require significant and perhaps country-specific investments, however, Apple will come under pressure in countries like Indonesia, where its market share has fallen to less than 6 percent. The moment technology evolves to include expensive integrations of phones and complements—think of applications in financial services, transportation, and health—developers will again give preference to the operating system with the largest number of users, Android in this instance. While no one knows the trajectory of technology, understanding how the cost of developing complements can elevate or diminish the importance of network effects is a critical skill that every strategist needs in their toolbox.

The Savvy Strategist—Imaginative and Vigilant

Managing in environments that have strong network effects is challenging because the feedback loops accelerate change: seemingly in the blink of an eye, cash disappears; platforms like TikTok, an entertainment app, and Pinduoduo, an e-commerce business, gain hundreds of millions of users almost overnight. In other instances, network effects impede change: they give rise to a stable set of platforms that dominate their industries decade after decade. Network effects create turbulence *and* intransigence; they generate vast opportunities for change *and* nearly immutable competitive outcomes. What mindset should you adopt in this type of environment? I argue that imagination and vigilance are two of the most important traits.

Imagination

A common view is that industries either have network effects or they don't. This mindset is too narrow. Many companies gain advantage by creating network effects where none existed. Others succeed by making existing effects much more powerful. Apple's FaceTime service created new network effects for customers who owned iPhones and iPads. UberPool added network effects between passengers who want to travel to similar destinations.

As you think about ways to lift your customers' WTP with the help of network effects, do not focus on the current state of your industry. Don't pay attention to whether or not your company benefits from network effects at this time. Instead, think of someone who owns one of your products. How might they benefit if others adopted that same product? Let your imagination fly.

Vigilance

Even if your firm lacks opportunities to create network effects, other companies might succeed at building them. Because network effects create a significant first-mover advantage, it is critical that you spot budding networks and up-and-coming platforms early. Pay close attention not only to rival companies but also to suppliers. The latter, recent business history shows, can become particularly powerful. Online platforms are a fairly recent phenomenon in many supply chains. But once they are established, they are difficult to displace, and they are likely to help themselves to a significant share of your profits. OpenTable, the leading restaurant-reservation service in the United States, is a good example. The platform charges restaurants a fixed monthly fee and a commission for each reservation.[21] In an industry where profit margins often hover below 5 percent, an OpenTable reservation can cost an establishment as much as 40 percent of its net profit.[*, 22]

Yet restaurants have little choice. For many diners, an establishment that is not listed on OpenTable simply does not exist. Competing platforms such as Resy, Reserve, and Tock, all of which entered the market in the early 2000s, have found little success. "When only ten other restaurants are on Resy, you don't want to be the one to take the plunge and possibly lose revenue," says Dallas restaurateur Brooks Anderson. "OpenTable is as ubiquitous as Coca-Cola. . . . People are afraid to make the switch."[23] Restaurateurs learned a hard lesson. What is rational

*This is not unusual for successful platforms. Online travel agencies, for instance, charge hotels a 15 percent commission, which amounts to 35 percent of net profit.

individually—everybody wants to be on the largest platform—creates significant challenges for the industry as a whole. Allowing one platform to become dominant is a grave strategic mistake.

I find it interesting to see how many network effects we now take for granted. Remember when searching for information required a trip to the library? Finding high school classmates involved thumbing through yearbooks and telephone directories? Estimating traffic was an art, not a science? How we trekked from store to store to find the products we wanted to purchase? Network effects underpin many of the businesses that have had such an impact on the way we live and work today. Technology made these advances feasible, but network effects are the reason these businesses were actually built and why they attracted the talent and the capital that allowed them to offer their services at scale.

As I think about network effects, a few insights stand out for me.

- ***Network effects increase WTP by connecting users directly, through complements or via platforms.*** Companies that build network effects raise WTP *and* they limit competition at the same time.
- ***Market share is an inadequate predictor of profitability.*** It should never be used as a strategic goal. Markets with network effects, however, are an exception. They reward companies with more users and greater share.
- ***Facebook-style winner-take-all outcomes are rare.*** Interestingly, geography both limits and enhances the strategic value of network effects. If these are local in nature, different companies win in different markets. But if the markets are small enough, they are more likely to tip and create a single winner. The net result is a patchwork of local champions.

The dark side of network effects is the extent to which they limit competition. The question of whether companies like Facebook, Google, and Alibaba have become "too big" is hotly contested.[24] To resolve the issue, we need to weigh the customer delight that results from network effects against the cost of limited competition. This is not a new question, of course. The regulation of natural monopolies—companies, such as railways and utilities, that benefit from scale to such an extent that no one is able to compete—involves similar trade-offs, with one important difference. While the monopolies of yore used their market power to raise prices and shrink customer delight, the opposite is more typical now. Do the low prices limit competition and innovation to such an extent that we would be better off forgoing some of the immediate benefits of network effects? We do not know.

9

Strategies for Underdogs

Network effects benefit larger companies and their customers. Whoever gets to scale first will have a substantial advantage. Building a network-effects business is a mad rush. But what about the companies that are left behind? What about small firms? Are there effective strategies for companies that have a limited number of customers? Yes! There are many examples of smaller companies that compete successfully with (and sometimes even displace) larger organizations that benefit from network effects. Some of the smaller firms succeed by creating customer delight that does not reflect scale. Others find success by giving preference to one of the groups on the platform. Serving a small set of customers can also lead to stellar performance. Let's look at some examples that illustrate these three strategies.

Creating Customer Delight That Does Not Reflect Scale

We have already encountered this strategy. Remember how Taobao, once a small startup, battled eBay, then the dominant platform with an 85 percent share in the Chinese market? Taobao's success is all the more surprising because platforms like eBay benefit from network effects. In fact, it was these network effects that made Meg Whitman, then CEO of eBay, so confident that she would win in China.

From Taobao's perspective, the competitive situation must have looked daunting (figure 9-1). Having been the first to enter the market, eBay had attracted a much larger number of customers, and that drew many more stores to its platform. It is a classic network-effects story. How could Taobao possibly catch up? It did so by finding other ways to boost willingness-to-pay (WTP)! With the help of services such as Alipay and Wang Wang, and thanks to a superior website design and two-sided ratings, Taobao increased and eventually matched eBay's ability to delight

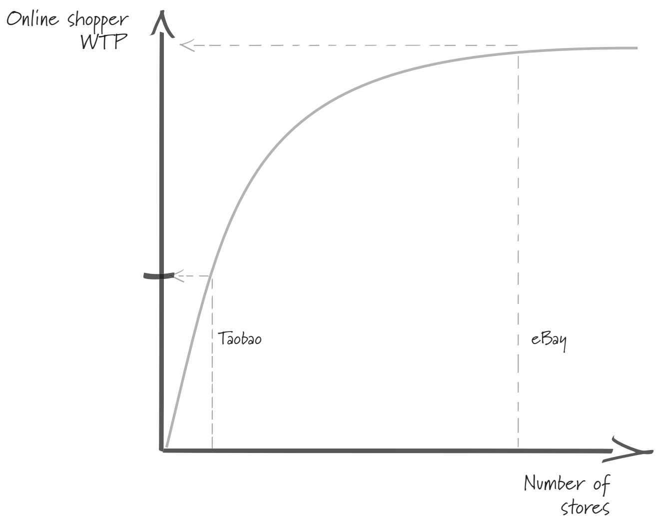

Figure 9-1 Network effects and competitive advantage

customers. The company caught up with and eventually surpassed eBay by developing crowd-pleasing features that work independent of scale.

As powerful as network effects can be, it is important to remember that WTP and customer delight are the currency that ultimately counts. In this sense, there is nothing magical about network effects.[1] An increase in WTP that results from network effects is no more valuable than increases in WTP that reflect great ideas, a more pleasant customer experience, or less-expensive complements.

Favoring One Group on the Platform

October 8, 2015, was a dark day for Etsy, a prominent online marketplace for handcrafted goods. On that day, Amazon launched Handmade, which competed directly with Etsy's business. "Amazon Launches Its Etsy Killer," cried *USA Today*, and Etsy's share price dropped 6 percent.[2] Amazon's advantage was plain to see: "Etsy . . . has reason to be worried," explained CNBC's Catherine Clifford. "While the company already has significant brand association with the artisanal maker movement, Amazon's customer base—and potential exposure for makers—is much larger. Amazon has an estimated 285 million active buyers, while Etsy has just under 22 million."[3] Remember, in platform competition, scale wins.

Or does it? In the five years since Amazon's entry, Etsy's revenues have more than tripled and its share price has risen tenfold. One reason that Etsy and Handmade can live side by side is that their platforms favor different groups. Amazon is squarely in the customer's corner. Every feature of its business is designed with customers in mind. By contrast, Etsy was set up to support artisans and serve the craft movement. This difference in orientation manifests itself in many ways. Etsy charges sellers lower fees and releases their payments immediately, while Amazon holds on to seller funds. Etsy has a long history of supporting the maker movement, engaging in extensive seller education and community support. When the company went public in 2015, it offered sellers a pre-IPO participation program. While Amazon insists on controlling communication and the interaction between sellers and their customers, artisans on Etsy can harvest customer contact information and add promotional materials in their shipments.[4] Lela Barker, a seller on Etsy, explains the basic difference: "In the final equation, Etsy has raised a generation of savvy makers that Amazon can now monetize. While that's a brilliant business move on Amazon's behalf, the maker community isn't any better for it. . . . I fear that handmade sellers are little more than dollar signs to Amazon."[5] Robin Romain, who sells her quirky, pet-lover clothes and accessories on both platforms, adds, "[Amazon] always sides with the customer and that can put handmade sellers in jeopardy, especially with customized offerings."[6]

Platforms serve multiple groups of customers, and while many create value for all groups, some choices betray the organization's primary orientation. A travel site that sorts hotels by profit margin primarily serves the lodging industry. A site that sorts by customer reviews has the opposite orientation. The distinction between buyer-focused and seller-dominated platforms is particularly stark in B2B. At one extreme, procurement platforms serve buyers by creating efficiencies in purchasing. At the other end of the spectrum, seller-oriented platforms often resemble business directories. Some platforms evolve over time. Alibaba, for example, started out being oriented toward sellers and became more buyer focused over time.[7] In markets where buyer-oriented and seller-focused platforms compete, neither can afford to neglect the other's prime group of customers entirely.[8] Competing with Handmade, Etsy has become less seller oriented. It now mimics Amazon in some of its decisions—it offers free shipping, for example. Despite the greater similarities, however, a profound sense of difference remains.

If yours is a small company staring at a large platform, it is always worth asking whether you might be able to create meaningful differentiation by focusing on the WTP of the group that is less favored by your competitor. Etsy found success battling the superpower that is Amazon by doing exactly that—maintaining a sharp focus on the success of its sellers.

Serving a Small Set of Customers

In all likelihood, this is the most counterintuitive move that platforms make when they compete against larger rivals that benefit from network effects. How can you succeed against big by being small? Consider online dating as an example. With 35 million monthly visitors, Match.com is the leading dating site in the United States.[9] It dwarfs competitors such as eharmony. And yet eharmony thrives. The company even manages to charge a price premium for access to a far smaller pool of dating prospects.[10] This is all the more surprising because eharmony lacks basic services—the site has no search function, for instance—and it limits the number of potential dates its users can see on any given day. How is this a recipe for success?

To understand eharmony, let's think about what happens when a dating site begins attracting more customers. As its membership grows, WTP is pulled in opposite directions.[11] For a man who would like to date a woman, WTP increases as more women join the site. This is the classic network effect. It is sometimes called a *cross-side network effect* because it describes the connections between different groups on the platform (figure 9-2). By contrast, the WTP of men who want to date women dwindles as more men join the site, because they now face greater competition. The "same-side network effect" is negative.

A supersized site like Match.com presents millions of choices, and competition is fierce. Both effects are more moderate on smaller sites like eharmony. The balance of choice and competition helps daters choose their preferred site. Consider someone for whom finding a romantic partner is very important. This person is happiest in a committed relationship; being rejected is particularly painful. For this person, eharmony is the better choice because it keeps competition at bay by offering no search and giving a limited set of potential matches each day.

Now think of someone who is as happy in a relationship as they are outside one. Being rejected is still unpleasant, but it is less consequential. This person will look at eharmony and think, "Why would I pay a

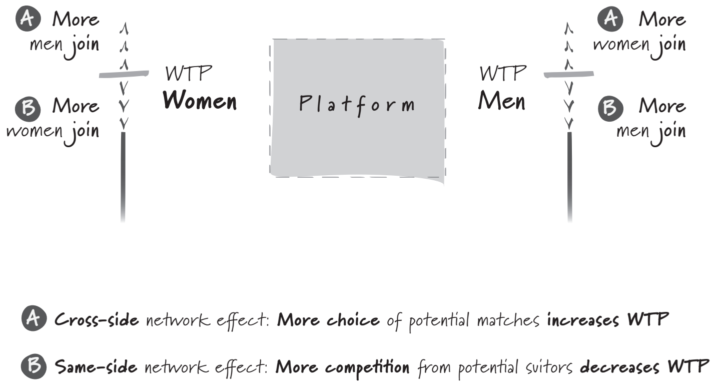

Figure 9-2 Same-side and cross-side network effects

premium for fewer choices?" eharmony's pricing policy is a factor that helps daters identify their preferred site. Those seeking committed relationships flock to eharmony, which further improves their experience on the site. Angela G's account is typical: "I totally love eHarmony. I had no success on other sites like Match.com or Plenty of Fish, but on eHarmony I got . . . real results. They truly give you compatible people."[12] The key insight here is that every large platform serves many different types of customers. The attraction between the types varies, however, and building a smaller platform for individuals who greatly value one another is a promising strategy.

Failing to pay attention to differences in the mutual attraction of platform participants can have grave consequences. Do you remember Friendster, a social network that predated Facebook? Friendster was enormously popular. In fact, it was so successful that it was unable to serve everyone who wanted to sign up. It simply lacked the technical and financial capacity to keep up with its user growth. "Friendster was having a lot of technology problems," remembers Jonathan Abrams, the company's founder. "People could barely log into the website for two years."[13] To tackle this predicament, Friendster decided to register new users on a first-come, first-served basis—a big mistake, given that the site's users were geographically dispersed. Friendster had many fans in

North America, but it was also popular in Indonesia. Adding Indonesians to the network did not raise the WTP of most Americans, because they did not have Indonesian friends; and growing the US user base was meaningless for most Indonesians. By admitting new users first-come, first-served, Friendster diluted its network effects, and that added to its competitive woes. Compare Friendster with Facebook. The latter built powerful network effects by focusing initially on a single college and then on a select number of universities. Facebook ended up dominating the world precisely because it limited its growth early on, creating *small communities* whose members highly valued being connected with each other.

ShareChat, an Indian social network, applies that same strategy by offering its services in 14 local languages. "It becomes very difficult for the Indian netizens to search information in vernacular content," explains cofounder and CEO Ankush Sachdeva. "Platforms like Quora or Reddit solved it for the English-speaking users, but nothing was available in an organized curated format in Indian languages."[14] With its focus on smaller local languages and content, Twitter-backed ShareChat attracts 160 million monthly active users, making it about as popular in India as Instagram.[15]

To strengthen the mutual attraction of smaller groups of customers, some companies cleverly segment their services. Istanbul's MAC Athletic Club, for instance, offers three types of clubs. Top-tier members have the highest WTP for fitness, and they are charged a premium price for access to particularly attractive facilities. MAC also charges premium prices for personal trainers who seek to work with the company's top-tier clients. The match—members and personal trainers who greatly value fitness—is attractive to both parties.

"Focus on a limited set of customers" is not the most intuitive advice if you are trying to build a business that will benefit from network effects. It is nevertheless good advice. By serving a select group of users who benefit most from being connected to one another, you might be able to compete with much bigger platforms.

In the early days of studying companies that benefit from network effects, many investors assumed these companies were poised to dominate their markets. Scaling quickly without any regard for profitability became the mantra.[16] This approach is deeply flawed for two reasons. In chapter 8, we observed how geography often limits the power of network effects. In this chapter, we have seen that markets with network effects often remain competitive because small players find ways to persist.

- *Underdogs lift WTP in ways that do not depend on scale.* Network effects are one way to raise WTP, but there are many others. As long as these alternatives require no substantial investments, the smaller organization is not at a disadvantage in exploiting them.
- *Underdogs cater to neglected parties.* Most platforms favor specific groups—customers or vendors. Serving the unloved group allows for meaningful differentiation.
- *Underdogs focus on a small group of customers who place a high value on connections with one another.* The number of users, a common proxy for the strength of network effects, has always been a flawed metric. In practice, customers attach a different value to connections with different groups. The dominant platform boasts the largest number of users. But smaller companies can build businesses that emphasize high-value connections.

PART THREE

Value for Talent and Suppliers

10

Feeling Heard

Value for Employees

Having explored the principal ways in which companies raise willingness-to-pay (WTP)—more attractive products, complements, and network effects—we now turn to the lower end of the value stick to see how companies improve their financial performance by creating value for their employees and suppliers.

Let us look at employees first. Services dominate advanced economies—they contribute almost 80 percent of US GDP—and both their cost and their value to customers are greatly influenced by the engagement of employees. How do you attract a talented and motivated workforce? The joy and satisfaction that workers derive from their job are the difference between their compensation and their willingness-to-sell (WTS). If a company pays the bare minimum that is required to keep people in their jobs, compensation matches WTS. Firms can do better by increasing compensation or by making work more attractive.

At first, it might seem that more generous pay and improved working conditions would both produce the same effect: greater employee

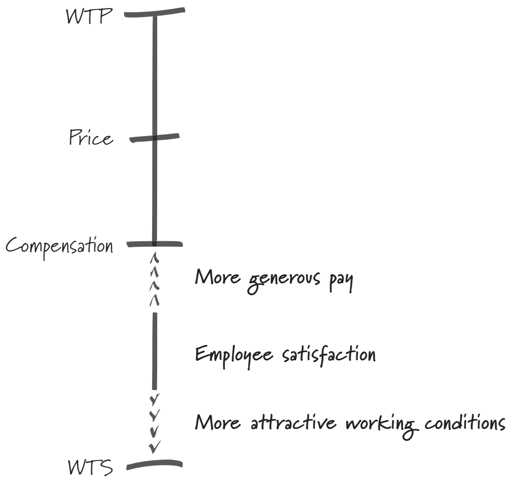

Figure 10-1 Levers for increasing employee satisfaction

satisfaction. While the end result may be the same, there are important differences between the two strategies (figure 10-1). Increased compensation lowers the firm's margins. There is no value creation, only redistribution. By contrast, more attractive working conditions *create more value* by reducing WTS, the lowest compensation that a person is willing to accept for the work.

Companies that find ways to lower WTS not only have more satisfied employees, they also attract workers who particularly value the ways in which the company reduces WTS. For example, BayCare, an organization that runs hospitals and outpatient centers in Florida, is nationally recognized for the quality of its training.[1] Its innovative programs include individual learning maps and regular interactions with senior leaders. Not surprisingly, BayCare is particularly attractive to healthcare professionals who value continued training and education. Uber is another example of a company that benefits from a selection effect. Uber made work safer for its drivers by recording the identity of passengers and allowing drivers to rate their customers. As a result, Uber has almost twice as many female drivers as regular taxi companies in the United States.[2]

Such selection effects are particularly valuable if they help retain and attract highly talented employees. As you know, these individuals can make a critical difference. The best sales associate at Nordstrom, a department store, sells eight times as much as an average salesperson. The best developer at Apple is nine times as productive as the average software engineer in the tech industry.[3] Companies that compete for the highly talented only with offers of generous pay find these selection effects to be muted. Why? Everybody likes money!

Although compensation-focused talent strategies yield less-powerful selection effects, the universal appeal of money can also be a strength, of course. It is easy, however, to overestimate the draw of increased compensation, especially among better-paid employees. When Deutsche Bahn, the German railway company, offered its workforce the choice of a 2.6 percent pay increase, a one-hour reduction in weekly hours, or six additional days of vacation annually, 58 percent chose the extra week off.[4] The opportunity to exchange money for time is increasingly popular, particularly in developed economies and among younger employees.[*5]

Every initiative that results in better working conditions creates value. If the programs are expensive, however, it is more challenging for companies to capture that value, because cost will increase as WTS falls. In this chapter, we will explore the mechanisms that companies employ to create *and* capture value from talent at the same time.

Job Quality at Quest Diagnostics

When MaryAnn Camacho first walked into one of Quest Diagnostics' call centers, she immediately noticed a large group of people just waiting around.[6] Later that day, she would be told that those nervous-looking

*Compensation remains the top priority among poorer workers. Eighty percent of migrant workers in China, for example, report "low pay" as the reason why they intend to leave their job.

individuals were new customer service representatives, about 50 of them. Camacho, a senior executive director at Quest, a leading company in the clinical laboratory industry with almost $8 billion in revenue, remembers being puzzled: “Fifty new reps in a call center of 400 employees?” Camacho soon learned that the company suffered from high staff turnover; 60 percent of reps left in their first year, and that cost Quest more than $50 million annually. Even worse, high turnover frequently resulted in poor service and even the loss of entire accounts.

Working in a Quest call center has never been easy (and the global pandemic of 2020 made it even harder). Each day, the 850 reps and 50 supervisors answer about 55,000 calls, most of which are related to patient test results. Conversations with physicians and hospitals are often technical, which requires that reps have a basic understanding of testing procedures and Quest’s 3,000 diagnostic tests. The company offers new reps six weeks of classroom training, and it requires each new hire to work side by side with an experienced employee for two weeks after the initial training. In 2015, when Camacho joined Quest, the starting pay was $13 per hour; back then, this was a small premium compared with what other call centers offered. At that time, Quest measured performance using metrics such as call wait times and the number of calls completed per hour. Reps who performed well received a 2.5 percent raise after their first year. Despite the incentive, call quality remained poor, often leaving physicians and patients feeling frustrated.

Imagine yourself in Camacho’s role. How do you turn around this call center? Can you create a competitive advantage for Quest by lowering cost and perhaps even increase customer WTP? Under Camacho’s leadership, the call centers underwent a deep transformation. Attrition dropped from 34 percent to 16 percent, and unplanned absences fell from 12.4 percent to 4.2 percent. The fraction of calls answered within 60 seconds rose from 50 percent to 70 percent. Even first-call completion and contacts per hour increased. The cornerstone of the transformation is not difficult to see: more attractive working conditions. In building a better work environment, Camacho and her team followed elements of a process that has proven successful in many organizations.[7]

Transforming the Call Centers

- ***Breaking the cycle*—**Quest had been stuck in a vicious cycle. Poor center performance led to high turnover, which made it difficult to invest in workers. Camacho needed to find a way to break the cycle. She accomplished this by raising everyone's base compensation and introducing incentives that reward tenure and on-the-job performance. Quest also created clear career paths for its call center employees, providing them with a longer-term perspective. In monthly performance reviews, supervisors began to discuss performance, personal goals, and career trajectories with each of their reps.
- ***High expectations*—**Camacho made it abundantly clear that she had high expectations. She broadened the center's performance metrics and instituted a stricter attendance policy. "You cannot let nonperformer[s] continue . . . because it becomes cancerous for the team," she explains.[8]
- ***Making the job easier*—**To make the job easier, the company created an expanded set of self-serve options, reducing call volume by 10 percent. Quest also added a subject matter expert to each of the teams, thus providing deeper technical expertise.
- ***Building capabilities*—**With reduced attrition, training became more meaningful, and Quest refocused it on customers. "Training used to be function-focused," says Quest's head of training. "We are now able to train for the 'why' behind the way we do things."[9] Employees can apply to become members of a newly established Quest management system (QMS) team, a central resource with expertise in continuous improvement techniques. In their application for QMS, reps need to suggest seven process improvements.

  If accepted into the team, they are taught Excel, data collection, root-cause problem solving, Gantt charts, and techniques for managing meetings and change. Call center teams also compete to become *model pods*: teams that are charged with suggesting and implementing process improvements. "Each one of the supervisors was so hungry to have investment and training and believed that they could actually do the job [of a model pod], they blew us away," recalls Camacho. "Members of my staff were in tears, and said things like, 'I didn't know they had it in them. I can't believe what I just saw.' And I said, 'You know, you invite people to the table and they'll rise to the occasion.'"[10]

- ***Making change real*—**The QMS team and the model pods soon discovered ways to make work easier and more efficient. Bilingual reps now receive advance notice of a caller's preferred language, saving about 20 seconds on each call; reps send faxes from their desktops instead of getting up to use the centrally located fax machines; when a physician is paged, the notice includes patient IDs, making it easier to pull up the relevant lab results when the doctor calls back. The best ideas conceived by the model pods are quickly implemented systemwide, creating highly visible change and momentum.

  Valuable suggestions also come from *frontline idea cards* (FICs). When Professor Zeynep Ton studied Quest's transformation, she interviewed call center reps, many of whom were particularly enthusiastic about the cards. One explained the general reaction: "FICs were the most important change. . . . It allows us to say, 'Hey, we need someone or something to help us. We need tools or processes put in place.' And we can be involved in helping make those changes." Another rep stated, "Before the FICs, you never felt like your ideas were being heard. You could say something to someone, but it just didn't go anywhere. Now, it feels like management cares about our ideas and how we feel."[11]

- ***Shifting ownership*—**Quest's bottom-up approach purposely shifts responsibility for continued change to individual reps and teams. Model pods meet for daily huddles: short meetings led by a rep chosen by the team's supervisor. Ton observes, "Initially, the reps didn't know what to do, but over time, the huddles became more structured. Members discussed performance metrics, ideas for improvement, and current projects."[12]

- ***Recognizing progress*****—**Quest rewards exceptional performance financially—the company created a 6 percent bonus pool, for example—and in more symbolic ways. *Wow calls* acknowledge employees who have been praised by clients. Members of the 100 Club—reps who achieve perfect performance in monitored calls—receive a free snack. Impactful FICs are rewarded with small gifts.

  Studying the transformation at Quest, Professor Ton praises the company for its textbook application of what she calls the "Good Jobs Strategy": "The strategy creates superior value by combining investment in employees with four operational choices that increase their productivity, contribution, and motivation. These choices are: focus and simplify, standardize and empower, cross-train, and operate with slack."[13]

WTS and Productivity

Two observations about the transformation at Quest strike me as particularly interesting. The first is that none of the changes are groundbreaking, unheard-of innovations. Scholars of service quality will easily recognize many of the steps in Quest's journey. What was required to transform the organization was a deliberate and thoughtful attempt to create a more attractive work environment, an approach that promised to substantially lower WTS. By reducing WTS *and* increasing pay, Quest created greater employee satisfaction, which resulted in a remarkable drop in turnover.

Second, Quest's transformation nicely illustrates how changes in WTS often lead to changes in cost. Quest was able to pay its reps more *and* contain spending, because it increased the productivity of its call center reps.* Quest's financial data show that the cost per call remained unchanged. In other words, the company passed on the entire value of the efficiency gains to its employees, the very people who had come up with all the ways to work smarter (figure 10-2).

As in many service settings, better working conditions also had an impact on service quality and customer WTP. "Calls or emails from my commercial team saying, 'Hey, your call center screwed up this relationship and I just lost a million dollars of business.' That has completely stopped," says Jim Davis, Camacho's boss.[14] While difficult to measure with precision, the improved call quality likely implies that Quest's transformation created happiness all around: more attractive working conditions and better pay for the reps and stronger financial performance for the company.

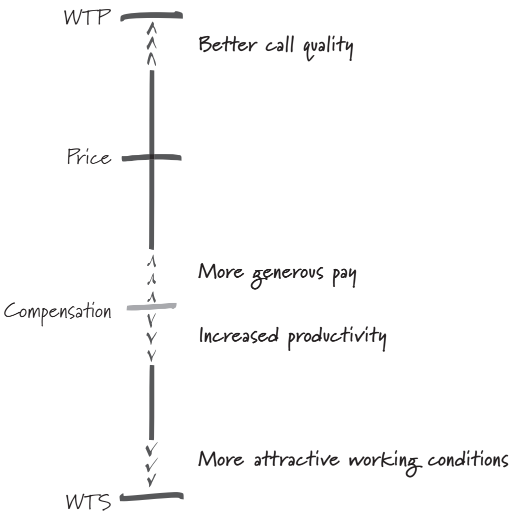

Figure 10-2 Increases in productivity lower WTS and increase WTP

*Value sticks are drawn for one unit of output—a call, for example, in Quest's case. If productivity increases—say, calls get shorter—cost and WTS per call decrease. The intuition is that WTS, a person's minimum required compensation, will be lower for a shorter period of work. Suppose I ask you to come in for 20 calls. Your WTS will be lower if the calls take half a day instead of a full day.

Tell Me, Muse, of the Many Ways . . .

There are innumerable ways to decrease WTS. The ability to identify these opportunities requires that you understand, in some detail, the work that is being performed in your organization, the joys and challenges associated with each activity, and the ways employees are likely to react to changes in their routines. Just like finding ways to raise WTP requires a deep understanding of customers, identifying avenues to lower WTS presupposes intimacy with your staff and their (work) lives. A narrow focus on products and sales, as we saw in our discussion of WTP in chapter 4, is often less helpful than a wider lens that is trained on the entire customer experience. The same is true for WTS. Making work more attractive is a far broader undertaking than optimizing processes, because work is so much more than a narrow set of activities that we perform every day. Work includes the tone of feedback, the laughs we share with coworkers, the anxiety we feel when we face challenging tasks, our commutes, the food choices in the cafeteria, the joy (or dread) when we are getting dressed in the morning. And any one of these facets of work can be improved.

Consider Gap Inc., a retail clothing company with 135,000 employees, many of them part-time.[15] To increase staff satisfaction, it would be natural for Gap to offer better-than-average pay, provide more training, and enable store managers to more effectively motivate their employees. Instead, Gap sought to improve an aspect of work that is typically of little concern to retailers but is very important for part-time workers: predictable and consistent hours. In retail, 80 percent of part-time employees report having hours that change from week to week. And the variation is huge. Swings of 40 percent in average work hours are typical. Moreover, more than one-third of retail workers know their schedules a week or less in advance, making any sort of planning difficult.[16]

To improve the lives of its sales staff, Gap worked with a team of labor market experts. The researchers asked a randomly chosen group of store managers in San Francisco and Chicago to make four changes:

standardize the start and end times of work shifts (these used to vary from day to day and week to week, depending on anticipated foot traffic), schedule employees for the same shift every week, provide at least 20 hours of work for a core group of staff, and allow employees to trade hours by using Shift Messenger, an app specifically designed for this purpose.[17] The result? Compared with stores that did not participate in the ten-month experiment, labor productivity increased by 6.8 percent and sales rose nearly $3 million. Shift Messenger proved particularly helpful. Over the course of the experiment, two-thirds of employees used it, trading more than 5,000 shifts. The app also allowed store managers to take back the shifts that employees wanted to give up, effectively reducing staffing without creating unexpected changes in worker income.[18] Not only did Gap's intervention increase the productivity of its workforce, but employees also reported increased well-being and better sleep quality.[19]

Gap's experiment teaches an important lesson that applies to industries beyond retail. WTS reflects every work-related activity. A comprehensive understanding of work lives is likely to reveal many opportunities to increase the satisfaction of your employees.

"Paying Market"

I find the rules that companies use to set prices endlessly fascinating. In my conversations with marketing executives, I always ask about their company's pricing policy. The answers often include references to "premium prices," "price leadership," "value-based pricing," and similar concepts. When I ask human resource professionals that same question about their compensation policy, the response is almost invariably, "We pay market."

The contrast is interesting. When we price products and services, we think in terms of differences. It is intuitive that customers would pay premium prices for premium products and receive a discount for middling quality. We understand that no two products are exactly identical

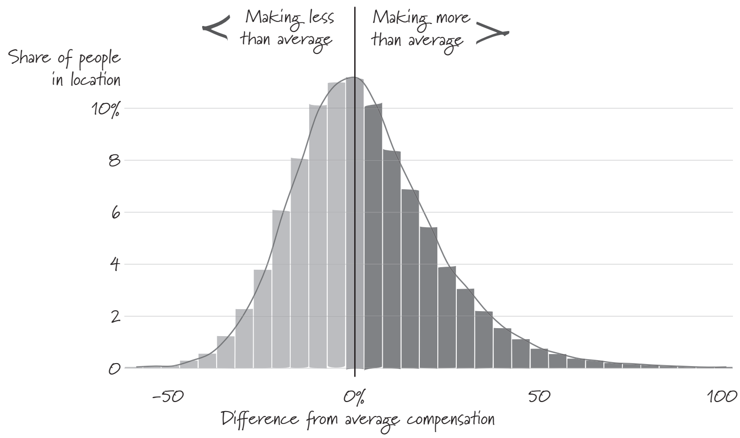

Figure 10-3 Differences between wages for the same occupation in a market

and that prices will reflect the differences. If Nestlé can sell water, the proverbial commodity, at premium prices, there is scarcely any product that cannot be differentiated in the mind of the consumer.

Jobs, however, appear to be different. When we think about competition for talent, our starting position seems to be that jobs are commodities, roughly similar across companies. This is why we need to "pay market," that is, offer similar compensation for (presumably) nearly identical work. Why do we hold such different views of products and jobs? If we manage to differentiate water, don't we have ample opportunity to offer significantly differentiated jobs and work experiences? And shouldn't these differences also be reflected in compensation policies?

The data show that they are. Compensation patterns in the United States clearly indicate that companies pay vastly different salaries for similar work. Figure 10-3 shows the fraction of workers in an occupation who get paid more and less than the average of that occupation in the local market.[20]

The variation is enormous. As figure 10-3 shows, it is not unusual for a company to pay 20 percent above or 20 percent below the average wage, indicated by the line at zero. Of course, there are many reasons for these differences. Employees in the same occupation have different levels of education, experience, and commitment to the job. Companies have varying management practices and cultures. Moreover, the quality of the match between a specific individual and the requirements of the job at a particular company can diverge substantially. Research that isolates these three sources of variation in compensation—employee skills, company characteristics, and the match between the two—finds that 20 percent (United States) to 30 percent (France, Brazil) of that variation is due to company characteristics.[21] If you had any doubt that companies can get away with paying far less than rival firms and still attract exactly the same quality talent, the data are unequivocal: many firms do it. How? By investing in initiatives that lower their employees' WTS.

To be competitive in the market for talent, companies do need to "match" competing offers. But matching does not imply paying the same compensation ("paying market"). Matching means creating as much value for your employees—the difference between compensation and WTS—as your company's competitors.

As figure 10-4 shows, the logic of setting prices is identical to the logic of setting compensation. At the top of the value stick, companies offer premium products to increase WTP. They then share that extra value by charging premium prices. As long as the price increase is smaller than the rise in WTP, both customers and the company are better off. At the bottom of the value stick, companies create more attractive working conditions to lower WTS. They then share this value by reducing compensation. As long as the drop in WTS is greater than the reduction in salaries, both employees and the company are better off.

An interesting question remains: if the logic of value creation and value capture is identical at both ends of the value stick, why does encouraging premium pricing feel so different from advocating for reduced compensation? Why do marketing and human resource managers describe their pricing policies (which are, in fact, quite similar) in such different terms? I have two conjectures.

- ***Power***—Employees and customers fare better if significant value creation (higher WTP, lower WTS) precedes more-limited value capture (through premium pricing and reduced compensation).

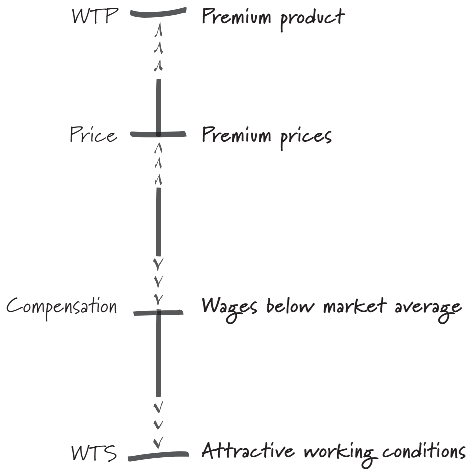

Figure 10-4 Levers for increasing and sharing value

But there is no guarantee that it will. If companies raise prices without first increasing WTP, customers are worse off. Reduced compensation in the absence of better working conditions hurts employees. When companies seek to capture value without increasing it, the consequences for customers and employees are very different. Customers have an easy remedy. They simply do not purchase the product. But for employees, the situation is more challenging. Most of us need our jobs, and walking away from work is financially costly and often difficult emotionally, even if the job provides little satisfaction. Walmart is a prominent example. When politicians lambaste the company for paying "starvation wages," their sense is that the low wages reflect the corporation's bargaining power, not a commitment to decrease WTS.[22]

- *Experience*—How satisfied are you with your job? Has your satisfaction changed over time? For nearly everyone, the answer is yes. Many components of WTS depend on experience, and it takes time to learn the facets of a new job and a company's culture. What will happen when you make your first serious mistake?

Will the company honor its promise to consider you in the next round of promotions? Compensation below market is immediate and certain. More attractive working conditions, however, are felt over time and are difficult to assess when you are deciding whether to take that new job.

Power and experience are two of the reasons why competing for talent by reducing WTS is a demanding (if promising) strategy. As you consider this opportunity for your company, I have four recommendations.

- ***Be specific***—If you compete for talent by offering better working conditions, be specific about the ways in which you decrease WTS. "We have a great culture" might be a truthful statement, but it is difficult for a job applicant to verify. Think of ways to provide greater certainty. Do you allow applicants to come in for a day to experience your work environment? Do you have them speak with current staff in private? Are they allowed to consult with former employees?
- ***Be predictable***—Focus on initiatives that lower WTS in a predictable manner. Flexible hours and opportunities to work from home, for instance, are easy to grasp, and it's straightforward to commit to these benefits. Not surprisingly, pre-Covid-19 research shows that employees who choose (and are allowed) to work remotely are happier with their jobs and more loyal to their employers.[23]
- ***Share creatively***—Consider various ways to share value with your workforce. Reducing compensation is only one of many ways to capture value from improved working conditions. For example, companies that provide tuition assistance reap the benefits of that policy by attracting more-skilled employees.[24] As we saw in the Quest example, the company shared value in the form of productivity gains.
- ***Magnify existing benefits***—It might seem that lowering WTS by increasing job amenities (for instance, better mentoring) or

reducing disamenities (for example, less noise) would have the same effect. If two initiatives create similar value, aren't they equally desirable? Not typically. Think about how employees chose their job. People who accepted a position in a noisy work environment are not likely to be noise sensitive. Reducing noise will therefore mean little to this group. On the other hand, improving mentorship has a greater potential if an existing mentoring program has attracted employees who are interested in mentorship. As a rule, magnifying existing benefits will serve your firm better than limiting current shortfalls.

In my experience, WTS is the least intuitive of the four elements that make up the value stick. But, as the examples in this chapter illustrate, lowering WTS by making work more attractive is a powerful method of creating value for your employees *and* your company. The following ideas are particularly important.

- ***Making work more attractive need not be rocket science.*** Consult any of your staff engagement surveys. Like Quest, you will find that employees have many ideas to make their work more pleasant. Pursue the ones that also raise productivity.
- ***Identifying attractive opportunities to reduce WTS requires you to be familiar with the many ways in which work touches the lives of your employees.*** A more pleasant commute outside rush hour might be as valuable as improved work processes.
- ***Initiatives that decrease WTS not only increase employee satisfaction, they also create powerful selection effects.*** In competition for talent, you gain an advantage with employees who value *how* your organization lowers WTS.
- ***As you choose ways to decrease WTS, think about whether the expected selection effect supports your business objectives.*** Google,

for instance, gave up on lucrative work for the US military and the development of a search engine for China after Googlers protested that the projects were inconsistent with the values that had attracted them to the organization in the first place.[25] Long after the company had struck "Don't be evil" from its code of conduct, staff selection effects forced Google to choose between military contracts and continued employee enthusiasm. The latter proved more important.

- *Companies that successfully lower WTS are able to participate in the value they create in many ways:* Some offer below-market compensation, others enjoy greater loyalty and engagement, and most see larger pools of job applicants.

11

Gigs and Passions

Digital technology allows companies to compete for talent in novel ways. Increased flexibility, in particular, opens new avenues for value creation (figure 11-1). For example, many employees are not assigned the number of hours they prefer to work. In a recent UK study, one-third of men and one-fourth of women indicated that they wanted to work fewer hours. About 6 percent hoped to work more hours.[1] Digital technology can help avoid such mismatches. At the most extreme, digital platforms that pair workers and tasks provide complete flexibility. Maintenance workers on TaskRabbit, software engineers on Topcoder, data entry clerks on Mechanical Turk (MTurk), and scientists on InnoCentive are free to work whenever they please.

How much value is created when individuals are allowed to choose their hours?[2] Uber is a good example. As is typical for gig work, drivers can drop in and out of the app with few limitations. Some pick only the most lucrative hours, when prices are particularly high. Others drive mainly when their principal job provides less income.[*, 3] When

*In the United States, only one-third of ride-sharing drivers obtain the majority of their income from driving.

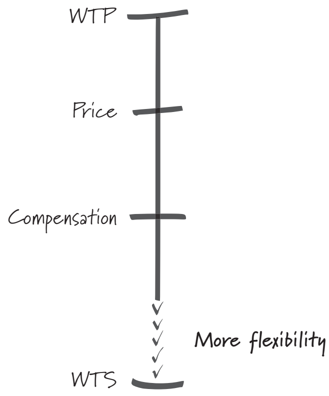

Figure 11-1 Gigs and passions

Professor M. Keith Chen and his coauthors calculated willingness-to-sell (WTS) for 200,000 Uber drivers, they found huge differences across drivers and time.[4] Figure 11-2 shows the WTS of 100 drivers in Philadelphia during the evening hours as an example.[5]

The black dots represent the average WTS for each driver. The vertical lines show how much WTS varies for this person over time. Look at the first driver in figure 11-2. His average WTS is more than $70 per hour, but it ranges from less than $40 (his 10th percentile) to more than $100 (the 90th percentile). The horizontal lines in the figure show how much a driver would have earned if she drove during one of these evenings. Driver incomes hover around $20 per hour.* Given these values, our first driver will never work in the evening. His WTS is always greater than the hourly earnings. In fact, this person appears to have a very strong preference for not working in the evening; it takes more than $70 per hour to lure him on an average night. Perhaps he looks after his children, he may be concerned for his safety at night, or his spouse may use the family car in the evening. The drivers who do work are shown at the right in figure 11-2. On average, their WTS is $11.67.

*$20 per hour is not the drivers' net income. From the $20, they must pay gasoline and other operating expenses.

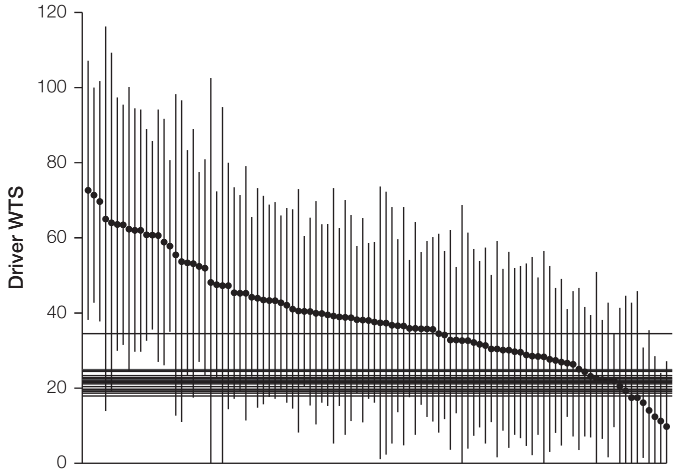

Figure 11-2 WTS for 100 Uber drivers in Philadelphia, evening drive time

The vertical lines give us a good sense of how much typical workers value the ability to choose work hours. With complete flexibility, drivers work only when their WTS is below the hourly earnings. Compare this to a job with no flexibility—say, the fixed shift of a regular taxi driver. This driver would sometimes have to work when his WTS is greater than compensation—value is being destroyed—and he would sometimes be unable to drive when his WTS is below hourly earnings, a missed opportunity to create value. The difference between Uber and an inflexible taxi arrangement, Professor Chen and his colleagues calculate, is \$135 per week.[6] In other words, flexibility creates as much value as driving 6.7 hours!

Flextime on Demand

Digital platforms like Uber are not alone in recognizing the advantages of flexible work hours. Flextime programs have arrived in many businesses. We have already seen how Gap's Shift Messenger allowed staff to trade hours. Other flextime policies include time-shifting, micro-agility (the ability to freely move some hours—for example, to attend a child's school play), part-time work, compressed hours (employees work full-time but over fewer days), periods of minimal travel, job sharing, and longer-term opportunities such as paid leave, sabbaticals, and even ways to "dial up" or "dial down" one's career, as in Deloitte's mass career customization program.[7] In a recent survey of 750 companies around the world, 60 percent said they allowed some of their employees to choose when to start and end their workdays. One-third offered compressed hours.[8] It seems likely that the global pandemic will accelerate this shift toward flexible work arrangements.

While companies have made significant progress, the demand for flexibility still outstrips current policies in many firms. When Annie Dean and Anna Auerbach, co-CEOs of Werk, a human resource startup, asked 1,500 white-collar professionals about workplace flexibility, the answers revealed a large gap between company programs and the preferences of these professionals (figure 11-3).[9]

An even bigger challenge is the acceptance of flextime programs. Introducing them is a first step; getting employees to actually use them is another. Professional services firms are a case in point: nearly all of them have flextime policies, but most employees do not take advantage of them.[10] A prime reason is that consultants and bankers believe they hurt their career chances when they ask for flextime. In the words of one

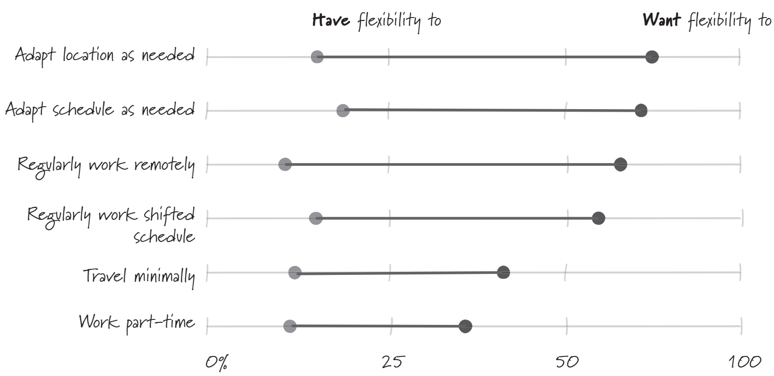

Figure 11-3 Workplace flexibility gaps, survey of white-collar professionals

line manager, "The culture here is to dedicate your life and soul to the bank. That's how people at the top got there. . . . If you ask for time off or flexible hours, you're considered a wimp."[11] Women's career prospects especially are harmed when they take advantage of flextime policies.[12]

As you think about ways to create value for the employees in your organization by way of flexible work arrangements, keep the following in mind.

- ***Employees are more likely to make use of flextime when KPIs emphasize productivity, not long hours.*** In a billable-hours culture, for instance, flextime programs are unlikely to make a difference.
- ***Role models matter.*** Where (some) senior managers work flexibly, flextime is seen more positively throughout the organization.[13]
- ***Make flextime a point of open conversation.*** Research shows that most individuals believe others view flextime workers less positively than they themselves do. Honest conversations can help reduce this collective bias.[14]
- ***Refrain from celebrating a long-hours culture.*** Kate Hamp, HR business partner at the price comparison site Moneysupermarket.com, explains: "If someone completes a big project or wins an internal award, we ask managers not to applaud long hours." Moneysupermarket.com built an effective flex culture that emphasizes decentralized decision-making—individuals and teams determine the specific parameters of their flextime policy—and informal arrangements, a chat with the boss as opposed to a clause in one's contract.[15]

Enter Passions

Flexibility is of substantial value in many contexts. But it can be truly transformational when coupled with personal passions. Think about your own interests. What is your favorite pastime? Are you a gardener?

Writer? Movie buff—excuse me—cinephile? Our passions move WTS in a powerful way. We all have activities that we pursue for pure enjoyment, no compensation needed. WTS is zero (or even negative if you are willing to pay good money to engage in your favorite hobby). While passions lower WTS, the time we spend on our favorite activities is a countervailing force. Imagine gardening during all waking hours. Unless you are wealthy, you would have to find a way to turn your hobby into a job. The more time you spend on your passions, the more expensive it is to pursue them because you are missing out on other opportunities, in particular the chance to earn an income. WTS will reflect this opportunity cost of time. For this reason, it is particularly compelling to combine limited-time work engagements and personal passions.

Historically, it has been difficult to connect people's passions to business activity. There were two principal challenges. First, it was not easy to find people with a particular passion. More importantly, even a passionate person's opportunity cost of time (and hence their WTS) will be substantial if we ask her to commit to many hours of work. The advent of the internet has substantially reduced both of these obstacles. It is now far easier to meet people with particular passions, and the passionate can pursue their pastimes at low levels of intensity, keeping opportunity cost in check and WTS low.

Travel writers, citizen journalists, graphic designers, book critics, freelance photographers: across many professions, passionate individuals pursue the activities they enjoy most. Food52, an online community for people who love cooking, operates a kitchen hotline that answers burning questions in real time. The hotline is "staffed" by 50,000 professional chefs and kitchen enthusiasts who freely share their expertise (and recipes) with the 1 million members of the Food52 community.[16]

Another example is General Fusion, a Canadian company that aspires to develop commercially competitive fusion power. The company's approach is to smash 220-pound hammers against a sphere to produce a pressure wave through liquid lead. Figure 11-4 shows the pistons that house the hammers.[17] Brendan Cassidy, who manages open innovation

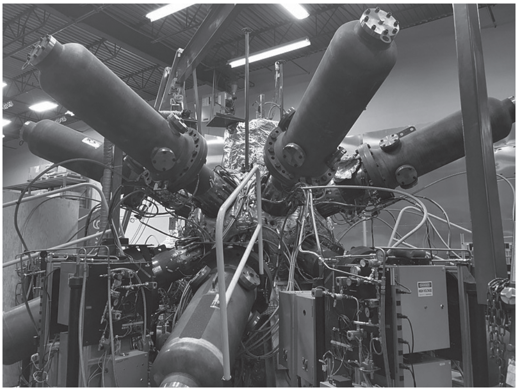

Figure 11-4 General Fusion array of pistons designed to compress plasma

at the company, explains how General Fusion tapped into the passions and expertise of scientists and engineers: "The issue we had was that the anvil on the surface, which is what the hammer hits, needs to seal inside the vessel molten metal and create a vacuum on the outside of the anvil. . . . This was a case where we said, 'You know, this is not our expertise. We've learned a lot about building these hammers, but as far as the best way to create a seal, there's probably people who have experience.'"[18] To benefit from the experience of others, General Fusion turned to InnoCentive, an online platform that connects companies to a network of nearly 400,000 experts. Some 229 engineers accessed General Fusion's technical brief, 64 submitted solutions, and the company awarded Kirby Meachum, an MIT-trained engineer, $20,000 for his proposal.

From simple cooking recipes to highly technical advice, an increasing number of companies now routinely rely on outside creatives and experts to build their business and accelerate innovation. It is no coincidence, of course, that a list of the services these professionals provide includes mostly activities that are intrinsically interesting and intellectually stimulating. The economics of community-based businesses (Food52) and open innovation (InnoCentive) are advantageous because they combine passion with short stints of work. (The "gig" in "gig economy" is jazzmusician slang from the 1920s, meaning a short-term engagement.) Put passion and short assignments together, and you are likely to see superb quality *and* reasonable remuneration. Food52 awards its "contributor of the month" $25. InnoCentive has helped address complex technical challenges for organizations as diverse as BP, NASA, and Prize4Life, a nonprofit that hopes to find a biomarker for Lou Gehrig's disease. Across all its contests, the expected value of participating in an InnoCentive challenge is $125.[19]

Crowdspring, an online marketplace for graphic design services, is a good example of the reach of platforms that connect businesses to outside talent. One of Crowdspring's specialties is logo design contests. In these competitions, brand managers describe their desired logo, and designers from a network of more than 200,000 freelancers submit proposals. A typical contest attracts about 35 designers who produce 115 designs.[20] Companies then provide feedback so that the designers can improve their work. Projects run for seven days. The company pays the winning designer a prize, generally about $300. In exchange, the brand owns the copyright.

My colleague Professor Daniel Gross studied more than 4,000 of these design contests to better understand how feedback improves quality (it has a large positive effect) and whether seeing the feedback that others receive influences continued participation (the weakest designers do give up early). In a clever research design, Professor Gross also calculated the benefits and costs of participating in Crowdspring's design competitions. The result of these calculations is shown in figure 11-5.[21]

Collectively, the designers incur far greater costs than the prizes justify. If all designers had a good sense of their probability of winning, aggregate costs and prizes would balance, and in figure 11-5, we would never see contests with cost-prize multiples that exceed 1. In practice, however, it appears that too many designers work for too little money.

Is the promise of gig-economy platforms to deliver high quality at low prices an illusion? Is the truth that the benefits of gig work come at the expense of (mostly desperate) freelancers? As a businessperson who wants to do the right thing, should you ever say no when someone is

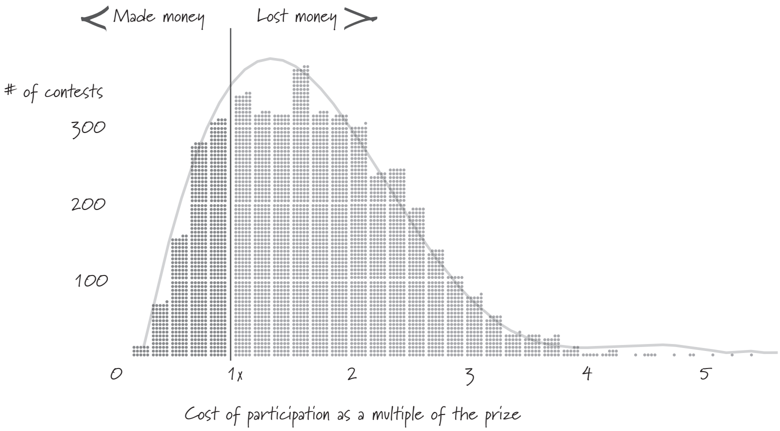

Figure 11-5 Logo design contests

willing to provide high-quality work for little money? These questions are at the very heart of the debate about gig-economy platforms and the need to regulate these businesses.

Let's explore these issues using the principle of value creation as our moral compass. Business practices are defensible as long as they make employees and independent contractors better off. Freelancers working for little money is not per se an indication that they are being exploited; their WTS for the task might be really low. But it is a warning sign that warrants further investigation. My hope is that you will ask questions such as these.

- ***Is it even plausible that WTS is low?*** For work that is not intrinsically attractive, the answer is probably no. Remember, it is passions that drive down WTS. Also, contractors for whom the work constitutes their principal income are unlikely to have low WTS. For example, a work arrangement with a person whose full-time job is to clean homes should not be based on a premise of low WTS.

- ***Does the work arrangement create value other than financial compensation?*** One reason that some of Crowdspring's designers work for small prizes is that they expect benefits other than money. Some hope to learn from company feedback. Others seek to build a reputation. In some cases, companies will ask for (better-compensated) follow-on work. General Fusion, for instance, ended up contracting with Kirby Meachum to further develop his ideas. Logo designers at times continue to design the company's websites.

- ***Are expectations of longer-term benefits reasonable?*** It is not easy for gig workers to estimate the value of longer-term benefits. What is the likelihood that a poorly paid freelancer will be awarded additional work? How likely is it that an unpaid engagement will open the door to a permanent position? Often, the business is better informed about the longer-term prospects than the freelancer. It is imperative not to exploit this information advantage. For instance, two-thirds of Uber drivers who start driving for the company abandon the platform after six months.[22] One interpretation is that drivers work for Uber only when they are in a bind. Another is that Uber does a poor job of setting the expectations of its drivers.
- ***Is it in the best interest of your business to respond to low WTS with low compensation?*** HuffPost, a US news and opinion website, was one of the first to rely on citizen journalists and aspiring writers. By 2018, more than 100,000 contributors had provided HuffPost with content—for free! But early that year, it all came to an end. HuffPost closed its contributor platform and shifted its focus to a smaller set of paid journalists who would produce "smart, authentic, timely and rigorous op-eds."[23] Other publishers with large contributor communities, such as Forbes and Hearst, followed suit.[24] Paying nothing for content, it turned out, produced a tsunami of stories of highly variable quality. "Media companies have flown into higher-quality content," explains Pau Sabria, cofounder of Olapic, a startup focused on employing user

content in marketing. "You cannot afford to [provide readers with] a bad experience when you're competing with other forms of media."[25] You are, of course, familiar with this effect from the beginning of this chapter. Compensation policies induce powerful selection effects. Even in cases with genuinely low WTS, sharing more value with employees and freelancers can have a profound impact on the quality of work.

Looking at flexible work arrangements and gig-economy business models, I take away a number of insights.

- ***Digital platforms that connect companies with passionate workers can help shift corporate boundaries.*** Activities that used to sit inside the firm can now be moved outside or combined in novel ways with efforts by gig workers and independent contractors. More often than not, the results show superb quality at a favorable cost. In the United States, about 10 percent of the workforce is now engaged in alternative work arrangements.[26] If you do not think about ways to shift corporate boundaries to attain a cost advantage, your competitors are.

- ***Even in 2020, workplace flexibility is still in short supply and is an effective tool to lower WTS.***

- ***Developing rules for flexwork is only a first step.*** Encouraging employees to make use of the flexibility often requires a broader change in culture. As a leader in your organization, your behavior will influence many others, irrespective of whether you intend to serve as a role model.

- ***Linking people's passions to your business purpose is an exciting avenue for value creation.*** This works best if the projects and activities are intrinsically interesting and require a limited time commitment.

- ***Engaging passionate individuals requires careful consideration of their expectations.*** Gig work can create substantial value for workers but it also risks exploiting them. The best companies develop firm guidelines and practices that ensure gig workers have reasonable expectations and get to share in the value that is being created.

12

Supply Chains Are People, Too

In June 2016, Vahidin Feriz, CEO of Car Trim, a Prevent subsidiary, received an ominous fax message. The news was grim. Volkswagen, one of Car Trim's principal customers, was informing Feriz that it would cancel a €500 million joint development project, alleging quality defects in Car Trim's leather seats. Volkswagen, under significant financial pressure as a result of its recent diesel emissions scandal, gave only two days' notice.[1] Car Trim sued. When Volkswagen refused to pay damages, Car Trim and ES Guss, another Prevent company, halted all supplies, forcing Volkswagen to interrupt production at six of its plants and idle nearly 30,000 employees.

Payback came two years later. When Prevent attempted to raise prices, Volkswagen canceled all remaining contracts with the group. Now it was the Prevent companies that had to cut back; one even declared insolvency. In 2020, the courts are still adjudicating the dispute.

The Prevent–Volkswagen battle is an extreme example, but tense relationships between buyers and suppliers are common. Amazon, for example, uses its formidable position in e-commerce to impose costly payment terms on its marketplace vendors. It takes the company 22 days to collect revenue from its customers but a full 80 days to pay its bills. The marketplace vendors effectively play Amazon's bank, helping fund the company's growth.[2] Brick-and-mortar retail offers similar examples. When retailers introduce private-label products, profits rise significantly. One important benefit: the new products help retailers squeeze the manufacturers of branded goods.[3]

Figure 12-1 illustrates such tensions. Companies hope to increase their margins by paying their suppliers less. Predictably, the suppliers push back. They seek to enlarge their own surplus: the difference between willingness-to-sell (WTS) and cost. These efforts create no value; whatever one party gains, it must come out of the pocket of the other.

There is, of course, a second avenue to increased profitability. If you manage to decrease the WTS of your suppliers, more value is created. Your company and your suppliers can be better off at the same time. Your supplier's WTS, you will recall, is the lowest price that they would ever accept from you. If you pay more than WTS—cost is greater than WTS, as shown in figure 12-1—the supplier will earn a surplus, a margin that is greater than the profitability that is built into WTS.

WTS varies from one buyer-supplier pair to another. It is determined by the relationship between the two. For instance, if a supplier earns

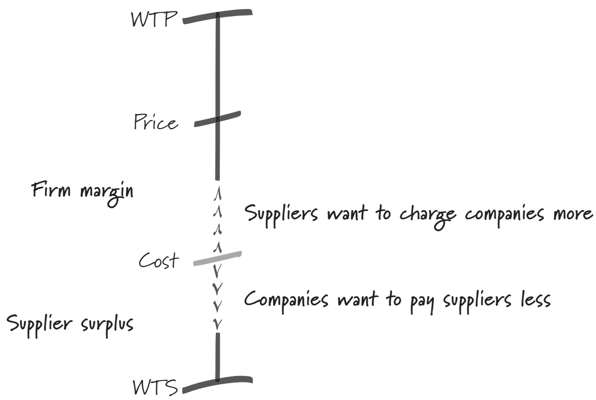

Figure 12-1 Companies and their suppliers fighting over fixed value

bragging rights by providing products to a famous company, her WTS will be lowered. If a buyer is a headache to work with, he will face suppliers with a higher WTS.

Such buyer-specific considerations aside, how do you actually lower the WTS of your suppliers? By making it more cost effective to sell to your organization. Any initiative that makes life easier for your suppliers, any investment on your part that makes them more productive, will lower their WTS and create more value.[4] Consider Raksul, a B2B marketplace for printing services. Its original platform allowed customers to compare prices across many of the 25,000 printing companies in Japan. Success came quickly, but Yasukane Matsumoto, Raksul's founder, was not happy. Every morning, he would look in the mirror and ask, "If today were the last day of my life, would I want to do what I am about to do today?"[5] Thinking about Raksul's listing service, Matsumoto decided the answer was no. He could create far more value. Under his direction, Raksul built a highly efficient matching service, sending client orders to carefully selected suppliers that had idle capacity of the type of printing machine that was required for the job. Printers with spare capacity and the right equipment had particularly low WTS, Matsumoto recognized. Raksul also hired former Toyota engineers to work on improving the printers' floor-level operations, lowering their WTS even further. The company shared the value it created with the printers as well as Raksul's customers, who enjoyed lower prices.

Raksul is a good example of two mechanisms that ensure your suppliers benefit from low WTS: careful supplier selection and the transfer of management expertise. In this chapter, we will see how leading firms employ both techniques.

Teaching Your Suppliers

Most companies detail the obligations of their suppliers in comprehensive contracts and service-level agreements. Many also develop codes of conduct that describe their expectations of supplier behavior. Nike, in early 2000, sought an even closer collaboration with its vendors when it decided to teach them lean manufacturing.[6] Lean production, also known as the Toyota Production System, was not a new approach, but it had not been adopted by Nike's suppliers.[7] Gerry Rogers, VP of global sourcing and manufacturing, explains, "The ability to find the right capability around the world is actually quite finite, particularly in this industry where you have tremendous product specialization. It's not in anyone's interest to engage transactionally and walk away anytime there is a problem. As the companies grow, they come up against new obstacles that we can actually help them with by showing best practice capability building or collaborating together."[8]

Lean production required Nike's nearly 400 shoe and garment suppliers to make profound changes. For example, traditional apparel factories separate sewing, ironing, and packing activities, and they have high inventory buffers between each process. Factories that adopt lean production move machines and workers into one production line, and they balance process cycle time (the time it takes to finish a garment) and *takt* time (the time between the start of one piece of clothing and the next, which is set to match customer demand). To be certified as lean, Nike asked its suppliers to make eight such changes. They included installing an Andon system, which allows workers to quickly signal production problems and perhaps even stop the line; using in-station quality inspections to prevent defects from being passed on; and showing evidence of 5S, a set of practices that reduces waste and promotes productivity.[9]

To prepare its suppliers, Nike opened a training center in an active factory in Sri Lanka. Vendors from across Asia participated in an eight-week program during which they studied the theory of lean, observed the method in practice, and worked with a Nike manager on a strategy to roll out the system in their own factories. Seeing early success in productivity and profitability, Nike doubled down on its effort with Lean 2.0, a program that promoted increased automation and worker engagement. Even a small pilot program demonstrated the significant potential of greater mechanization. At one factory, productivity increased 19 percent, quality moved up by 7 percent, and workers said they felt more valued.[10] By 2018, 83 percent of Nike's production came from factories that operated under Lean 2.0.

At around the same time, Nike began to work with Niklas Lollo and Dara O'Rourke, researchers at the University of California, Berkeley, to better align worker compensation in vendor factories with lean production methods.[11] To set the price for a piece of clothing, Nike negotiates standard allowable minutes (SAM), an engineering-based measure of production time, with its suppliers. The factories then use SAM to determine the pay rates for their workers, who try to beat SAM to make more money. Because SAM is fixed for each garment, workers prefer easy-to-produce styles with which they are familiar. With an unfamiliar design, beating SAM is difficult, so workers focus on overtime pay instead. This approach is at odds with many of the goals of lean production, in that SAM-based compensation provides little incentive to improve quality, reduce inventory, eliminate waste, and build just-in-time capability.

The Berkeley team tested three compensation mechanisms in a Thai factory that was already certified Lean 2.0: a productivity multiplier that rewarded more output; the productivity multiplier plus an added bonus for cost reductions or superb quality; and the multiplier plus a target wage.* Workers who participated in the experiment were guaranteed to earn at least as much as they had prior to the experiment. The researchers also installed LCD panels that displayed wage and productivity information for each production line. (Fewer than 50 percent of global garment workers receive pay slips that show the number of hours they have worked.)[12] Figure 12-2 shows how performance changed compared to production lines that did not participate in the compensation study.[13]

The study produced rich insights both for the vendor and for Nike. For example, the target wage proved particularly effective in raising pay

*When a line reached 90 percent of its productivity target, piece rates were multiplied by 1.06. The multiplier increased by 0.06 for every additional productivity increment of 5 percentage points, up to a ceiling of 1.48. Workers in the lines with a target wage could decide to leave for the day when they had earned a minimum of 650 baht per person in ten hours. The historic average for a team ranged from 440 baht to 530 baht.

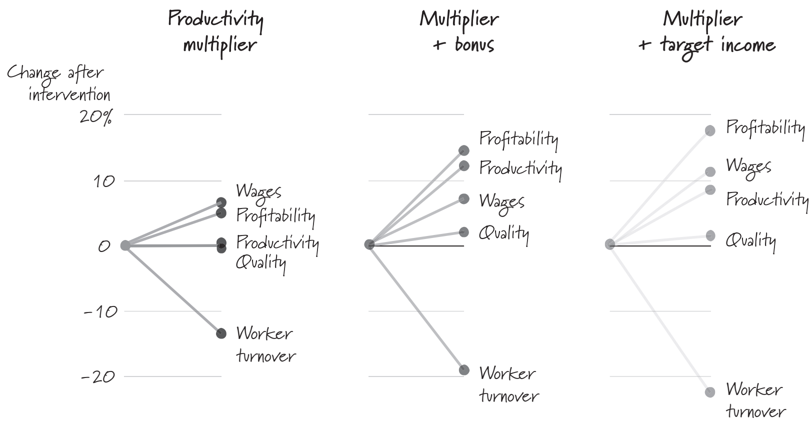

Figure 12-2 Compensation experiments at Nike vendor factories

and profitability, even though no team ever decided to go home after hitting the 650-baht target. In focus groups, workers said it was more important to earn additional income when production ran smoothly. Across all three interventions, workers earned more and vendor profits increased. This is possible because productivity rose by more than 6 percent in each of the production lines, an accomplishment that also reflects the steep decline in worker turnover. Quality—which was high even at the outset—further increased in the bonus and target groups. One of the lines that had received only the multiplier incentive proved an exception. This line became increasingly dysfunctional. Workers criticized each other for a lack of skill, their supervisor for poor communication, and management for an insufficient flow of quality material. A full 70 percent of these workers quit. (Another line with the same incentives did just fine.) The meltdown is a useful reminder of the stress that can result from high-powered incentives. Factory management, however, remained undeterred. When the experiment ended, productivity multipliers were introduced factorywide.

Teaching your suppliers to become more productive is an effective way to lower their WTS and create more value. The Nike factories are typical. As a rule, local vendors make significant strides once they start working with multinational companies. They increase their productivity, hire more workers, and experience greater sales success, even outside their relationship with the global firms.[14] The multinationals benefit as well. Nike, for instance, lowers SAM over time to take advantage of the productivity advances of its vendors.[15] A focus on WTS creates value for both parties—local companies and multinationals.

The Shadow of Value Capture

Even in buyer-supplier relationships that focus on value creation, the shadow of value capture is ever present. Suppliers are anxious that investments in production capacity will not pay off if buyers, seeing the newly installed capacity, demand prices that make the investment unattractive. Buyers fear that suppliers will exploit a close relationship if they become too dependent on a firm.[16] Both sides make costly moves to protect themselves. Buyers resort to sourcing from multiple suppliers when it would in fact be advantageous to work with only one.[17] Suppliers refuse to work with buyers they do not trust. For instance, when Xiaomi, now a leading smartphone manufacturer, first started, it approached more than 100 leading component suppliers, 85 of whom refused to do business with the fledgling company.[18] Value creation is challenging when everyone is anxious about their ability to capture a part of the value that they help create.

So how do leading companies do it? When I speak with supply chain executives who have successfully lowered their suppliers' WTS and created long-term value for themselves and for their suppliers, I often hear pieces of advice like this.

- ***Be selective.*** Developing and maintaining supplier intimacy is challenging and time-consuming. Limit the number of vendor relationships in which you invest.

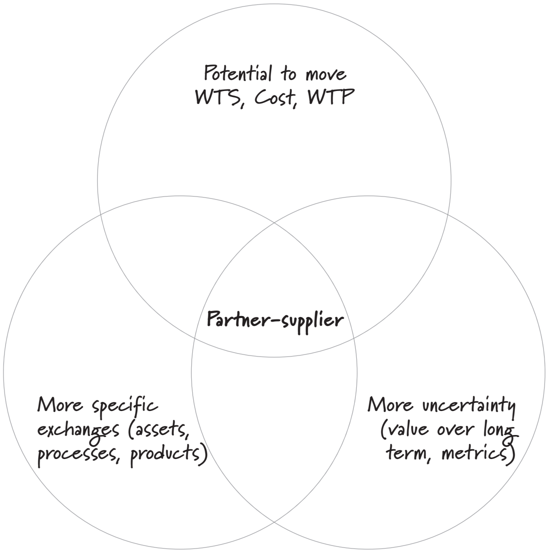

Figure 12-3 Criteria for selecting partner-suppliers

My recommendation is to use three criteria (figure 12-3) to choose the right partners. The first is value potential: close collaborations are particularly valuable if they have the potential to move WTS, cost, and willingness-to-pay (WTP). The supplier of an inexpensive component whose quality barely registers with your customers will not be high on your list of candidates for close partnerships. Second, specificity: Do you ask your supplier to invest in dedicated capacity? Would you like them to develop a novel process that benefits primarily your firm? The more specific the exchange, the more helpful it is to collaborate closely and develop trust. If you fail to do so, the supplier will likely underinvest or not invest at all. Third, completeness: How difficult is it to describe in a contract what you expect of your supplier? Is it possible to list most contingencies? Are you sure you understand how your expectations will evolve over the duration of the contract? Deep relationships are particularly advantageous if contracts are incomplete, if it is hard to describe and measure what you expect of your supplier.

- *Get to know your supplier.* It is tempting to view your supplier relationships exclusively through the prism of cost, but this lens is too narrow. As a highly successful manager once reminded me, "Supply chains are people, too!"

  Many considerations flow into supplier WTS. Just as creating value for clients requires a degree of customer intimacy, being close to your suppliers enables you to see initiatives that would increase supplier surplus. Do you remember Yasukane Matsumoto, the Japanese printing executive? He visits each of his suppliers personally before he decides to build a partnership.

- *Focus on outcomes, not billing codes.* Significant opportunities to lower WTS often result from *changes in your behavior.* Many buyers are overly prescriptive in their demands of suppliers, specifying in minute detail what they need to do and how they need to do it. Of course, there are sometimes technical reasons for being precise, but too-detailed specifications often reflect mistrust—will the supplier take advantage if I leave him some wiggle room?—and a desire to create apples-to-apples competition among suppliers. Being overly prescriptive comes at a cost, however. It robs suppliers of chances to adopt novel processes and introduce innovative products and services. It is a tension that sits at the heart of many buyer-supplier relationships. Presumably, we work with suppliers because they possess specialized knowledge and superior skills. Why, then, do we insist on imposing detailed guidelines that constrain them?

  When Tata Motors set out to build the world's least expensive car, the Tata Nano, it asked Bosch Automotive to design the engine. Bernd Bohr, then chairman of Bosch, explains the unusual nature of the collaboration:

  > Tata did not come to us with large rulebooks or specifications. They simply told us what the weight of the car would be, that it would have a two-cylinder engine, and [that it] would need

> to achieve Euro 4 emission regulation. In addition, it needs to drive, of course. And that was the difference from other auto projects. Early in the process, one could already see that our teams were coming up with new ideas. . . . For example, typically each cylinder has an injection valve on an engine; here, our engineers came up with the idea of having one injection valve for two cylinders and give two spray holes so that it takes care of two cylinders.[19]

Although the Nano ended up not being the financial success that Tata had hoped for, Bosch's technical breakthroughs found their way into many other engines.[20] The key to Bosch's success was a buyer who was focused on outcomes—in this case, a cost goal—and not on ways to get there.

FedEx Supply Chain had a similar experience working with Dell. When the computer technology company sought to transform its supply chain, it replaced a long list of specific services—hundreds of billing codes—with broad results that mattered the most. In its reverse logistics operation, for instance, Dell went from paying FedEx a fixed fee to dispose of products to asking the company to minimize Dell's overall loss from returned computers. In close collaboration, the two companies created three channels: one to refurbish machines, one to harvest parts, and a third to discard products.[21] John Coleman, general manager at Dell, explains the shift:

> [Traditionally,] Dell sold all returned product on a retail basis. If product didn't meet retail standards, it was scrapped. For years, I had asked Dell to come up with a system to use wholesale as an additional option. It was a good idea, but Dell could not generate internal interest in investing in a project. FedEx Supply Chain had no reason to make investments besides just contributing the idea. [After agreeing on the broad goal of cost minimization], however, FedEx

> Supply Chain created a wholesale alternative for refurbished merchandise. . . . [They] made the investments to take the concept from idea to reality.[22]

With the three channels and the wholesale alternative in place, Dell and FedEx reduced scrap by two-thirds, and they lowered the cost of Dell's reverse logistics operation by 42 percent in only two years.[23]

- ***Align external and internal incentives.*** With broad goals in place, you can define metrics that align with these goals and link them to financial incentives. FedEx Supply Chain benefits financially, for instance, if the costs of Dell's reverse logistics operations decline.

  In addition to strong external alignment, it is equally important to make sure the buyer's organization shares the same view of buyer-supplier relationships. Does your purchasing department know that your supply chain manager is developing a collaborative relationship with one of your suppliers? The manager is doomed to fail if purchasing is incentivized exclusively to achieve the lowest cost possible.

- ***Keep an open mind.*** The dark side of deep relationships is, well, the depth of these relationships. Once you build trust with a supplier, you have limited incentives to search elsewhere. When Victor Calanog, then a PhD student at Wharton, and I called all 596 plumbers in Philadelphia to offer brochures and a free sample of an innovative floor drain made of elastomeric material, the plumbers who trusted their current suppliers were much less likely to accept the brochure or the free sample. One year after our initial calls, the trusting plumbers had purchased fewer units of the novel drain.[24] Even if you have had great success building long-term, trusting relationships with some of your suppliers, reevaluating these relationships might point you to new opportunities to achieve even lower WTS and cost.

Collaboration in supply chains is not a new idea, of course. But the shift in perspective that comes with value-based thinking is useful nevertheless. These are some of the key insights.

- ***By helping your suppliers lower their cost, by making it easier for them to sell to your organization, you end up helping yourself.*** Ask not what your supplier can do for you . . .
- ***The logic of value capture dominates many buyer-supplier relationships.*** A reorientation toward value creation makes it easier to share information, align incentives, and discover attractive business opportunities.
- ***Making value creation the center of a buyer-supplier relationship is hard work, and you want to be careful in the selection of the suppliers with whom you build this type of relationship.*** In selecting the most promising partners, you need to consider their value potential (how much you can move WTS), the specificity of the investments (how unusual your demands are), and contractual incompleteness (how easy it is to put your expectations in writing).

PART FOUR

Productivity

13

When Big Is Beautiful

Whenever I examine productivity data, I can scarcely believe the dramatic differences between companies in the same industry.* On average, a US company at the 90th percentile of productivity creates twice as much output as a company at the 10th percentile—with identical inputs![1] The dispersion is even more pronounced in China and in India, where we often see 90–10 ratios of 5:1.[2] Nor are these fleeting differences. Gaps in productivity tend to persist over long periods.[3]

Advances in productivity lower both cost and willingness-to-sell (WTS) at the same time (figure 13-1). Recall that value sticks are drawn for one unit of a specific product or service. If a company becomes more efficient, it procures fewer inputs, thus reducing WTS as well as cost.

*In the research, the "same industry" means companies that share the same four-digit SIC code. SIC (Standard Industrial Classification) is a business classification system created by the US government. For example, companies that produce office furniture made of wood have code 2521. Firms that produce office furniture from materials other than wood have code 2522.

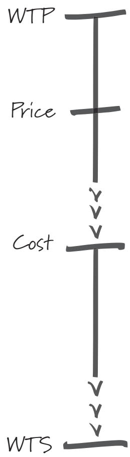

Figure 13-1 Productivity lowering cost and WTS

In this and upcoming chapters, we will examine three forces that help determine productivity: scale (this chapter), learning (chapter 14), and operational effectiveness (chapter 15).

Scale

In February 2007, Freddie Mac, the US government-sponsored enterprise that buys mortgages in the secondary market, announced that it would no longer purchase the most risky subprime mortgages. The Great Recession of 2007–2009—which plunged the global economy into its deepest crisis since the 1930s and destroyed almost 9 million jobs in the United States alone—had begun.[4] Banks played a central role in the crisis. To stabilize the economy, the government eventually supported almost 1,000 US financial institutions at a cost of nearly $600 billion.[5] In the depth of the crisis, taxpayers guaranteed $4.4 trillion in financial assets.[6] Looking back, former Federal Reserve chairman Alan Greenspan commented, "If [banks] are too big to fail, they're too big. In 1911 we broke up Standard Oil—so what happened? The individual parts became more valuable than the whole. Maybe that's what we need to do [with the largest banks]."[7]

Policy makers shied away from breaking up financial institutions, but they took steps to make banks less risky, by, for instance, increasing capital and liquidity requirements.[8] The regulations introduced after the crisis had the intended effect. By many measures, the banking system is much safer now.[9] And what happened to the size of the largest banks? They grew even larger! Wells Fargo quadrupled in size, JPMorgan Chase doubled, and Bank of America (BofA) grew by two-thirds. Among the largest banks, only Citibank shrank—a little.[10]

Why do banks grow increasingly larger? One important reason is that they benefit from *economies of scale*, that is, average costs fall as the business grows. Figure 13-2 shows the increase in cost that the largest US and European banks incur if they grow by 10 percent.[11] Any value below 10 percent (see the horizontal line at the top of figure 13-2) indicates economies of scale. Any value greater than 10 percent is evidence of *diseconomies of scale*—in other words, costs grow more quickly than the business.

In 1986, BofA benefited from modest economies of scale; at that time, its cost increased by 9.3 percent when the business grew by 10 percent.

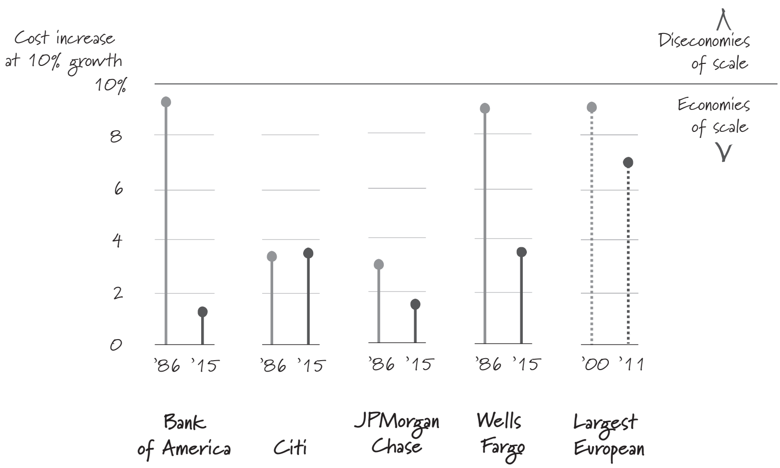

Figure 13-2 Economies of scale in banking

By 2015, the bank's economies of scale were far greater; a 10 percent increase in business resulted in a cost increase of only 1.4 percent. With the exception of Citibank, which was highly efficient even in the 1980s, all the largest US and European banks had more significant economies of scale in 2015 compared with 1986.

The economies of scale shown in figure 13-2 reflect the presence of some type of fixed cost. In banking, investments in technology are an important example of a fixed cost. (The financial services industry spends twice as much on IT as health-care and technology companies, and three times as much as manufacturing.)[12] To see how fixed costs create economies of scale, imagine a trading floor with a trader who executes a single trade per day. This trade is incredibly expensive, because the entire cost of the trading infrastructure is allocated to this one transaction. As the number of trades increases, the fixed cost is spread over more and more trades, leading to a decline in average cost (figure 13-3). The incremental effect of spreading that same fixed cost, however, gets smaller as trading activity increases.

Minimum Efficient Scale

Do you know your firm's *minimum efficient scale* (MES), the business volume that you need to be cost competitive? This is a number that every businessperson ought to be aware of.* If your company is smaller than MES, you will not be able to compete with larger rivals on the basis of cost. On the other hand, once your organization achieves MES, continued growth no longer results in a greater cost advantage. In fact, for

*Despite its strategic significance, MES is not included in standard financial reports. To find MES for your company, determine how cost would change if the firm grew by 10 percent. Pay close attention to which cost items you consider fixed—these will not change as you grow—and which ones you treat as variable. Finally, compare average cost at the current and the higher production level. If average cost declines as you grow, your company is too small to be cost competitive with larger rivals. If average cost remains roughly unchanged, you are at or beyond MES.

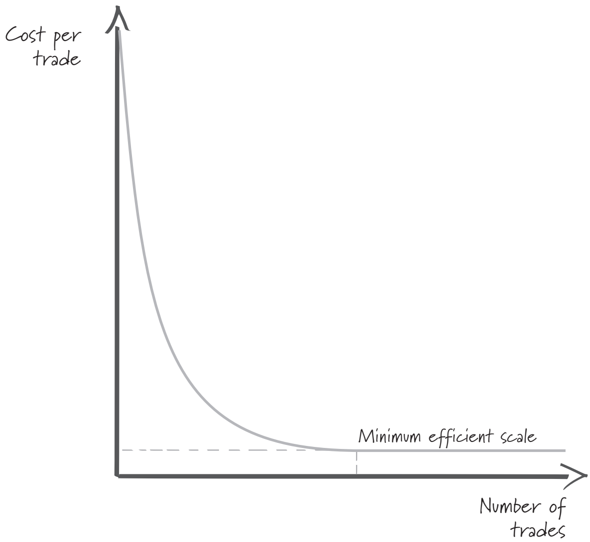

Figure 13-3 Economies of scale in trading

some companies, average cost might increase because of the complexity of running a very large organization.

IT spending is not the only type of fixed cost that results in significant economies of scale. Marketing is another good example. When Coca-Cola and Pepsi escalated their advertising spending in the mid-1970s, soft drink commercials became a regular fixture on American television. The advertising battle between the two titans raged for decades. Who won?

The companies' market shares tell a surprising story. Both of them emerged victorious. Coke and Pepsi's combined share of the soft drink market increased from 54.4 percent in 1970 to 73.2 percent in 1995.[13] Both grew at the expense of smaller competitors, which were unable to spread the fixed costs of advertising over a large volume of business. Resigned to a lesser presence on television screens, many of the hundreds of competing soft drink producers were acquired by larger companies or pushed out of business.

We often think of fixed costs as undesirable, because they force large investment decisions and make it difficult to adjust during the ups and downs of the business cycle. But fixed costs can be an advantage if your company is larger than its rivals. By increasing their marketing expenditure, Coke and Pepsi, for instance, were able to grow at the expense of competitors who fell short of minimum efficient scale.[14]

Scale as a Barrier to Entry

At their most powerful, economies of scale can create completely uncontested markets. For many years, Walmart enjoyed this advantage. The majority of Walmart's stores are located in suburbs and less densely populated places. To serve these markets, the company built a spoke-and-hub system of large distribution centers, each of which supplies about 100 satellite stores that are located within a 150-mile radius.[15]

This configuration provides Walmart with three types of benefits. By placing the stores within a day's drive of the distribution centers, the company spreads the fixed cost of the central warehouses over a large volume of sales, creating economies of scale. Because the stores are relatively close to one another, delivery trucks can supply them quickly, creating *economies of density*, a special type of scale economy. For every mile that a store is closer to a distribution center, Walmart's profit increases $3,500 annually.[16] With more than 5,000 stores in the United States alone, economies of density contribute noticeably to the company's bottom line. Because the stores can be resupplied quickly, they reserve little space for inventory; virtually every inch is dedicated to selling products.[17]

Walmart's third advantage highlights the link between market size and fixed costs. In a small market, fixed cost cannot be spread over a large volume of business. As a result, Walmart, the company with the largest share, has a distinct cost advantage. Even if a second firm decided to compete, was able to match Walmart's infrastructure, and managed to gain significant share, both companies, each saddled with significant fixed cost, would suffer reduced profitability. Anticipating this outcome, potential entrants are reluctant to enter in the first place. In many of the smaller markets, Walmart faced little competition for precisely this reason. Where it was alone, the company raised prices by as much as 6 percent.[18]

By pursuing a strategy of growth in uncontested markets, Walmart has grown to be the world's largest company by revenue. But even Walmart can extend its core advantage (low costs that reflect economies of scale) only so far. It now faces headwinds on three fronts. The company has had little success in penetrating urban markets, where it faces intense competition in general merchandise (from companies like Target) and groceries (from food-focused competitors like Kroger). In densely populated cities, the ratio of fixed cost to market size is insufficient to soften competition, making it more challenging for Walmart to gain a commanding position. Meanwhile, Walmart's international expansion has found mixed success. The company did well in markets like Mexico and the United Kingdom, where it was able to acquire a leading domestic retailer, thus replicating the economies of scale that it enjoyed in its home market. But Walmart failed (South Korea, Germany) or was slow to gain traction (Argentina, Brazil) in markets where it attempted to build its own store network or when it acquired weak retail chains (Japan).[19]

A final challenge is the rise of e-commerce. Online retailers successfully entered Walmart's core markets without incurring the fixed cost of a local-store infrastructure.[20] Amazon in particular targeted Walmart's higher-margin general merchandise segment. By contrast, the lower-margin grocery business—56 percent of Walmart's sales in the United States—appears to be better protected. That's because US consumers prefer buying groceries in stores (97 percent of sales) or picking them up at brick-and-mortar retail locations, an advantage for a company like Walmart, which has thousands of stores.[21]

Walmart's story is especially interesting because economies of scale explain both where the company is successful and where it struggles. In our discussion of willingness-to-pay (WTP) in chapter 8, we saw how network effects can limit the number of companies that can profitably enter a market. On the WTS end of the value stick, economies of scale have a similar effect. Take a look at figure 13-4, which shows the number of restaurants and newspapers in US cities.[22] As cities grow larger, the number of restaurants increases proportionately. In the most populous metropolitan areas, there is an almost unimaginable number of establishments of a wide range of quality. If a restaurant goes out of business, it is usually quickly replaced by—another restaurant. Newspapers are different. In figure 13-4, the size of a city seems to have almost no influence on the number of papers. Even major cities like New York have only a few. Across the United States, the market share of the leading newspaper never falls below 50 percent, irrespective of the size of the city.

What makes the difference? Restaurants and newspapers have very different cost structures.[23] Running a restaurant involves many activities that are variable cost. On slow days, chefs purchase less food, and owners schedule fewer staff. Unable to use fixed cost to deter entry, the restaurant business remains highly competitive. The costs of publishing a newspaper are largely fixed. In the largest cities, newspapers compete by increasing the size of their newsroom—the *New York Times*, for example, employs more than 1,600 journalists—to produce high-quality journalism that smaller competitors are unable to match.

In the news business, quality is a fixed cost. In restaurants, it is variable. Competition looks very different as a result.

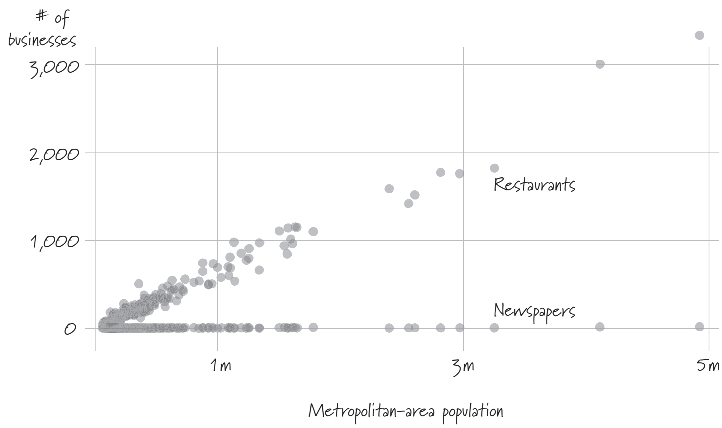

Figure 13-4 Market size and competition

In the pre-digital economy, I would first look to fixed cost to get a sense of how competitive a new market will be. In the internet era, network effects are often as influential as fixed cost in determining the number of companies that can compete. But economies of scale remain important in many sectors of the economy. A few considerations stand out for me.

- ***Every strategist needs to know the minimum efficient scale of their firm.*** It is irresponsible to choose a strategic direction without knowing whether the firm has the scale that is necessary to be cost competitive.
- ***Minimum efficient scale changes over time.*** Some of these changes mirror trends in technology and consumer tastes. Others reflect savvy strategic decision-making. Escalating fixed costs can be a powerful means to limit the number of competitors.[24]
- ***If your company competes on quality, make sure to compare the benefits of raising WTP with the help of fixed or variable costs.*** Even if the two modes of investment have similar financial returns in the short run, they might well have different implications for the number of competitors that you will face in the future.

14

Learning

When Henry Ford first started making the famous Model T in 1909, producing each vehicle cost the company $1,300.[1] By 1926, wages at Ford had increased threefold, while the cost of producing a vehicle had dropped to $840.[2] Ford's secret? The learning curve.[3] As companies increase the *cumulative volume of production*, costs often decline because employees gain familiarity with the product and processes, and they find ever new ways to improve productivity (figure 14-1). By the time Ford had produced 10 million cars in 1926, learning alone had reduced costs by more than one-third.

Similar effects exist in modern car plants. Figure 14-2 shows what happened in a company that switched from line assembly to team-based production.[4] As you can see, it was not easy for the workers to figure out how to collaborate. Right after the changeover, it took them more than 400 hours to assemble a vehicle. But look at the rapid progress. After only ten weeks, production time had fallen to less than 100 hours.

For companies that compete on learning effects, an important question is whether learning can be transferred from one worker to another, from existing plants to new ones. Can you lock in these advances? Or do you have to relearn processes every time you expand production capacity?

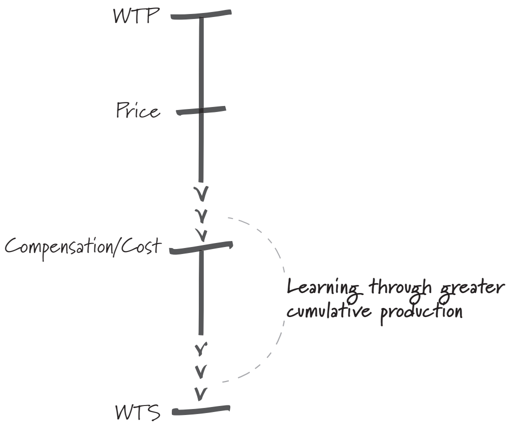

Figure 14-1 Learning through greater cumulative production lowers cost and WTS

Figure 14-2 illustrates a case where the transfer of learning worked perfectly. When the company added a second shift in week eight, the new teams immediately incorporated all the progress the pioneers had achieved.

Learning not only improves productivity, it also raises willingness-to-pay (WTP) in many contexts. In health care, for example, it takes surgical teams less time to perform operations if they frequently perform the same procedures. The Indian hospital groups Apollo Hospitals and Narayana Health exploit learning curves to offer complex surgeries at remarkably low prices, making them more affordable to less-affluent households.[5] A surgeon at Narayana Health performs 200 open-heart surgeries annually, twice as many as a doctor at the Cleveland Clinic. The high volumes not only reduce cost, they also improve quality. Both Apollo and Narayana Health boast success rates that rival those of the very best hospitals in the West.

As the examples in this chapter illustrate, learning takes on many forms. Recent advances in artificial intelligence and machine learning, in particular, have renewed companies' interest in learning as a source of competitive advantage. In only one of many examples, anomaly detection algorithms now help reduce cost across a wide variety of applications in many different industries. In manufacturing, AI prevents faulty parts from entering

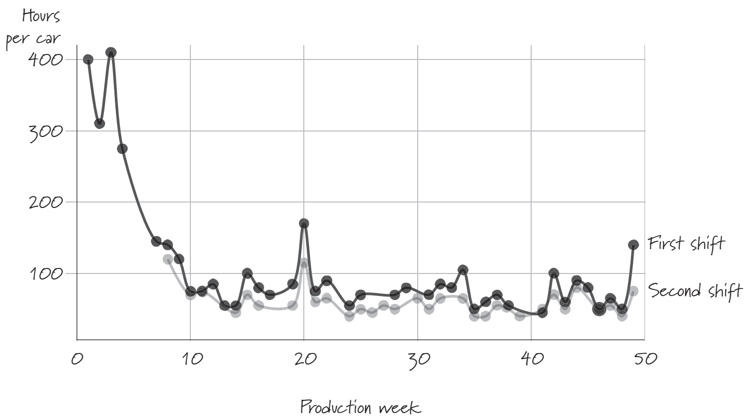

Figure 14-2 Learning effects in automotive assembly

production; in financial services, the algorithms help spot fraud; and in health care, machine learning identifies anomalous physiological readings.

Many forms of learning are related to the volume of available data and to cumulative output. But it is good to keep an open mind. For many years, Intel's management greatly valued the high-volume production of memory products for their learning benefits, only to discover that learning did not depend directly on overall volume. Sunlin Chou, who led Intel's memory development group, explained, "You don't learn more quickly when you increase volume by brute force. You have to learn by examining wafers. Learning is based on the number of wafers looked at, analyzed, and the number of effective corrective actions taken. Even if you have processed 1,000 wafers, the technical learning probably only came from the 10 wafers you analyzed."[6] Craig Barrett, then executive vice president and later Intel CEO, said, "We were late in waking up to the fact that we did not need to run volume in order to learn. There are other ways to be intelligent."[7]

As you consider opportunities for your company to compete on the strength of learning effects, keep the following in mind.

- ***If you have a long head start, learning effects will discourage rival companies from entering your market.*** But if your head start is short, learning effects make your competitors more aggressive; everyone will scramble to ramp up production as quickly as they can.[8]

- ***Learning effects are most powerful if they reduce cost at an intermediate pace.*** If costs decline very fast (as in the automobile example in figure 14-2) or very slowly, there is little advantage in having produced more than your competitors.[9]

- ***As you observe firms in your industry learning, it is tempting to cut prices to catch up.*** Keep in mind, though, that companies learn from their own experience and from observing other firms in their industry (just as you did). The easier it is to learn from others, the more modest your planned price cut should be.[10]

- ***Be aware of a dark side of learning.*** Because you benefit from running the same process many times, learning can lock in your organization and stifle innovation. Ford's Model T is again a good example. In the process of learning how to produce its cars at ever lower cost, the company created many novel processes (figure 14-3).[11] Over time, product and process became closely

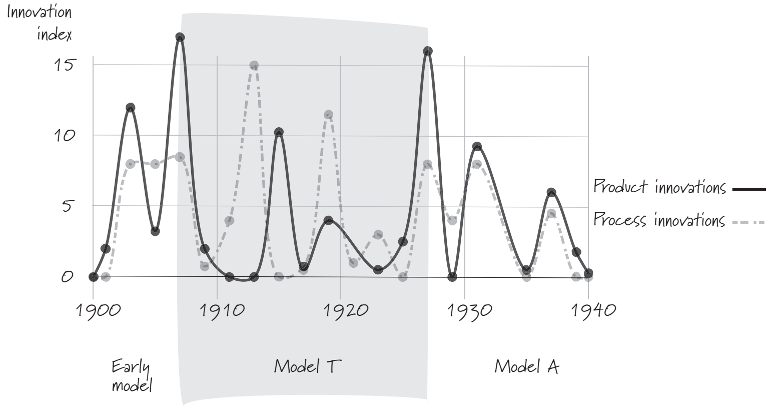

Figure 14-3 How learning can stifle innovation

linked. In Ford's sophisticated production system, any change in the Model T would have forced a multitude of process changes, an expensive undertaking. It was for this reason that Ford resigned itself to working solely on minor tweaks. Important product innovation returned to Ford only when it introduced the Model A.

15

No Reason to Sneer

Professor Michael Porter popularized the distinction between operational effectiveness and strategy. Strategic moves, he explains, confer a lasting competitive advantage. Operational effectiveness is important but not sufficient to achieve corporate success.[1] After all, everybody strives to be operationally efficient; there is no lasting advantage in adopting modern management practices, because every company will use these techniques if they prove effective. Smart strategic moves create *differences* between companies. Investments in operational effectiveness reinforce *similarities* (figure 15-1).

Warren Buffett is credited with a story about a parade that nicely illustrates Professor Porter's powerful idea: "One spectator, determined to get a better view, stands on his tiptoes. It works well initially until everyone else does the same. Then, the taxing effort of standing on your toes becomes necessary to be able to see anything at all. Now, not only is any advantage squandered, but we're all worse off than we were when we first started."[2]

Buffett's story builds on two assumptions. The first is that standing on tiptoes will spread quickly; any initial advantage is fleeting. The second is that the effect of tiptoeing is similar for everyone. The spectators are

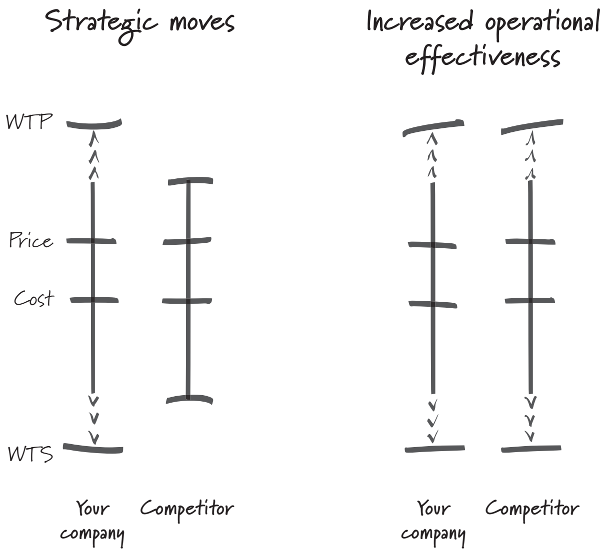

Figure 15-1 Strategy versus operational effectiveness

all a few inches taller, but the differences in height remain roughly the same. Is investing in operational effectiveness really like standing on your tiptoes? Let's find out. We first discuss the speed with which management practices spread.

The Speed of Diffusion

The view that you cannot achieve a lasting productivity advantage by adopting modern management techniques, it turns out, is too simple.[3] More than a decade ago, Professors Nicholas Bloom and John Van Reenen assembled a research group to systematically study the diffusion of management practices. After more than 12,000 interviews at companies in over 30 countries, the verdict is in.[4] My colleague Professor Raffaella Sadun, a prominent member of the group, explains the key finding: "If you look at our data, it's obvious that core management practices can't be taken for granted. There are enormous differences in how well managers execute even basic tasks like setting targets and tracking performance. And these differences matter: better-managed firms are at a long-term advantage; they are more productive, more profitable, and they grow at a faster pace."[5]

Figure 15-2 displays some of the differences in management quality.[6] The left column shows whether companies regularly track their performance, on a scale from 1 (the company has no KPIs) to 5 (KPIs are frequently measured and well communicated throughout the organization).[7] Some 18 percent of US companies are rated 5. In Brazil, only 5 percent of firms are top-ranked. Even more interesting than these international differences is the wide in-country dispersion.[8] In Germany, only 2 percent of companies have no KPIs, but 44 percent are rated 3 or lower, meaning they still fall well short of best-practice performance tracking. Yet 18 percent of German companies are best in class.

This pattern—excellence and mediocrity living side by side—is repeated across dozens of management practices. The middle column

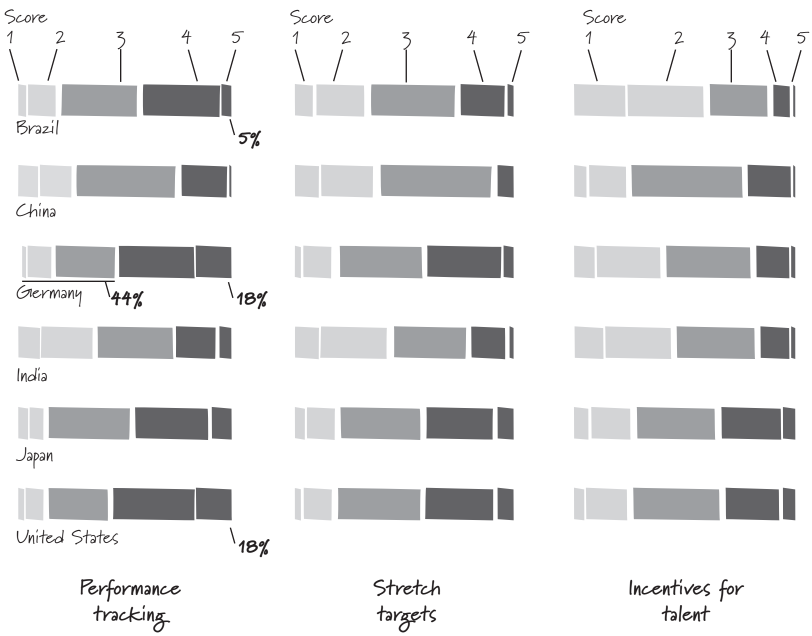

Figure 15-2 Diffusion of management practices

of figure 15-2 illustrates the dispersion in target setting, and the right panel shows the extent to which companies use appraisals and incentives to motivate their employees.* The results are always the same. In similar competitive contexts, some companies are stellar while others are decidedly middling. Substantial differences in the adoption of modern management practices exist even across plants that belong to the same firm. Nothing about the diffusion of good management is automatic or fast.

An important question is whether these practices are applicable everywhere. Might the effectiveness of financial incentives depend on the type of work? Could it be that financial incentives are more broadly acceptable in, say, Anglo-Saxon cultures? There is little doubt that the performance consequences of adopting modern management practices vary from company to company.[9] Even so, the effects of better management are so great that they are not easily swamped by external circumstances or company cultures. Consider this: moving a firm from the worst-managed 10 percent of companies to the best 10 percent increases productivity by 75 percent.[10] These benefits of better management are remarkably similar across countries and cultures. The sheer size of the productivity advantage suggests that a vast majority of companies would benefit from better management.

You might wonder why so many firms fail to adopt core management practices if they have such significant payoffs. Three barriers seem to be particularly important.

- ***Knowing your company*—**Many managers find it difficult to assess the quality of management at their firms. Professor Sadun explains, "At the very end of our conversations with each of the companies, we always asked managers to tell us, on a scale from 1 to 10, how well their company is managed. The mean rating is a 7

*The "Stretch targets" scale measures the degree to which the company sets stretch targets that are appropriately difficult to achieve. The "Incentives for talent" scale indicates whether the company regularly appraises the performance of its talent and supports high achievement with the help of financial and nonfinancial incentives. The full set of questions and metrics is available at https://worldmanagementsurvey.org/survey-data/methodology/.

on the 10-point scale, quite high, but the answers do not correlate with the actual adoption of modern work practices. Many executives do not seem to know the quality of their management."[11]

- *Managerial involvement*—Some executives prefer a hands-on management style; they frequently visit plants and work one-on-one with employees and suppliers on operational tasks. Others focus on collaboration in the C-suite. There is no general performance advantage in adopting either style, but hands-on managers run the risk of seeing process-oriented management techniques as a substitute for their own personal involvement. As a result, these executives often fail to adopt some of the most effective tools, such as automated performance tracking and financial incentives.[12]
- *Understanding the promise*—Not seeing the likely performance consequences of better management is a final hurdle for companies to make the necessary investments. In most companies, the data suggest, improved execution is more valuable than many managers believe. As a result, the gulf between poorly managed firms and better-managed ones is likely to widen over time. Executives who do not believe in incentives, for instance, are unlikely to introduce them, robbing their firms of an essential instrument to encourage the adoption of proven management techniques.

Springboard for Strategy

Standing on tiptoes at a parade is self-defeating, not only because everyone will quickly imitate the move but also because the results do not vary much from one spectator to the next. Do companies that invest in operational effectiveness share this fate? Will they end up looking like everyone else?

Intel provides an interesting example. A leading producer of memory chips in the early days of Silicon Valley, the company had fallen behind its Japanese competitors by the mid-1980s.[13] Japanese executives had pioneered practices such as total quality management and continuous improvement in the 1970s, outcompeting Intel with higher quality at lower cost. By any manufacturing metric one might consider—equipment utilization, yield, reliability, overall cost, and productivity—Intel's performance was dismal compared to that of its Japanese rivals. Craig Barrett, Intel's manufacturing czar at the time and future CEO, remembers, "We were unpredictable. We were not cost competitive. We were not manufacturing competitive, and the realization was that we needed to do things differently."[14]

Intel aimed to slash costs by 50 percent in 1985 and by another 50 percent the following year. To reach these ambitious targets, the company shut down its least-efficient production facilities and let go nearly 5,000 workers. Managers at the remaining facilities were asked to upgrade their manufacturing practices dramatically, often copying the Japanese model. Like its Asian competitors, Intel removed all sources of contamination from its facilities and its supply chain, shifted the responsibility of maintaining production equipment to the suppliers of the equipment, and automated its fabrication units ("fabs"). It took Intel nearly a decade and billions of dollars in investment to remake its operations. By the early 1990s, however, the company's productivity had quadrupled from the 1980s levels, utilization had surged from 20 percent to 60 percent, and yields improved from 50 percent to more than 80 percent. Intel emerged as a highly efficient, low-cost producer.[15]

A good number of Intel's initiatives resemble standing on tiptoes. Closing inefficient plants and copying advanced manufacturing techniques raise a company's financial performance, of course. But as Professor Porter and Buffett emphasize, these initiatives do not create the type of differentiation that is the basis for long-term competitive advantage.[16] For Intel, however, copying Japanese practices was only act one. The company set out to imitate the modern management practices of the day, and in the process of doing so it discovered novel ways to reduce cost, increase speed, and raise quality.

One of Intel's issues was that its developers created new processes directly on the manufacturing lines, working side by side with production staff. This approach resulted in fast transfers from development to fabrication, a key advantage for a company like Intel that competed on being first to introduce higher-capacity memory chips.[17] But codeveloping processes had serious shortcomings as well. The approach led to low utilization—development and production teams frequently competed for access to equipment—and immature and unpredictable production.

As Intel pushed for parity with its Japanese competitors, it began to separate development and production. The 1-micron 386 microprocessor, for instance, was developed in Portland but produced in Albuquerque.[18] Over time, the company became world class in moving technology from development to production and from one fab to another.[19] It was able to ramp up production volumes without sacrificing quality. How might the company exploit this capability?

Intel made two game-changing strategic decisions. It ceded the market for memory chips, in which it had retained a small and unprofitable share, to its Japanese competitors. Important in the company's early days, by the mid-1980s, speed counted for little in memory products. Instead, Intel concentrated on microprocessors, a market where its superior design capabilities coupled with manufacturing prowess held great promise.[20] Much to the disbelief of its customers, Intel also decided to single-source its microprocessors, beginning with the 386 in 1985.[21] This was unheard of in the semiconductor industry. Firms had always licensed their designs to rival companies, reassuring customers that they could meet demand. Intel's decision to serve as the single source of its products critically depended on its improved manufacturing practices. Barrett remembers, "Intel got to the point where it could generate enough customer confidence to pull off [single-sourcing]. . . . Our quality thrust of the early 80s began to pay off in improved consistency on the manufacturing line and overall better product quality."

By pursuing operational effectiveness, Intel ended up gaining valuable strategic opportunities, single-sourcing being one of them. Intel is typical in this respect. Programs to raise operational effectiveness often provide the building blocks for strategic renewal.[22] It is as if the spectators at the parade had gotten up on their toes and caught a glimpse of something new. They gained a different perspective and began to shift their position in response to it. Once it was fully mature, Intel's technology transfer strategy, eventually dubbed "Copy EXACTLY!," was no longer easy to replicate, because it required significant organizational and cultural adjustments. With Copy EXACTLY!, the company's production engineers lost much of their autonomy. Intel's Eugene Meieran recalls, "It was a huge cultural issue. Engineers would say, 'I am an engineer. I want to make changes to the process. Why should I go through this bureaucratic morass [of having the smallest changes approved by senior managers]?'"[23] Not surprisingly, some engineers were so unhappy that they left Intel.[24]

As organizations invest in operational effectiveness, it is of course possible that they end up performing the exact same set of activities as their competitors. But it is unlikely. Even if two companies embrace the same management approach—say, continuous improvement or high-powered incentives—their implementations will vary, and they will discover different avenues to raise willingness-to-pay (WTP) or lower willingness-to-sell (WTS). As a result, operational effectiveness can serve as a powerful springboard to strategic renewal.

Thinking about the role of operational effectiveness in explaining differences in productivity across companies, I take away a few insights.

- ***Good management practices and operational effectiveness help create meaningful differentiation between companies.*** They are hard to achieve, diffuse slowly, and can serve as the basis of a long-term competitive advantage.

- ***As Intel's experience shows, operational effectiveness and strategy are intertwined.*** My advice is to pay little attention to the distinction. Do not dismiss an initiative simply because it seems to be an investment in operational effectiveness. It might well turn out to be the catalyst for a strategic renewal.

- ***Rather than asking whether projects fall in the "strategy" or in the "operational effectiveness" bucket, consider their potential to raise WTP or lower WTS.*** If an initiative is implemented successfully, how easy will it be for your competitors to imitate it? If a project moves the needle and is difficult to replicate, it will improve your firm's competitive standing and raise profitability, whether or not the project is a clever strategic move or an attempt to improve operational effectiveness.
- ***There is no doubt that improving the quality of management can create substantial value.*** Keep in mind, however, that better execution is *no substitute* for sound strategy. Maxims such as "execution beats strategy every time" and "culture eats strategy for breakfast" are nonsense. The flawless implementation of an initiative that does not change WTP or WTS will fail to create value.

PART FIVE

Implementation

16

Asking How

Once you have decided how to create value—raise willingness-to-pay (WTP) or lower willingness-to-sell (WTS)—it is time to bring your strategy to life. What could be more exciting? At this step, questions will abound. How will activities have to change? How do you adjust investment patterns? What projects will you prioritize? In this final part of the book, we will see how companies move from strategy formulation to strategy implementation.

Prior to making any commitment to initiatives and projects, it is critical that you understand, in some detail, *how* they would move WTP or WTS. Companies often build on broad strategic ideas, many of which come in the form of simple recipes—be number one or number two in your market, create a powerful brand, invest in adjacent businesses, build global scale. When I study such recipes, I invariably find that they work for some companies but not for others. To be specific, consider the idea that a prominent brand will confer a lasting competitive advantage. Each year, Kantar, a brand strategy consulting firm, publishes a list of the 100 most valuable global brands. As you might guess, companies like Apple and Google are typically at the top of the list. But the rankings also include lesser-known companies such as Indonesia's Bank Central Asia (BAC). Of the leading brands, 57 are American and 14 are Chinese.

The ranking is particularly noteworthy for the breadth of data it reflects. Among many other variables, Kantar considers a brand's market share and price premium, its salience (how quickly it comes to mind), and its distinctiveness and meaning (whether it addresses customer needs in relevant ways).[1] To build the ranking, the firm interviews an astounding 3.6 million consumers in more than 50 markets. Clearly, brands that score high on this metric are of great value. By Kantar's accounting, the top 100 global brands are worth $4.4 trillion, more than Germany's GDP.

You can imagine my surprise when I checked to find out how much the world's most valuable brands contribute to their organization's overall financial success. The answer: on average, not at all. Figure 16-1 compares changes in brand strength, as measured by Kantar, to changes in financial performance over the 2013–2018 time period.[2] As you can see, sometimes the world works as we expect it to. Home Depot, for instance, increased its brand value by almost $29 billion, and its return on invested capital (ROIC) soared by 18 percentage points to 34.7 percent. IBM's story is just the opposite: its brand suffered, and so did its financial results. It is also not difficult to understand Hewlett-Packard (HP). The company dramatically increased its profitability, but it did so

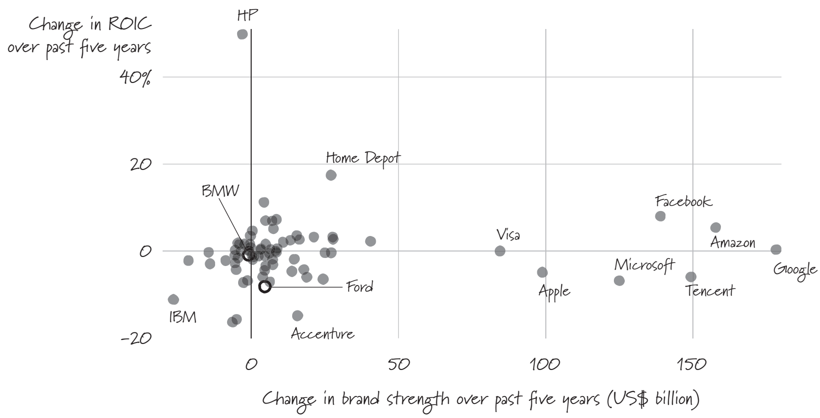

Figure 16-1 Brand value and financial success

by means other than brand building. The data for companies like Visa and Google, however, are puzzling. Both witnessed a significant rise in the value of their brand—Google's by a remarkable $188 billion. Yet this rise in value apparently had no influence on these companies' profitability. Accenture is an even greater surprise. The company increased its brand value, but profitability declined! For our sample of 75 companies (financial data are not available for all the top 100 brands), the correlation between changes in brand value and changes in ROIC is 0.0353. Let's call that zero.

At this point, your mind must be racing. How can one explain the patterns in the data? Is there something special about technology companies? Are there diminishing returns to stronger brands? Would Accenture have fared even worse if it had not increased its brand strength? From figure 16-1 alone, it is hard to say. What is obvious, however, is that the relationship between brand strength and financial profitability—a seemingly plausible point of departure for the implementation of a brand-focused strategy—is less straightforward than you might have expected.

Or consider the notion that greater scale will lead to increased productivity and improved margins, an idea we explored in chapter 13. Figure 16-2 shows this association for American law firms.

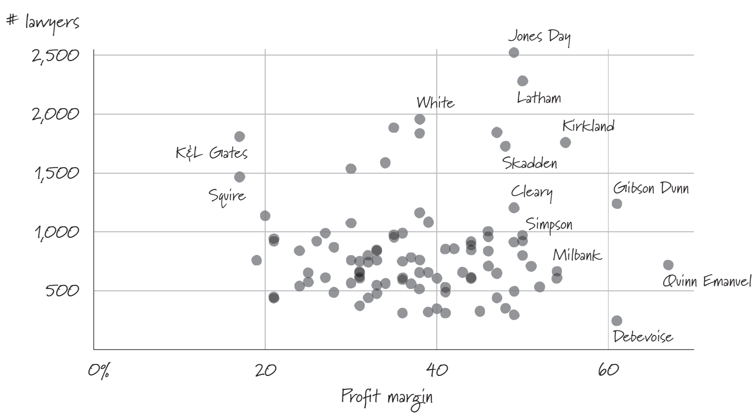

Figure 16-2 Scale and profitability of law firms

There is no obvious link between the size of law firms (measured here by the number of lawyers) and their profit margins.* Sure, Kirkland & Ellis is large and financially very successful. But K&L Gates is of similar size, and yet this firm falls in the bottom quintile of firm profitability.

Before you commit to a strategic course and begin implementation, these examples show, it is useful to ask, What are the *circumstances* under which [insert your favorite recipe for strategic success] will increase WTP or lower WTS? This question is powerful, because it prompts you to be specific about the mechanisms by which a proposed initiative will change WTP or WTS. Often it is only when we observe the underlying mechanisms that we begin to understand why generally sound strategic advice might not apply to a specific firm's circumstances. Examining how an initiative raises WTP or lowers WTS also allows you to recognize the resources and capabilities your company needs if you are to bring the strategy to life. Figure 16-3 illustrates this link between mechanisms and resources.

Asking how a strategic initiative creates value often yields surprising insights. What appeared to be one strategy, one recipe for success, is often a set of different strategies that require distinct capabilities and resources.[3] A stronger brand, for instance, can raise WTP by conferring status, by reducing uncertainty, and by establishing tastes and norms.

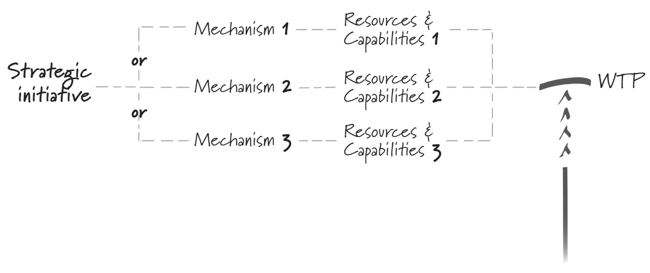

Figure 16-3 Different mechanisms to raise WTP

*The graph in figure 16-2 excludes some of the largest firms because they are organized as vereins. These firms show low margins on average, but their financials are not directly comparable to the financials of the partnerships shown in the graph.

Depending on the mechanism that they employ, brands delight customers in radically different ways. Let me illustrate each of these mechanisms to highlight how different they are.

Conferring Identity

The idea that branding a product helps customers communicate who they are is intuitive. The techniques that brands use to do this are nuanced and fascinating. Mercedes-Benz, for instance, affixes its famous star to the hood or the grill of most of its models. The star varies in size, ranging from less than 8 centimeters to almost 20 centimeters. The largest stars are reserved for the least expensive models. On average, customers pay an additional $5,000 for every 1-centimeter *decrease* in the size of the star.[4] Brand managers at Mercedes understand that their less-affluent customers have a greater WTP for social differentiation via prominent brand markers. By contrast, the brand's richer clientele prefers more subtle signals, hence the smaller star.

You can observe similar patterns in other luxury markets. When Professor Young Jee Han and her coauthors studied the market for handbags, for instance, they found that brands raise WTP for three distinct groups of customers.[5] For the most affluent—think old money—brands signal membership in that group. For the nouveau riche, brands serve as a means for buyers to disassociate themselves from others who are not as wealthy as they are. Finally, luxury handbags signal aspirations of belonging for less-affluent consumers who crave social status. Look at how Gucci raises WTP for each of these groups (figure 16-4).[6]

The Sylvie top-handle bag ($31,000) features a quiet design that requires customers to recognize Gucci's green-and-red-striped pattern and to note the distinct shine of true crocodile leather. It is a handbag for old-money customers who value understatement as a sign of group membership. Gucci hides its brand so that only those who are in the know recognize each other. The louder design—the Marmont bag with a prominent display of the Gucci logo ($2,790)—is popular among the nouveau riche, who treasure clear social demarcations. Professor Han

Figure 16-4 Gucci handbags—the Sylvie (left) and the Marmont

shows that this group would not purchase the Sylvie, because they do not recognize it as a Gucci bag.[7] As a result of Gucci's branding tactics, the firm's old-money clients are safe from nouveau riche impostors. The greatest demand for fake products comes from lower-income groups with a substantial need for social status. Because this group favors unmistakable signals, a fake Sylvie is less expensive ($319) than a fake Marmont ($359).[8]

Reducing Uncertainty

How do you increase WTP to such an extent that you can charge a 200 percent price premium for a product with many substitutes? Ask Bayer how it does it. The pharmaceutical company created aspirin in 1897, and the success of the drug continues more than a century later. What is remarkable is that aspirin is not protected by any patent, and there are many competing products with exactly the same active ingredient (acetylsalicylic acid), the same dosage, and broad availability, at a far lower price. Your drugstore may even attach a small "compare to" notice to shelves that carry the generic version to remind you that you are about to purchase a substantially overpriced product if you choose Bayer aspirin. How does Bayer defend its position?

Brands like Bayer are valuable because they reduce a trace of uncertainty about the performance of products. Is the generic version really just as good as the "real" drug? Is Bayer perhaps a more reliable manufacturer compared with others that make the same drug? As uncertainty vanishes, these brands lose in value. Better-informed consumers—for instance, those who can name the active ingredient in aspirin—are much more likely to leave the branded version on the shelf. A study of branded products with close substitutes estimates that the market share of aspirin would fall by more than 50 percent if everyone were as well informed as pharmacists.[9]

Aspirin is no exception. Amateur chefs purchase twice the amount of branded salt and sugar compared with professionals. Across all product categories, US consumers spend $166 billion annually on products for which a private-label alternative of similar quality is readily available.[10] In all these instances, brands create value by instilling confidence, by assuring consumers that they're purchasing products of a hoped-for quality. It is not surprising, then, that this brand premium is larger in countries with more variable product quality. In China, for example, generic drugs are, by and large, sold at international prices.[11] Branded drugs, however, can be six times as expensive. Drug safety scandals and the resulting consumer anxiety are partly responsible for this astonishing brand premium.[12]

Setting Standards of Performance

In some cases, brands raise WTP by teaching us what experiences and products should look, feel, and even taste like. With a 25 percent market share, Folgers is America's number one coffee brand.[13] (In case you wondered, Starbucks has a 12 percent market share.) But Folgers has limited success in New York City, where Maxwell House dominates. The latter's advantage is no secret: Maxwell House was the brand that taught New Yorkers what coffee tastes like. The company entered the city long before Folgers did, and New Yorkers came to acquire a taste for Maxwell. Now they prefer it to any other brand.

When Professor Bart Bronnenberg and his colleagues analyzed market shares, they found that this story plays out across the United States.[14] The coffee brand that enters first ends up winning the lion's share of the market. Folgers, founded in San Francisco in 1872, is the leading brand in the western United States. Maxwell House, launched in Nashville in 1892, leads in the eastern and southeastern United States. When consumers taste different coffee brands side by side, their taste buds tell them they like best what they are used to, the brand that entered first.

Taste-based loyalty is significant for many consumer packaged goods (CPGs). If you grew up in India, I would guess Amul is your favorite butter; in Mexico, Pan Bimbo your choice of bread.[15] First impressions are decisive. Bud Light is the most popular beer in America, but it plays second fiddle in Chicago, where Miller entered long before its rival. Los Angeles favors Hellmann's mayonnaise, while Denver prefers Kraft, a pattern that reflects the order of market entry. Growing up, consumers develop a taste for "their" product: "That's what mayonnaise is supposed to taste like." Taste-based loyalty is one reason why Godrej food products perform exceptionally well in India and why the Colgate brand of toothpaste is very profitable in the United States.

Taste-based loyalty is only one example of brands setting standards that are difficult to beat. Amazon taught Americans how one-click shopping works. WeChat showed Chinese consumers how to use a messaging app to pay for just about everything. Airbnb set our expectations for ways to find private accommodations. At times, a brand's name becomes synonymous with the activity; we Google information, wipe our faces with Kleenex, and TikTok funny videos. In all these instances, the follower brands face a difficult choice: they risk disappointing consumers when they offer experiences that fall short of the standard. And they are seen as undistinguished when they emulate it.

Figure 16-5 summarizes the three main ways in which strong brands raise WTP.

It is useful to ask how a proposed strategy will increase WTP, because the answer often indicates the circumstances under which the strategy is unlikely to improve financial performance. Brand strength raises the WTP for BMW. Driving the all-electric i8 model undoubtedly confers

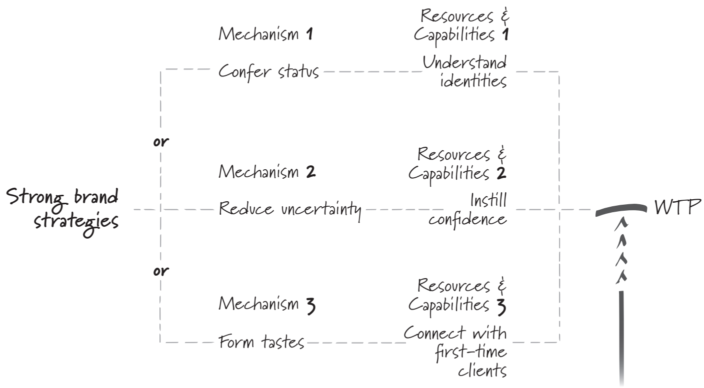

Figure 16-5 Three mechanisms for brands to raise WTP

status. But would you invest in the brand strength of the Ford Focus or the Chevrolet Impala?

Let's consider the three mechanisms shown in figure 16-5. In the market for cars, status appears to be reserved for luxury vehicles and pickup trucks. It seems unlikely that our first mechanism—conferring status—will be effective for a midsize sedan such as the Ford Focus or the Chevrolet Impala. As for reducing uncertainty, the quality of cars used to be a serious concern. Cars broke down often, and it was difficult for buyers to obtain information about the likely performance of a particular model. In this environment, a strong brand was quite valuable. How things have changed! Today's cars are far more reliable, and we now have libraries of statistical information about the long-term performance of specific models at our fingertips. As a consequence, using brands to reduce uncertainty is unlikely to create much value in the market for cars. The third mechanism, forming tastes, suggests that early experiences with a product can create long-term loyalty to the brand. In the segment for midsize sedans, for example, many customers make repeat purchases of the same brand, but only a small minority feel true loyalty.[16] There is only scant evidence that early driving experiences permanently raise WTP for a brand.

Considering the three mechanisms, investing in the Ford or the Chevrolet brand is likely to be wasteful. In fact, even at the corporate level, I found no evidence that either Ford's or GM's brand strength is related to the financial performance of these companies.

While the discussion here has focused on brand strategy, the key points hold more generally.

- *Recipes for strategic success often mask different mechanisms that connect WTP or WTS with financial performance.* Scale, for instance, can stand for economies of scale (lower cost and WTS), learning (lower cost and WTS), network effects (increased WTP), and incentives to invest in complements (increased WTP), to name only a few.
- *Depending on which of these mechanisms you employ, different resources and capabilities become critical.* Remember the failure of Friendster in chapter 9? For Friendster, scale represented network effects; chasing users in North America and in Indonesia was a mistake. If scale had represented economies of scale (say, the fixed cost of investing in a global technology platform), pursuing multiple markets would not have been an unreasonable strategy.
- *By being specific about the mechanisms that connect strategic advice and WTP or WTS—by asking how—you gain a deeper understanding of the likely financial implications of strategic ideas.* If you come across strategies that provide no indication of how they will change WTP or WTS, chances are you will execute brilliantly without achieving a lasting financial impact.

17

Being Bad in the Service of Good

Few entrepreneurial careers illustrate the role of fortunate accidents (and accidental fortunes) as clearly as that of Stewart Butterfield, cofounder of Flickr and Slack. Butterfield's first startup built a multiplayer online game whose main purpose was to "kick ass." It largely failed to do so, but the tools created for developing the game provided the building blocks for Flickr, a photo-sharing site that Butterfield eventually sold to Yahoo! He later returned to gaming to produce Glitch, another failure—and another instance where software written for a project that failed proved generally useful: thus was born Slack. The workplace communication platform went public in 2019. A year later, it was valued at $15 billion.

In many ways, Slack exemplifies the mindset we have explored throughout this book. The company obsesses about customer willingness-to-pay (WTP) and talent willingness-to-sell (WTS). Slack works hard to escape a narrow product mindset. In a now-classic memo titled "We Don't Sell

Saddles Here," Butterfield explains how a focus on WTP opens up business opportunities:

> Consider the hypothetical Acme Saddle Company. They could just sell saddles, and if so, they'd probably be selling on the basis of things like the quality of the leather they use or the fancy adornments their saddles include. . . . Or, they could sell horseback riding. Being successful at selling horseback riding means they grow the market for their product while giving the perfect context for talking about their saddles.[1]

Because the company espouses a broad notion of value creation, Slack seems novel and unique to many of its customers, which is interesting because it is not. Similar products existed before Slack, but Yammer, HipChat, and Campfire failed to catch on because clients found it difficult to see how group messaging would create value. Butterfield describes the process of developing a deep understanding of customer WTP.

> Just as much as our job is to build something genuinely useful, something which really does make people's working lives simpler, more pleasant and more productive, our job is also to understand what people think they want and then translate the value of Slack into their terms. . . . Putting yourself in the mind of someone who is coming to Slack for the first time—especially a real someone, who is being made to try this thing by their boss, who is already a bit hangry because they didn't have time for breakfast, and who is anxious about finishing off a project before they take off for the long weekend—putting yourself in their mind means looking at Slack the way you look at some random piece of software in which you have no investment and no special interest.[2]

For a company that is as obsessed with WTP as Slack is, Butterfield and his team made a counterintuitive decision when they first developed the communication platform. Rather than developing an all-around well-working product, they expended all their energy on only three features—search, synchronization across devices, and file sharing—at the expense of many other desirable functions. Why would a company that genuinely cares about customer WTP adopt a shortcut? Why not do it properly? Why not do it all? The notion that a focus on WTP (or WTS) implies doing it all, getting better by every conceivable measure, is perhaps the single biggest risk of adopting a strategy that is centered entirely on value creation. Invariably, companies that attempt to do it all fail to create significant value, because every value proposition reflects a set of trade-offs, a mixture of dos and don'ts, a blend of promises and letdowns.

Slack's decision to focus on only three features is an example of such a trade-off. Slack is what my colleague Professor Youngme Moon, in her elegant book on differentiation, calls a *reverse-positioned* brand.[3] These brands choose to be bare-bones in many respects, only to surprise us with extravagance in others. IKEA, JetBlue, the early Toyota Corolla, and Slack have all assumed reverse positions.

Resource constraints are the main reason firms assume reverse positions. To be great in one specific dimension—search, for example—Slack had to neglect many others. This principle holds true not only for startups, where resource constraints are particularly severe. Excellence invariably requires resources in short supply: time, capital, managerial attention. Investing these resources in one place (so as to be outstanding) means they will not be available elsewhere. Companies that spread their resources over many product attributes and innumerable service features end up being mediocre throughout, because they lack the means to be truly excellent. As my colleague Professor Frances Frei and Anne Morriss write in their analysis of companies that provide uncommon service quality, "You must be bad in the service of good."[4]

The logic of trade-offs is impeccable and not difficult to understand. "We had a lot of conversations about choosing the three things we'd try to be extremely, surprisingly good at," says Butterfield. "And ultimately we developed Slack around really valuing those three things. It can sound simple, but narrowing the field can make big challenges and big gains for your company feel manageable. Suddenly you're ahead of the game because you're the best at the things that really impact your users."

Making Trade-Offs Visible

In many executive education courses at Harvard Business School, we conduct what we call a *value map* exercise. Of all the hands-on tasks with which we engage our course participants, this is one of our most impactful activities. We must have run this exercise with hundreds of companies. It leaves a deep impression every time.

You begin to build a value map by selecting a group of customers—or a group of employees if you create a map for talent. Next, you compile a list of criteria that are important to these customers when they make a purchase. These criteria are called *value drivers* (figure 17-1). Think of them as the product and service attributes that determine WTP (or WTS).

You then rank the value drivers from most important to least important. For example, your customers might value speed of service above all else. In this case, "speed" is value driver number one. If your customers do not care much about the price of your service, "price" goes toward the bottom of the list. Keep in mind that this is the customer's perspective, not yours. In a final step, indicate for each value driver how good your company is at meeting this customer demand. For instance,

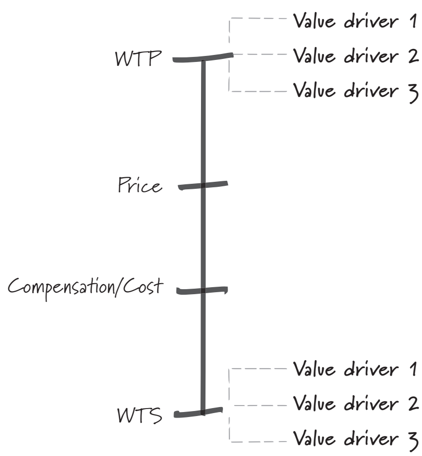

Figure 17-1 Value drivers

"speed" could be important for your customers, but your company might be mediocre at providing fast service.[5]

Value maps allow you to see, at a glance, your competitive standing and strategic opportunities.[6] Figure 17-2 shows an example of a global consulting company, one of the so-called Big Four firms. This value map is based on interviews conducted by Source Global Research, a firm based in London. To establish the list of value drivers and rank them, Source speaks annually with over 3,000 executives about their recent experience with consulting engagements.

As you can see in figure 17-2, the firm's clients care most about how well their account is managed and the firm's innovation capabilities. These are the top two value drivers. Global reach and stakeholder management are less critical. The figure also shows that the firm's value proposition is not particularly well aligned with the clients' WTP. The firm underperforms on some important service attributes (e.g., innovation), and it exceeds expectations in areas of little importance to clients

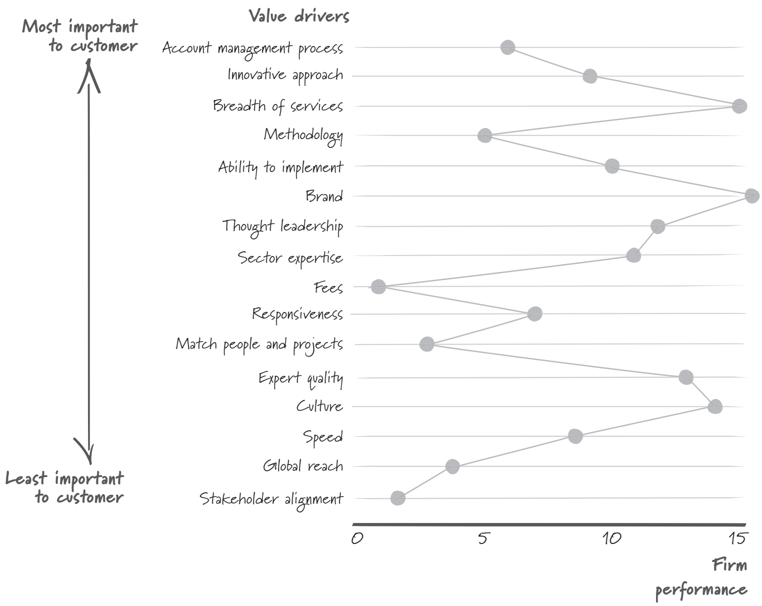

Figure 17-2 Value map for a global consulting firm

(e.g., culture). Fiona Czerniawska, cofounder and joint managing director of Source, was not surprised by these results.

> Most consultants have a very strong sense of client service; they are genuinely trying to do what clients want. But they don't really know what their clients want. And their tendency is to deliver what *they* think the client needs. They are not trained to have a good conversation about it in practice. When a client asks for a proposal, consultants talk about *their* work, but they don't say, "Why are we here then? Why don't you do this yourselves? What are we supposed to bring that is of value to you?" And that means it's not embedded in the proposal, which means that people working on the project don't really understand why they are there.[7]

The consulting industry is no exception. Many value maps resemble the one shown here. If the value drivers are appropriately ordered from most important to least important, an ideal *value curve*—the line that connects the levels of performance for each value driver—would tend to slant from top right to bottom left. Firms exceed expectations where it counts, and they sustain excellence by diverting resources from lower-ranked value drivers. Why not be excellent on all dimensions? Trade-offs. The slanted value curve reflects the trade-offs that are necessary to deliver stellar services.

Executive Ambition Meets Trade-Offs

When I conduct this exercise at Harvard Business School, we discuss the importance of trade-offs before the executives create value maps for their own firms. It is usually a short conversation. Everyone agrees that companies cannot be good at everything; true excellence requires firms to shift resources from value drivers of lesser importance to critical customer concerns that drive WTP.

When the course participants complete their maps, I ask them to use arrows to indicate how they would like to evolve their firm's value proposition over time (figure 17-3). Can you guess the results?

All the arrows point to the right! A good hour after we have all agreed on the importance of trade-offs for business success, there are often few trade-offs in sight. Smart, ambitious executives want to become better at everything. Does this remind you of your firm? Do you sit in meetings where you make long lists of products and processes to improve? The sad news is, of course, that any attempt to get better at everything virtually guarantees mediocrity—exhausted mediocrity at that. By spreading scarce resources across many value drivers, you make it impossible for your organization to achieve true excellence.

I have been thinking about why it is so difficult to make trade-offs. Why is it challenging to decide what not to do? Where not to invest? Where to underperform? Here is one conjecture: the idea of trade-

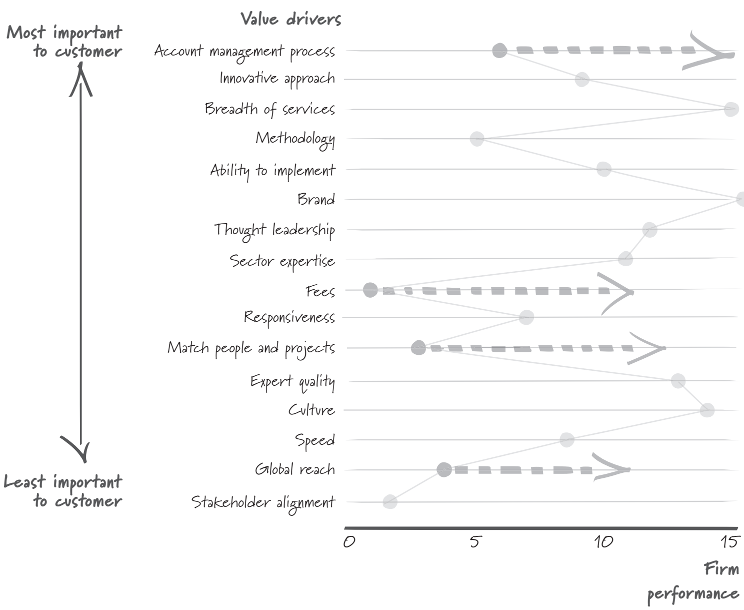

Figure 17-3 Improving the global consulting firm's value proposition

offs applies least to incredibly talented, supersmart people, the type I encounter in C-suites and in HBS executive education programs. These folks can be good at almost everything. And if they sacrifice a little sleep, they get huge amounts of work done, just in time and in fabulous quality. The danger is to take this model of personal success and apply it to organizations. (Some) people can be good at almost everything, but companies cannot. Firms must pick and choose where they strive for excellence lest they be condemned to remaining second-rate.

The lessons here are straightforward.

- *Value maps are a simple tool that provide a wealth of information.* They reveal the product and service attributes that determine customer WTP; they show where you have an advantage in creating customer delight and where you lag; and, perhaps most importantly, they indicate if your firm is making appropriate trade-offs. Do you excel where it counts?
- *It is exciting to decide where to excel and figure out how to make progress.* It is far harder, however, to determine where not to invest, where to underperform. True excellence is built on trade-offs. No company can be good at everything.
- *The next time you and your team sit in a strategy meeting and you start making a long list of issues to resolve, projects to complete, and services to improve, remember to ask, "What will we* stop *doing?"*

18

Guiding Investment

Value maps are not only a powerful way to visualize trade-offs but they also help guide investments and connect strategy with operations. In this chapter, we will see how companies use value maps to link strategic choices with activities and budgets.

Choosing a Value Proposition

You will recall (from chapter 3) that a company's ability to capture some of the value that it creates depends entirely on differences—differences in willingness-to-pay (WTP) or willingness-to-sell (WTS). By comparing your company's value curve to the value propositions of your competitors, you can identify relevant differences and devise ways to heighten them. Let's look at an example.

When Expedia, the online travel agency, set out to build its value map, the company began by asking customers how they choose travel sites. It started with personal, open-ended conversations and focus groups; both techniques are well suited to identifying critical value drivers. With a list of key concerns in hand, Expedia then surveyed more than 13,000

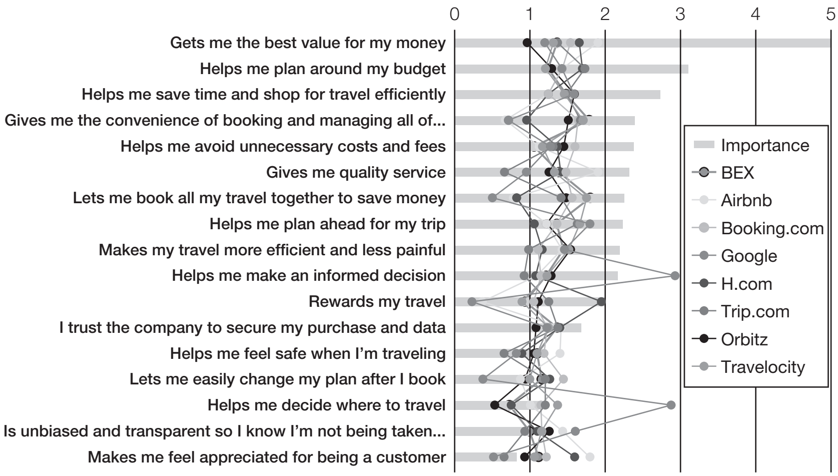

Figure 18-1 Value map for online travel services

travelers to learn more about the importance of the various value drivers. The company also asked the travelers how well Expedia meets their needs and then compared its own performance to that of the competition. The result of the research is shown in figure 18-1.[1]

The value drivers in figure 18-1 are ordered from most important ("Gets me the best value for my money") to least important ("Makes me feel appreciated for being a customer"). The gray bars indicate the relevance of each item. As you can see, the performance of the six companies is tightly clustered on many dimensions. This is a fiercely competitive industry. To capture patterns of differentiation, the Expedia team grouped the value drivers into eight broad themes, as shown in figure 18-2.[2]

You see that Airbnb leads the industry in providing value for money. Expedia scores top points for saving time and money. Google has made the clearest trade-offs; it dominates the planning stage of travel but lacks many other services that travelers need. Booking.com and Hotels.com are essentially undifferentiated.

Grouping value drivers is helpful because it provides a sense of brand personality. Ike Anand, Expedia's vice president for strategy, led the

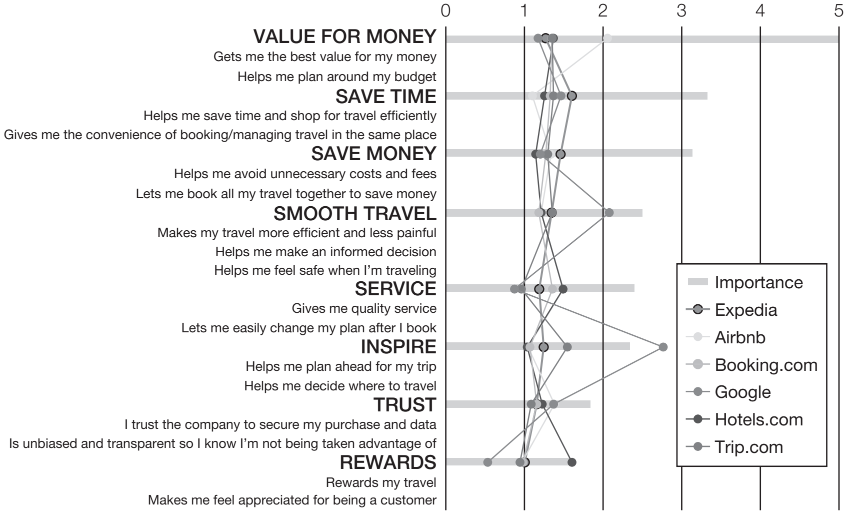

Figure 18-2 Groups of value drivers and firm performance

company's value map project; he explains, "When we looked at our competitors, we realized they often do well in value drivers that try to achieve similar objectives. In order to stand out in the minds of consumers, you can't just do well on a single value driver. You have to go after a theme."[3] Although developing themes is critical to understanding how customers make choices, Anand still recommends starting the research with specific value drivers: "If you ask consumers thematically, you lose the granularity that you need in order to act."

A careful analysis like Expedia's allows your company to select a favorable competitive position, one that will include significant points of differentiation—a set of value drivers that will ensure you stand out from the competition. To best your rivals on these dimensions, you will have to divert resources from other value drivers, areas where you do not excel. These are the trade-offs associated with your competitive position.

Let's look at a hypothetical example. Suppose Expedia were to consider the three changes to its value proposition shown in figure 18-3.[4] What criteria would you apply to select a proposal? Here are the key considerations.

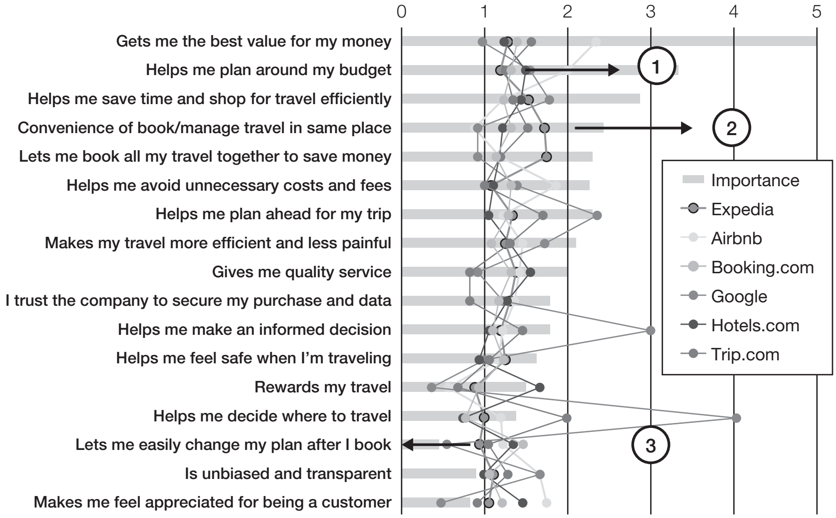

Figure 18-3 Evolving your value proposition

- *What is the return on investment?* For each proposal, you can calculate an expected return on investment. Proposal 1—improving the way you help travelers work around their budgets—might be very effective in raising WTP, but developing and implementing it could be expensive and might therefore reduce financial returns. For each change in a value driver, you will want to determine both the impact on WTP and the resources and capabilities required to create more value.
- *How important is the value driver?* Because you seek exceptional returns for changes in your value proposition, the most attractive initiatives improve value drivers that sit near the top of the chart. You should be skeptical about the merits of investments in lower-ranked value drivers.
- *Is the value driver part of a theme?* Groups of value drivers that serve a similar purpose often make attractive investment opportunities. As Anand pointed out, themes help your company stand out in the minds of consumers.

- *Are you catching up or pulling ahead?* Choosing between projects that make up for shortcomings (proposal 1) and initiatives that deepen a current competitive advantage (proposal 2) can be difficult, especially when they yield similar financial returns. In these situations, it is important to remember what you hope to achieve. You want to raise WTP—both projects do so—while maintaining or increasing differentiation. Only the second proposal achieves the latter. Improved help with budgeting would make Expedia more attractive but also more similar to Airbnb, forcing the two companies to compete more heavily on price. As a rule, deepening an existing competitive advantage is a better idea than trying to catch up with your rivals.
- *Where do you underinvest?* Spotting opportunities to do less is as important as thinking about ways to raise WTP. Proposal 3 might be an attractive target for underinvestment, because it removes (costly) options that are of lesser importance to travelers. At Expedia, as in most companies, it was challenging to decide where not to invest. Anand recalls, "The prioritization part of the conversation was easier; it was the deprioritization that was difficult. The first time we drew the value curves, we didn't exactly end up where I wanted us to be. But the discussion was super useful, because it became apparent to everybody that we were not willing to cut too much. If you keep the process going—meet every quarter and have this discussion, and then update the value maps once a year and have the conversation again—it becomes a habit, so people feel much more comfortable making those deprioritization decisions."

Taking all these considerations into account, you are likely to come up with a value curve that slants from the top right to the bottom left, as we discussed in chapter 17: you excel at the dimensions that are important for the WTP of your customers, and you deprioritize value drivers that have less impact on value creation.[5] At the same time, the shape of your value curve will also need to reflect competitive concerns. Even the smartest allocation of resources will provide little competitive advantage if you choose a value proposition that closely resembles one that your rivals have adopted.

Customer Segments

Expedia used its value map to sharpen the company's overall competitive profile. You can also employ value maps to make more granular investment decisions. Customer segmentation is an example. Most companies serve more than one segment, and initiatives that benefit one of them may or may not create an advantage with others. Figures 18-4a and 18-4b show value drivers for Tatra banka, Slovakia's first post-communist private bank. Founded in 1990, Tatra quickly led European banking in the adoption of digital technology. It first offered mobile banking in 2009, introduced voice biometrics in 2013 and facial recognition in 2018, earning more than 100 awards for its innovative services.

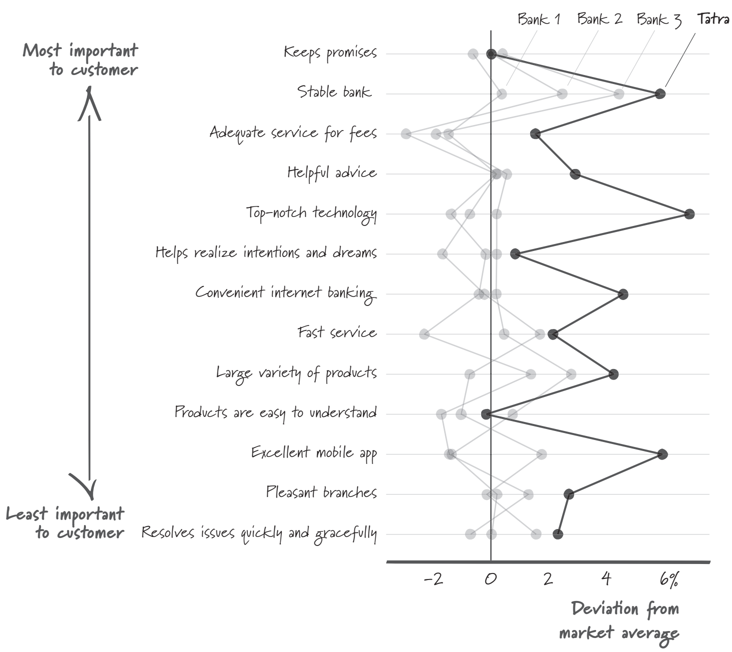

Figure 18-4a Value map for Tatra banka, mass market customers

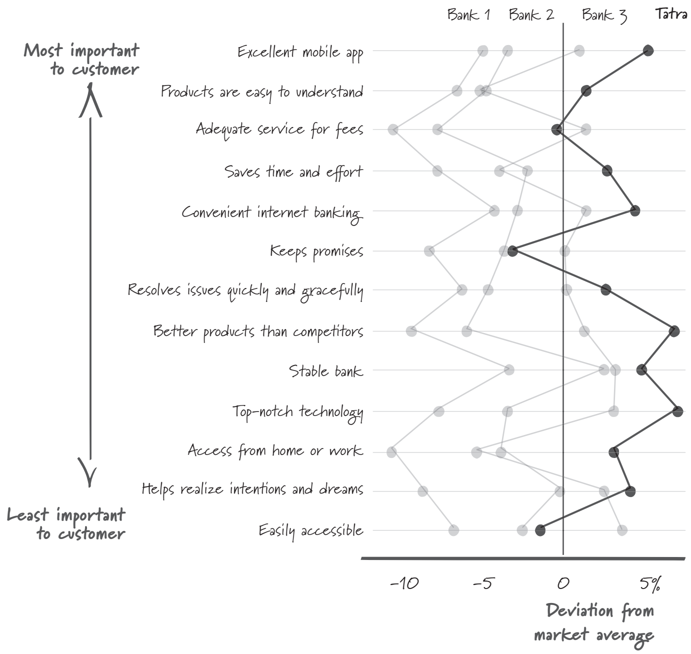

Figure 18-4b Value map for Tatra banka, premium income customers

In late 2019, Tatra decided to update its strategy. CEO Michal Liday explains the motivation: "The idea was to take what we had learned from our existing strategy and upgrade it to a new level, a level that takes into account where the world is headed and how customers have changed."[6] Tatra used value maps to get a sense of the bank's strategic opportunities. "This goes back to our deepest belief that differentiation is the only way to succeed in a difficult environment," says Liday. "We always strive to be different. Value maps play a significant role, because it's not enough to say, 'We want to be different.' You need to understand how customers perceive the market and which factors they value. You then focus on these factors to make differentiation work."

When Tatra's leadership team studied the updated value maps, the results for premium income and mass market customers differed substantially (figure 18-4a and figure 18-4b).[7]

The two segments share some value drivers. For example, both groups of customers are sensitive to fees. Most striking, however, are the many differences. For premium income customers, an excellent mobile banking application is the top concern. Mass market customers appreciate Tatra's excellent mobile app—its rating is 6 percent above market average—but the quality of mobile apps is not nearly as important to them as the bank's financial stability and a sense that the institution will keep its promises.

Differences in value drivers across segments have important implications for strategy. In Tatra's example, investments in mobile technology do not quite yield the benefit that the firm would reap if the two segments were more similar. At an extreme (think of segments with completely different value drivers), the analysis will show that it is impossible to serve all segments successfully, so you might decide to focus on a particular subset of customer groups. By highlighting commonalities and differences, value maps provide important insights for questions of corporate scope and inform decisions about whom to serve and what products to offer.

My recommendation is to begin your value curve analyses by employing a fine-grained customer segmentation. Create separate value curves for many different groups of customers. If the data show that two segments have nearly identical value drivers, you can treat the two groups as one segment. If you begin with a broad grouping, however, subtle differences that might influence your strategy will remain hidden.

Customer Journeys

Value curve data can also be employed to guide customers more effectively through the buying process. Figure 18-5 shows Tatra's marketing funnel for mass market customers. Some 90 percent of them are aware of Tatra banka, but only 19 percent actually use the bank's services.

How can the firm encourage broader adoption? Value curves will show you which drivers are particularly effective at moving customers from one location in the funnel to the next. Figure 18-5 lists the relevant value drivers in order of importance. For example, Tatra's mobile app is particularly successful at encouraging customers who consider banking

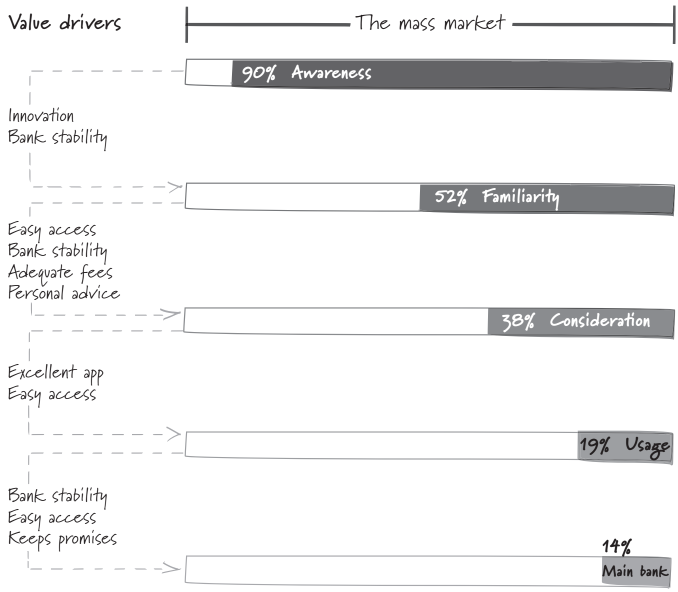

Figure 18-5 Value drivers along Tatra's marketing funnel

with Tatra to actually open an account. But the app is less relevant for the decision to make Tatra a customer's main bank. This fact, Liday explains, "reflects a shortcoming of our previous strategy. Our focus was on technological innovation and features, not customer experience. But it is the customers' experience that influences the depth of their relationship with us, so now we are refocusing. Let's use technology, but let's use it in a way that increases customer engagement."

From Value Maps to Strategy Implementation

Once you decide which value drivers to strengthen and which ones to deemphasize, strategy implementation follows naturally. The key steps are to generate ideas that have the potential to move the value drivers in the desired direction; this is a chance to let your creativity shine—and then to assign responsibility for implementation.[8] Figure 18-6 illustrates the process, using KitchenAid appliances as an example. Whirlpool, the company that owns the brand, focused its investments on four value drivers:

versatility, performance, styling, and craftsmanship. For each of these, the company developed a tagline that describes the benefit from the customer's point of view. Versatility aspires to provide "cooking/warming 'how I need it . . . where I need it,'" and craftsmanship means "fit, feel & finish that is durable and never fails." Engineers used the taglines to identify strings of innovation projects. Whirlpool calls these strings *migration paths.* Each path promises to raise WTP along one of the four dimensions. The rectangles in figure 18-6 represent the planned innovation projects.[9]

What I find particularly interesting about Whirlpool's migration paths is that they include projects for which the operating units currently lack resources. Placing these projects on the paths is valuable, because it shows opportunities for reallocating talent and capital in the interest of raising customer WTP even more effectively.

Seeing the four migration paths (represented by the large arrows), you might conclude that Whirlpool decided to compete on innovation. But this impression is false. Innovation is simply a tool; the strategy is to strengthen the four value drivers. David Whitwam, then CEO of Whirlpool, said,

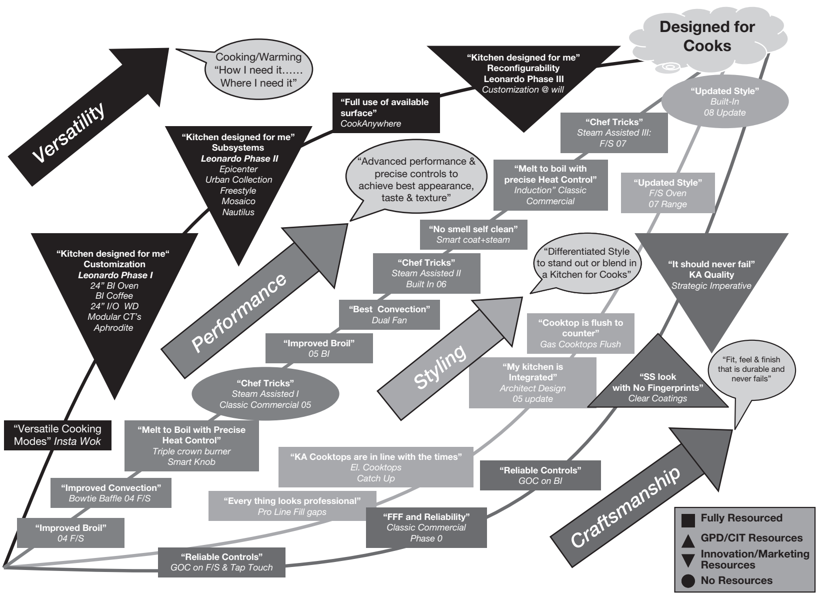

Figure 18-6 KitchenAid migration paths

"I don't know how many times I've had to emphasize this. Innovation is *not* our strategy. Our strategy is brand-focused value creation. . . . Innovation is a critical enabler of the strategy."[10] As it implemented the strategy mapped out in the migration paths, the KitchenAid team was able to grow its business considerably and raise prices by more than 3 percent over the first five years of brand-focused value creation. Quite an accomplishment, considering that, industrywide, prices fell by 7.7 percent.

Tatra banka illustrates the connection between value-creating activities, responsibilities, and performance with the help of a road map. The map is prominently displayed in all its offices and branches (figure 18-7).[11] Liday explains, "We describe our strategy in what we call 'The Book of the Bank.' It's a nice document, but we noticed that there was no direct connection between the storyline in the book and the job descriptions of our 4,000 employees, their day-to-day work." Tatra uses the road map to align its strategy with the activities in the bank.

Figure 18-8 shows the section of the map that pertains to mass market customers.

Figure 18-7 Tatra banka road map

ACTIVITIES	Business intensity	Acquisition to OWN segment	Acquisition to PREMIUM segment	Acquisition to MASS RB segment	Main bank/ Primary relationship	Client satisfaction and retention	Innovation image maximization
Effective handling of sales potential	3 4 9 10 14			3 4 9 10 14	3 4 9 10 14	3 4 9 10 14	
Systematic management of primary banking relationship and increase of innovations usage					3 4 9 10 13	3 4 9 10 13	3 4 9 10 13
Proactive search and elimination of reasons for client's dissatisfaction				8 9 10 11 13 15		8 9 10 11 13 15	
Increase share on sales and self-service transactions via digital sales and chatbot	3 4 5 7 8 9 10 13 14 16 19					3 4 5 7 8 9 10 13 14 16 19	3 4 5 7 8 9 10 13 14 16 19

3 Electronic distribution channels
4 Marketing
5 HR
7 Project management
8 Process management
9 Retail products
10 Distribution network and retail segments
11 Operations
13 Legal
14 Retail credit risk mng.
15 R&D
16 IT
19 Procurement

Figure 18-8 Tatra banka road map—linking activities and KPIs

"Activities" represent the processes and initiatives that help Tatra move value drivers in the desired direction. Across the top, the road map displays KPIs. For example, in 2020 Tatra wanted to be the main bank for 57 percent of its mass market customers. The numbered circles indicate the part of the organization that bears responsibility for the activity and, ultimately, its performance. Smileys and frownies indicate how well the organization is meeting its goals (figure 18-7). "We go through all the activities each quarter and have long conversations about the frownie indicators. Why are we not on track?" says Liday. "If an activity falls short for three-quarters, we meet with all division heads and regional leaders, about 60 managers. In a deep dive, the owner of the activity explains the issues, and we look for solutions." Laughing, he adds, "This is a meeting everybody wants to avoid." Liday credits the road map with providing a sense of strategic direction for nearly everyone: "What I'm most happy about is that, in employee engagement surveys, nearly 90 percent of Tatra employees tell us that they understand the strategy of the bank and know how they contribute to its execution."

Value Proposition for Employees

As important as a differentiated value proposition for customers are advantages in WTS. "This was a process for us," says Liday. "We knew we had to have a business strategy, of course. But it took some time to come to the conclusion that we needed the same view of customers *and* employees. We ran through an intensive exercise, trying to understand what is important to our employees, how they find meaning in their work." To identify and heighten differences in WTS, you can use the exact same process described earlier. Figure 18-9 illustrates how Tatra competes for people who might consider working as bank tellers.

In Slovakia, Amazon is the employer of choice for this group of workers. The retailer stands out on all the criteria that matter most: an engaging work environment ("creative thinking"), generous compensation, and flexibility. McDonald's, by contrast, struggles: it approaches

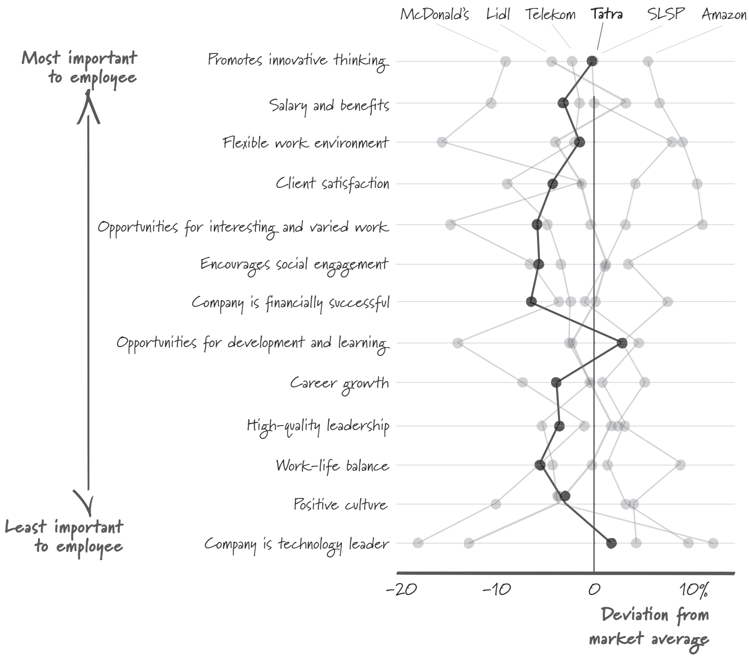

Figure 18-9 Competition for bank tellers in Slovakia

the market average in only two value drivers (client satisfaction and the quality of the company's leadership), and it leads in no dimension. The data also show that Tatra faces a tough competitive environment in the market for this type of talent. The firm's most promising opportunities are to emphasize that Tatra banka promotes innovative thinking and provides great opportunities for learning and development.

Keep in mind that any measure of WTS (or WTP, for that matter) is subjective. The values in figure 18-9 reflect the perceptions of *prospective* employees. These values may or may not correspond to actual differences between the six competitors. The perceptions are important, however, because they determine which jobs employees consider when looking for work. If you find that your talent pool is missing particular groups of individuals for whom you could provide attractive work, consider taking a closer look at your talent funnel. Value curves can help you understand how candidates think about the prospect of working at your firm. The results of the analysis are useful in developing employer branding initiatives and steering recruitment efforts.

A comprehensive strategic plan includes customer and talent value propositions. If your company relies on critical suppliers or works closely with important complementors, you will also want to develop value maps for these relationships.

Taken together, the maps will point to numerous opportunities for creating value. Because every initiative that flows from this process is directed at raising WTP or lowering WTS, activities in the organization remain closely aligned, and you avoid a situation where hundreds of initiatives would pull the organization in different directions.

Value maps are a powerful tool that facilitates the transition from strategy formulation (how you plan to move WTP and WTS) to strategy implementation (the specific activities and initiatives that make the proposed changes in WTP and WTS real). In my experience, the tool provides several key advantages.

- ***WTP and WTS are summary statistics.*** An understanding of your customer's WTP informs competitive moves and pricing decisions, but it does not tell you much about the reasons for this valuation. Understanding value drivers completes the picture. "The prospect that you are just average is very scary," says Liday. "We know we need to be different. But we need to know *how*. Value maps are a perfect tool to help us navigate through this complicated world."

- ***Value maps are data driven.*** It is tempting to rely on one's intuition and anecdotes to get a sense of customer WTP and talent WTS. But when I see companies undertake a serious value curve analysis, there is almost always a surprise—a value driver that turns out to be less critical than commonly assumed, or an unexpected level of performance in some dimension. "The method is continuous and research-based," says Expedia's Anand. "You can really measure your progress. It is a lot more detailed and more reliable because it is based on data."[12]

- ***Seeing your organization through the lens of value maps is an exercise that is radically customer-, talent-, and supplier-centric.*** Remember, the true performance of your organization matters only to the extent that it influences the perceptions of these three groups.

- ***Most companies collect extensive data on customer perceptions of their organization and the engagement of their employees.*** Value curve analyses encourage you to also see *the competition* through the eyes of both your customers and your talent. "Plotting all your competitors together is pretty interesting," explains Anand. "A lot of times companies do research only on themselves, but [value curve analysis] is really looking across your industry, which is super helpful."

- ***Value drivers live midway between the rather abstract notions of WTP and WTS and the specific attributes that describe your current product or service.*** This has two advantages. On the one hand, value drivers are specific enough to be actionable. It is a straightforward task to link them to operating models and KPIs. On the other hand, value drivers do not specify in any detail *how* you will meet a particular customer need. They help you explore new ways to satisfy clients. Focusing on value drivers, you are less likely to fall into the trap of adopting a narrow mindset that equates business success with selling more of what you already offer.

PART SIX

Value

19

Connecting the Dots

To achieve exceptional performance, strategists employ two levers: willingness-to-pay (WTP) and willingness-to-sell (WTS). In the preceding chapters, we discussed the principal mechanisms that either raise WTP or lower WTS. We also saw that value maps help us identify opportunities for differentiation in WTP or WTS. Focusing on a single lever (i.e., WTP or WTS) is useful for describing mechanisms that create value.

In practice, however, it is unlikely that a strategic move will influence only one of the two levers. Most real-world strategic initiatives affect both ends of the value stick, so it is essential that you think through all the changes—WTP, price, cost, and WTS—before you embark on a new strategic course. This is all the more important because the four elements are often interconnected. In the best of all worlds, an increase in WTP lowers WTS, creating what strategists call a *dual advantage*. In other instances, however, an increase in WTP lifts WTS and reduces supplier surplus, forcing companies to decide whom to champion: customers or suppliers.

In this chapter, we will explore the ways different modes of value creation are connected. To take stock of the consequences of a particular strategic initiative, we will account for all the value drivers and for their connections. Let's begin with a practical example, Tommy Hilfiger's decision to enter the market for adaptive clothing.

Tommy Adaptive

"Mom, I want to wear jeans to school tomorrow—all my friends will be wearing them." For most parents, this type of request poses no challenge. Not so for Mindy Scheier. Her son Oliver, who was eight at the time, suffers from a rare form of muscular dystrophy. Scheier explains, "We learned early on that the everyday task of getting dressed was really difficult for him. He couldn't manipulate a button through a buttonhole. He had a hard time getting bottoms over his leg braces. So we decided he would just wear sweatpants to school every day, because that was the only way he could safely go to the bathroom."[1] When Oliver made his request, Scheier, a fashion designer by trade, took a deep breath: "I looked at him and said, 'Of course you're wearing jeans tomorrow!'"

That night, Scheier purchased a pair of jeans, removed the zipper, cut out the side pieces of the pants, and attached Velcro strips to fit Oliver's leg braces under his jeans. "It looked like an arts and crafts project. Any proper fashion designer would've been horrified by what I did," Scheier remembers. "But the experience opened my eyes. Wearing sweatpants every day made Oliver feel like he was dressing disabled. Even I—steeped as I was in the fashion industry—had completely overlooked how his clothing spoke to him, how he was missing out on the confidence it could bring."

Starting that night, Scheier has been on a mission to bring adaptable clothing to the 40 million Americans who find it difficult to dress themselves.[2] She was particularly hopeful on the day she was scheduled to meet with Gary Sheinbaum, CEO of Tommy Hilfiger Americas. To convince him that clothing could easily be adapted to the needs of customers with disabilities, Scheier had bought two pieces of each item from Tommy Hilfiger's entire children's collection. "When the day of the meeting arrived, I set up the room like a mock showroom, a kind of before-and-after," she says. "I showed the original pieces and the modified versions; they looked identical. But they were all adjustable, easy to get in and out of, and they had magnets behind the buttons, a much better closure system."

Sheinbaum immediately grasped the opportunity. Scheier remembers, "Only five minutes into the meeting, Gary slammed his hands on the table and said, 'We're in. I can't believe nobody has done this. This is amazing!'" Scheier was delighted—and surprised: "Tommy Hilfiger was truly the first brand that just got it—they got the business opportunity, got that this is the right thing to do. In many of my discussions with other brands, I heard comments like, 'If nobody has done this before, there must be a reason.'" For his part, Sheinbaum explains, "It was a natural fit for us. Tommy Hilfiger has always valued inclusion, and we were ready to embrace the diversity of our customers."[3]

Tommy Hilfiger introduced a clothing line for children with disabilities in partnership with Scheier in 2016. The following year, the company launched Tommy Adaptive, which included a collection for adults (figure 19-1).[4]

Figure 19-1 Tommy Adaptive

In 2020, the brand expanded the geographical reach of Tommy Adaptive, making the products available in Japan, Europe, and Australia. Adaptive shirts, dresses, and pants looked identical to regular Tommy Hilfiger clothing, but the collection offered easy closures (magnets and one-handed zippers, for example), bottoms optimized for sitting in a wheelchair (pants with a lower front to reduce unwieldy fabric bunching, and back rises without seams to eliminate pressure points), garments that fit over prosthetics (concealed magnets at the hem accommodate leg braces and orthotics), and ease of movement (dresses with openings at the shoulders or the back, pants with slide loop closures that can be adjusted with one hand). Tommy Hilfiger featured the Adaptive products alongside the brand's main collection on its website. Zappos, Macy's, and Amazon carried Tommy Adaptive in their online stores.

Integrated Strategic Thinking

In building the Adaptive business, the team at Tommy Hilfiger exhibited a mindset that I admire in many successful strategists. They were laser focused on value creation, developed deep empathy with their target customers, and excelled at carefully thinking through the many consequences of competing in the adaptive market. Figure 19-2 shows how Tommy Adaptive creates and captures value.

WTP and Price

The brand's early research showed that an adaptive collection would lift WTP in three ways. Customers with disabilities were willing to pay an extra 10 percent for functional modifications of their wardrobe. Each customer spent more than $500 annually on adaptive clothing, creating a market of about $6 billion in the United States alone. The Tommy Hilfiger brand and its distinctive style further raised WTP. A 2016 value map indicated that currently available adaptive clothing lacked a prominent brand, offered limited choices, and suffered from poor social

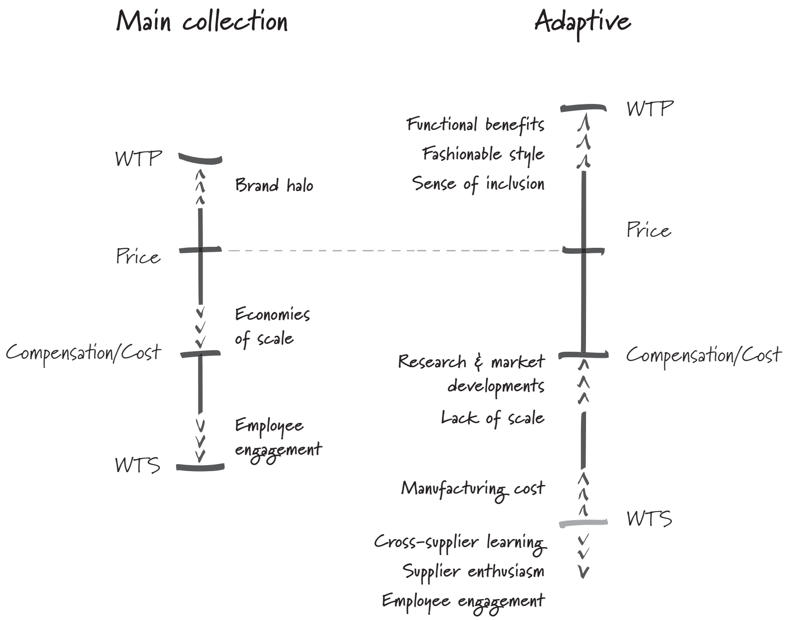

Figure 19-2 Tommy Hilfiger main collection versus Adaptive collection

perception (figure 19-3). One focus group participant explained, "The 'adaptive' that is out there right now leans toward the accessibility part of it. It screams medical."[5] Stephanie Thomas, a Los Angeles–based stylist who serves clients with disabilities, said, "The uncomfortable truth is that you can find more fashion lines for pets than you can for people with disabilities."[6]

To be competitive, Sheinbaum and his team concluded, Tommy Adaptive needed to match existing clothing in comfort and fit. The company would outcompete its rivals, however, by emphasizing style and social perception, the brand's traditional sources of advantage.

A third value driver, the team discovered, was a sense of respect and inclusion. Jeannine D'Onofrio, executive vice president at Tommy Hilfiger, explained.

> Very quickly, we realized how hard this was going to be. Even in focus groups, you are so afraid to get it wrong, to insult

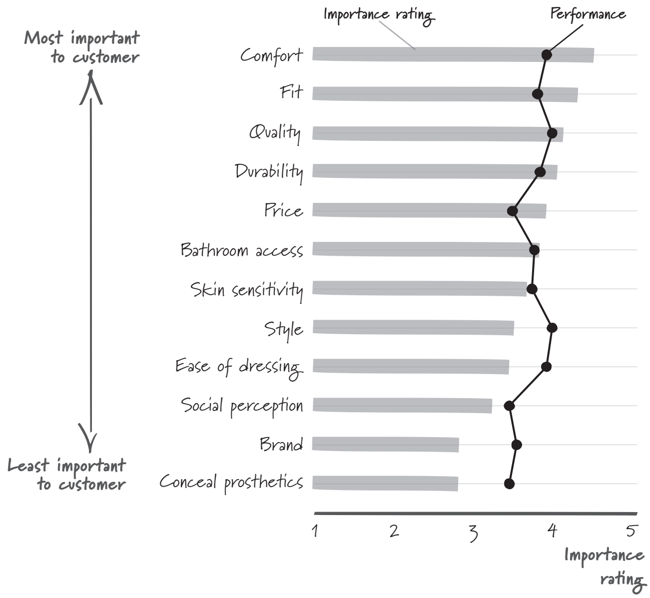

Figure 19-3 Value drivers and performance of Tommy Hilfiger's competitors

somebody. If I ask the wrong question, am I going to offend them? I think it is one of the reasons no other major brand had entered this market. You also have this feeling that you don't want to disappoint these customers. They have so many challenges already. Companies don't want to be rejected, so it just feels safer to stay away.[7]

To build a sense of respect and inclusion, the brand made a series of critical decisions. One was to forgo a price premium for Tommy Adaptive products. D'Onofrio explained, "We had to be authentic in our desire to serve this community, and we could not afford to have people feeling that we were taking advantage of them—for instance, by overcharging them for clothing they never had but now wanted." The team also abandoned an early idea to build a separate website for Tommy Adaptive customers and decided to feature the collection on its main site, Tommy.com. In focus groups, many participants had urged the team not to make them feel separate: "I would want the clothing to be talked about the same way other clothing is described. I don't want to feel isolated," said one participant. Another added, "Just like there is the tall section and the petite section, tell us, 'Here's the adaptive section.'"[8]

After more than a year of extensive research and more than 1,500 in-depth interviews, Sheinbaum and his team created a customer journey that reflected the three main drivers of WTP: adaptive clothing with a multitude of functional modifications, all of which were designed in close consultation with disabled persons (steps 1–6 in figure 19-4); fashion concerns (steps 8 and 9); and a sense of inclusion and belonging (steps 10–14).[9]

The launch of Tommy Adaptive did not disappoint. "The impact has been fantastic," says Sheinbaum. "In the very first quarter, two of our five top-selling styles on Tommy.com were from this collection. And 20 percent of our kids' business was driven by Adaptive."[10]

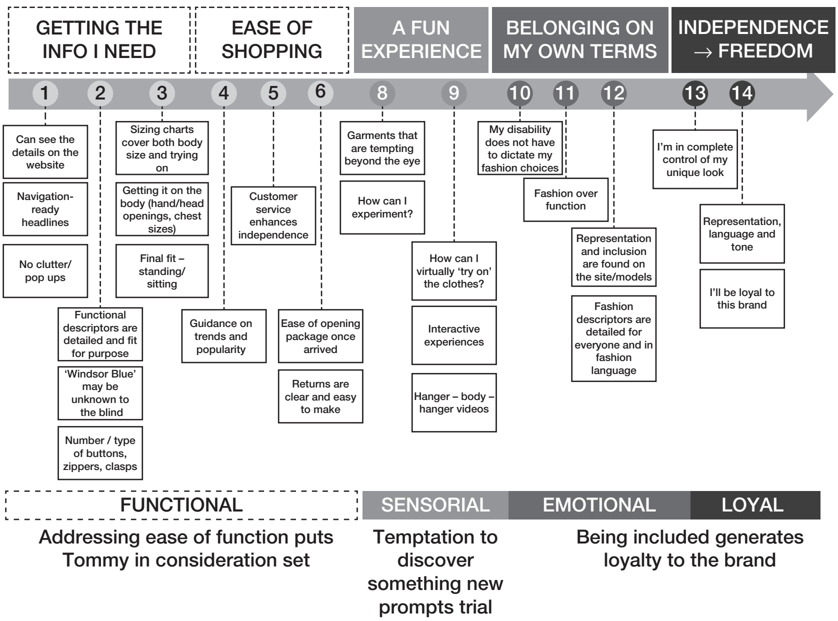

Figure 19-4 Journey for Tommy Adaptive customers

WTS and Cost

Producing the Tommy Adaptive collection is about 20 percent more expensive than regular Tommy Hilfiger clothing. The increased cost reflects additional materials—each magnet cost about $1, for instance—and the extra time it takes to produce the modifications. Tommy Hilfiger asked its suppliers to absorb the extra manufacturing cost. D'Onofrio recalled, "When we first showed them our video of customers with disabilities wearing Tommy Adaptive clothing, the vendor reaction was incredible. Some had tears in their eyes. Everybody asked how they could help. And we said, 'Charge us what you would normally charge us. This is how you can help.'"

As the vendors began to master the novel processes—preventing the magnets from sticking to the sewing machines was only one of many challenges—they shared their insights with one another. "Typically, everybody has their own way of building efficiency in their factory," said D'Onofrio. "But in this setting, there is an unusual openness; vendors are willing to share their insights. Everybody wants Adaptive to be successful." While the added manufacturing complexity increased vendor WTS and reduced their margin, the change was tempered by cross-supplier learning and the enthusiasm for contributing to the well-being of people with disabilities, both of which lowered WTS and enhanced supplier surplus.

The Adaptive team encountered a similar passion among Tommy Hilfiger employees. Sarah Horton, senior director of marketing, had many examples: "People would go to their managers and ask, 'How can I be a part of this?' Our advertising team was fully booked when we first approached them. They were really strapped for time, but they went to the head of their department and asked to take on the extra work. I was floored to see how many teams did something like this."[11] D'Onofrio added, "Adaptive touches many people in the organization. Take the staff in our call center. They hear mostly complaints—some customers yell, others hang up on you. Adaptive is different. One-third of all calls are from customers who reach out just to say thank you."

Spillovers and Value Capture

Tommy Adaptive not only raised WTP and lowered WTS for employees (and perhaps the participating vendors), the collection also influenced the brand's principal business. "There is no doubt that the line has created positive spillovers and a halo effect," says Sheinbaum. "Some 85 percent of adaptive fashion customers are new to Tommy Hilfiger, and 44 percent of visitors who come for the adaptive fashion collection buy other products as well."[12] When the Tommy Adaptive team modeled the financial effects of entering the market for adaptive clothing, it predicted that Tommy Adaptive margins would match the margins of the regular collection once the business reached scale.[13]

Dual Advantages

Taking stock of all the value drivers in your business allows you to see how they depend on one another. For Tommy Adaptive, every advantage ultimately rests on customer delight. If the brand were less generous with its target customers, employee engagement and vendor enthusiasm for the project would suffer. Customers would also be less likely to shop across adaptive and regular products. Sheinbaum and his team are keenly aware of these connections. He explains, "Tommy Adaptive is all about creating a better life for children and adults with disabilities. Improving their lives animates everything we do." The link between customer delight and WTS creates an important trade-off for Tommy Hilfiger. To maintain an exceptional level of employee engagement and vendor enthusiasm, the brand must not pursue an aggressive pricing strategy.

Tommy Adaptive's dual advantage—higher WTP *and* lower WTS—might come as a surprise to some strategists. Many believe that it is challenging, perhaps even impossible, to raise WTP and lower WTS at the same time. In their view, company resources and capabilities normally lend themselves to improving customer delight or supplier surplus, but not both. The mindset of organizations that discover ever new ways of pleasing their customers, the argument goes, is very different from a mindset that is ruthless at slashing cost and raising productivity. In the view of these executives, trying to achieve a dual advantage risks achieving none, being "stuck in the middle." As Professor Michael Porter explains, "Becoming stuck in the middle is often a manifestation of a firm's unwillingness to make choices about how to compete. It tries for competitive advantage through every means and achieves none, because achieving different types of competitive advantage usually requires inconsistent actions."[14]

The inconsistencies that Professor Porter highlights play no role, however, if value drivers are connected naturally. Tommy Adaptive created exceptional value for a disadvantaged group of customers, and employee enthusiasm for the project followed easily. We have seen these kinds of connections throughout this book. When Quest Diagnostics created more attractive work conditions for its call center employees (WTS↓), call quality improved (WTP↑). Malls give Apple a price break (WTS↓), because the company attracts a large number of shoppers (WTP↑). Doctors at Narayana Health perform many surgeries, which increases their productivity (WTS↓) and improves quality (WTP↑). When Intel (and other successful semiconductor firms like Samsung) raises manufacturing yields—the fraction of wafers without defects—product quality increases (WTP↑) and costs fall (WTS↓).[15] Zara's fast-fashion model reduces inventory (WTS↓), and it provides customers with the latest trends in cuts and colors (WTP↑).[16] Progressive's fleet of emergency vehicles allows the insurer to take better care of customers who have had an accident (WTP↑), and it lowers fraud and administrative expenses (WTS↓).[17] Do you check in online for your flights because you like choosing your seat? You are a happier customer (WTP↑), and you also help reduce airline staffing cost (WTS↓).

Dual advantages are not uncommon, as these examples show. We often find them in services, where employee satisfaction and customer experience are inextricably linked. To build a dual advantage, pay close attention to the connections that lead from one set of value drivers to others. The stronger these bonds, the greater is the overall advantage that your firm will enjoy.

Beginning the Conversation

When I visit companies, I make it a habit to ask executives why their company achieves its current level of success. I often find that my hosts hold very different views. Without a shared understanding of success, however, guiding investments and securing a long-term competitive advantage is challenging, perhaps even impossible. Value-based strategy, as I argue throughout this book, is ideally suited to developing a common view of performance and identifying opportunities for enhanced returns.

To begin this conversation in your company, take a piece of paper, draw a value stick, and ask three simple questions. What do we do to move WTP? How do we change WTS? What are the connections between our value drivers, prices, and costs? The preceding chapters provide you with all the core ideas and considerations to successfully lead this conversation. Here are some of the benefits you can expect.

- ***Recognizing value*****—**Most firms use financial analyses to decide which initiatives to pursue. These analyses reflect the company's ability to capture value, but they generally do not show the value that is being created. Studying the financial model of the Tommy Adaptive business, for example, you would see firm margins and returns on investment. But customer delight, the substantial goodwill with the community of people with disabilities, does not easily make its way into spreadsheets. Yet it is customer delight that drives every advantage that Tommy Hilfiger enjoys in this market. If you are guiding your organization without recognizing the value that you create, you are flying blind.

- ***Identifying value drivers*****—**It is nice to know that your company has an advantage in WTP or WTS, but it is even more important to understand where this advantage comes from. As we saw in chapter 18, value maps are ideally suited to identifying critical value drivers. But even a first casual conversation can help align your team.

- *Seeing the connections*—Some strategic initiatives create a dual advantage, while many others have more mixed effects. Consider, for instance, the competitive position of companies that decide to build IBM-compatible personal computers. By adopting the dominant industry standard, these companies benefit from network effects that provide their customers with a wealth of useful software and broad compatibility across multiple devices (WTP↑). But competing in the IBM-compatible market also exposes the manufacturers to two powerful suppliers: Intel and Microsoft (cost↑). Those two companies combined earned 51 percent of all industry profits in 1990, 72 percent in 1995, and 80 percent today, leaving only a trickle of cash for everyone else.[18] In this example, as in many others, increasing WTP leads to higher cost, making the strategy far less attractive. Connecting the dots—seeing the connections between your value drivers, prices, and cost (be they positive, neutral, or negative)—is an important step in assessing the true attractiveness of a strategic move.
- *Coordinating investments and aligning activities*—Companies that have only a shallow understanding of how they create and capture value are forced to spread their investments across many domains and activities. Who knows? Any one initiative might save the day, any one technology, if missed, could undermine the firm's future success. In these companies, guiding investment and aligning activities is an enormous challenge. Some teams make investments in order to raise WTP, adding cost. Others pare down product quality to become more cost competitive. Before you know it, the firm is a hive of inconsistent activities, stuck in the middle, without a discernible competitive advantage. Recognizing how you create and capture value allows you to steer investments in the right direction, coordinate activities, and strengthen your current competitive advantage.

My hope is that this book has encouraged you to put pen to paper, draw that value stick, and begin the conversation. Research is on your side. You have excellent reasons to be optimistic about the potential of your organization, about its ability to improve and perform at a higher level. At the same time, I won't be surprised if you find disagreements in early conversations about your company's value stick. Do not be alarmed or discouraged. Your experience is common, and airing these differences is informative and useful. As you work toward a shared understanding of your company's current success and future opportunities—using hard data to confirm some conjectures, collecting important examples to give prominence to others—feel confident that you are contributing to your company's highest purpose: creating value for customers, employees, suppliers, and shareholders.

20

Value for Society

The news was unexpected. In mid-2019, the Business Roundtable, an association of 188 CEOs who lead America's largest companies, broke with a 20-year tradition of advocating for shareholder capitalism. Shareholder primacy, the CEOs argued, was out. Going forward, corporations needed to deliver value to all their stakeholders: customers, employees, suppliers, and communities, as well as shareholders. JPMorgan Chase CEO Jamie Dimon, the group's chairman, explained, "[The new purpose] more accurately reflects how our CEOs and their companies actually operate. It will help set a new standard for corporate leadership."[1]

You will not be surprised to learn that the announcement drew a mixed response. "This is tremendous news because it is more critical than ever that businesses in the 21st century are focused on generating long-term value for all stakeholders," said Darren Walker, president of the Ford Foundation.[2] Tricia Griffith, CEO of Progressive, agreed: "CEOs work to generate profits and return value to shareholders, but the best-run companies do more. They put the customer first and invest in their employees and communities."[3] At the more cynical end of the spectrum of responses, James Mackintosh, writing in the *Wall Street Journal*, predicted that little would change in practice: "Expect the usual solution: Companies will talk up their commitment to the latest corporate fashion while doing whatever they would have done anyway. Shareholder return will still be the No. 1 concern. And No. 2 and No. 3."[4]

How serious are the CEOs about stakeholder capitalism? Some signs are encouraging. The Drucker Institute, for instance, reports that the CEOs of the Business Roundtable lead companies that perform above average on many dimensions that are critical to stakeholder capitalism.[5] Professors Aneesh Raghunandan and Shiva Rajgopal are more skeptical, pointing out that Business Roundtable companies are more likely than other firms of their size and in the same industry to violate labor and environmental regulations.[6]

At this point, it is too early to judge the Roundtable's long-term commitment to stakeholder capitalism, and unfortunately I do not have a crystal ball. It is possible, however, to identify benchmark behaviors, to draw up a list of decisions and actions that corporate boards and CEOs would take if they genuinely valued the well-being of all stakeholders. Value-based strategy is uniquely positioned to help create this list because the framework provides a sharp definition of value and a precise means by which we can determine how value gets shared.

Here is my list of expectations.

1. ***Stakeholder-focused corporations will take no credit for increasing customer willingness-to-pay***—creating value for customers is the essence of business. Raising willingness-to-pay (WTP) is simply good management. Even companies that are solely focused on creating shareholder value will seek opportunities to lift WTP.*

*I know this is a stringent expectation. For a stakeholder-focused company, customer delight has intrinsic value. As a result, the company will make investments in WTP that a shareholder-focused firm would forgo. Because many of these investments still contribute to the profitability of the stakeholder-focused company, in practice it will be challenging to distinguish between (a) increases in WTP that are motivated solely by financial returns and (b) increases in WTP that reflect a mix of shareholder and customer concerns. I like to set the expectation this high because it discourages companies from claiming too much credit for their actions.

2. ***Stakeholder-focused corporations will take no credit for lowering the willingness-to-sell of employees and suppliers***—the same argument holds at the lower end of the value stick. Creating value for employees and suppliers is how companies contribute to the well-being of their workers and the profitability of their suppliers. But most of these actions are entirely consistent with an exclusive focus on financial returns.

3. ***Stakeholder-focused corporations will share the value they create more generously than competitive concerns would lead us to expect***—profit-oriented companies will maximize the returns to shareholders, the owners of the company. Corporations that balance the interests of multiple stakeholders are more generous with customers, employees, and suppliers. Figure 20-1 illustrates the difference.

    To attract customers, employees, and suppliers, the stakeholder-focused organization needs to offer at least as much value (customer delight, employee satisfaction, and supplier surplus) as its profit-maximizing rival. Figure 20-1 shows this

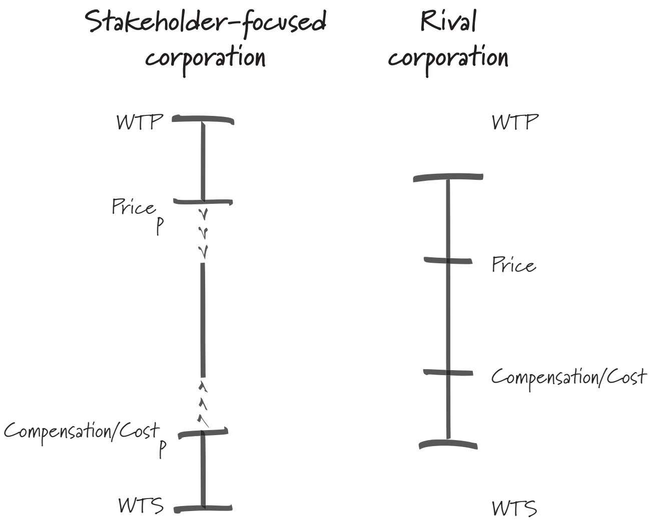

Figure 20-1 Stakeholder-focused company versus rival company

situation. At $Price_p$ and $Cost_p$, the stakeholder-focused company is not yet living up to its name. It provides the competitively required value to customers and employees; any extra value that it creates flows to shareholders. In other words, the company maximizes profits. If boards and CEOs are serious about balancing the interests of all stakeholders *in a novel way*, they would be more generous toward customers (by charging lower prices), employees (by offering more generous compensation), and suppliers (by paying more for intermediate products and services).*

4. ***Stakeholder-focused corporations will take account of the true cost of economic activity, and they will support policies that adjust prices where this is necessary*—**value sticks misstate the value that companies create if prices do not reflect the true cost of resources. The most important example today is global warming. Because the price of carbon does not mirror the cost of releasing greenhouse gases, we burn too much fossil fuel, causing serious harm to life on the planet. Stakeholder-focused organizations will attempt to correct for the mispricing themselves—they will purchase carbon offsets for flights, for example—and will support public policies that correct prices. Unlike companies with a sole focus on shareholder returns, many of which fight carbon pricing today, stakeholder-focused companies will not lobby against well-designed carbon taxes.[7]

5. ***Stakeholder-focused corporations will not use political influence to soften competition*—**competition forces companies to share value with customers and employees. Lobbying for trade protection and other measures that increase barriers to entry is inconsistent

*Note that $Price_p$ and $Cost_p$ already reflect the connections between value drivers discussed in chapter 19. For example, a company might pay more generous compensation because it understands that satisfied staff will provide better service and lift WTP, allowing the company to charge higher prices or win more business. This is simply smart business practice, and not a focus on stakeholders.

> with delivering value to all stakeholders. Limiting competition enhances financial returns to shareholders (and possibly employees) at the expense of customers.

Applying a value lens to stakeholder capitalism, two ideas strike me as particularly important. First, business creates substantial value for customers, employees, and suppliers even if its only goal is to maximize financial returns. Think of all the stories in this book—Best Buy, Apple, Michelin, Quest, Intel, Tommy Hilfiger, and many more. Every one of them is testament to the ability of business to create significant customer delight, employee satisfaction, and supplier surplus. Competition is our best assurance that companies continue to innovate in service to these stakeholders.

Second, shareholder capitalism is at its shakiest if prices fail to reflect the true cost of economic activity. Companies that exert political influence to keep prices distorted and limit competition do wonders to weaken the case for any form of capitalism, shareholder or stakeholder. To make matters worse, income and wealth inequality increase the ability (and the temptation) of corporate leaders to undermine, through political means, a fair-minded distribution of value.[8] The consequences are not difficult to spot. In developed economies, 50 percent of the population now agrees that "capitalism, as it exists today, does more harm than good in the world."[9]

I am deeply convinced that we can do better. The key to progress is a relentless focus on value creation, not value capture. Fortunately, there is no contradiction. Financial success, as we have seen time and again, will follow true value creation.[10] At a policy level, this means that corporate leaders need to pay close attention to benchmarks number four and number five. Undermining markets will surely leave us poorer—and more divided! The most important work, however, takes place in companies. No matter where you sit in your organization, whether you work alone, in a team, or lead a large corporation, can I ask you to never tire of seeking new ways to increase WTP and lower WTS? Can I convince you that your role is both vital and noble? What better way to lead a life than being preoccupied with creating value for others, to touch their lives in ways both big and small?

NOTES

Preface

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2. The data in the figure come from Compustat. The sample includes firms that were in the S&P 500 in 2009 and remained in the index for the next ten years. ROIC is calculated for each firm and year, using the mean of the sum of current and lagged invested capital as the denominator. I dropped firms whose standard deviation in ROIC

is above the 95th percentile of the sample's standard deviations. The distribution shown in the figure reflects the firm-level averages for the 2009–2018 time period, winsorized at 1 percent and 99 percent.

3. The source of the WACC data is Bloomberg.

4. Worldscope is the source of this data. The sample is the 500 largest companies by market capitalization in each market in 2009 that remained in this group for the next ten years. ROIC is calculated following the procedure for the US data. As before, I dropped firms whose standard deviation in ROIC is greater than the 95th percentile of the sample's standard deviations. The data for China excludes companies listed in Hong Kong.

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7. To calculate the performance gain within an industry, I sort industries by interquartile range in ROIC and select the median industry, food and beverages, which has an interquartile range of 0.108. To compute performance differences across industries, I look at the distribution of the industry-level median ROIC and compare the 25th percentile (0.055) and the 75th percentile (0.089). These calculations are obviously sensitive to industry definitions. To test for robustness, I compare the calculation in the text with a calculation for a finer-grained classification with 70 industries. For this sample, the within-industry interquartile range is 0.109. Across industries, the interquartile range of median ROIC is 0.045. At least for these two samples, the definition of industry does not change the conclusion that within-industry performance differences are far greater than differences across industries.

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