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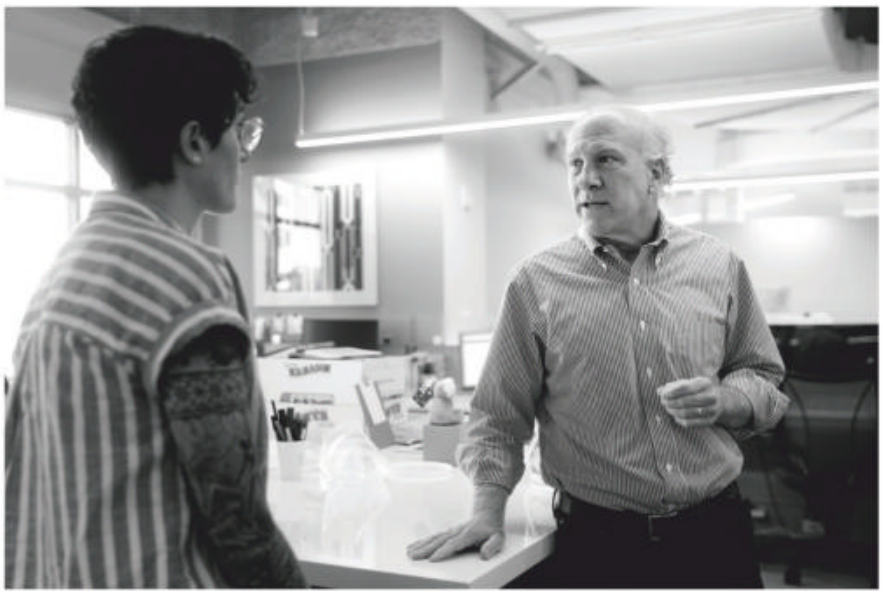

Senior editor Paige Cohen with Adi Ignatius

Sasha Patkin

BEFORE COMING TO HBR, I spent a dozen years as an editor at *Time,* the iconic newsmagazine. We published weekly, and the fast pace seemed to encourage short-term thinking. Almost everyone at the organization worked primarily on that week's issue, even as new competitors (which were primarily digital) began chipping away at our economic model. *Time* has survived, but it's far smaller than it once was, and its competition remains fierce.

At HBR we put thousands of hours of work into each issue of the magazine (and our website and books). But a lot of our energy is devoted not to these current products but to long-term projects that will help us develop innovations that will drive our business into the future. The same is true at your company, I hope.

Pulling off ambitious initiatives with extended timelines can be challenging—a reality that this issue's Spotlight on better project management addresses. "When executives ignore project management, products launch late, strategic initiatives don't deliver, and company transformations fail, putting the organization's future seriously at risk," writes Antonio Nieto-Rodriguez, the former chairman of Project Management Institute, in the Spotlight's lead article.

There are times when juggling projects can be a drag—with more meetings, more ambiguity, and more risk of failure. But organizations that underinvest in projects face a limited future, so finding ways to help your people execute them better is an imperative.

ADI IGNATIUS
Editor in chief

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Building Responsible Partnerships

Contributors

While pursuing an MBA two decades ago, **Antonio Nieto-Rodriguez** was struck by the glaring absence of courses in project management. "Given that many executives have to manage hundreds of projects at a time, this seemed misguided," he says. He set out to educate senior leaders on the importance of project management, to make it more accessible and focused on value, and to persuade MBA programs to teach it. His success with those goals led Thinkers50 to give him an Ideas into Practice Award. He is also the author of *HBR Project Management Handbook,* from which his article in this issue is adapted.

38 The Project Economy Has Arrived

After **Linda Hill** and her coauthors published *Collective Genius,* a book about highly innovative companies, leaders kept asking her, "How do we become an organization like that?" So she launched a quantitative study of companies that were in the midst of making themselves more agile and innovative to learn what was holding firms back. The results were clear: Companies struggled with decision-making. In an article in this issue, Hill and her coauthors describe how organizations can update their approach to this critical management capability and in the process unleash their creative power.

70 Drive Innovation with Better Decision-Making

Bent Flyvbjerg became fascinated by project management while studying city planning. He recognized that although the quality of a region's infrastructure helped determine its economic success, large infrastructure projects—like the Channel Tunnel between England and France—were very difficult to complete on time and on budget. His early career experience as a project planner rolling out a new, nationwide school system in Nepal led him to see that using modular, replicable project design improved project delivery—a strategy he describes in this issue.

50 Make Megaprojects More Modular

"Enriching the lives of customers and employees is the primary purpose of truly great firms," says **Fred Reichheld**, inventor of the Net Promoter System and the author of the upcoming book *Winning on Purpose,* from which his latest article is adapted. The founder of Bain & Company's loyalty practice, Reichheld has researched the financial impact of customer satisfaction for more than 30 years. "Financial accounting is woefully inadequate when it comes to measuring the human impact of a business," he says. To try to solve that problem, he and his coauthors introduce a new system called *earned growth* in this issue.

80 Net Promoter 3.0

Marie Emmermann studied graphic design and worked as an art director before opening Skizzomat, her Berlin-based art studio. (*Skizzomat* is a combination of the German words for *sketch* and *machine*.) She specializes in digital collages combining handmade cutouts, typography, found objects, and other random items. "It's all about exposing forms and remixing realities—a rearrangement and transformation of the familiar, juxtaposing material to create unexpected insights and new perspectives on a topic," she says. "I'm always aiming to find the inner beauty of life and looking beyond surfaces."

90 Fighting Bias on the Front Lines

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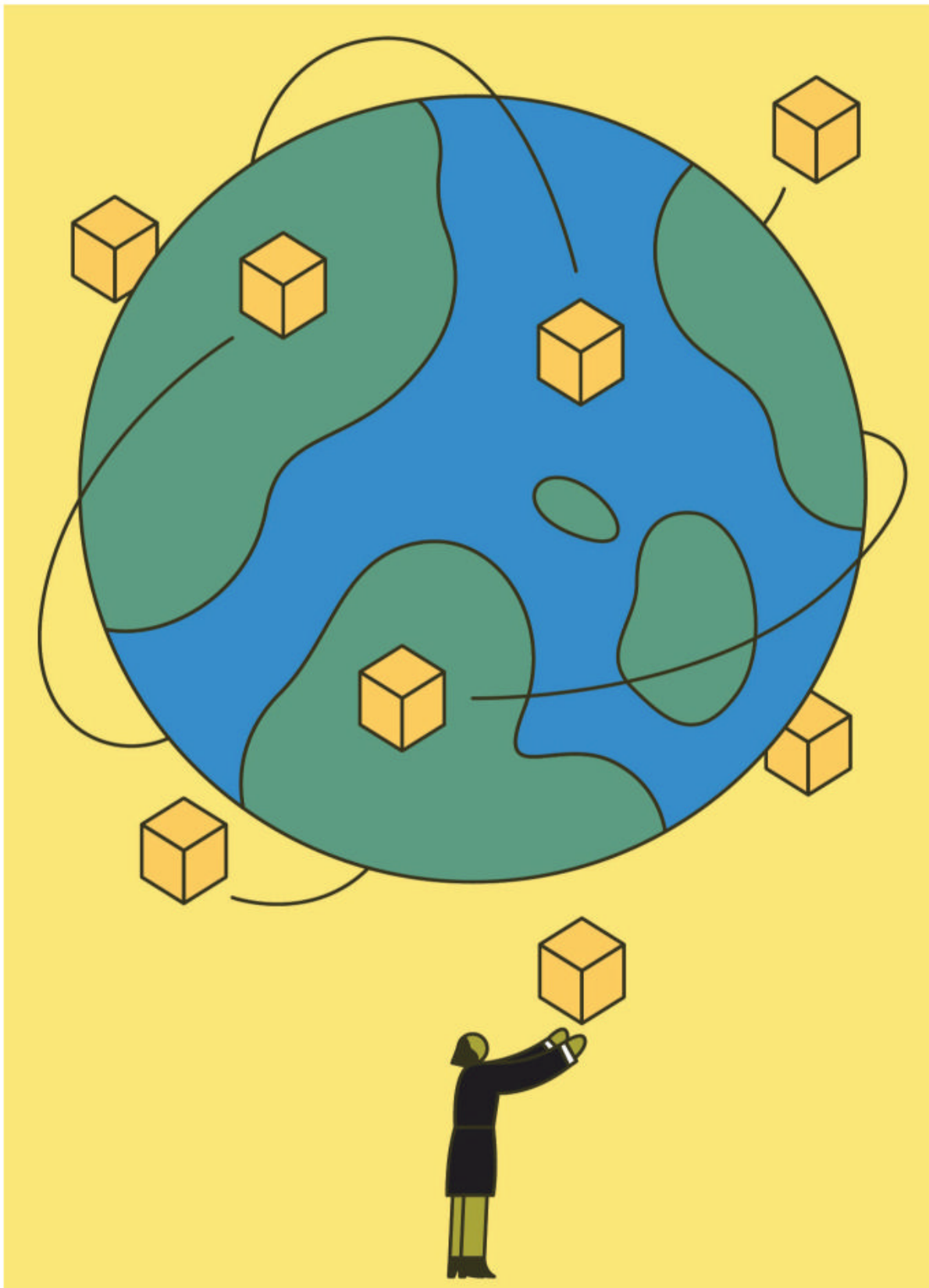

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IN THEORY

How to Help Your CMO Boost Global Growth

Chief marketing officers are vital to international expansion—if given the right authority and limits.

CHIEF MARKETING OFFICERS have fallen out of fashion in recent years. Some researchers claim they don't add value, and many companies, including Johnson & Johnson, Uber, and Hyatt, have scaled back or even eliminated the position. A new study finds that, on the contrary, CMOs have a crucial role to play in multinational companies. They can be instrumental in helping those businesses grow globally—but only under certain conditions.

"Every multinational enterprise faces two major challenges: a rise in nationalism and a saturation in domestic markets," says V. Kumar, a professor at St. John's University and the lead author of the study. Unlike other C-suite officers, he explains, CMOs

Illustrations by **ROSE WONG**

have expertise on the front lines of the business—and that firsthand customer experience is vital to international growth. And because their responsibilities are broad and include both strategic and tactical decisions, they are what the study calls *meta integrators* of knowledge.

The research team began by interviewing 41 CMOs at multinational firms to understand the self-reported challenges they face. One of the most common complaints was a lack of authority and managerial discretion. The researchers then compiled data on 297 multinational firms from 2007 to 2016, assessing the level of internationalization of each firm for each year by looking at the number of continents in which the firm operated, along with the ratio of foreign sales to total sales. Their analysis showed that giving the CMO leeway in certain areas did indeed determine the degree to which a company's global expansion plans were successful.

Three forms of managerial discretion in particular enabled marketing chiefs to grow their firms' international presence. First, successful CMOs were given *strategic discretion,* measured by comparing the CMOs' tenure at their firms with that of the other top managers. These marketing chiefs had the power to develop global customer and supplier relationships and set go-to-market strategies, such as whether the firm would take a "waterfall" approach, in which new products are introduced to various markets sequentially (first Spain, then Mexico, then Colombia), or a "sprinkler" approach, in which a product is launched in multiple markets at once.

Second, successful CMOs were granted *operational discretion,* measured by the number of business segments they were involved in. For example, they could decide how the firm would communicate with customers (whether through digital or traditional channels, in personalized or mass messages, and so on). They also had discretion over whether to offer promotional discounts, start a loyalty program, and set up licensing agreements with foreign partners or run international operations from headquarters.

Third, successful CMOs had *financial discretion,* measured by dividing a given period's marketing budget by the previous period's sales. They could decide how much to invest in various activities and what budgetary trade-offs to make—for example, how to allocate funds between traditional and digital marketing (a decision sometimes made by the chief financial officer).

The three types of discretion affected internationalization efforts in different ways. Both strategic and financial discretion helped CMOs boost sales in existing foreign markets: A 1% increase in strategic discretion correlated with a 13% increase in the ratio of foreign sales to total sales, while a 25% increase in financial discretion

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correlated with a whopping 77% increase. Operational discretion helped CMOs grow the number of foreign markets in which their companies operated: A 43% increase in operational discretion correlated with an 8% increase in continents entered.

"Most multinationals want both more sales and more markets, so increasing all three forms of discretion is advisable," Kumar says. "It may seem paradoxical, but for companies that are dissatisfied with the CMO, the answer might very well be to give him or her more power."

Many companies are going in the opposite direction, however, restricting marketing chiefs' power by holding them to quarterly marketing metrics such as customer acquisition and retention. Owing in part to this constraint, turnover in the top marketing job is notoriously high. In a previous study, Kumar and colleagues found that the average tenure of CMOs is only about two years, whereas other C-suite executives typically remain on the job for at least five years. "Two years is not enough time to oversee an international expansion," Kumar says. "Yet that is one of the main ways the CMO can drive value to the firm." The high turnover, he adds, is the reason many frustrated companies have eliminated the position. (See "Why CMOs Never Last," HBR, July–August 2017.)

Does all this mean that CMOs should have free rein? Not exactly. The researchers found that after a point, additional discretion yielded diminishing returns—and that the firms with the strongest international growth linked CMO compensation to shareholder value, which incentivized disciplined growth. "You need to give CMOs power, but you should ensure that they don't misuse it by taking unnecessary risks," Kumar explains, adding that incentives should be tied to stock market returns rather than to softer metrics such as gains in awareness and market penetration.

The most-internationalized firms had another characteristic in common: a C-suite with global experience. "The CMO may be inclined to enter every market in the hope that at least one will take off, so you need other senior executives who can ask the right questions and keep any overenthusiasm from the CMO in check," Kumar says. One marketing chief told the researchers how his globally savvy colleagues helped him course-correct. "Members of the top management team were able to push back not on his plan for further expansion but on which country to target next," Kumar explains. "They knew from experience which kind of sequence works best."

Regarding the claims that CMOs don't add value, the researchers believe that they reflect a lack of understanding about the need to carefully manage those in the top marketing spot. "It's not a question of whether you have a CMO," Kumar says. "It's whether your CMO has the discretion—and the support and oversight—to succeed."

HBR Reprint F2106A

ABOUT THE RESEARCH *"Chief Marketing Officers' Discretion and Firms' Internationalization: An Empirical Investigation," by V. Kumar et al.* (Journal of International Business Studies, *2021)*

IN PRACTICE

"We Can't Just Copy the Plays We Run in the U.S."

As CMO of UPS, ***Kevin Warren*** *is responsible for all U.S. and international marketing. He recently spoke with HBR about the role of the chief marketing officer. Edited excerpts follow.*

Is internationalization harder and more important than ever before?

Yes. At UPS, we have three strategic growth imperatives. The first is our health care logistics business. The second is the small and medium-size business segment. The third is international. We have our highest margins in the third—our global business model is "asset light," without many of the structural costs we have in the U.S.—but international business is a lot newer and smaller. Much of my role is to make sure that resources, time, digital investments, and talent are allocated appropriately in international. We can't just copy the plays we run in the U.S. We have to be attuned to the different cultures, business models, economies, and languages.

So we draw on programs we've developed in the U.S., where we

have scale and expertise, and work with marketing colleagues on the ground internationally for local execution and customization. In some cases they might need a very different approach, and we support them to go their own way.

Describe an instance where marketing played an important role internationally.
For years we've been losing share in the SMB market. We realized we needed to learn how those businesses want to work—not just do what we've always done. We found that they want to operate in an integrated fashion, with demand generation, checkout, delivery and fulfillment, and returns all in one integrated format—not à la carte, as was traditional. So we've established partnerships with 16 companies to date, including Amazon, Shopify, eBay, and Facebook, and that has been enormously successful in growing our small business segment in the United States.

As you get outside the U.S., it's a lot of small and micro businesses. So we went global with those partnerships. There was some skepticism early on, because it was so different, but the effort quickly scaled up and became profitable, and the skepticism turned to enthusiasm.

Does your experience align with the study's findings about the managerial discretion CMOs need to succeed?
Yes. I sit on the executive leadership team. I have responsibility for revenue forecasting and pricing for our SMB and e-commerce strategies. I've got product management responsibility. More than 5,000 franchise stores report to me. So I have operational and commercial responsibility in addition to traditional marketing.

When I came to UPS, three years ago, marketing was seen as a discretionary expense. We worked hard to change the approach to what we did—to think about outcomes rather than outputs, to show the ROI and shareholder value we would hold ourselves accountable for.

What about others in the C-suite—is it important that they have international experience?
It is helpful to have not just experience but sensitivity. We're fortunate in that Scott Price, who runs our international business, previously ran that for DHL in Europe and Asia. He spent a lot of time living in those regions, so his sensitivities are real-life ones.

One of the biggest things we have to avoid is the idea that the United States is the center of the universe and everything else is second fiddle. Being sensitive to that is really important.

Photograph by **LYNSEY WEATHERSPOON**

THE WIDENING GAP

The political homogeneity of U.S. firms—defined as the likelihood that two randomly chosen executives at the same company belong to the same party—rose by five percentage points from 2008 to 2016, with the sharpest increases occurring around presidential elections and the passage of Obamacare. "The Political Polarization of U.S. Firms," by Vyacheslav Fos, Elisabeth Kempf, and Margarita Tsoutsoura

CREATIVITY

In Defense of Multitasking

The knocks against multitasking are well-known: It reduces the efficiency and quality of work and increases stress. But a series of studies finds an upside: Multitaskers are more creative on subsequent tasks.

One of the studies focused on the TV reality show *Chopped,* in which contestants must create a three-course meal incorporating items from mystery boxes of ingredients. Examining 44 episodes of the series, professional chefs coded the dishes in the appetizer and entrée rounds for multitasking by counting the actions needed to produce them. Other chefs rated the creativity of the dishes in all three rounds. High levels of multitasking in the appetizer round led to more-creative entrées, while multitasking in the entrée round led to more-creative desserts. (The effect held only for downstream work; multitasking during the appetizer round, for instance, did not yield more-creative appetizers.) Two lab experiments and a field study found similar results and explored the reasons for them. The cognitive demands of multitasking create additional energy, the researchers say, and that energy dissipates slowly, so it spills over into subsequent activities, enhancing cognitive flexibility—a key condition of creativity.

"The downstream benefits of multitasking may outweigh the drawbacks for those who have discretion over their schedules, perform multitasking only for less important tasks, have high multitasking skills, or for whom the relative importance of creativity is higher than task performance," the researchers write. "Those working in creative industries such as technology or advertising may derive benefits from multitasking based on how they structure their tasks over the course of their day."

ABOUT THE RESEARCH *"More Tasks, More Ideas: The Positive Spillover Effects of Multitasking on Subsequent Creativity," by Chaitali Kapadia and Shimul Melwani* (Journal of Applied Psychology, *2021)*

BRANDING

The Power of a Nickname—When Judiciously Employed

Coke, Tarjay, Big Blue: Brand nicknames abound, causing some marketers to worry that customers will be confused by them or that the brand's image will suffer (Chevrolet reportedly kept a "swear jar" to discourage in-house references to "Chevy"). New research finds that they can be a boon, boosting credibility and engagement—as long as some guardrails are observed.

Across six studies involving both real and fictitious brands and various online platforms, the researchers showed that the inclusion of a nickname in user-generated content signals that the user has a genuine relationship with the brand, increasing potential buyers'

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Murali Kulathumani
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confidence in the testimonial. In one experiment, participants read a tweet from a hypothetical consumer touting McDonald's iced coffee and referring to the company either by its full name or as Mickey D's. Those who read the Mickey D's version perceived the recommendation as significantly more authentic than did those who read the McDonald's one, and they expressed more willingness to buy the drink. Subsequent experiments showed that the effect derives from the use of a nickname, not the specific word chosen for it, and, crucially, that it holds only for content generated by consumers themselves, not for communications crafted by the firm.

"Companies should be careful when appropriating consumer lingo, as it could be perceived as deliberate and less authentic," the researchers warn. Although marketers should steer clear of devising or using brand nicknames themselves, they add, they can leverage them in other ways. Companies could label reviews containing brand nicknames as "top reviews" and place them so that they're among the first ones consumers see. They could highlight brand nicknames in referral programs and other peer-to-peer interactions. And they should keep them in mind when devising their search engine optimization strategy, to ensure that people can find the brand regardless of which name they type in.

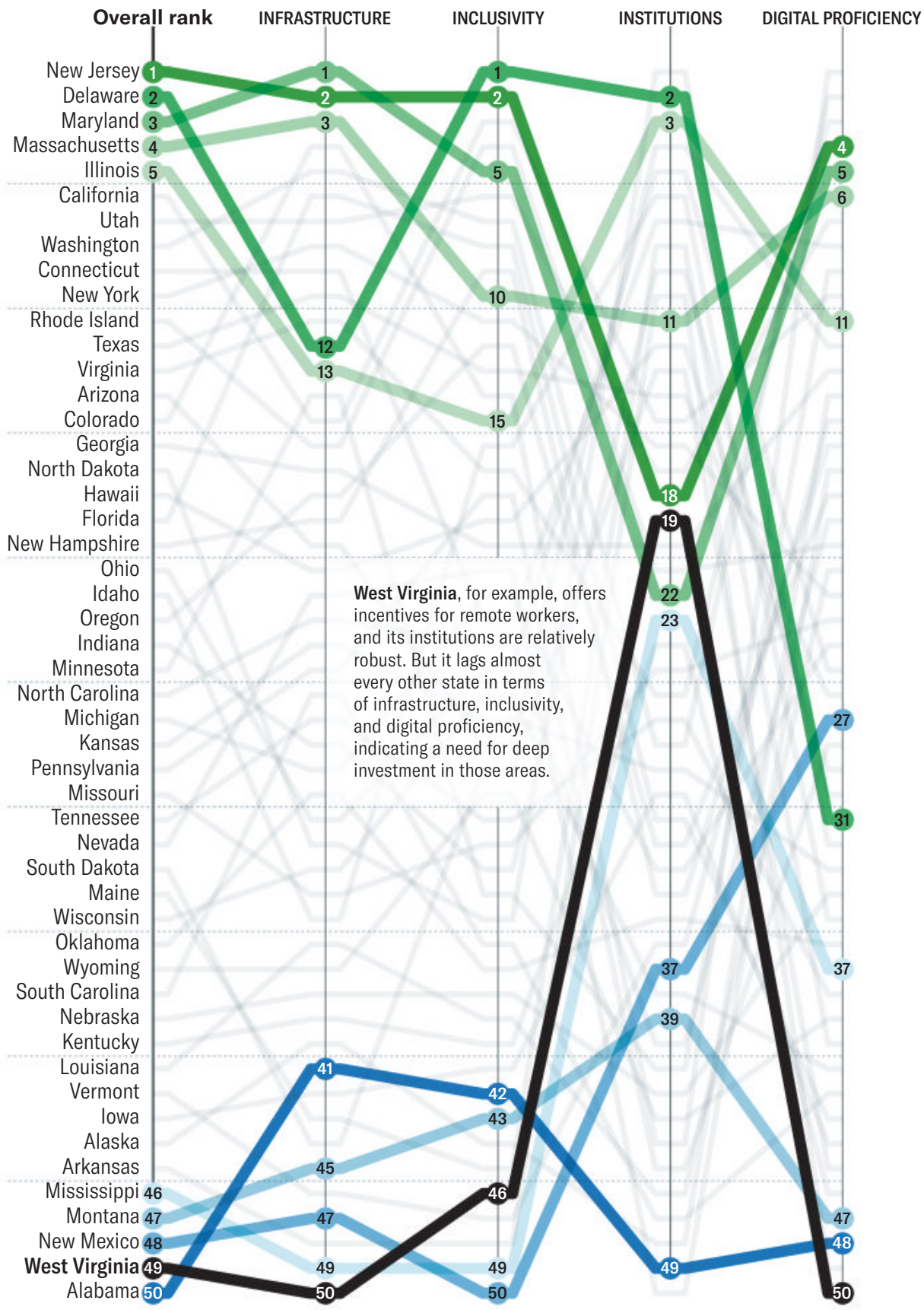
ABOUT THE RESEARCH *"Mickey D's Has More Street Cred Than McDonald's: Consumer Brand Nickname Use Signals Information Authenticity," by Zhe Zhang and Vanessa M. Patrick* (Journal of Marketing, *2021)*

TECHNOLOGY

A State-by-State Look at the Digital Divide

Digital readiness in the United States is often seen simply as a matter of access to broadband internet service, but it encompasses elements in addition to infrastructure: ***inclusivity*** (the affordability of broadband, the degree to which it is equitably accessed, and the degree to which it's used), ***institutions*** (political prioritization of broadband strategies, technology for public services, and local broadband solutions such as municipal networks), and ***digital proficiency*** (users' ability to navigate the digital world). Efforts to close the gap will require investments in all four components.

How the States Stack Up



Source: Data from Digital Planet, the Fletcher School, Tufts University; analysis by Bhaskar Chakravorti

The more visibility we can provide, the stronger we feel across buildings, walls, and countries.

Jessica Burton
SENIOR MANAGER OF MARKETING OPERATIONS, ARC'TERYX

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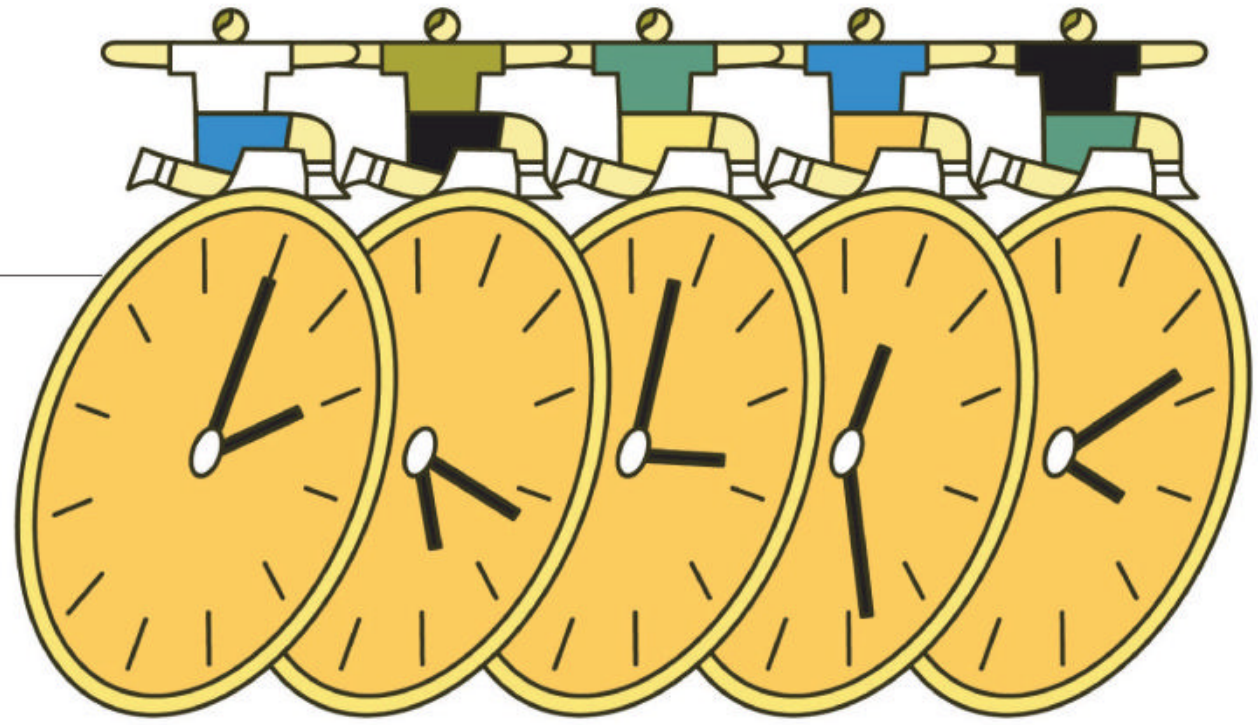


HABITS

"Stick to a Routine" Isn't Always the Best Advice

Organizations are increasingly interested in fostering employees' well-being; for example, many provide incentives to engage in regular exercise. According to research and conventional thinking, habits are more easily formed and retained amid consistent circumstances—say, when someone commits to visiting the gym at the same time every day. But a new study finds that in many cases, a certain amount of flexibility boosts results.

The researchers conducted a field experiment with 2,508 Google employees who expressed interest in exercising more regularly. All chose a daily two-hour window when they wanted to visit the gym. The researchers divided the employees into five groups. Those in two "routine" conditions would earn either $3 or $7 for each 30-minute workout undertaken during their designated window over the course of four weeks. Those in two "flexible" conditions would earn one of those amounts for each workout whenever it took place. Participants in a control group were offered no incentives. While all four incentivized groups exercised more frequently than the control group did, members of the two flexible groups together were more than four percentage points likelier than members of the two routine groups to have visited the gym at least once a week—and employees in the routine condition who were paid $7 for each visit hit the gym no more often than employees in the flexible condition who got only $3 per visit.

What really matters when trying to establish a habit, of course, is whether it is sustained—and so the researchers tracked gym visits for four weeks after the incentives stopped flowing. Exercise fell off among all the incentivized groups, but the drop was five percentage points greater among the $7 routine group than among the $3 flexible group—even though those groups had previously exercised at similar rates. This isn't to say that routines can't play a role in establishing new habits—but they're more helpful in some situations than in others. "An incentive program that promotes rigid routines can be counterproductive," the researchers write. "Routine incentives are unlikely to be more effective than flexible incentives in dynamic, fast-paced work environments but may be more successful in stable environments, where they can reinforce the development of routines that are less prone to disruption."

ABOUT THE RESEARCH *"Creating Exercise Habits Using Incentives: The Trade-Off Between Flexibility and Routinization," by John Beshears et al.* (Management Science, *2021*)

GENDER

The Hidden Bias in Crowdfunding Platforms

Many start-ups post their inventions on platforms such as Kickstarter and Indiegogo to gain feedback from early adopters and drum up interest among investors. But there's a problem with that approach: It all but guarantees a biased sample of respondents, given that the vast majority of users on such platforms are men.

Researchers examined data on nearly 6,000 products posted from 2016 to 2018 on Product Hunt, a San Francisco–based platform with 2 million active monthly users, some 90% of whom are men. Applying machine learning to product descriptions, they calculated the degree to which each product appealed to men versus women. They counted the visits made to each product's website over the subsequent year as a measure of products' growth, looked at each website's technology stack as a proxy for product development, and used venture capital databases to track products' funding. Female-focused ventures had

A LITTLE HELP FROM THEIR FRIENDS?

CEOs who replace the CFO after taking office enjoy an average pay premium of 10%, largely in performance-based compensation—suggesting that they are influencing their new partners to manage earnings in ways that boost their own pay. "Chief Financial Officer Co-option and Chief Executive Officer Compensation," by Shane S. Dikolli et al.

45% less website traffic, on average, than male-focused or gender-neutral ones and engaged in significantly less product development over the course of the year. They received less VC funding, and they were five percentage points less likely to have any active users at the end of the year, suggesting that the venture had failed.

Are female-focused products just inherently worse performers? The researchers dispensed with that notion by closely tracking Product Hunt's daily newsletter, reasoning that on the relatively rare occasions when it featured products that were aimed at women, more women would be likely to visit the platform and offer comments. Indeed, female-oriented products posted on the platform on those days (though not featured in that day's newsletter) subsequently enjoyed the same degrees of success as male-oriented and gender-neutral products, presumably because they received equally helpful feedback. "While prior work shows that the underrepresentation of female inventors leads to fewer [female-oriented] inventions, here we show that the diversity of key gatekeepers also matters," the researchers write. "The composition of early users can induce systematic biases in the signals of startup potential, with consequential effects—including a shortage of innovations aimed at consumers who are underrepresented among early users."

ABOUT THE RESEARCH *"Biased Sampling of Early Users and the Direction of Startup Innovation," by Ruiqing Cao, Rembrand M. Koning, and Ramana Nanda (working paper)*

MARKETING

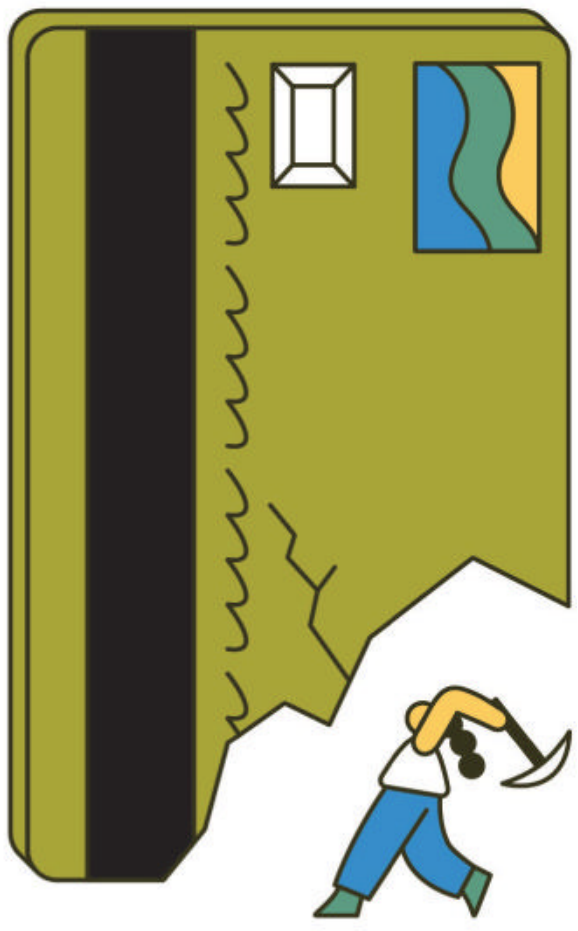
Chipping Away at Credit Card Debt, One Purchase at a Time

Credit card debt plagues many consumers: Unpaid balances have increased over the past decade, along with interest charges and fees. New research finds that a simple intervention significantly boosts repayment rates.

In the first of five experiments, 181 U.S. adults were asked to imagine that they had credit card charges totaling $1,376 and had $800 to allocate across that bill, groceries, and social occasions. Half were told that any money directed to the credit card would reduce the total balance, as is typical; half were told to direct any payments toward specific items on the bill. Participants in the latter group paid off significantly more debt, on average, than others: $559.74 versus $473.50. Subsequent experiments probed the reasons for the behavior. People attacking balances purchase by purchase had a greater awareness of what they were repaying, which increased their sense of progress toward reducing their debt—and that encouraged higher rates of repayment.

In the final experiment, the researchers tested the effect in the field. Over six months in 2018, nearly 275,000 customers of the Commonwealth Bank of Australia were randomly divided into two groups. One encountered standard repayment information when logging in to the bank's mobile app; the other was given the option to "pay by category" (eating out, groceries, transport, and so on). Only a small number did so—but they paid significantly more of their bills than others. They were younger than the customers who eschewed that option, had shorter tenures with the bank, and were more likely to have checking and savings accounts and home-equity loans there. They also had much lower card balances—and their subsequent spending was lower as well. "This intervention offers an inexpensive and scalable policy option to help consumers get out of debt," the researchers write. "[It] may not only impact repayment decisions but also influence the decision to accumulate additional debt."

ABOUT THE RESEARCH *"'Repayment-by-Purchase' Helps Consumers to Reduce Credit Card Debt," by Grant E. Donnelly et al. (working paper)*

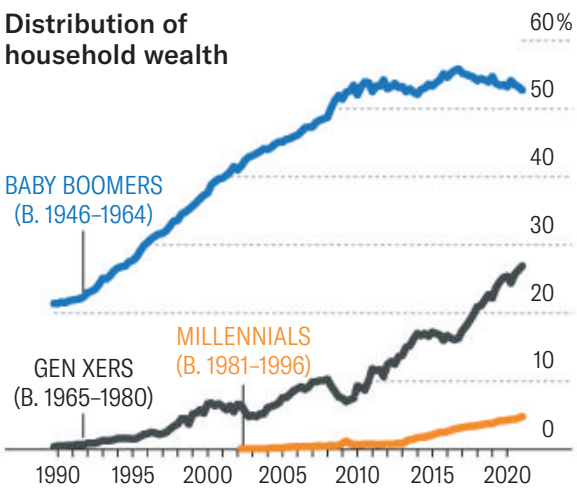


IdeaWatch

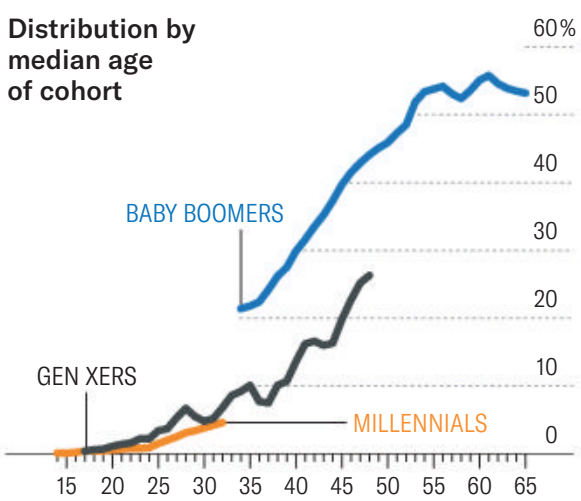
MARKETING

Who Has the Most to Spend?

Millennials and Gen Zers make headlines and set trends—and marketers increasingly seek to connect with them. But by far the largest share of household spending power in the United States still rests with an older generation: Baby Boomers.



Although some of the disparities in household wealth simply reflect the various cohorts' different stages in life, that's not the whole story. Gen Xers hold a smaller proportion of the nation's wealth than Boomers did at similar ages, and so far that's true of Millennials as well.



Source: Breakdown of data from the Board of Governors of the Federal Reserve System; calculations and analysis by Zak Dychtwald

DIFFICULT DECISIONS

When Bad News Is Good News

Suppose you have a medical condition and are awaiting test results meant to guide the decision about whether to undergo surgery. A score of four or greater is unequivocal: You are at high risk, and surgery is medically indicated. A score below four indicates intermediate risk, leaving the decision up to you. Would you rather get a score of 3.5 or 4.5?

When asked this question in a recent lab experiment, a surprisingly large share of participants—38%—said they would prefer the higher score. Across nine field surveys and randomized experiments in a variety of medical contexts (for example, athletes with torn tendons who will need surgery if the tear exceeds a certain size but otherwise must choose between surgery and physical therapy), many people expressed a preference for relatively worse news. When a tough choice looms, the researchers explain, many of us prefer to have the decision taken out of our hands—and unambiguously bad news often does just that, sparing us from feeling personally responsible for the outcome. The harder participants perceived the decision to be, the more they hoped that bad news would make it for them.

"The effect we have identified is likely generalizable well beyond the medical domain," the researchers write. For instance, after a collision a driver might be relieved to learn that his car is totaled, because then he doesn't have to weigh the cost of repairs. Similarly, a student applying to two universities might prefer to be rejected by one. Identifying such situations could be useful to those advising people on the horns of a dilemma, the researchers say, helping them to recognize when someone might want firm guidance rather than decision autonomy and to understand that even recipients of less-than-dire news might need significant support.

ABOUT THE RESEARCH *"Hoping for the Worst? A Paradoxical Preference for Bad News," by Kate Barasz and Serena F. Hagerty* (Journal of Consumer Research, *2021*)

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Siddhanth Mookerjee and his colleagues at the University of British Columbia conducted a series of studies exploring the impact of labeling visually atypical produce "ugly." They found that despite managers' and store owners' reluctance to use that language, it generated more customer purchases than euphemisms such as "imperfect" or simple discounts without a stated reason. **The conclusion:**

To Sell an Ugly Product, Just Call It That

Mr. Mookerjee, DEFEND YOUR RESEARCH

MOOKERJEE: Each year in the United States alone, retailers throw away more than $15 billion worth of edible produce, and farmers discard almost a third of their crops because of purely cosmetic imperfections. It's clear that food waste is a huge issue—both for the environment and for sellers' bottom lines—but what's less clear is what we can do to make consumers more willing to buy these visually unattractive fruits and vegetables. For example, we found that 96% of managers think that the best way to market them is to underplay or shift the focus away from their appearance. But our field studies and lab experiments that looked at labeling strategies consistently found that consumers were most likely to purchase atypical produce when it was labeled "ugly."

HBR: Why do you think that is? There's an established psychological phenomenon known as the *ugliness penalty,* in which people tend to ascribe negative characteristics to unattractive objects. In the context of buying groceries, we found, people did indeed assume that ugly produce would be less tasty and less healthful, and those perceptions drove their purchasing decisions. But when you explicitly acknowledge that produce is ugly, you emphasize the fact that its appearance is the only thing that's wrong with it—essentially interrupting and counteracting the bias against visually imperfect food.

Are any other factors at play here? Our research indicates that the main mechanism driving the effectiveness of "ugly" labels is this bias-correction effect. But we did look into a few other drivers.

First, when sellers use honest, straightforward labels like "ugly," it may make them seem more trustworthy, and prior research suggests that such perceptions can impact buyers' decisions. We also explored whether these labels led buyers to anthropomorphize the produce—that is, if you call a cucumber ugly, does that make people feel bad for it on some level? Or conversely, does it make people feel bad about themselves when they buy something labeled "ugly," as if that purchasing choice reflects on their self-worth? Research suggests that in other contexts both kinds of considerations could apply, but we found that neither was a significant factor in our studies.

We did identify one important caveat: It's important to pair "ugly" labels with the right pricing. Managers often sell unattractive produce at steep discounts, but we found that too steep a discount can send the message that there really is something wrong with the produce beyond its appearance. This essentially counteracts the effect of the "ugly" label, since it triggers people's biases that large discounts imply low quality. We found that a moderate 20% discount actually led to more purchases than a steep discount of 40% or 60%.

Illustration by KATTY HUERTAS

When you explicitly acknowledge that produce is ugly, you emphasize the fact that its appearance is the only thing that's wrong with it.

It sounds as if "ugly" labels are pretty effective—so why are they used so rarely? Most of us instinctively believe that people don't like unattractive things, so we assume that the best way to promote something with aesthetic flaws is to deemphasize or make light of those flaws. That's why you see brands like Imperfect Foods and descriptions like "misfit" or "produce with personality." The issue with this approach is that deemphasizing the problem doesn't stop people from seeing it. On the contrary, a vague label like "imperfect" doesn't specify what exactly is wrong with the product, leaving it up to the consumer's conscious and subconscious to fill in the blanks.

If the issue is that people assume ugly produce is less tasty and less healthful, couldn't you just tell customers directly that that isn't true? You could, but the "ugly" label essentially serves as a shortcut. Especially when they're shopping for food, people have limited attention and a lot of quick buying decisions to make. If you're selling luxury cars, a detailed sales pitch might be appropriate, but it's hard to communicate a lot of nuanced information in the time it takes for a person to decide which tomato to buy. We did run a study to test the impact of displaying a disclaimer noting that visual differences in produce did not correspond to any difference in taste or healthfulness and found that that approach was as effective as "ugly" labeling. But the latter is a lot easier! And in many real-world shopping contexts, it just wouldn't be feasible to communicate the extra level of information to customers.

Your studies looked at farmers' markets and produce delivery services. Might the average grocery-store shopper respond differently? We did our best to account for basic demographic factors like age and gender, but certainly there could be other cultural factors at play, such as socioeconomic status and political views—in particular, interest in environmentalism and food waste. That said, a large body of research suggests that bias against unattractive products applies in a wide variety of contexts regardless of your subcultural group, and it stands to reason that a marketing strategy designed to counteract that bias would be broadly effective as well.

We also looked at international acceptance of "ugly" labels and found that both online and brick-and-mortar stores around the world were consistently reluctant to use those labels. While folks from different cultures and backgrounds might have varying degrees of tolerance for unattractive produce, I'd guess that the underlying bias against it—and thus the effectiveness of identifying and interrupting that bias—would be fairly universal.

OK, so does this mean companies should put "ugly" labels on any unattractive product? Not necessarily. While we found that this is an effective way to sell produce, we can't guarantee that a similar strategy would work as well for other kinds of products. There are certainly some well-known examples where it does seem to apply, such as ugly sweaters, but for purchasing decisions with higher stakes and longer decision-making processes, that labeling approach might not be your best bet.

I guess that means we can't design a similar intervention to counteract lookism or other insidious forms of bias against certain people in broader society? The ugliness penalty is extremely widespread. You can see it in how people consume content, favor certain businesses, and interact with one another. For example, there's extensive research on the tendency to see unattractive people as less competent and less sociable.

Studies do suggest that identifying your biases can be an effective way to start counteracting them, in the same way that an "ugly" label implicitly calls out the antipathy toward unattractive produce. But with people our perceptions and interactions are a lot more complex than they are with food.

It's easier to address bias against a carrot than bias against a person. Exactly. Especially when it comes to prejudices based on race, gender, and the like, a lot more factors are involved. For example, research that has examined success rates for salespeople relative to their looks has found that while attractive people are more likely to sell some types of products, unattractive people are more likely to sell others. And of course, the inferences we draw about people based on their appearance are hugely context-dependent, as we can reach different conclusions if we're considering someone as a potential colleague, romantic partner, buyer, or seller. Our biases about people tend to be a lot harder to untangle than the ones we have about produce.

Interview by **Dagny Dukach**

HBR Reprint F2106B

HOW WE DID IT

The CEO of Chipotle on Charting a Culinary and Digital Turnaround

by Brian Niccol

IT'S NOT OFTEN you find your next job because of a breaking news alert from the *Wall Street Journal,* but that's exactly how my journey to becoming CEO of Chipotle began. The U.S. fast-casual Mexican food chain had been facing challenges since 2015, when several of its restaurants were implicated in a series of *E. coli* and salmonella outbreaks. In November 2017 it announced that it was looking for a new leader to improve its operations, digital strategy, and marketing. When I saw the news, I thought, *That's interesting.*

I had spent the past six-plus years working for Taco Bell, as chief marketing and innovation officer, as president, and then as CEO. Although the two chains compete in different arenas (convenience, low prices, quick service, and a constantly updated menu for Taco Bell; fast-casual, fresh-ingredient-focused, customizable offerings for Chipotle), I'd watched Chipotle's launch and rise with fascination. I enjoyed its burritos and bowls, and I knew it still had a great brand with a loyal customer base. It just needed to get its business back on track fast. Within a few weeks I had connected with the recruiting firm that was

Photographs by CHRISTINA GANDOLFO

handling the CEO search, and we began a conversation about the turnaround I might lead.

Only three years later, with help from an amazing team that predated me along with those who came on after my arrival, we've joined the *Fortune* 500, grown our digital sales, launched a rewards program that now has 24 million members, raised our average minimum wage to $15 an hour, and opened 200 new restaurants. We also ensured that the business not only survived the Covid-19 pandemic but emerged stronger.

A PLAN TAKES SHAPE

Before joining Taco Bell, in 2011, I'd spent nine years in brand management at Procter & Gamble, studied finance in the MBA program at the University of Chicago, and worked for five years at Pizza Hut. I came to the marketing and innovation role at Taco Bell with big ambitions, and we executed on three important things: We significantly strengthened our social media and digital marketing. We launched new menu items, including Doritos Locos Tacos. And we made the brand more relevant, creative, and youthful. During those years Chipotle was becoming very popular for its tasty hormone- and antibiotic-free food and customer-friendly culture, and I loved going there myself. When friends and acquaintances mentioned Chipotle, I'd always ask lots of questions to better understand its appeal. (When working on Scope mouthwash at P&G, I did the same sort of intelligence gathering on Listerine.)

As I began talking to the recruiter for Chipotle, I wanted to learn more about what was going on inside the company's restaurants. I visited some near my home in Southern California. Anytime I was traveling to other parts of the country, I'd stop in at a Chipotle location. I began to get a sense that its operations weren't as smooth as they ought to be. Eventually I asked the company's founder and then-CEO, Steve Ells, to make a few of those visits with me. The restaurants wouldn't know we were coming.

The first thing we noticed was positive: Customers were lined up. However, the lines weren't moving very quickly. When we reached the front, where the team members were assembling our food, it was obvious that they could benefit from additional training and guidance. The restaurant managers seemed a little overwhelmed, which is a big problem: If the manager isn't confident, that will carry over to the team and show up in poor execution. This wasn't very surprising, because Chipotle has always had a more complicated strategy than its peers have. Chain restaurants compete on four dimensions: quality, value, speed, and customization. Most focus on just one or two of them, but Chipotle offers all four.

The food-safety incidents were one symptom of that difficulty. Unlike traditional quick-service restaurants, which typically prepare their food at a central commissary and simply reheat and assemble orders on-site, Chipotle requires that fresh meat and produce be cooked from scratch at every location, which necessitates extremely high levels of care.

The company had been working on those issues since the health scares. It introduced what it calls the Food Safety Seven, a checklist to ensure that managers and employees were following best practices, but that system hadn't yet become routine. I saw that we would need to work on implementation and reinforcing good habits.

Another strain on Chipotle's operational capabilities and culture was the speed at which it had been growing in the years before my arrival—adding approximately 200 restaurants a year. That pace of expansion was laudable—and customers couldn't get enough. But the company's ability to hire and train staffers wasn't keeping pace. Customer service was further stymied by a new mobile app that allowed people to order online but didn't give them a way to skip the long wait in line that Steve and I encountered. Finally, I noticed that although Chipotle was spending $150 million a year on marketing, its messaging wasn't very prominent.

In my mind, and in conversations I had with Chipotle's directors, a turnaround plan began taking shape. When I accepted the chief executive role, in March 2018, I and the team began working to implement it.

FOOD WITH INTEGRITY

Our first goal was to focus even harder on maintaining a great culinary culture. As part of a marketing campaign dubbed For Real, we transparently featured our full ingredient list on our website, in our restaurants, on our social media channels, and in our advertising. We rolled out an

educational training program and told managers to encourage their team members to begin thinking more like chefs. We provided all our employees with a pocket guide about our ingredients and our expectations for delivering on our purpose and our promise of "food with integrity."

Now they know to taste the food they're cooking—to make sure there's enough salt in the rice and not too much cilantro in the guacamole. We taught them that the flavor of avocados and limes can vary by season, so they need to constantly test and recalibrate the ratios they use. Of equal importance was bringing back our customer focus. Managers reminded their teams to ask guests what they thought of the food, whether the balance of rice and chicken was right, whether they had enough sauce, and then really listen to the feedback.

I also recognized that Chipotle would greatly benefit if it could harness the power of digital. Our fledgling mobile app would be a plus for customers only if we reconfigured our restaurants to allow for skip-the-line pickup. So we created grab-and-go shelving next to the cash registers in every restaurant, and we educated customers about how to find their food.

We also solved another problem that had been hurting our reputation: Those waiting in line could see when employees stopped serving them to put together an online order, and it annoyed them. So we created a second "kitchen" in the back of the restaurant, managed by a separate staff, that focused exclusively on online orders. And we added a new computer system that fed those orders into an easy-to-read screen. Those steps may sound like simple solutions, but doing them in 2,400 restaurants was no small undertaking.

We were able to accomplish it because even though Chipotle is a $6 billion company, it still has the feel of a start-up. There's very little bureaucracy. Six months after I started as CEO, we held our annual conference for general managers—about 3,500 people altogether. And although that sounds like a big number, it felt intimate and casual. I could also sense that everyone was already enthusiastic about implementing these changes.

The other area I'd identified for improvement—marketing—continues to evolve. In the wake of its 2015 food-safety issues, Chipotle had begun heavily promoting local buy-one-get-one-free deals to lure customers back into its restaurants. It was a very defensive, expensive, promotion-focused approach, and giveaways weren't what the brand needed. So we shifted our marketing spend to social media and television, where our message—for example, For Real—has become much more resonant.

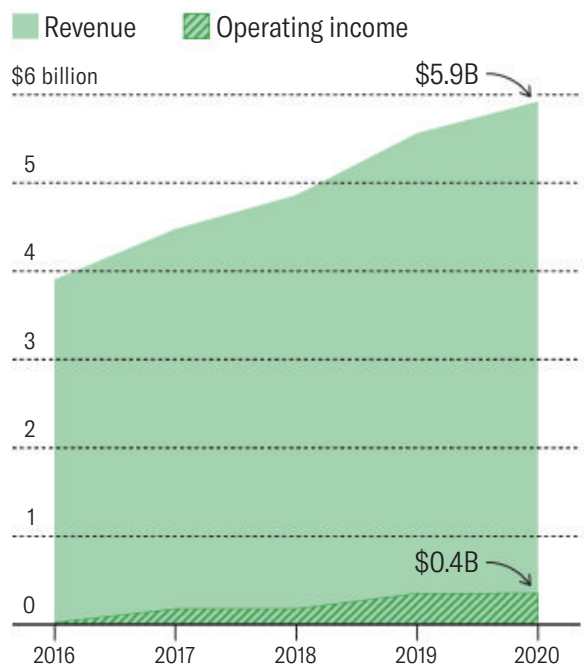
The rewards program is another important piece of this. Today we have more than 22 million members in our database, and we're gathering information to better understand what motivates them to come into a restaurant to eat or to place and pick up an order, and how we can encourage them to do both more often. Chipotle was a bit late to this game, but the upside is that we've been able to look at what everyone else is doing, learn, and draw on the best components of other companies' efforts. We're still in the early stages of rewards, driving enrollments and starting to personalize and customize offers. Over time, I expect, the understanding and insight we achieve from this work will deliver a big return.

One area in which we haven't done much tinkering is the food. I give my predecessor, Steve, a lot of credit: He created a menu on which every combination really works. Even if you're eating vegetarian or keto or paleo or Whole30, Chipotle has something for you. So instead of adding lots of new items or promoting items of the month, our limited-time offers emphasize twists on familiar offerings—proteins such as smoked brisket, for example—and

FACTS & FINANCIALS

Chipotle

Founded: 1993
Headquarters: Newport Beach, California
No. of employees: 97,000
No. of restaurants: 2,800



Source: Chipotle

Chipotle has illustrated how a business can be revitalized through refocusing on its original core values—in our case, culinary excellence and great customer service.

lifestyle bowls (available with one click online) as diet-driven options. We did add carne asada, and we created a new recipe for our queso dip, which needed improvement. But unlike most other restaurants, we didn't—and still don't—need to revamp our menu to drive traffic.

PIVOTING FOR THE PANDEMIC

Before March 2020 Chipotle was already investing in digital access, but we accelerated that in the face of Covid-19. Despite the difficult backdrop, we were able to pivot and adapt to the rapidly changing needs of our guests—a testament to the durability of our business model and the strength of our team members.

During the pandemic we've conducted wellness checks and offered employees paid sick leave to ensure the safety of our team members and our guests. We also increased restaurant wages and expanded our partnership with Guild Education, which allows our employees to pursue college degrees. Chipotle covers 100% of tuition costs for nearly 100 degree options, and we have a tuition-reimbursement program as well.

At the onset of the pandemic we quickly rolled out additional third-party delivery partnerships with Uber Eats and GrubHub and aimed all our marketing messaging at free delivery and safety protocols. The business remained open, and those protocols were reinforced by earlier investments, including advanced air-filtration systems and sanitizers throughout the restaurants. Our digital sales grew by 174.1% year over year to $2.8 billion, representing 46.2% of all sales in 2020. About half that food was delivered, benefiting from our expanded partnerships. Ordering ahead and the convenience of more drive-through "Chipotlanes" accounted for the remaining sales.

OVER THE PAST few years Chipotle has illustrated how a business can be revitalized through refocusing on its original core values—in our case, culinary excellence and great customer service. When I arrived at the company, some people were asking whether we should be expanding into breakfast, or switching to frozen food to enhance safety, or offering combo meals the way the burger chains do. We knew not to do any of those things. We just needed to get even better at doing what people already loved us for.

Three years later, it's gratifying to have helped make that happen.

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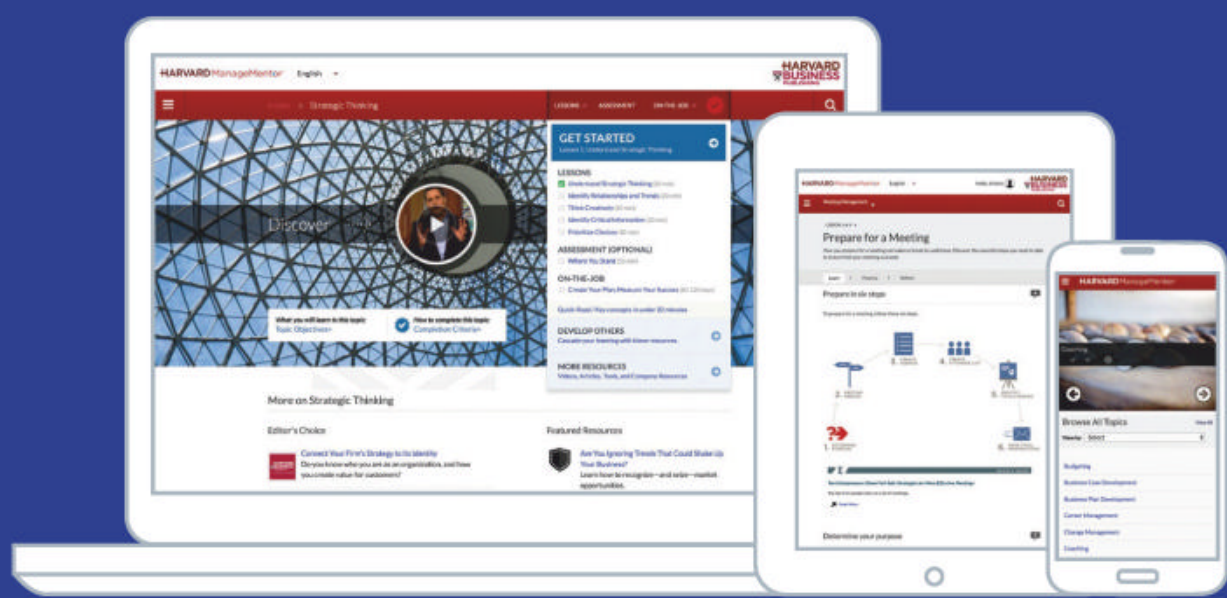

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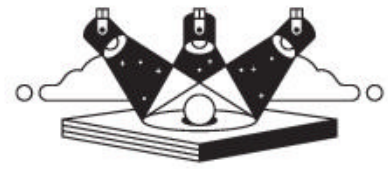
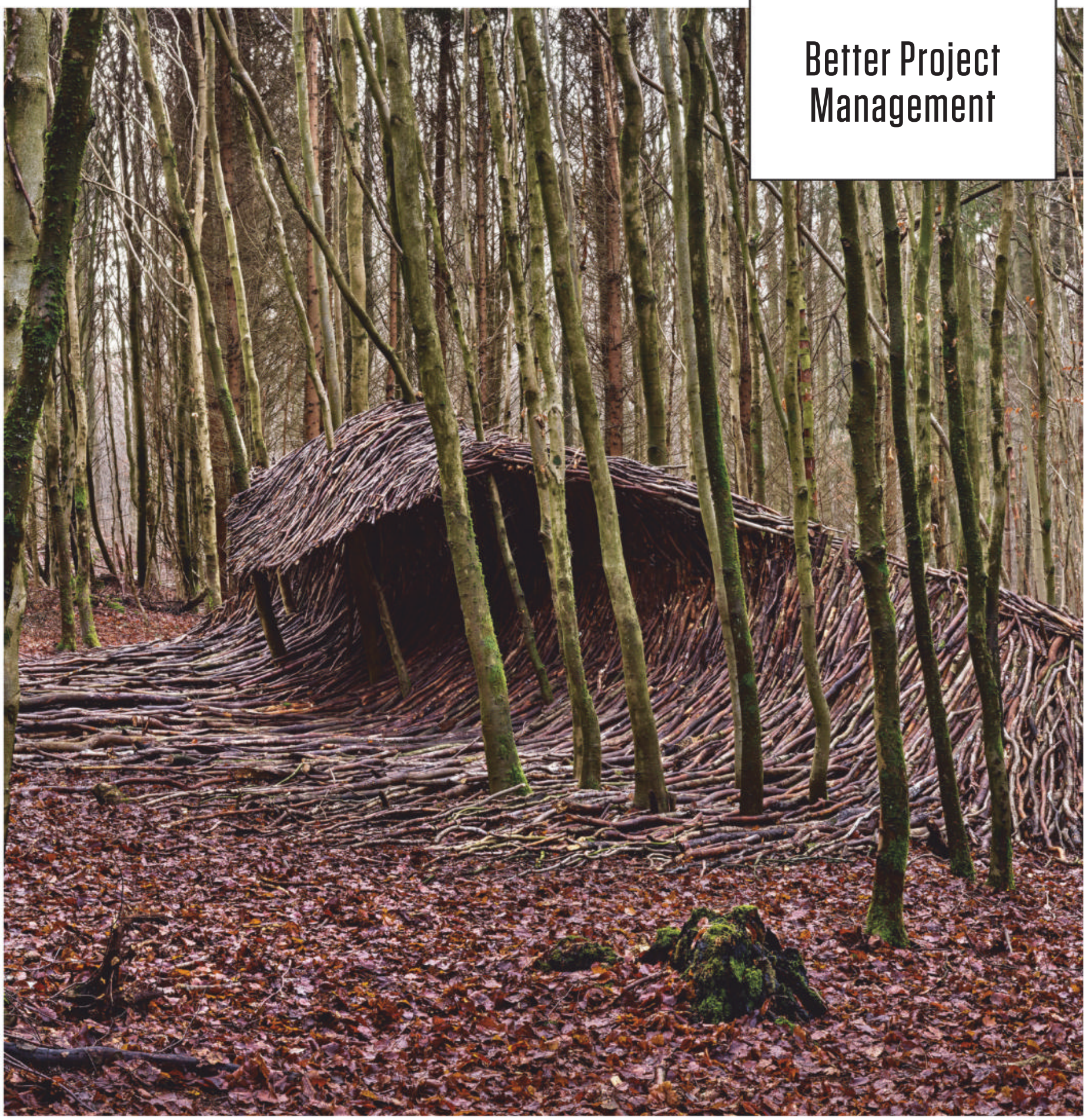


Spotlight

Better Project Management



Photographs by **JOERG GLAESCHER**

AUTHOR
Antonio Nieto-Rodriguez
Former chairman, Project Management Institute

The Project Economy Has Arrived

Use these skills and tools to make the most of it.

QUIETLY BUT powerfully, projects have displaced operations as the economic engine of our times. That shift has been a long time coming.

During the 20th century, operations (which involve the *running* of organizations) created tremendous value, and they did so through advances in efficiency and productivity. But for most of the current century, productivity growth in Western economies has been almost flat, despite the explosion of the internet, shorter product life cycles, and exponential advances in AI and robotics.

Meanwhile, projects (which involve the *changing* of organizations) are increasingly driving both short-term performance and long-term value creation—through more-frequent organizational transformations, faster development of new products, quicker adoption of new technologies, and so on. This is a global phenomenon. In Germany, for example, projects have been rising steadily as a percentage of GDP since at least 2009, and in 2019 they accounted for as much as 41% of the total. Precise data is hard to come by for other countries, but similar percentages are likely to apply in most other Western economies. The percentages

ABOUT THE ART
Artist Joerg Glaescher contemplated the intense power of nature by handcrafting waves out of gathered deadwood in the forest near his home in Leipzig, Germany.

are probably even higher in China and other leading Asian economies, where project-based work has long been an important source of growth.

And we're only just getting started. In 2017, the Project Management Institute estimated that the value of project-oriented economic activity worldwide would grow from $12 trillion in 2017 to $20 trillion in 2027, in the process putting some 88 million people to work in project management–oriented roles—and those estimates were made before nations started spending trillions on pandemic-recovery projects.

Forward-looking companies have recognized the organizational implications of this surge. "Soon we will no longer have job descriptions," one senior IBM talent executive told me. "We will have only project roles." That's where the management thinker Roger Martin believes we already should be. "The average person in an office thinks that their life is some sort of regular job," he told me, "and that the projects they work on get in the way of doing it. In fact, in organizations the entire decision factory should be thought of as nothing *but* projects."

Some companies are already starting to make this change. In 2020, Mohamed Alabbar, the founder and chairman of Emaar, the giant Dubai-based property developer, announced that as part of a shift to project-based work, the company had abolished all traditional job titles—including his own—and that employees would now be defined not by the department to which they belonged but by the projects on which they worked. In a similar move, the Richards Group, the largest independently owned ad agency in the United States, has removed almost all its management layers and job titles and now refers to most of its employees as project managers.

This transformation to a project economy will have profound organizational and cultural consequences. The problem is, many leaders still don't appreciate the value of projects and write them off as a waste of time. Typical is the attitude of one executive who recently told me, "If you want to make sure that something is *not* done, make it a project."

It may be that leaders don't value project management because its methods are too complex to be easily applied. Many project managers end up producing reams of paperwork, too, which can create the impression that their role is primarily administrative. Dismissing the importance and potential of projects for these reasons is a huge mistake. When executives ignore project management, products launch late, strategic initiatives don't deliver, and company transformations fail, putting the organization's future seriously at risk.

There's one more thing that executives often fail to recognize: Projects give work meaning. Behavioral and social science show that projects can be particularly motivating and inspiring for team members. The moments they feel most proud of almost always happen on the projects they work on—the successful ones, of course, but often even those that fail.

Leaders need to recognize that their role in the project economy involves more than just the direct sponsorship of individual initiatives. At a broader level, it involves being clear and courageous in selecting and prioritizing strategic projects. It involves adopting a project-driven structure and creating a collaborative and empowering culture that reaches across silos. They must also ensure that project management competencies are developed throughout the organization.

I can say all this with confidence because I've devoted my career to the study of projects and the practice of

IDEA IN BRIEF

THE SITUATION
Projects have displaced operations as the economic engine of our times. By 2027, some 88 million people around the world are likely to be working in project management, and the value of project-oriented economic activity will have reached $20 trillion.

THE PROBLEM
Despite this shift, many leaders still undervalue projects and project management. As a result, only 35% of the projects undertaken worldwide are successful—which means we're wasting an extravagant amount of time, money, and opportunity.

THE WAY FORWARD
Companies need to reinvent their approach to project management. They need to adopt a project-driven organizational structure, ensure that executives have the capabilities to sponsor projects, and train managers in modern project management.

Joerg Glaescher/laif/Redux

project management. I've worked as the director of the program-management offices at PwC, BNP Paribas Fortis, and GlaxoSmithKline. I've served as the chairman of the Project Management Institute. I've taught thousands of senior leaders, managers, and project managers at several top business schools. In short, I have worked on and examined projects from every point of view, and what my work has taught me is that we need a clearer, simpler, and more comprehensive approach to project management.

The stakes are high. According to the research firm the Standish Group, around 35% of the projects undertaken worldwide are successful. Given that we're talking about tens of trillions of dollars, and the labor of millions of employees, that's a mind-blowing number. It tells us that we're not only wasting 65% of the time and money that we've invested in our projects but also forfeiting trillions of dollars of new value for organizations and society at large.

We can and we must do better. In this article I'll present a simple but powerful project-management framework that can make the job easier for everyone, and I'll lay out six skills that you'll need to succeed in an increasingly project-centric world.

From Operations to Projects

It's often said that to succeed in times of change, companies need to be organizationally ambidextrous—or as the academics put it, they must balance the *exploitation* of their current capabilities (operations) with the *exploration* of new competencies (projects). In other words, they need to focus simultaneously on running the organization and changing it.

Running the organization (operations). This dimension is made up of the core and legacy activities of the business. It includes functions such as sales, customer service, finance, manufacturing, and IT. Most of the revenues (and fixed costs) generated by firms are from running-the-organization activities. These functions are what keep the company alive. Running the business is about efficiency, productivity, and speed. The focus is short-term, the objectives are mainly performance-driven, and the structure is hierarchical. Culturally, the model is command and control.

Changing the organization (projects). This dimension is key to the future of the company. It includes all the organization's strategic and tactical initiatives and programs. Changing the business is about innovation, transformation, agility, and long-term value creation. The focus is medium- to long-term, the objectives are more strategic, the structure is flat and project based,

and the outcomes are less quantifiable than operational results. Culturally, the model is entrepreneurship and collaboration.

The future belongs to organizations that can achieve the right balance of run and change, but most leaders are far better at the former, and so spend more of their time on it. That's a legacy of the 20th century, when, starting in about 1920 and guided by the likes of Henry Ford and Frederick Taylor, most companies made productivity their prime directive. They achieved it with a relentless focus on increasing efficiency, reducing costs, and raising volumes and outputs. Because they mainly produced goods, they grew in mostly organic ways: by increasing production capacity, by standardizing and automating processes, and by entering new markets. Once a year, senior leaders would decide on strategies, projects, budgets, and operating plans and then would manage operations accordingly. Between annual-planning cycles, only a few minor amendments were allowed.

All this made operations extremely efficient. But efficiency has its downsides. By commoditizing their processes, companies sacrificed elements of medium- and long-term value for speed. They regularly grew their businesses through acquisition, often at the expense of organic growth, or as an alternative to it. That allowed them to accelerate their product-release schedules or simply to produce more. But there comes a point after which a strategy of more volume, more product releases, and more brand extensions simply runs out of road. Sustainable growth through further efficiency becomes impossible, especially in times of uncertainty and rapid change.

That's where we are today. The yearly operational rhythm that prevailed for a century is out of touch with reality. Every organization, public or private, now operates in an environment of continual and sometimes disruptive change. Projects used to be temporary, and operations permanent, but now the reverse is true: Operations keep you afloat temporarily, and change is what's permanent. Anticipating, managing, and driving change thus become the prime directives. And what's the best way to do those things?

Handle your projects better.

New Terms and Conditions

What exactly is a project? Everybody uses the word, but it means different things to different people. That's a problem. As projects drive more and more of the value that organizations create, everyone needs to have a common understanding of what projects and project management are. So let's briefly define them.

Projects involve a series of planned activities designed to generate a deliverable (a product, a service, an event). These activities—which can be anything from a grand strategic initiative to a small program of change—are limited in time. They have a clear start and end; they require an investment, in the form of capital and human resources; and they are designed to create predetermined forms of value, impact, and benefits. Every project has elements that are unique. That's key: Each contains something that has not been done before.

Project management, for its part, involves the collection of competencies, techniques, and tools that help people define, plan, and implement projects to achieve their goals. Most project-management methods we use today were developed in the 1970s and 1980s and reflect the efficiency and standardization methods used for operations management. Organizations typically adopted one standardized project-management methodology and applied it consistently to all their projects. Over time, what project management was and what it needed to be drifted apart. Organizations evolved rapidly, and although the number of projects increased exponentially, project management somehow stayed in the past.

Using the traditional model, project managers have focused far too much on *inputs and outputs* (planning, estimation, cost, time, scope, risk management) and not nearly enough on *outcomes and value* (purpose, rationale, benefits, impact, and strategy). It hasn't mattered much to them what happens before or after their projects are complete—they've concerned themselves with deliverables, the idea being that if they can complete their projects on time, on budget, and on scope, then the promised benefits will... just happen.

Typically, project managers conceive of their projects in life cycle stages, moving sequentially from initiation through planning and implementation to closing. You work on one stage until you're done; you move on to the next; and when you've made it through the final one, your project is complete. At no point do you return to a previous stage.

But we now know that projects don't lend themselves naturally to such a rigidly sequential, one-size-fits-all approach. In taking on work that's never been done before, projects involve experiments and false starts and failures and, as a result, are prone to movement

Agile and traditional project management aren't at war with each other. In a change-driven world, companies can't apply just one methodology to all their projects.

back and forth among the stages. To run projects well, sponsors and managers need to focus on three main things: innovating; creating a high-performing team; and, most important, delivering benefits.

In the early 2000s, as the internet and new technologies converged to create an explosion of change, the agile movement began to take hold as an alternative to the rigidity of traditional project-management practices. The focus was on accomplishing work in smaller increments, on delivering value to customers faster, and on evaluating requirements, plans, and results continuously. Agile has been a positive development in many ways, but at times it has led to tribalism in the project-management-expert community. Many leaders see agile as cool and fresh, and traditional project management as obsolete—and so they have rashly instituted agile throughout their organizations.

That is counterproductive. Agile and traditional project management aren't at war with each other. In a change-driven world, companies can't apply just one methodology to all their projects. Instead, they need a toolbox of approaches—among them agile and traditional project management, certainly, but also design thinking, change management, and product development—and then must build competencies in all of them throughout their organizations.

But to make that possible, they first need a framework that allows everybody in the organization to see, understand, and work productively on the key elements of any given project.

The Project Canvas

I've created just such a framework for the executives and managers I teach and advise across the globe—a one-page strategic template that I call the project canvas. The concept is inspired by the business model canvas developed by Alex Osterwalder and Yves Pigneur and used by millions of people worldwide. Both Alex and Yves helped with early brainstorming for the design of the project canvas. A few other frameworks with the same name exist, but none has been as widely adopted as this one.

The framework is composed of just three domains: foundation, people, and creation. Each domain is vital to the success of any project. (See the exhibit "The Project Canvas.")

What distinguishes the project canvas from other guides to project management? A lot of things. It can be applied to any project, program, or strategic initiative. It focuses on value and benefits rather than processes and controls, and it encourages you to focus on how to quickly deliver the elements of greatest value. It helps you ensure that every project has a purpose and lines up with your organization's strategy. It focuses on implementation rather than detailed planning, and—this is critical—it spans not just the traditional project life cycle but also the pre- and postproject phases, to include aspirations and benefits. It's flexible and allows changes to be made quickly whenever necessary.

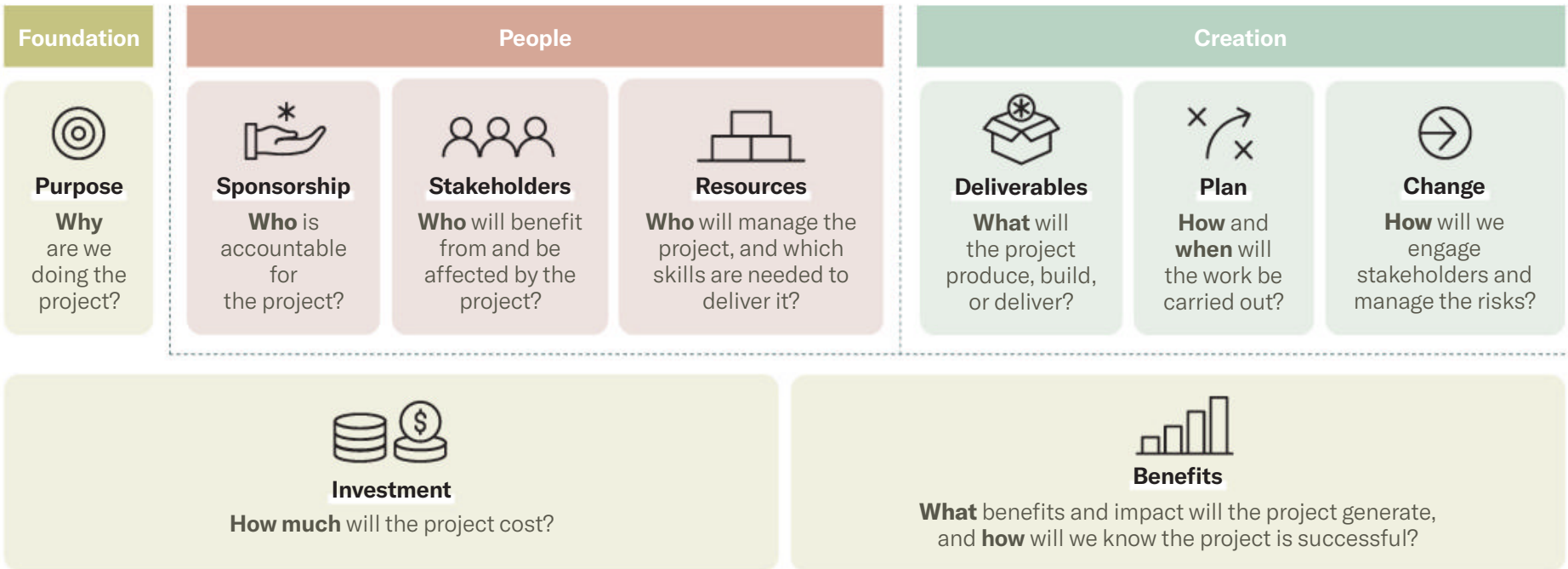
The project canvas works with all project-management methodologies, and it guides each stage of the process. It is used before the project begins, to assess how well it has been defined and whether it's ready to go. It is used throughout the project to track progress and ensure that critical elements and assumptions remain valid. It is used near the end, to assess whether the project is delivering its intended benefits, and after the project is over, to capture lessons learned and build up competencies found to be lacking.

The canvas process begins just before you invest heavily in a project but after you have put both a project manager and a project sponsor in place. Those two roles are key to the success of any project. It's common to think of a project manager as focusing primarily on the technical aspects of the project—with the goal of providing the deliverables on time, within scope, and on budget—while the project sponsor oversees and supports the project manager and ensures that the project stays true to its purpose and delivers its promised benefits. But that division diminishes the role of the project manager, who also needs to be concerned with purpose and benefits. When it comes to how a project is run and what its goals are, the manager and the sponsor must be on the same page—which, of course, is exactly what the project canvas makes possible.

The canvas has to work for everybody, so it must be built on consensus. The project manager should start by convening a project-definition workshop—a meeting that brings together the project sponsor, key stakeholders, and company experts, not to mention anybody else who might provide relevant information, including customers and suppliers. This meeting might take

The Project Canvas

This framework ensures that every project has a purpose and lines up with your organization's strategy. It is a living document, to be revisited anytime you face a major decision or make changes to the scope of the project.



two or three hours. Don't rush it. Make sure everybody has a blank copy of the canvas. Review the goals, scope, and details of the project, and walk through the elements of the canvas template. Then have everybody brainstorm for a while. Start with the foundation, and then move through the other domains and their building blocks. Ask participants to share their views and opinions, and then using a master copy of the canvas, summarize the main themes that have emerged for each domain and building block. You'll now start to see a picture of the challenges ahead.

At this point, your canvas will have a lot of information on it. Ask yourself, Does it all work together as a cohesive and integrated whole? Does it make sense from a strategic and an organizational perspective? Does it acknowledge that you'll be implementing your project in a fast-changing and multiple-priority environment? Now is the time for some careful thought and focused iteration. If you are missing or unclear about two or more building blocks, it's probably too early and too risky to start your project. Take more time to define them. And if you still can't do that, don't start the project at all.

When the meeting ends, the process is far from over. Your next step is to share the document you've produced with other stakeholders and incorporate their feedback.

The canvas is now a living document, to be revisited regularly. Consult it each time you face a major decision, and update it any time you make changes to the nature of the project or your goals. You might even want to feature the canvas in your drumbeat communications. Consider producing a video, drafting an article, or facilitating a short workshop around one (or more) of the elements in the canvas on a regular cycle—perhaps once a month.

Skills and Training

Projects are only as good as the people who run them. So what are the main qualities that leaders need to excel in a project-driven world?

I divide them into six categories.

Project management skills. Executive sponsors need a solid grounding in the essentials of project management. They need to know why projects succeed or fail, how to ensure that a particular project's technical fundamentals are robust, and which characteristics of that project to consider when choosing its project manager. In addition, they need to understand the technical complexity and constraints associated with how plans and estimates are developed.

Project managers, for their part, need to be able to use tools and techniques to determine the rationale and business case for a project. They must be adept at working with contributors and partners in defining scope. They need to know how to identify and manage risk effectively. Once a project is underway, they are responsible for establishing reporting mechanisms to monitor execution and quality. When delays or changes to the plan are foreseen, they need to be able to anticipate their impact and come up with viable alternatives.

Product development and subject matter expertise. Project sponsors and managers need to develop a reasonably proficient understanding of the technology, features, product, service,

or capabilities that the project aims to produce. This will do a lot for them: It will give them credibility with the team and the stakeholders. It will enable them to communicate in the language of the experts and the product teams. It will ensure that they understand what the project benefits are, and how and when they will be achieved. And it will help them understand how the project connects with the organization's overall strategy.

Strategy and business acumen. Because of their seniority, executive sponsors tend to have a good understanding of their organization, its strategy, and its key competitors. They're also typically savvy when it comes to the financials and the environment in which their projects will be implemented. Project managers often need to develop these skills. Being able to connect the project benefits and purpose to concrete business priorities is essential for winning buy-in and achieving goals. Also key is a strong focus on a project's benefits and impact, even in the early stages.

Leadership and change management skills. Project sponsors and managers today need strong leadership and change management capabilities. They have to create high-performing teams; provide direction; manage and persuade across multiple cultures; build bridges across the organization; communicate clearly and effectively; evaluate, develop, and coach staff; and resolve disagreements in ways that all parties can embrace.

Agility and adaptability. There's no question that project sponsors need to adapt to agile methods. In the old world, they were expected to lead according to a predetermined plan and treat decisions as simple and binary. But in a change-driven world, they won't have all the answers and will need to alter their course and cancel projects regularly. Many agile training groups offer very helpful courses and certifications that can provide a solid knowledge base.

Similarly, project managers need to be comfortable working in uncertain contexts and making plans and decisions with only limited information. They should be prepared to apply some agile methods or adaptive techniques, among them Agile Project Management, Scrum, Kanban, and Scaled Agile Framework.

Ethics and values. Project sponsors and managers are role models. They create a safe, respectful, nonjudgmental environment in which the project team can build trust and communicate openly. In the launch phase of any project, consider developing a code of ethics to guide you and the project team. Start by consulting existing models. Both the Project Management Institute and the International Project Management Association have codes posted online.

Mastering these skills is no small task, but fortunately plenty of good options for learning are available. Some business schools offer yearlong programs in project management. Groups such as the Project Management Institute and Prince2 offer internationally recognized programs of accreditation. PM2, from the European Commission, and Praxis provide free project-management frameworks online, and the International Project Management Association offers a competency framework for technical skills. The best option, however, is to develop an in-house training program specific to your organization's needs and culture.

GREAT PROJECTS DON'T just make work better—they make the *world* better.

If managers and organizations want to build the competencies required to transform themselves and thrive in the new project economy, they'll need to get comfortable devising strategies that are driven not by efficiency but by change. They'll need to allocate more resources, budgets, and decision-making power to projects and project teams at the expense of the traditional departmental hierarchy. They'll need a simple framework, such as the project canvas, so that everybody in their organizations can get involved. They'll need to build project management competencies and adopt new technologies. They'll need to encourage a shift in focus from inputs and outputs to outcomes and value. They'll need to broaden the scope of their ambitions for their projects, by including, for example, a focus on diversity and sustainability.

If all of us as leaders can do these things, just imagine what we'll collectively make possible: By executing our projects better, we'll be able to provide trillions of dollars' worth of additional benefits to the world.

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Agility Hacks

How to create temporary teams that can bypass bureaucracy and get crucial work done quickly

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IN THE PAST 20 YEARS, the agile approach to improving products, services, and processes has swept the business world. It calls for organizations to adopt small, empowered, cross-functional teams, break initiatives or challenges into small modules, and develop solutions using rapid prototyping, tight customer-feedback loops, and quick adaptation. Rooted in software development, agile has spread to many other functions, and some companies have turned much of their organization, including the C-suite, into agile teams.

Although agile can benefit the parts of a business that must be nimble—those that manage shifting customer relationships, explore new markets, and develop new products quickly and responsively, for example—it is less effective for operations or functions that require consistency and efficiency rather than agility. Consider mature, high-volume production processes such as those used to produce aluminum, commodity chemicals, and paper. They can run efficiently for weeks or months without interruption, and tweaks can be extremely costly and even dangerous. Other repetitive activities, including bill processing, payroll, and budgeting, are also best run with bureaucratic systems. Indeed, bureaucracy—characterized by specialized functions, fixed rules, and a hierarchy of authority—has gotten a bad rap: When designed well, it excels at ensuring reliability, efficiency, consistency, and fairness.

Photographs by ELLIE DAVIES

ABOUT THE ART
Ellie Davies constructs temporary interventions in the forests of England to consider the complex interrelationships between landscape, individual experience, and meaning.

But understandably, such systems don't adapt quickly to changing circumstances in the market, and occasions arise when businesses need to bypass them to tackle select projects that demand speed, flexibility, and experimentation. Examples include jump-starting an R&D function to generate more-radical innovation; figuring out how to serve the needs of a strategic new client in an emerging market whose requirements differ dramatically from those of existing customers; and responding very quickly to a sudden contextual change, as happened during the early days of the Covid pandemic.

In such cases, how can large, established organizations bypass their own processes to act quickly and effectively while leaving the overall system alone? Our research identified several large companies—among them PepsiCo, Sony, Novartis, and GE—that used temporary teams to carry out time-sensitive strategic projects quickly. All employed agile principles and values, but some did not use formal agile methods. Instead, they used what we call *agility hacks*. Similar in spirit to life hacks, they are shortcuts or novel methods that increase productivity or responsiveness, and they deliver on computer programmers' original use of the term "hack": a quick, effective, if inelegant, solution to a specific problem.

In some instances, teams were unleashed to pursue a new market opportunity; in others, they were formed to respond forcefully and creatively to serious performance problems such as an alarming and sustained decline in revenues. Team members knew they were trying to capture something that the organization would otherwise miss. All teams used unorthodox methods to achieve results quickly; they acted as work-arounds to get things done outside the organization's established architecture and normal operating processes. Although the projects differed in size and duration, we uncovered commonalities in their approaches—related to their purpose, the permission granted to them to operate outside the norm, and the disciplined, iterative process they employed—that other companies seeking to create agility hacks can apply.

Purpose

Each project we studied began with an animating purpose that was inspiring and actionable—for example, winning a bid for a mega-order, regaining a key account, or catalyzing novel innovation. The importance of the goals helped minimize pushback from the custodians of standard operating procedures in the organizations. And in all cases project team members—and those in other parts of the company whose expertise or resources were necessary to succeed—believed that the objective mattered.

Consider what happened at GE in 2012. Indian Railways, the second-largest rail network in the world, had announced a $2.5 billion plan to revamp its entire fleet of diesel locomotives and asked for bids to be submitted within six months. Given the decades-long life span of a locomotive, it was a rare opportunity. But Nalin Jain, a young executive at GE India, realized that a variety of factors stood in the way of being able to submit a bid in time to compete: the company's plodding traditional systems; the distant location of GE Transportation's headquarters in Erie, Pennsylvania; Indian Railways' vague requirements and the likelihood that the specifications would shift during the bidding process; and the deal's high risks (bid too high and the deal would be lost; bid too low and the deal would result in a massive financial loss). A nimble approach to assembling a winning proposal was the only option. Jain pulled a team together and got to work. The team needed expertise in manufacturing, sourcing, finance, and contracts, and in how a government tender process worked in India. It also needed people who could think about the problem in new ways. By highlighting the enormous size of the opportunity and making the case that it might be possible to win the bid and make it profitable, Jain gained the support of executives and the cooperation of various groups at GE whose expertise was critical to putting together a strong bid.

Another example is PepsiCo UK. In mid-2016, the unit had experienced two consecutive years of declining revenues and was poised to suffer a third. Ian Ellington, the general manager, knew he needed to take action. But he realized that PepsiCo's entrenched systems and rules would impede rapid, novel responses. Ellington also knew that reforming the entire organization from within would take too long and most likely engender significant resistance. His solution was a "SLAM" (self-organizing, lean, autonomous, and multidisciplinary) team tasked with turning the ship around. Over eight weeks, team members reached out to key stakeholders with brand expertise or relationships with frontline retailers to understand what had gone wrong and to collect and generate ideas for revitalizing the different brands and accounts. Some brand experts, for instance, had ideas for improving online sales but had never been invited to experiment with them. The SLAM team

When to Use Agility Hacks: Three Examples

When dealing with an immediate crisis that requires fast execution (e.g., saving a large corporate account)

When viable innovation opportunities would otherwise be missed due to bureaucratic processes and organizational silos (e.g., overriding incremental product development to pursue radical ideas)

When standard operating procedures preclude speed in addressing an issue of long-term strategic importance (e.g., new manufacturing technologies that threaten to reshape the market)

did not dictate solutions; rather, it collected ideas and empowered others to create a viable path out of the decline. It led to an increase in UK revenues of 2.3% in the first year and 2% in the second.

Permission

A motivating purpose provides a starting point. But agility hacks fail unless they deviate from conventional ways of doing things. In every case we studied, project teams were given permission—and resources—by senior leadership to try new things fast, without going through the usual channels and approvals. But significantly, none of the teams we observed were skunkworks—off-site autonomous enterprises shut off from the rest of the organization. Instead, all relied on support from and interactions with colleagues in traditional roles.

The Indian Railways team at GE bypassed organizational layers and reported directly to the CEOs of GE India and of GE Transportation. The team kept them abreast of progress and hurdles. Given the stringent cost and customization requirements, it wasn't clear whether GE could make a profit on the deal. Worse, Indian Railways had put out similar bids in the past only to pull them back later. For these reasons, there was resistance within GE to even pursuing the deal. With the strong support of the two CEOs, however, the team overcame those obstacles by moving fast to recruit key experts from within GE, sharing the cost across divisions, engaging extensively with Indian Railways, triangulating information from different sources to improve cost estimates, and taking quick action to test ideas. When the team encountered problems in getting necessary resources or decisions, the senior executives intervened.

Consider also an agility hack launched in 2013 by Sony's new CEO, Kaz Hirai. An important part of his transformation effort, it reversed a long period of slow decline that had started in the early 1990s. Hirai recognized that a risk-averse bureaucracy had prevented exciting innovations from getting from the lab to the market because they didn't fit neatly into one of Sony's existing business verticals. His solution? An innovation hack that enabled the pursuit of concepts outside existing product categories and ultimately launched a series of successful innovations. He assembled a team that reported directly to him, allowed it to bypass Sony's cumbersome budgeting and decision-making processes, and ensured that it could quickly access whatever resources and technologies it needed from wherever in Sony they resided. This setup provided the team with the air cover to imagine new possibilities and then get them done within and outside the Sony organization. Among the innovations the team launched was a popular 4K home projector that cast high-resolution large-screen images onto walls and also served as a piece of furniture, and a glass speaker system housed in a light bulb.

At pharmaceutical companies, R&D tends to be a top-down affair: Senior leaders allocate research dollars to specific areas, often leaving lab scientists boxed in by defined therapeutic areas, such as cardiovascular disease or cancer. In addition, specific scientific methods, disciplinary silos, and a reluctance to fail often discourage risky experiments.

When Jay Bradner left academic science to become head of R&D at pharma giant Novartis, in 2016, a series of breakthroughs had put the company in a strong place. But Bradner wondered how many great ideas were being missed by not tapping into the more out-of-the-box thinking of bench scientists—a question amplified by the departure of a number of them who had left for start-ups. So when scientist Ian Hunt suggested a new approach to catalyze more-radical innovation, Bradner invited him to step away from his current role and give it a try. The result was Project Genesis.

Set up as a competitive, fast-paced innovation contest, Project Genesis encouraged cross-disciplinary teams to pitch proposals for dream projects to a panel of scientists, which included Bradner. Of the 90 proposals, five were ultimately selected. The winning teams then received lab space, funding, and time to develop their concepts further. One scientist told us, "I am surprised by how much Genesis speeds things up. We were able to get prime lab space and equipment in just a couple of weeks." Each project was able to tap into diverse expertise as needed. But despite their risky, novel content, all the projects remained housed inside the parent organization. After 18 months, each would have to either find a home within one of Novartis's existing R&D programs or end the project.

Following its positive reception, Project Genesis attracted more than 150 proposals in its second round, in 2018. The panel selected six to be funded. Although the full impact of the initiative remains to be seen—it takes many years to bring a new drug to market—Bradner

praises Project Genesis for quickly generating efforts to explore breakthrough ideas with little cost and disruption to the overall organization. "Genesis isn't very expensive," he says. "It isn't very disruptive." But it greatly accelerated the launching of initiatives in new areas, boosted collaboration and engagement among scientists across disciplines, and increased the number of transformative technologies and therapeutics in the pipeline.

Process

The agility hacks we studied were anything but chaotic or sloppy. Each followed a systematic, disciplined process of rapid trial and error aimed at producing results within a tight time frame. All shared a bias for action. They didn't let the pursuit of perfect solutions get in the way of speed. In every case the project processes were designed to accelerate the pace of learning—despite risks—by forcing progress and providing guardrails. (Gulati's article "Structure That's Not Stifling," HBR, May–June 2018, offers guidance on how companies can empower employees and yet retain control.) They embodied what we call "execution as learning," a structured approach to getting projects done while paying close attention to what works and then changing course frequently in small, responsive ways. (For more on this, see "The Competitive Imperative of Learning," HBR, July–August 2008.)

Novartis and other firms we studied that ran innovation contests set up rules and timelines for the competition process and for the projects selected for funding. Project Genesis offered coaching and presentation-skills training to scientists who chose to compete and facilitated collaboration among them by hosting structured ideation sessions and creating an internal social media platform. That allowed people to find partners in key disciplines more easily. A fast-paced schedule of deadlines was posted to put the pressure on the ideation process.

PepsiCo UK's initial SLAM team and the others that followed worked intensively on a tightly defined mission, with a deadline, and used a structured agile method. The process included forming a team charter around the problem or opportunity; identifying a team leader, coach, and stakeholders; specifying key work areas, which were sorted into one-week blocks; designing successive experiments; and adopting a set of practices that organized the collaborative work in a transparent, iterative way. The process allowed SLAM teams to bypass organizational roadblocks and coordinate as needed with colleagues in various functions, such as marketing or manufacturing, to ensure execution of time-sensitive tasks. Once results were achieved, team members returned to their former roles. The GE Transportation team pursuing the Indian Railways deal was also able to move fast as long as it didn't violate size, cost, and other parameters outlined by the customer and GE leadership.

ADMITTEDLY, AGILITY HACKS are short-term solutions that don't address underlying causes of entrenched performance problems. But they can be extremely effective in tackling immediate challenges quickly and in doing so awaken people to new possibilities and pave the way for success.

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Make Megaprojects More Modular

Repeatable design and quick iterations can reduce costs and risks and get to revenues faster.

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WITH CLIMATE change forcing the pace, many sectors are contemplating major changes in technology and basic infrastructure. The oil- and coal-fired power generators of the last century are giving way to wind farms and solar arrays. Fossil-fueled cars and networks of gas stations may soon be consigned to history. In almost every industry, large capital investments will need to be made, and with them will come big risks.

I've researched and consulted on megaprojects for more than 30 years, and I've found that two factors play a critical role in determining whether an organization will meet with success or failure: replicable modularity in design and speed in iteration. If a project can be delivered fast and in a modular manner, enabling experimentation and learning along the way, it is likely to succeed. If it is undertaken on a massive scale with one-off, highly integrated components, it is likely to be troubled or fail.

Unfortunately, in conventional business and government megaprojects—such as hydroelectric dams, chemical-processing plants, aircraft, or big-bang enterprise-resource-planning systems—the norm is still to build something monolithic and customized. Such projects must be 100% complete

Photographs by ALEXANDER LADANIVSKYY

before they can deliver benefits: Even when it's 95% complete, a nuclear reactor is of no use. Components are typically bespoke, with a high degree of specificity rather than modularity, which limits opportunities for learning and increases the costs of both integration and rework when problems arise. New technologies and customized designs are common, which further hinders speed and modular scale-up. What's more, the size of megaprojects is typically specified many years before operations are slated to begin. That spells disaster if more capacity is built than is ultimately needed or if demand is greater than expected and additional capacity cannot be added. The Channel rail tunnel between France and the UK, for instance, has a fixed capacity, and because tunnel use is roughly half of what was projected, huge and expensive capacity goes unused. The investment has been a financial calamity. (See the sidebar "Eurotunnel: When Success Spells Disaster.")

Cost overruns may not matter if you are a large multinational such as BP or Tesla contemplating a $10 million project. At such firms, coming in at $10 million over budget would make little difference to the bottom line. But when the estimated budget starts at $10 *billion*, the stakes are much higher, even for governments. Smart organizations, therefore, adopt processes and technologies that lend themselves to modularity and rapid learning and involve less-complicated rework when problems arise.

To entrepreneurs in the tech industry, much of this will sound familiar and logical. But large corporations and governments have yet to internalize these lessons for big-ticket projects. To be sure, many megaprojects—such as bridges or power plants—are unlikely to ever be completely modular, but there is still plenty of scope for choosing technologies that enable rapid scaling and introducing modularity by applying tried-and-true technologies in innovative ways. Let's begin by considering the factors that enable projects to scale up rapidly.

Why Speed and Modularity Matter

Speed is important to the success of megaprojects because with extended timelines come increased risk and uncertainty. Decades of research by Philip Tetlock, a professor at the Wharton School, have established that people can forecast certain events—such as GDP growth, macroeconomic policies, business cycles, technological advances, and geopolitical conflicts—with some accuracy over periods of up to one year. After that, however, accuracy declines rapidly, and beyond a time horizon of three to five years, it disappears into the mists of randomness.

And Tetlock is probably overly optimistic in that assessment. His findings are based on the work of highly skilled forecasters, and the forecasts he studies are simplified, often framed as yes or no answers to questions such as: "In the next year, will any country withdraw from the euro zone?" or "Will North Korea detonate a nuclear device before the end of this year?" Most real-life forecasts do not have binary answers but instead cover a wide range of possible outcomes. They address questions like: "How many people are likely to die from Covid-19 over the next year?" or "How much is the California high-speed rail system likely to cost?" Binary questions are easier to answer than ones with many possible answers, but the latter are more common in practice.

Entrepreneurs and financiers in Silicon Valley, who compete in winner-take-all markets, have long understood that speed is critical. New ventures in the tech industry place a great emphasis on developing a minimum viable product within their first year and establishing themselves as a market leader within three to five years. LinkedIn cofounder Reid Hoffman calls this process "blitz-scaling" and argues that scale-ups, and not start-ups, are what distinguish Silicon Valley from other tech ecosystems.

Speed is only half the equation. Former Alphabet chairman and CEO Eric Schmidt and former Google senior vice president of products Jonathan Rosenberg identify the other half: Ship and iterate. "Create a product, ship it, see how it does, design and implement improvements, and push it back out," they advise. "The companies that are the fastest at this process will win."

Iteration ensures that the quality of delivery constantly improves as you go along. As Harvard Business School professors emeriti Carliss Baldwin and Kim Clark demonstrated over two decades ago, iteration enables learning by creating a feedback loop in which the experience from delivering one module improves the delivery of the next, repeatedly. Iteration also provides scope for experimentation. Instead of going full-scale immediately, you experiment with

a few modules, improve the next ones, and repeat until you master delivery, at which point you go full-scale. It's easy to see how speed contributes to this process—the faster you iterate, the more you learn and the further you can drive cost down and safety and productivity up.

Humans are inherently good at experimenting and learning, which is why a venture based on modular replicability is more likely to succeed than one that depends on long-range planning and forecasting—something humans are inherently bad at.

Let's look next at a megaproject that epitomizes a smart scale-up.

Giga Nevada: Scaling Up the Smart Way

Tesla's Gigafactory 1, also known as Giga Nevada, is a $5 billion high-tech lithium-ion-battery factory under construction east of Reno. The goal of the megaproject is to make electric vehicles and home-power systems more affordable by producing batteries at an unprecedented scale. If completed as planned, Gigafactory 1 will have the biggest footprint in the world, at more than half a million square meters, or 107 football fields.

The building is modular by design. At the outset, Tesla defined a minimum viable production facility, or "block," that could be operational as soon as it was completed, delivering learning as more blocks were being built. Construction of Gigafactory 1 started in late 2014, and by the third quarter of 2015, the first portion had been finished and was producing the Tesla Powerwall, a home-energy-storage system. In July 2016, Tesla celebrated the grand opening of the factory, with three of 21 blocks completed, amounting to approximately 14% of the expected total size. Mass production of battery cells began in January 2017, just a little over two years after the project broke ground. That pace is much faster than is common in projects of this size, where operations typically start five to seven years after construction begins. In 2014, the projected capacity of Gigafactory 1 was 35 gigawatt-hours a year. That capacity seems to have been achieved even before completion of the factory, indicating that significant learning in construction and manufacturing has taken place.

Tesla reaped two substantial advantages from its emphasis on speed. First, the company lowered the risk of cost overruns, which tend to balloon as schedules drag on. Second, it began generating revenue within a year of deciding to go ahead with the project—much earlier than would have been the case had it used the conventional approach to megaprojects. Both advantages are crucial to fast-growing companies that cannot afford to have funds tied up in slow-moving, risky construction projects.

Unfortunately, traditional megaprojects tend to turn out rather differently.

Monju and the Problem of Negative Learning

Japan's Monju nuclear power plant, a prototype fast-breeder reactor, was the first of its kind for commercial use.

ABOUT THE ART
Alexander Ladanivskyy used a drone to photograph the Great Pyramid of Giza, zeroing in on the modular pattern of rocks on its top.

Named after the Buddhist deity of wisdom, it was intended to become the cornerstone of a high-priority national program to reuse and eventually produce nuclear fuel in a country with few energy sources of its own.

The plant was entirely custom designed: Each part and component was created and produced for a unique application and featured cutting-edge technology. Construction got underway in 1986, and initial criticality (that is, a sustained fission chain reaction) was attained eight years later, on schedule, in 1994. Then test operations began, followed by inauguration in August 1995. In December of the same year, a major fire shut down the facility, resulting in a five-year delay, which was considerably extended as further problems were uncovered. Test runs did not begin until 2010, and shortly thereafter, a three-ton machine used for refueling fell into the reactor vessel. It took nearly a year to retrieve the machine.

Following further problems and the discovery of serious maintenance flaws, in May 2013 Monju was ordered to suspend its preparations for restarting the reactor for commercial use. The Nuclear Regulation Authority declared the operator of Monju unqualified to operate the reactor, and in December 2016, the government closed the plant permanently.

After more than 30 years and $12 billion in expenditures, Monju is said to have generated electricity for all of one hour during its 22-year lifetime. Decommissioning is expected to take another 30 years, until 2047, at a further cost of $3.4 billion. If previous experience is anything to go by, those numbers are optimistic, with additional delays and cost overruns a near certainty. At a minimum, Monju will end up a 60-year, $15 billion venture with zero or negative benefits. Monju is not alone—it is merely one of the most obvious examples.

The contrast with Tesla could not be starker. There was nothing in Monju's design that compared with the replicable production modules at Gigafactory 1, where learning was continual and scaling got better and better and faster and faster. At Monju, everything was done just once, with extreme complexity. That created a phenomenon that operations experts call negative learning, a dynamic in which learning slows rather than accelerates progress. The more the Monju team learned, the more obstacles and additional necessary work it identified.

Like Monju, many megaprojects are difficult to break down into replicable units that can be rapidly iterated to deliver learning and improvement. As soon as you dig a hole in the ground, for example, things seem to become unpredictable, bespoke, and slow. But difficult does not mean impossible. In almost any project, large parts of the work can be made replicable, giving even the least-scalable projects some room for turning negative learning positive. The choice is not an either/or: scalable or not scalable. It is a matter of degree: getting as much scalability as you can into any project, including the least likely ones.

Let's look at an example.

Madrid's Modular Metro

Manuel Melis Maynar understands the importance of scalability. An experienced civil engineer and the president of Madrid Metro, he was responsible for one of the largest and fastest subway expansions in history. Subway construction is generally seen as custom and slow by nature. It can easily take 10 years from the decision to invest in a new line until trains start running, as was the case with Copenhagen's recent City Circle Line. And that's if you don't encounter problems, in which case you're looking at 15 to 20 years, as happened with London's Victoria line. Melis figured there had to be a better way, and he found it.

Begun in 1995, the Madrid subway extension was completed in two stages of just four years each (1995 to 1999: 56 kilometers of rail, 37 stations; 1999 to 2003: 75 kilometers, 39 stations), thanks to Melis's radical approach to tunneling and station building. In project management terms, it offers a stark contrast to the experience of the Eurotunnel, which has cost its investors dearly. Melis's success was the result of applying three

Eurotunnel: When Success Spells Disaster

In many cases, large projects that look like marvels of human achievement and ingenuity prove to be economic disasters.

The Channel Tunnel, the longest underwater rail tunnel in Europe, is an example. The decision to build the privately financed tunnel was made in February 1986, and full passenger service started almost nine years later, in December 1994.

The custom design of both the tunnel and the trains that would service it proved much more difficult and costly to build than estimated. Costs went 80% over budget for construction, in real terms, and 140% over for financing. Those costs had to be covered and debt had to be serviced during construction, while revenues were still years in the future. When they finally materialized, in 1995, they were a fifth of what had been estimated, resulting in the tunnel's first insolvency and financial restructuring. During the project's long gestation, low-cost airlines had entered the market, undermining the pricing power of a London-to-Paris train in unforeseen ways.

The loss to the British economy alone has been estimated at $17.8 billion, with a rate of return on the venture of negative 14.5%. An ex post evaluation of the Channel Tunnel, which systematically compared actual with forecasted costs and benefits, concluded that Britain "would have been better off had the Tunnel never been constructed."

In 2020, Covid-19 hit passenger numbers hard, forcing insolvency yet again. This further dimmed the prospects of the tunnel's ever becoming viable as a business and of having a net positive impact on Britain and France in wider economic terms.

basic rules to the design and management of the project.

No monuments. Melis decided that no signature architecture would be used in the stations, although such embellishment is common, sometimes with each station built as a separate monument. (Think Stockholm, Moscow, Naples, and London's Jubilee line.) Signature architecture is notorious for delays and cost overruns, Melis knew, so why invite trouble? His stations would each follow the same modular design and use proven cut-and-cover construction methods, allowing replication and learning from station to station as the metro expanded.

No new technology. The project would eschew new construction techniques, designs, and train cars. Again, this mindset goes against the grain of most subway planners, who often pride themselves on delivering the latest in signaling systems, driverless trains, and so on. Melis was keenly aware that new product development is one of the riskiest things any organization can take on, including his own. He wanted none of it. He cared only for what worked and could be done fast, cheaply, safely, and at a high level of quality. He took existing, tried-and-tested products and processes and combined them in new ways. Does that sound familiar? It should. It's the way Apple innovates, with huge success.

Speed. Melis understood that time is like a window. The bigger it is, the more bad stuff can fly through it, including unpredictable catastrophic events, or so-called black swans. He thought long and hard about how to make his window radically smaller by organizing tunneling work for speed. Traditionally, cities building a metro would bring in one or two tunnel-boring machines to do the job. Melis instead calculated the optimal length of tunnel that one boring machine and team could deliver—typically three to six kilometers in 200 to 400 days—divided the total length of tunnel he needed by that amount, and then hired the number of machines and teams required to meet the schedule. At times, he used up to six machines at once, completely unheard of when he first did it. His module unit was the optimal length of tunnel for one machine, and like the station modules, the tunnel modules were replicated over and over, facilitating positive learning.

As an unforeseen benefit, the tunnel-boring teams began to compete with one another, accelerating the pace further. They'd meet in Madrid's tapas bars at night and compare notes on daily progress, making sure their team was ahead, transferring learning in the process. And by having many machines and teams operating at the same time, Melis could also systematically study which performed best and hire them the next time around. More positive learning. A feedback system was set up to avoid time-consuming disputes with community groups, and Melis persuaded them to accept tunneling 24/7, instead of the usual daytime and weekday working hours, by asking openly if they preferred a three-year or an eight-year tunnel-construction period.

No monuments, no innovation, modular, and fast. Sounds like a recipe for boring, low-quality design, right? But go to Madrid and you will find large, functional, airy stations and trains—nothing like the dark, cramped catacombs of London and New York. Melis's metro is a workhorse, with no fancy technology to disrupt operations. It transports millions of passengers, day in and day out, year after year, exactly as it is supposed to do. Melis achieved this at half the cost and twice the speed of industry averages—something most thought impossible.

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A Wiser Path

The contrasting experiences of the major projects presented here suggest that in embarking on big ventures, companies and governments need to carefully choose and wisely invest in technologies that lend themselves to smart scaling.

Consider again the energy industry. In order to survive, it has to break the current vicious circle of negative learning and crack the code of fast, replicable scale-up. Small modular reactors (SMRs)—nuclear power plants costing an estimated $1 billion each—aim to do just that. Financed by Bill Gates and Warren Buffett, the proposed construction of an SMR in Wyoming may be a first step in that direction. But with an estimated timeline of seven years for the project, it is still very slow. With the climate crisis looming, we don't have time to wait.

In terms of scalability, a superior alternative is wind. Turbines are inherently modular and replicable—and are thus ideal candidates for smart scale-up. Initially they were constructed on-site, but the nascent industry quickly learned that this was inefficient and shifted to manufacturing them indoors, using industrial processes and logistics that could be effectively controlled and optimized. The UK's London array was the largest offshore wind farm in the world when it was completed in 2013, costing $3 billion in 2012 prices. The project broke ground in March 2011, electricity production began in October 2012, and all turbines were fully operational by April 2013, just two years and a month after construction started. And by today's standards, less than a decade later, that's no longer particularly fast. In 2018, the Walney Wind Farm extension, which is off the coast of England and has 87 turbines, was built in less than a year.

Energy is not the only sector that is starting to move away from the traditional megaproject. Consider the space industry. NASA typically takes a decade to plan and another decade to build its complicated designs. Its missions are too big to fail and too slow to start over when they do. The longer the time, the higher the risk of ultimate failure, with little opportunity to learn along the way. But a new generation of space entrepreneurs (Elon Musk among them) are dramatically lowering costs and delivery times by relying on the use (and reuse) of standard, industrially manufactured building blocks.

Take the case of Will Marshall, who began his career as a young engineer working at NASA's Jet Propulsion Laboratory. Eventually, he got tired of the slowness and waste of Big Space and decided to do things differently. Along with two other NASA alumni, he founded Planet Labs and built a satellite called Dove in his garage in Cupertino, California.

With a weight of 10 pounds, a build time of a few months, and a cost under $1 million (including launch and operations), Dove satellites are radically smaller, faster, and cheaper to build than anything at NASA—but they are equally well engineered and more agile. Each satellite is made up of three CubeSat modules, which are themselves made up of multiples of 10x10x10 cm modules—what Marshall calls Legos. The CubeSats use commercial off-the-shelf components for their electronics and structure, like those mass-produced for cell phones and recreational drones, keeping cost and delivery times low. During the 2010s, Planet Labs launched several hundred satellites—the largest constellation ever put into orbit—that provide up-to-date information for climate monitoring, farming, disaster response, and urban planning.

Planet Labs lost 26 Dove satellites in 2014. They were sitting on a big rocket that exploded on the launchpad. Stacked against his nine successful launches at the time, the loss hardly affected the business, however. The lost satellites were quickly replaced, and the new ones were put into orbit. Marshall's modular approach means that every mission is cheap enough to fail and fast enough to replicate in the event of failure, with lessons immediately applied in the next iteration.

MY ADVICE TO anyone planning a big project is to follow the examples of Tesla, Planet Labs, Madrid, and wind farms. Where you can, pick basic technologies that lend themselves to modularity and replicability. Where that's difficult, try to apply regular, tested technologies in innovative, modular ways so that you can learn as you go, driving down cost and accelerating speed with every iteration. If this approach can be effective with something as difficult and necessarily bespoke as digging a subway under a city, it can work for most any project. The possibilities are as rich as your imagination.

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How Boston Beer Taps into Greater Inclusivity

Ever since it rolled out its first barrel of Samuel Adams Boston Lager, The Boston Beer Company has brewed something bolder than complex recipes: a focus on an innovative culture of inclusion and representation.

In the mid-1980s, the demographics of the beer industry were homogeneous—much like the beer itself. But when he founded Boston Beer at that time, Jim Koch made it a priority to hire a workforce that reflected a forward-looking approach to building a company culture. Today, Boston Beer continues to prioritize its workforce's well-being and emotional safety as a tenet of collaboration.

"At any time, any of our coworkers can bring something up to each other, or to someone above them," says Carissa Sweigart, Boston Beer's Leader for Diversity, Equity, and Inclusion (DEI). "We have a rule here: 'Discuss the undiscussable.'"

In the beer sector, as in many sectors, DEI sometimes goes undiscussed. But Boston Beer's leadership sees that growth calls for leading with empathy by purposefully shifting a strategy of inclusivity from the periphery of its business to the core.

"This is not just a business case—this is a humanity case," Sweigart says. "We decided we should do more than just talk about our goals, and get to understand the hard work it will take to accomplish significant and sustainable change."

Early in the discovery phase, Boston Beer is learning which competencies it has internally and which external tools and expertise it needs to bring in to help build a DEI-oriented culture that will be true to its values of allyship, listening, and learning.

Trusaic, a regulatory compliance company, offers a comprehensive, always-on analytics suite that helps users measure diversity, inclusion, pay equity, hiring, performance, promotion, and retention—all in real time—so companies can take a proactive approach and keep up with compliance laws.

"We wanted to have a partner that supported ongoing monitoring of what we're trying to do here," Sweigart says. "And Trusaic, hands-down, provided the best balance of both expertise and strategic point of view when it comes to pay equity."

While still in the initial analysis phase, Trusaic has simplified Boston Beer's employment data—an extremely complex data set, due to the company's many unique roles—while also applying Trusaic's expertise to interpret the data and identify a pragmatic approach to close any workforce gaps over time.

Trusaic's dashboards will help Boston Beer interpret and share clear data among company leaders to strengthen pay equity, strategize how to elevate a range of backgrounds and viewpoints, and reflect its audience by tapping talent and ideas from outside the beer business.

Building a DEI strategy is a monumental undertaking that demands serious introspection and tough decisions. For Boston Beer, teaming up with Trusaic was the easy part.

"Coupled with the tools and even the timing, it was really a no-brainer for us," Sweigart says. "We're still early on with DEI. And we have a partner that can shift with us as we continually reevaluate our process and support."

Learn how Trusaic can partner with your organization on DEI and build your future.
trusaic.com/DEI

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Features

"People making transitions today don't have the luxury of allowing their network connections to form serendipitously. To be successful, you (and those who onboard you) must be intentional."

"HOW TO SUCCEED QUICKLY IN A NEW ROLE," PAGE 60

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NETWORKING

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How to *Succeed Quickly* in a New Role

Five ways to build a **strategic network**

IDEA IN BRIEF

THE PROBLEM
People who transition to new roles—within their organizations or in other ones—often have a hard time doing so successfully. Surveys indicate that 27% to 49% of them underperform.

THE RESEARCH
Analysis of transitioning employees in 100 diverse companies suggests that the ones who get up to speed and excel most quickly are those who know how to use internal networks effectively.

THE STRATEGIES
These people follow five "fast mover" practices: They surge rapidly into a broad network; generate pull by energizing new connections; identify how to add value and who can help them fill skills gaps; use the network to expand their impact; and prioritize relationships that enhance their workplace experience.

ROLE TRANSITION—WHETHER a promotion, a move to a new organization, or a fresh challenge in your existing job—can be a huge boost to your career and a chance for you to blossom and thrive. You know the drill heading in: Apply your experience and talents to the position, make sure you are accepted by the hierarchy (including your own direct reports), and clinch a few big wins in the first couple of months to demonstrate what you can do.

But in today's hyper-collaborative and dynamic workplaces, successful moves aren't as easy as they once were, even for the most qualified and hardworking people. Too often, transitioning managers and employees don't live up to their organizations' expectations. Gartner surveys indicate that a full 49% of people promoted within their own companies are underperforming

ABOUT THE ART

Julie Anand and Damon Sauer's Ground Truth—Corona Landmarks *explores the ubiquity of contemporary satellite technology by capturing the satellites' pathways across the skies in relation to the remains of Cold War satellite calibration markers on the ground.*

up to 18 months after those moves, and McKinsey reports that 27% to 46% of executives who transition are regarded as failures or disappointments two years later. They have the right skills and experience. They understand the company's goals. They've been vetted for cultural fit. So why didn't they quickly excel in their new roles?

We analyzed employee relationships and communication patterns across more than 100 diverse companies and interviewed 160 executives in 20 of them. Our research points to one overlooked prerequisite for transition success: the effective use of internal networks. The people who are the most productive, innovative, and engaged in new roles—the "fast movers"—are those who establish extremely broad, mutually beneficial, uplifting connections from the start. Specifically, they surge rapidly into a broad network; generate pull; identify how they add value, where they fall short, and who can fill the gaps; create scale; and shape their networks for maximum thriving.

In most cases, individual managers must do these things on their own. Only 43% of people surveyed in 2021 by the Institute for Corporate Productivity (i4cp) said their organizations ensured that transitioning employees were onboarded with guidance and support. Only about a quarter said their employers encouraged transitioners to build connections early or create networks to address skills gaps. That should not be the case. Organizations and team leaders can help people in new roles work through the five strategies as part of a well-designed program.

In this article we'll explain why successful transitions are so important to both career and company success, describe how rising demands for collaboration have made networks increasingly critical, and give some advice on implementing each of the fast-mover practices.

MANY TRANSITIONS + POOR ONBOARDING = BIG PROBLEMS

In today's organizations, transitions occur all the time and take many forms. Managers and employees—Millennials and Gen Zers in particular—change jobs far more often than previous generations ever did. A January 2021 survey of 14,000 consumers in nine countries by the IBM Institute for Business Value found that about 20% of workers voluntarily changed employers in 2020, citing desires for such things as job-location flexibility and more-meaningful work, and more than 25% were looking to make a move in 2021. And a Microsoft study of more than 30,000 people in 31 countries indicated that 40% of them were considering leaving their employers in 2021.

Internal moves are increasingly common too. For example, research from i4cp shows that 64% of organizations have recently undergone or are currently undergoing some form of deliberate culture change. To support such efforts, nearly half of those companies moved leaders at all levels around or out of the organization. According to Gartner, one in three leaders is in transition at any point in time.

Although many companies tout their onboarding processes, it's not clear that those methods are working. In another i4cp survey, only 44% of respondents said their organizations' efforts to onboard external hires achieved desired outcomes, and 88% said that onboarding programs weren't offered to employees who'd been promoted or transferred into new jobs.

Gallup research shows that the cost of replacing an employee is typically one-half to two times that person's salary, depending on seniority and the sophistication of his or her skills. At pre-pandemic (2017) turnover rates, that translates to nearly $1 trillion a year for U.S. businesses. And that picture may be comparatively rosy, for a few reasons. First, surveys indicate that as workers seek new opportunities and more flexibility post-Covid, voluntary turnover is likely to rise. Second, Gallup's calculations don't factor in the very real network effect of departures. For example, the company suggests that a hypothetical 100-person organization paying an average salary of $50,000 might face staff-replacement costs of $660,000 to $2.6 million a year. But at the Connected Commons—an intentional network dedicated to enabling individuals and organizations to thrive—we've found that the fallout from failed transitions goes beyond acquisition and compensation, because when people underperform and leave, it hurts their coworkers' productivity. Our research shows that, on average, most employees are relied upon by five to 12 colleagues. Let's say someone leaves and five teammates are affected, all of whom take a 5% hit to performance for six months (three months to locate a replacement and three months to get the new

People making transitions today don't have the luxury of allowing their network connections to form serendipitously.

hire up to speed). That conservative estimate adds another $845,000 for inefficiencies in the network. (A free calculator is available at network-toolkit.com/connectedtalent.)

Even transitioners who don't fail so badly that they must leave create negative, often unseen ripple effects. According to Gartner, the direct reports of a struggling transitioning leader perform, on average, 15% worse than people who report to a high-performing manager, and they are 20% likelier to leave the organization or be disengaged. The productivity of peers, too, suffers if their work depends on the transitioning employee.

THE HYPER-COLLABORATIVE ENVIRONMENT

Just as important as the frequency and impact of transitions is what's going on in day-to-day work. More and more companies have identified collaboration across disciplines and units as a way to meet the new business goal of ever-greater agility.

In a 2017 Gartner survey, 67% of organizations indicated that they were using collaborative business models to focus on digital transformation and ranked collaboration as the second-most-important workforce skill, after innovation. Other Gartner research shows that work interdependence is very high. In one study, 82% of organizations reported that their employees must work closely with colleagues to achieve their objectives. In another, 50% of employees said that in the previous three years they had experienced a greater need to coordinate and collaborate to complete their work. (Only 16% said that such demands had shrunk.)

Our own (pre-pandemic) research showed that collaboration in even the most transactional roles had risen markedly, with most leaders and knowledge workers spending 85% or more of their time in collaborative activities—on the phone, on email, and in meetings. For many kinds of jobs, this figure has since increased by five to eight hours a week as a result of remote working, with collaboration earlier in the morning and later at night as employees struggle to keep up with technologies and always-on expectations.

This environment has changed companies' thinking about what's most valuable in their employees' contributions. Gartner reports that companies now view "network performance"—effectiveness at enhancing and capitalizing on others' performance to improve one's own—as equal in importance to the ability to handle tasks individually. A decade ago the former was seen as one-third as important as the latter. And yet only 20% of companies surveyed by i4cp indicated that helping new hires establish critical organizational networks is an objective of their onboarding process. That needs to change.

THE FAST-MOVER STRATEGIES

In our collective study and analysis of networks, collaboration, and transitions in organizations, we noticed that 10% to 15% of movers became well-connected in a quarter to a third of the usual time, even if they started with few or no contacts, and were reaping the benefits: rapid productivity, innovation, higher engagement, and lower risk of departure. These fast movers showed that people making transitions today don't have the luxury of allowing their network connections to form serendipitously. To be successful, you (and those who onboard you) must be intentional. Here's how.

Surge rapidly into a broad network. Fast movers act as quickly as possible to discover the informal org chart of key boundary-spanning, energizing opinion leaders who are able and willing to help them get things done.

Consider a manager we'll call Holly, who took on the challenge of improving workforce planning in her global professional-services firm. This was not a formal promotion, but it was an important transition. She saw that she needed to talk to helpful and passionate experts who had been thinking about the topic for a long time and weren't afraid to float unusual ideas. Within six weeks she met with dozens of people across various groups to understand the business environment, how the groups operated, and each person's most pressing concerns. Importantly, she ended every conversation by asking for the names of others with whom she should meet or work.

For example, after convening members of the HR function to discuss current processes, she asked each of them to name one or two people in the business units who were well-connected, were frequently tapped for help, or seemed to make a real impact in meetings. She then met with each of those individuals to hear their perspectives on workforce needs. She quickly began to build a broad network encompassing her group, the larger HR function, and people

in other business units, corporate functions, levels, and locations who might have a disproportionately positive or negative impact on her success in implementation. She set out to ensure that their impact was uniformly positive.

Holly understood that her transition success depended on creating connections to and goodwill with not only key stakeholders and customers or clients, the organization's formal leaders, and her own team and direct reports, but also people who might not necessarily be viewed as important, such as the *deputies of formal leaders,* who can help transitioners learn about the leaders' goals, motivations, interests, schedules, and workloads so that it becomes easier to make the most efficient use of their time; *colleagues in functional and support roles,* who can facilitate the transitioner's work; and *peers,* who can be sounding boards and sources of information about opportunities and others' views.

Generate pull. John Hagel III, John Seely Brown, and Lang Davidson addressed "the power of pull" in a 2010 book of that name, describing how people who attract like-minded colleagues and "shape serendipity" benefit themselves and their organizations. Once you've put yourself out there, as Holly did, you want people to come to you, to offer advice, suggest new ideas, and bring you into new projects and your next role.

We noted that while broadening her network, Holly focused on asking questions and listening to better understand others' thinking, needs, and objectives. She also worked to build real relationships, displaying curiosity about others' professional and personal interests and looking for points of commonality. And she left people feeling good, by making it clear that she recognized their status, value, and contributions and by showing that she cared about what she could do for them as much as what they could do for her.

Holly and other fast movers also understand the value of modesty. When transitioning and meeting new people, many of us are tempted to oversell ourselves—to describe our skills and experiences and immediately explain how we'll add value. But heed the adage: "Show, don't tell."

Consider Meredith, an executive who transitions frequently in her industrial-packaging company because others want her, rather than because she requests a transfer or a promotion. She told us that before relating any experience or sharing how her expertise might be relevant, she asks herself

Fast movers get clarity on their value add and then work to improve in the areas where they're weak or find people whose knowledge and skills fill the gaps.

whether it will help the person she's speaking to or just cast herself in a better light. If the latter, she keeps it to herself.

Successful transitioners also adjust their approaches and ideas to mesh with new members of their networks. For example, in one new role, Meredith saw that her colleagues were much more consensus-oriented than she was. So when she wanted to move forward on a plan to begin sourcing paperboard from Brazil, which involved weighing cost, quality, and sustainability concerns, she diligently worked to bring everyone on board, rather than making a unilateral decision or settling for a majority vote.

Of course, the fastest way to generate pull is through mutual wins that benefit new contacts as much as they do you. One of the people with whom Meredith linked up was the company's sustainable development officer, who at first opposed her idea because of the rampant falsification of Forest Stewardship Council certification in Brazil. While acknowledging that reality, Meredith made the case that a newly developed grease-barrier coating on the Brazilian paperboard would eliminate the need for plastic liners for food applications. The SDO saw this as a big win for him, so he reversed his position and supported her plan. Impressed by her knowledge and flexibility, he became a friend and an adviser, frequently coming to her with questions, information, and ideas for new initiatives.

Much transition advice focuses on how people should present their own stories and define themselves in others' eyes. We found that fast movers do it differently: They engage with collaborators to cocreate a joint narrative of success.

Identify how you add value, where you fall short, and who can fill the gaps. Whether your main contribution is your knowledge of a key technology, your ability to inspire people, or other skills and intangibles, you can use traditional connections, such as bosses, direct reports, and internal clients, to help you pinpoint exactly what others are expecting you to bring to the table. One executive we interviewed felt completely out of her depth in a new C-suite role that involved meetings on highly technical issues. "I had no idea what to say," she told us. "I didn't think I'd ever be able to speak in those terms." But the CEO reassured her. She recalls his saying, "The reason I picked you for this role was your ability to build momentum and communicate success. You don't have to know all of this."

He also noted that she would need to rely on her network for help. Transitions invariably create skills gaps like this. Most of us either fail to see them or try to bluff our way through. But fast movers get clarity on their value add and then work to improve in the areas where they're weak or find people whose knowledge and skills fill the gaps—which is often a faster and more effective way to come up to speed.

Consider Gary, a manager in an industrial firm, who was promoted to an executive role for his knowledge of a particular product line. He was a 20-year veteran of the organization who was staying within his area of expertise, and yet he soon realized that he was out of touch with some of the terminology being used in his unit. Instead of pretending to understand, he made a list of 33 terms he'd heard but didn't know and asked his team for help. One phrase in particular—"But is it A and K?" which meant "But is it awesome and kewl [cool]?"—opened his eyes to a new way of thinking about the production line. It was said half in jest, but it reflected very real concerns about the company's ability to make its factories more appealing to young workers.

Create scale. Fast movers can not only quickly integrate into their new roles but also get big things done by harnessing the power of those they know. They tap their networks for both *ideation* and *implementation*—that is, they seek help from innovators across the organization who can offer novel solutions to pressing problems and from influencers who can help execute on, spread, and sell those ideas.

A physician we'll call Calvin, who led a palliative-care group in a teaching hospital, illustrates how ideation within a transitioner's network can help achieve scale. When his hospital was integrated into a larger health care system that had little understanding of his field—the discipline of providing relief rather than aggressive treatment for seriously ill patients—Calvin feared that his group might be disbanded, so he started working to broaden his network in the newly merged organization. One contact led to another, and he was soon connected with doctors from specialties such as oncology and geriatrics, who were intrigued by his work, and with people in the health system's communications department. Those conversations sparked an idea: He could use internal publications, speeches, news-media interviews, and other tools of the PR trade to help more colleagues understand palliative care. Because he'd cultivated his new relationships

Some of your new connections should be role models—contacts who show you a path to better work/life balance.

NETWORKING

with deliberation, generating pull just as Holly and Meredith did, those new communications-savvy contacts also helped him with implementation. They enthusiastically took up his cause, lending their time and talents to write press releases, edit his blog posts, set up interviews with media outlets, and coach him on public speaking.

Calvin and the other fast movers we've studied make a point of connecting with four types of influencers to achieve scale: *central connectors,* who have big, informal networks that help them socialize ideas and garner support from specific groups; *boundary spanners,* who have ties across groups and geographies and can bridge silos; *energizers,* who create passion and enthusiasm in their interactions, thereby amplifying ideas and engaging the broader organization; and *resisters*—those contrarians and naysayers whose viewpoints must be taken into consideration early, both to improve the idea and, ideally, to get them on your side.

Working through his network, Calvin not only saved his team but established its members as go-to consultants for doctors throughout the hospital system.

Shape the network to maximize personal and professional well-being. Despite the stress inherent in taking on a new role, and all the networking they're doing, fast movers also manage to prioritize their physical and mental health. They don't allow the breadth of their networks to undermine the quality of their relationships or overwhelm them with too many demands for collaboration. They find people who understand, energize, adapt to, and create mutual wins for them just as they did for others. They rely on people who can fill their skills gaps and free them up for more valuable, meaningful, and scalable work.

A carefully crafted, supportive network shields them from some of the pressures of their new roles. As Jerome, a consumer-products marketing-analytics expert tasked with a new initiative, explains, "If I get stuck on one thing, I have six or seven people I can talk to....If the problem is more cerebral, more strategic, there are other people I reach out to." Another transitioner told us that because he has created a larger circle of people "who know me, who I have shared my story with...almost like an advisory board," he knows it's always "OK to pick up the phone and talk to somebody."

Some of your new connections should be role models—contacts who show you a path to better work/life balance. An engineer and project manager we'll call Barry told us that his networking efforts in a new role led him to people whose successful management of career and family gave him the confidence to rethink his own patterns of behavior. "When I see them, it gives me a clear understanding that I can have that too, if I take actions to make it happen," he said. He now leaves work early to avoid a traffic-clogged commute, stays offline on weekends, and serves on the board of a local charter school.

IF ORGANIZATIONS WANT to ensure that everyone who transitions has a reasonable shot at becoming a fast mover, leaders must develop a networks-first mindset—an understanding of the prime importance of connections in today's highly mobile workforce and how they really function. Many companies pay lip service to supporting networking for new hires and promoted employees. But then they simply provide social hours, urge involvement in external associations, or assume that the bigger your network, the better. Not so. Some of the most effective fast movers make a point of engaging more intentionally with smaller subsets of super-helpful people.

Organizations can further help transitioners by thoughtfully establishing norms for sharing expertise in meetings, pairing newcomers with veterans, and continuing onboarding programs well into the first year. They can develop leadership training that intentionally cuts across silos, conduct "connections audits" to help employees build their networks, and flag ineffective networking practices. And they can deploy coaches and mentors to spread best practices.

Networking for transition doesn't have to be a do-it-yourself exercise. Employers can lead the way in showing people how to quickly build the connections that will help them thrive.

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DECISION-MAKING

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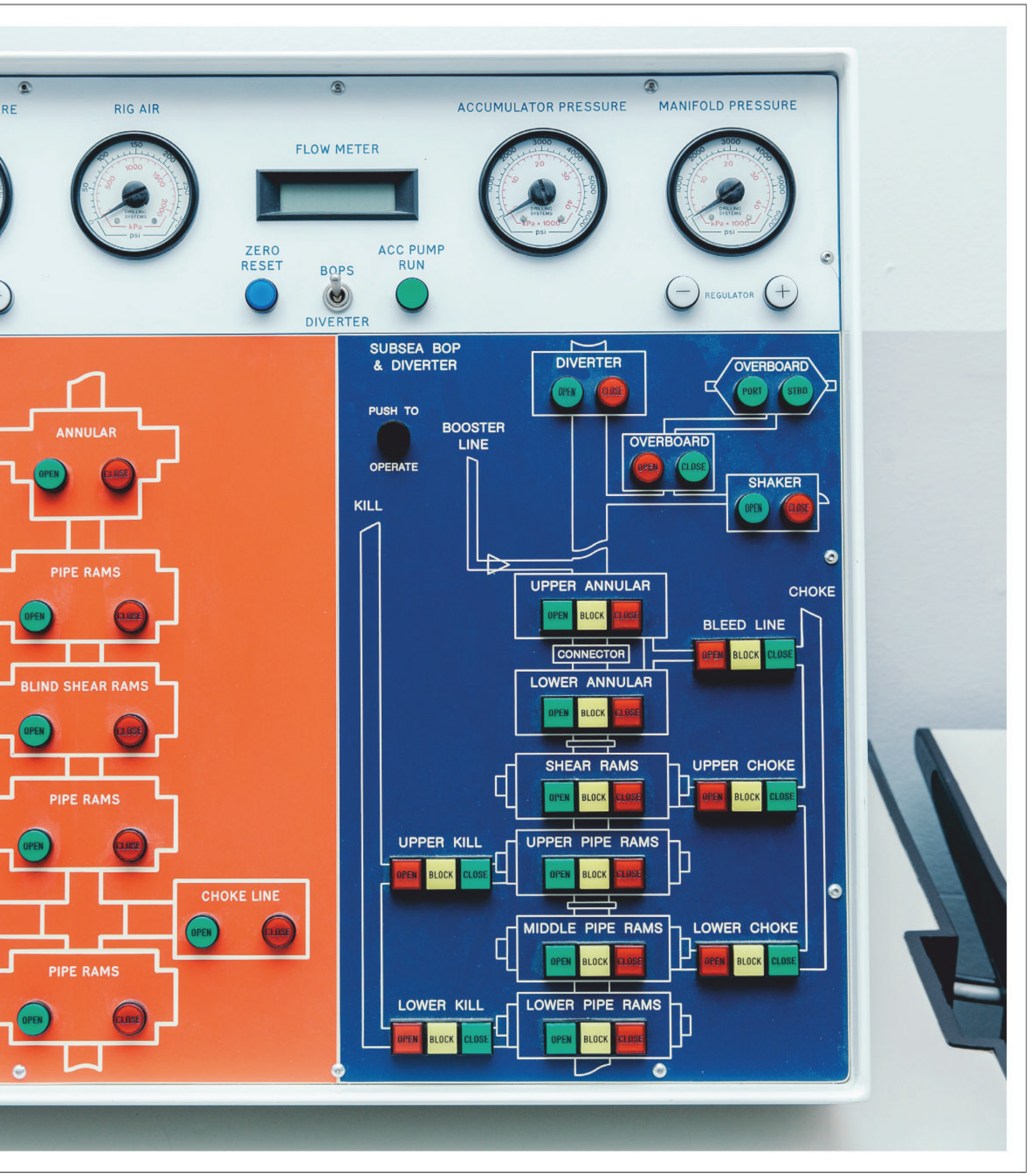
Drive Innovation with Better Decision-Making

Don't let old habits undermine your organization's creativity.

PHOTOGRAPHER **MATTIA BALSAMINI**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OPEN
CLOSE
BLOCK

IDEA IN BRIEF

THE PROBLEM

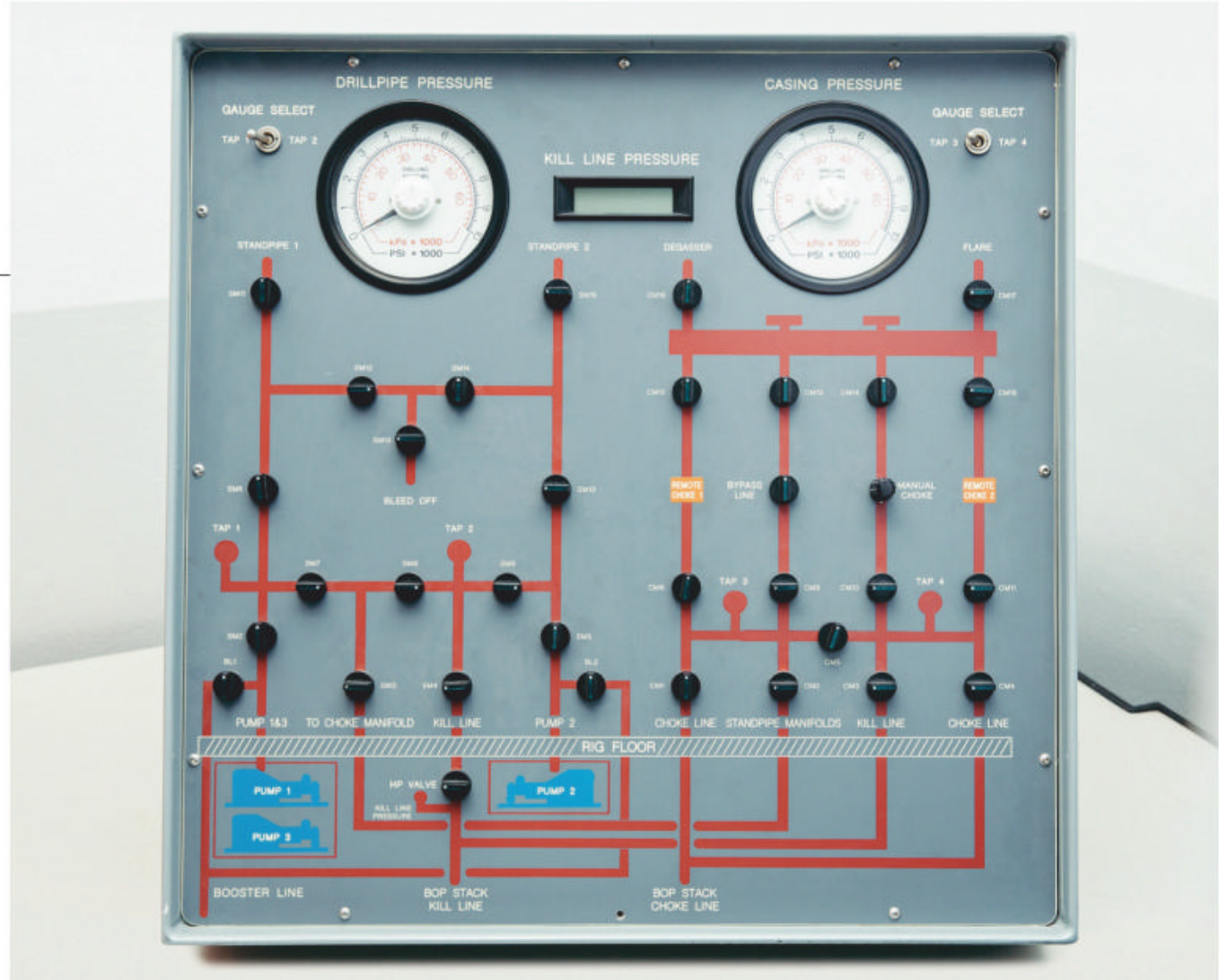
Despite their embrace of agile and lean methodologies, many organizations looking to become more innovative are still struggling to move quickly on new ideas. That's often because of their outdated, inefficient approach to decision-making.

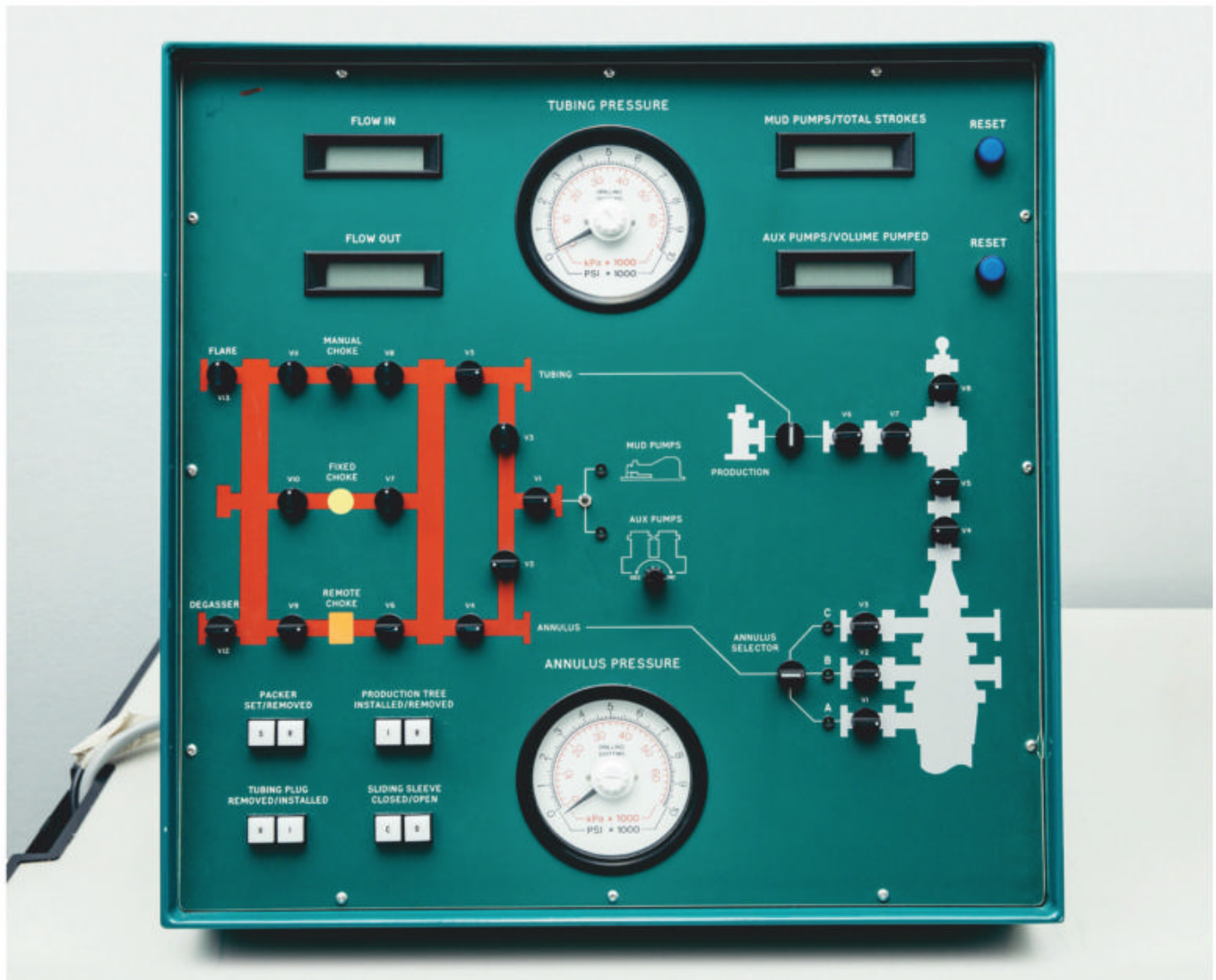
THE RESEARCH

Over the past two decades the authors have worked with innovative companies across the globe, most recently focusing on incumbent firms that were transforming themselves into nimbler businesses, to learn what key challenges they faced and how they addressed them.

THE SOLUTION

Businesses need to strengthen and speed up their creative decision-making processes by including diverse perspectives, clarifying decision rights, matching the cadence of decisions to the pace of learning, and encouraging candid, robust conflict in service of a better experience for the end customer. Only then will all that rapid experimentation pay off.





ABOUT THE ART
Mattia Balsamini photographed equipment at the teaching labs at Eni Corporate University, which trains the energy company's workforce, in Cortemaggiore, Italy.

To stay competitive, today's business leaders are investing millions in digital tools, agile methodologies, and lean strategies.

Too often, however, those efforts produce neither the breakthrough operational processes nor the blockbuster business models companies need—at least not before their competitors introduce their own advances. And a key culprit is the inability to make quick and effective innovation decisions.

The discovery-driven innovation processes companies now rely on involve an unprecedented number of choices, from big go/no-go gates that govern which ideas are pursued to countless decisions about how to conduct experiments, what data to collect, how to interpret findings, and how to act on them. But in companies that are just learning to experiment, too many decisions are made inefficiently or informed by past experience and narrow perspectives. As a result, critical risks aren't identified, and bad ideas hang around forever, eating up scarce resources and crushing the chances of bigger, more-transformative bets.

Take Pfizer. (One of us, Hill, has been a paid adviser to the company over the years.) In 2015 the pharmaceutical giant kicked off a digital transformation effort in its Global Clinical Supply (GCS) arm, which delivers more than a million doses of investigative medicines to thousands of clinical sites in over 70 countries each year. Doing so while maintaining clinical trial integrity is a complex task. Any issue, such as inadequate refrigeration, unclear instructions for medical professionals, or patients' failure to comply with regimens, could delay the development of potentially lifesaving treatments. By 2018, GCS had made significant progress with its digital initiatives. But with new medical and digital technologies on the horizon, Pfizer's strategy changed to focus exclusively on breakthrough drugs and vaccines. GCS needed to become ever more agile, innovative, and patient focused so that it could adapt to myriad clinical-site and patient needs. Findings from a cultural survey, however, underscored that the organization was struggling to make good, timely decisions about systems, processes, and capability innovations.

So GCS altered its approach on a number of fronts, creating cross-functional teams that were responsible for key decisions, changing the frequency of decision-making meetings, and improving team members' ability to robustly debate ideas. Those efforts paid off when Covid hit: Thanks in no small part to the quick-footed support of GCS, the first emergency authorization of the Pfizer-BioNTech vaccine was granted only 266 days after the declaration of the pandemic. (GCS's journey in advance of the pandemic will be described throughout this article; for more on the race to make the vaccine, see "The CEO of Pfizer on Developing a Vaccine in Record Time," HBR, May–June 2021.) GCS's success at rapidly delivering tens of thousands of doses of the vaccine candidates and collaborating with colleagues across Pfizer to develop solutions to the thorny challenge of preserving them at subzero temperatures is just the most prominent of its many recent innovation achievements, which range from real-time tracking of trial-drug shipments to personalized tests for cutting-edge therapies.

We've spent almost two decades studying leaders at highly innovative organizations and, more recently, incumbent firms that are on their way to becoming innovation powerhouses. When we looked closely at 65 of the companies that were on the journey to becoming more nimble, we found that the more successful ones were applying many agile and lean principles to decision-making itself. In this article we'll show what that means: including diverse perspectives, clarifying decision rights, matching the cadence of decision-making to the pace of learning, and encouraging candid, healthy conflict in service of a better experience for the end customer.

DIVERSE PERSPECTIVES

Research has long shown that diverse teams are better at identifying opportunities and risks in any problem-solving situation. But in organizations that are learning to experiment, four perspectives tend to be underrepresented in decision-making:

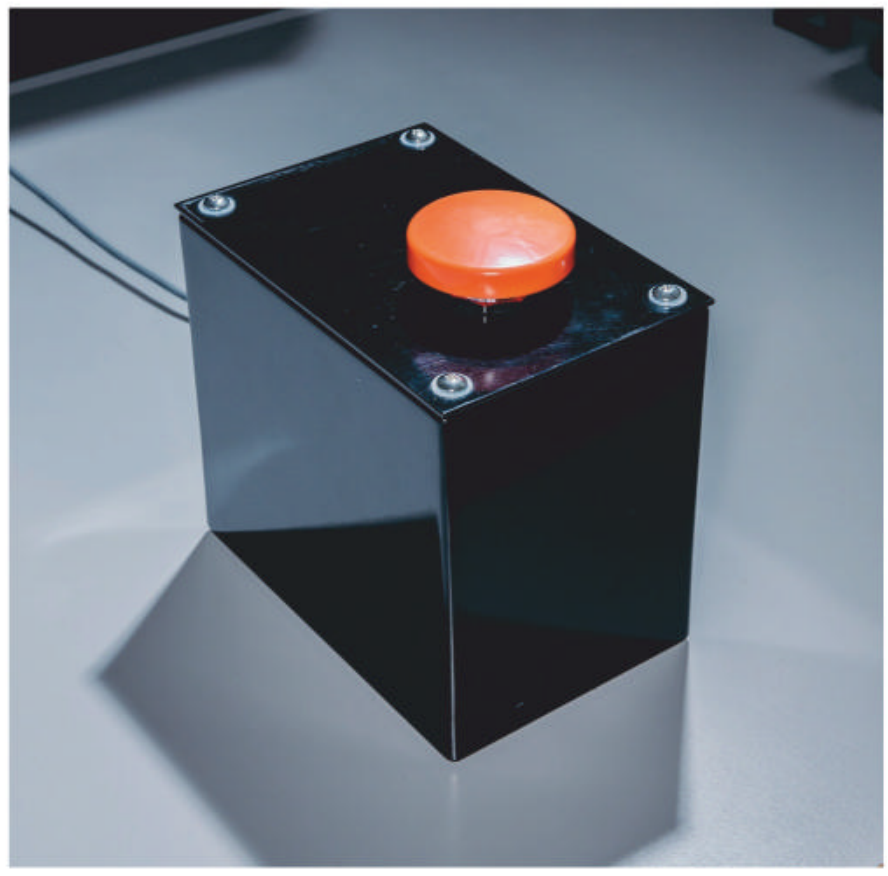
The customer perspective. It's hardly a surprise that the customer needs to be at the heart of all decisions, whether they're about new products, business models, or internal processes. But we find that customer intimacy is all too rare. Because of that, firms end up chasing problems that don't really matter to customers and miss opportunities to address their unarticulated pain points and desires.

The solution here is to include in your decision-making processes the people who are most closely connected with end customers: frontline operations staff, customer service employees, salespeople, and the customers themselves. Organizations that are good at this also tend to work closely with user experience or user interface teams, ethnographic researchers, or experts in human-centric design. And if you're developing a new business process or a digital tool for employees, remember that *their* voices need to be heard—in this case they are the customers who will use it.

To represent the voices of patients in clinical trials and the health care professionals working directly with them, Pfizer's GCS unit created a new function, Clinical Research Pharmacy, and recruited pharmacists (who had prior experience administering the treatments) to join it. Over time, the CRP came to play an integral role in decision-making at GCS. Its pharmacists' insights have led to innovations ranging from user-friendly package designs to virtual-reality training for health care providers.

The local perspective. Too often decisions in global companies are made at headquarters without adequately taking into account perspectives from different geographies. Yet people at headquarters rarely have the contextual intelligence required to judge which new business models, services, or operations are best suited to a local economy and regulatory environment. Getting local input can make a big difference.

At GCS, strategic decisions, even those that affected regional operations, had been made principally by U.S. teams. But once the unit began deliberately soliciting ideas



How to Avoid Common Traps

A number of traditional decision-making habits can hinder agile decision-making. They need to be unlearned.

Don't let leaders and experts dominate. More often than not, at the end of decision-making processes, one individual confidently makes the final call. This frequently stems from something innocuous: a respect for expertise. The problem is, experts can quickly become naysayers who shut down conversation. That's dangerous since they're often the most wedded to the status quo. Imagine a team with one digital expert who dismisses others' ideas about technology as naive or infeasible. No one wants to look ill-informed, so team members are likely to keep silent.

To combat this, experts should be asked to provide evidence for their points of view just like everyone else, keeping the argument rooted in fact rather than opinion or politics. Some leaders remove themselves from the process once the problem has been framed, letting their teams make the ultimate choice. Leaders often tell us it can be hard to stay quiet; Jessie Woolley-Wilson, the CEO of the ed-tech company DreamBox Learning, admits, "I am the worst practitioner of that because I get so excited and want to bring energy to the discussion." But she reminds herself, "My goal is to make fewer and fewer decisions."

Don't let people go along to get along. Compromise to avoid conflict can be superficial—everyone agrees while in the room but disagrees after leaving it—and it usually prioritizes employees' needs over customer experience. A good way to avoid this problem is to have proponents of each alternative make the case for other options. That helps all involved broaden their points of view, empathize with the logic of their teammates, and make sure they really understand an idea before discarding it. People should be encouraged to ask questions like "What am I not seeing?" and "Where is my expertise creating blind spots?" and open-ended "what-if" questions to help them let go of any assumptions constraining their thinking.

Avoiding compromise can lead to novel solutions. In one company we studied, the marketing and product divisions were deadlocked over a new service that the product team envisioned offering through the company's mobile app. The marketing division believed it wouldn't bring in a large-enough return to justify the costs of adding it to the app. The service went nowhere for nearly three years, until the company brought in a new innovation leader who asked, "What if we promoted the service somewhere other than the app?" The ultimate solution this prompted was neither a compromise nor one of the two original options: The team developed the service and touted it over SMS and email. Ultimately, its success provided the data the marketing team needed to confidently add the feature to the mobile app.

Don't let people make a decision prematurely. Decision-makers trying to keep up with the pace of change typically lean toward urgency. But even in an agile framework, the leader's role is to sense when more learning or synthesis of ideas is necessary and encourage patience.

At P&G, when a team wants to scale up a new product idea, its executive sponsor requires evidence that the product offers an "irresistibly superior experience" to customers. If the results look promising but not compelling enough to support a launch, teams are encouraged to continue to incubate the idea. Running additional experiments and collecting more data often leads to pivots that increase the value proposition.

from local managers, empowering them to innovate, it saw impressive improvements. For instance, when a new Latin America–based team was established, it used its expertise to cut the time it took to get trial medicines to local health care providers and patients from 55 to 20 days.

Even more prevalent is the failure to transfer local insights back to a business's core processes and products. Often small divisions in small markets can be quicker and more innovative than their larger counterparts in home markets. For example, eBay's successful Buy It Now button, which revolutionized e-commerce and helped shopping move online, was developed by eBay Germany and was based on its deep relationships with its user communities.

The data-informed perspective. Especially in years like the past one, when the business environment was in constant flux, relying on past experience to guide innovation efforts may lead a company astray. Lean methods call for testing ideas and using near-real-time quantitative and qualitative data to decide next steps. The challenge lies in making that information accessible to every decision-maker.

Data visualization provides a solution: It can allow timely, complex information to be interpreted by people from a variety of functional backgrounds, leveling the playing field so that those who are less data savvy can fully engage when making decisions.

At GCS, a new digital-business-operations group created visual dashboards that superimposed information about events such as weather, flight, and shipping route disruptions over supply chain data to predict risks to operations in real time. These dashboards, which were accessible to all team members, proved invaluable at the daily "light speed" meetings held to respond to the Covid crisis as it upended supply chains, shut down borders, and overwhelmed the hospitals running Pfizer's clinical trials. GCS teams were

able to make critical decisions about the processes for supplying ongoing trials across the globe, including those for the new Covid vaccine candidates and antivirals. Despite the logistical challenges brought on by the pandemic and natural disasters from wildfires to hurricanes, the organization didn't miss a single delivery to trial patients.

The outside perspective. Even the best-intentioned innovators can get mired in their companies' dominant logic. Leaders of incumbent firms, especially ones that are still growing, albeit slowly, tend to reject bold ideas—ideas that present high risk as well as high reward, require new resources or capabilities, or threaten to cannibalize the core business. An outside view can help organizations contemplate those moves more seriously.

That outside view can come from within the company, however. GCS invited high-potential talent from other parts of Pfizer to join its leadership team permanently, increasing the group from six to 16 members. Many leaders at other firms ask less-experienced, recently hired employees to attend C-suite meetings. Because these people aren't steeped in the company's inner workings, they ask questions that challenge core assumptions and help reframe strategic choices.

An outside perspective can also come from beyond the company's walls or even its industry. GCS, for example, invited people from Delta Air Lines' innovation lab to participate in a design workshop on the clinical trial experience for patients. Delta's boarding-pass scanner and bag-tracking capabilities sparked ideas for new ways that GCS could enhance its own shipment-tracking capabilities, ensuring that more patients got the right dose of the right drug at the right time.

CLEAR DECISION RIGHTS

As they recognize the need to bring together many points of view, a lot of organizations are relying more on decentralized networks of cross-functional teams, both permanent and ad hoc, to increase their agility. But this can have a downside: Involving more voices in a decision can mean less clarity about who ultimately owns it, slowing the innovation process and often prompting frustration and disengagement.

For example, when executives at a financial services firm asked their high-potential team leaders to identify and pursue new business models, the results were disappointing. The team leaders didn't understand that they'd been given the authority to make decisions themselves and often came back to the executives and suggested options to choose from, rather than proposing an intended plan of action. The team leaders also had a mixed experience. At first they were honored and energized by being selected for an innovative

project. But later they became discouraged by the disconnect between their recommendations and the decisions of the executives—who'd fallen back into their habit of calling the shots—and ultimately, by the ambiguity about decision-making rights.

To effectively empower decision-makers, leaders must be explicit in every case about who will be *responsible* for executing the decision, who will be *accountable* for making it, who will be *consulted*, and who will be *informed*. (Creating and sharing a traditional RACI chart can do the trick here.) If leaders are delegating decisions to a group, they should specify the process to be used and the parameters of the group's authority for everyone involved.

GCS transferred ownership of the investigative drug supply from a single leader to cross-functional teams of four known as "tetrads." Each tetrad became responsible for one therapeutic area. The members were collectively accountable for decisions, and they had clear guidelines about when they should escalate a decision to the tetrad's executive sponsors. It took some months for everyone involved to feel confident about the new structure and to refine the guidelines, but ultimately the tetrads helped GCS kill less-promising ideas faster, without having to push those choices up to senior leadership. With their enterprisewide view, the teams were also able to begin proposing more-innovative ideas for optimizing the whole clinical supply chain, such as how to pioneer delivery of highly personalized gene-therapy drugs.

THE RIGHT CADENCE

Established companies tend to make innovation decisions on a fixed schedule, through quarterly or annual reviews at which senior teams step back, assess past plans, and make new ones. But in agile companies, innovation is based on discovery-driven learning. With each experiment, data and insights emerge that should be taken into consideration in setting up the next one. Leaders must encourage decisions to be made at a pace aligned with the learning cycle.

To gauge the right cadence for your meetings, think about how long it will take to gather enough data to validate (or disprove) your hypotheses. If you're learning quickly or confronting rapid change, you may need to make decisions more frequently. During the pandemic, for example, most leadership teams at companies we observed naturally increased the cadence of meetings. Given the unfolding nature of the crisis, every decision had to be considered a "working hypothesis," so they opted for short sessions daily over longer ones every few weeks. Many told us they hope to stick with the new, faster rhythm even after the pandemic is over.

The many decisions that come up daily in experimentation often call for continuous processes. For example, in one Indian organization we studied, the design team created a WhatsApp forum to collect rapid feedback on its proposals from the whole organization, including remote employees working closely with end users in the field. Because the channel was always available, designers could spontaneously solicit feedback from employees and apply it to decisions immediately.

But longer timelines can still be needed to create the space necessary for collaboration and information gathering, especially if you're contemplating big bets. When Kathy Fish, P&G's former chief research, development, and innovation officer, introduced the lean start-up model to her organization, the business units supplemented their annual planning processes with a review of innovation portfolios every 90 days in order to issue metered funding to the initiatives in them. That gave teams enough time to conduct experiments and consolidate findings while preserving their momentum.

GOOD FIGHTS

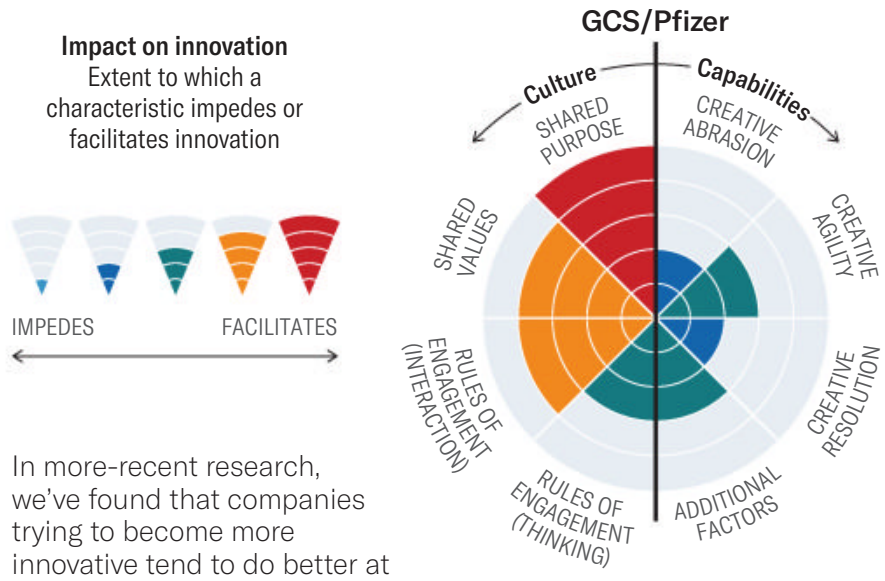
Inviting diverse sets of participants to well-timed decision-making forums doesn't automatically lead to the thorough vetting of ideas. This is where so many organizations get stuck: They fail to create a competitive marketplace of ideas, where genuine debate increases the odds that risks are identified and the most-promising projects are pursued.

In some dysfunctional teams, productive discourse is stymied by political infighting, defensive behavior, or hidden agendas. Critiques of ideas often become critiques of personalities, and employees don't trust that their ideas will be taken seriously. Often any real conversations and decisions happen "outside the room," so members of the group feel disenfranchised even though they've been asked to participate.

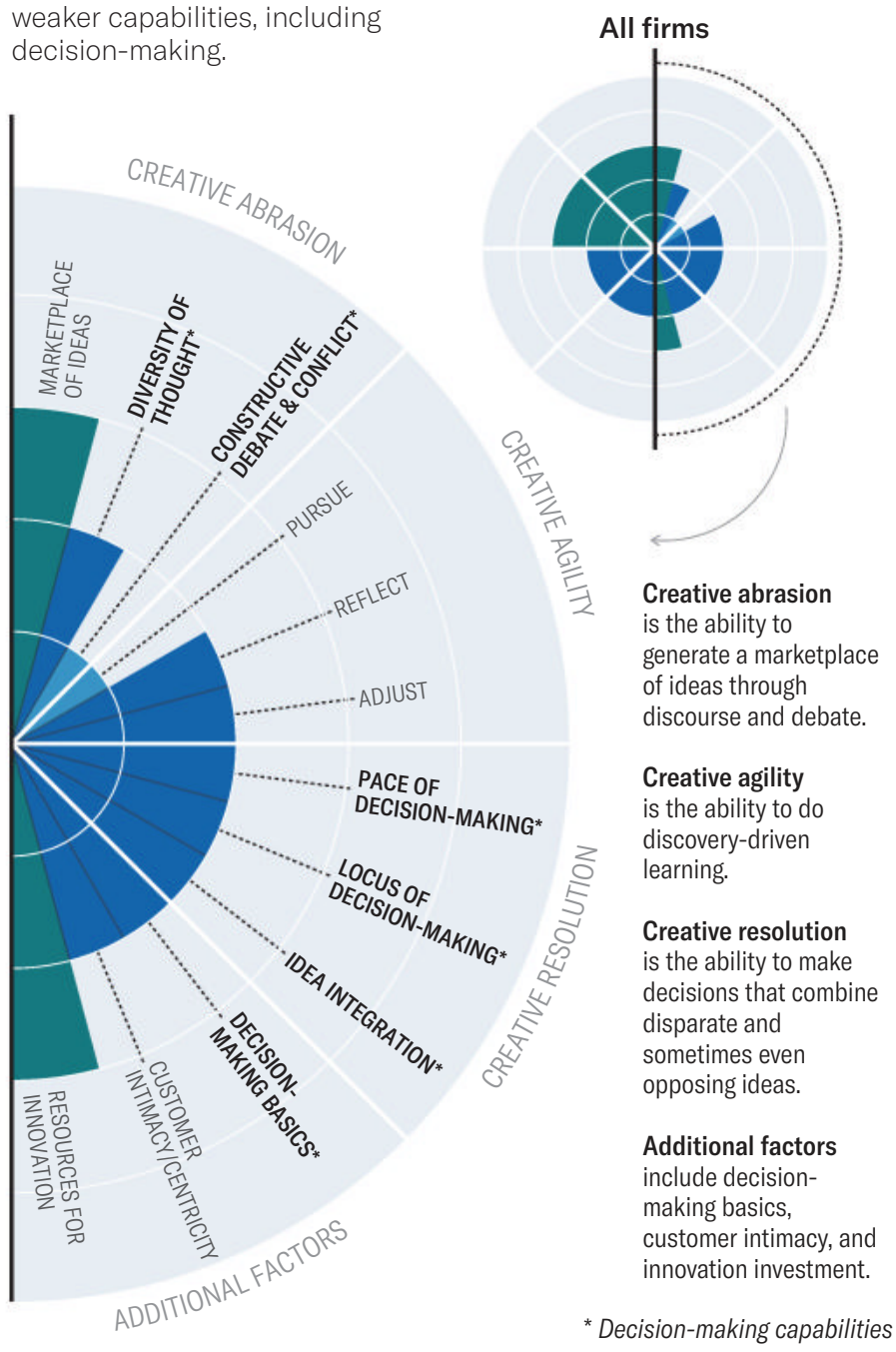
Yet an even more common cause of unproductive debate is a culture of politeness. Many people try to minimize differences as opposed to amplifying them, in an effort to avoid conflict. The effect is that those with minority views don't speak up or compromise too quickly when they're challenged. As a result bosses or experts tend to dominate the decision-making process no matter how diverse the assembled group is.

Why Focus on Decision-Making?

In our almost 20 years of research with organizations across the globe, we have identified the most important factors that support innovation—whether it's the invention of new product or service offerings, business processes or models, or ways of organizing or cutting costs. They include both cultural factors and capabilities.



In more-recent research, we've found that companies trying to become more innovative tend to do better at the cultural factors but have weaker capabilities, including decision-making.



Creative abrasion is the ability to generate a marketplace of ideas through discourse and debate.

Creative agility is the ability to do discovery-driven learning.

Creative resolution is the ability to make decisions that combine disparate and sometimes even opposing ideas.

Additional factors include decision-making basics, customer intimacy, and innovation investment.

** Decision-making capabilities*

When innovation is called for, leaders need to create environments in which their people can find answers on their own.

In both kinds of situations, leaders must stop worrying about whether people can collaborate and instead worry about whether they know how to argue. Leaders can encourage the psychological safety that promotes good fights in three ways:

Ask questions. Leaders need to avoid shutting down the conversation with solutions from the outset. Instead, they should be transparent about what they don't know. At P&G (which has also hired Hill as an adviser in the past), leaders are encouraged to ask these four questions in response to every experiment: *What did you learn? How do you know? What do you need to learn next? How can I help?* By demonstrating that they don't have all the answers, leaders help set the expectation that all present should share their opinions and that anyone can be wrong. They also create an environment in which people feel more comfortable challenging one another.

At Pfizer, team members were initially reluctant to disagree with vice president Michael Ku when he became the head of GCS. But as he learned to admit what he didn't know and adopted the habit of being the last person to share his thoughts in meetings, they became more comfortable speaking up.

Focus on the data. Data can provide a solid foundation for productive debate. Team members who have the same data visualizations in front of them are likelier to develop a shared understanding of problems—common ground on which they can add their unique perspectives. Ku ensured that all decisions made at GCS's monthly operational review were informed by data. When things had to move quickly during Covid, this kept the team from making choices based on emotion or past experiences that were no longer relevant.

Articulate a shared purpose. Aligning the whole organization around a common, meaningful purpose (why we exist and whom we serve) gives people permission to fight about new ideas, because they all agree about what they're fighting for. Ideally the purpose will serve as a framework that ensures that decisions benefit the end user or customer.

A shared ambition can keep debates from getting personal. At one retail company we studied, a team created avatars for key customer segments. "Ali" was the avatar for urban Millennials, for instance. Whenever a discussion started to get more personal than substantive, someone would intervene and ask, "What does Ali need from us all right now?" That encouraged the team to focus on a joint concern for customers instead of descending into a winner-takes-all argument.

A purpose can also encourage criticism rather than silent politeness. A real challenge in companies learning to be agile is killing "walking zombies"—projects without enough value to justify their continuation. To meet it, leaders should remind teams of their purpose. When Ku first took the reins at GCS, most people were reluctant to criticize others' ideas. Decision-makers interpreted silence as agreement that an idea was worth pursuing, so the number of projects underway became overwhelming. Ku's first priority was to align the entire team around a shared purpose: "Patients First." In debates about which initiatives to pursue, people learned to ask, "Is that the best solution for the patient?" rather than staying silent. The team soon found itself rejecting more ideas and able to focus more effort on those that enhanced the patient experience.

A common purpose helps decision-makers focus on solving problems rather than fulfilling personal agendas. In the midst of Covid, while everyone was working 24/7, Ku observed with pride that leaders in GCS were advocating for decisions that were in the best interests of the patient even when doing so meant more work for their own functional areas.

LEADERSHIP MATTERS

Organizations and teams must adopt new behaviors to make informed decisions more quickly, but managers need to change, too. Too many leaders act unilaterally, swooping in to save the day with the "right" answers—especially during a crisis. But when innovation is called for, leaders need to create environments in which their people can find answers on their own. It takes courage and practice to step back and let others make decisions and especially to avoid taking the bait when teams naturally try to delegate up the chain. But until you adopt this new way of working yourself, your organization will never be as innovative as it could be.

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Net Promoter 3.0

A better system for understanding the real **value of happy customers**

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ABOUT THE ART
Manuela and Stefan Kulpa are a husband-and-wife team and are fascinated by the distinct personalities of the animals they photograph and the essential connection that exists between humans and animals.

On a scale from 0 to 10, how likely would you be to recommend our company to a friend?

As a consumer, you've probably encountered this sort of question dozens of times—after an online purchase, at the end of a customer service interaction, or even after a hospital stay. And if you work at one of the thousands of companies that ask this question of their customers, you're familiar with the Net Promoter System (NPS), which Reichheld invented and first wrote about in HBR almost 20 years ago. (See "The One Number You Need to Grow," December 2003.) Since then, NPS has spread rapidly around the world. It has become the predominant customer success framework—used today by two-thirds of the *Fortune* 1000. Why has it been embraced so enthusiastically? Because it solves a vital challenge that our financial systems fail to address. Financials can easily tell us when we have extracted $1 million from our customers' wallets, but they can't tell us when our work has improved customers' lives.

That's the objective of NPS. It gauges how consistently a firm turns customers into advocates, by tracking and analyzing three segments: *promoters*, customers who are so pleased with their experience that they recommend your brand to others; *passives*, customers who feel they got what they paid for but nothing more and who are not loyal assets with lasting value; and *detractors*, customers who are disappointed with their experience and harm the firm's growth and reputation. Promoters give a score of 9 or 10, passives a 7 or 8, and detractors a 6 or less. To calculate your firm's overall Net Promoter Score, you subtract the percentage of your customers who are detractors from the percentage who are promoters.

While that arithmetic might seem simplistic, the full system is intended to inspire teams to deliver experiences that are not merely satisfactory but remarkable. When customers feel cared for, they come back for more and bring their friends.

The power of customer advocacy is evidenced by the remarkable success of NPS leaders. Consider the 11 public firms highlighted in Reichheld's most recent book, *The Ultimate Question 2.0.* Over the past decade their median total shareholder return was five times the U.S. median (for public companies with revenues of more than $500 million as of 2010). Those results motivated more firms to track their Net Promoter Scores—and some to report them to investors.

Unfortunately, self-reported scores and misinterpretations of the NPS framework have sown confusion and diminished its credibility. Inexperienced practitioners abused it

IDEA IN BRIEF

THE PROBLEM
The widely popular Net Promoter System has been misused and misunderstood.

THE CAUSE
Firms corrupted a valuable metric, the Net Promoter Score, by making it into a target and reporting unaudited vanity statistics that hurt the credibility and usefulness of NPS.

THE SOLUTION
An accounting-based counterpart for the Net Promoter Score, earned growth rate, *provides firms with a clear, data-driven connection between customer success, repeat and expanded purchases, recommendations, a positive company culture, and business results.*

Unfortunately, self-reported scores and misinterpretations of the NPS framework have sown confusion and diminished its credibility.

We realized that the only way to make the system work better was to develop a complementary metric that drew on accounting results.

by doing things like linking Net Promoter Scores to bonuses for frontline employees, which made them care more about their scores than about learning to better serve customers. Many firms amplify the problem by publicly reporting their scores to investors with no explanation of the process used to generate them and no safeguards to prevent pleading ("I'll lose my job if you don't rate me a 10"), bribery ("We'll give you free oil changes for a 10"), and manipulation ("We never send surveys to customers whose claim was denied"). No details are provided about which customers (and how many) were surveyed, their response rates, or whether the survey was triggered by a specific transaction. Reports rarely mention whether the research was performed by a reliable third-party expert using double-blind methodology. In other words, some firms have turned Net Promoter Scores into vanity statistics that damage the credibility of NPS.

Over time we realized that the only way to make the system work better was to develop a complementary metric that drew on accounting results, not on surveys. We needed one that would illuminate the quality (and the likely profitability) of a firm's growth. It had to be based on audited revenues from all customers, not just on a potentially biased sample of survey responses, so that it would be far more resistant to gaming, coaching, pleading, and the response biases that plague the results of non-anonymized surveys. We're confident we've successfully developed that metric.

In this article we introduce *earned growth* as the accounting-based counterpart for the Net Promoter Score, one that will reinforce the effectiveness of NPS, providing firms with a clear, data-driven connection between customer success, repeat and expanded purchases, word-of-mouth recommendations, a positive company culture, and business results.

THE ORIGIN OF EARNED GROWTH

The superior economics of companies with high Net Promoter Scores prove that generating more promoters (assets) and fewer detractors (liabilities) drives sustainable growth. But we knew we needed to reinforce NPS in a more objective way. Even when augmented with digital signals and big-data tracking, survey scores are inherently soft. Executives (and investors) need a hard metric to which people can be held accountable.

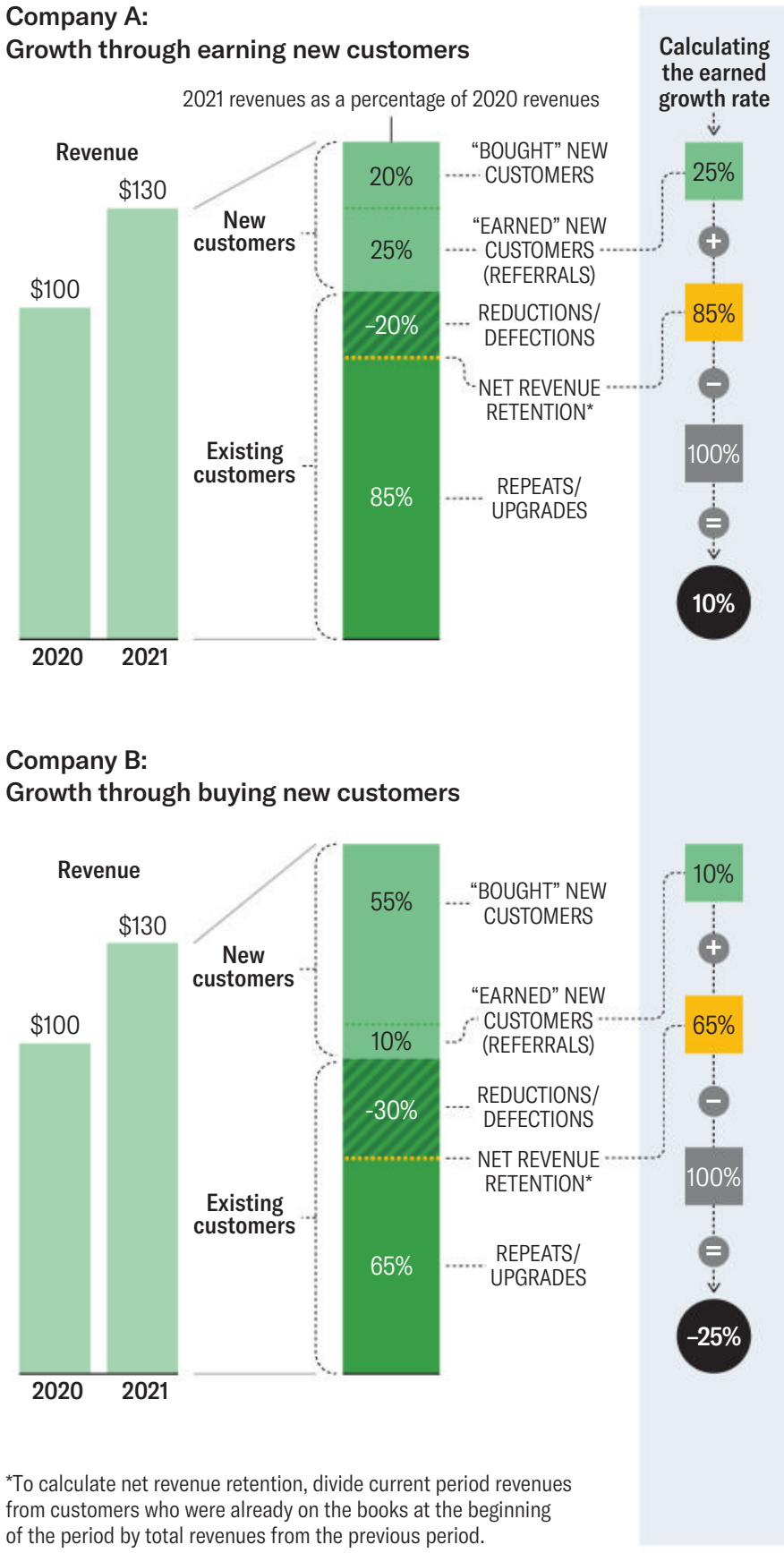
Reichheld had his "aha!" about earned growth while studying an investor presentation slide in preparation for a keynote at First Republic Bank's executive conference. The bank had quantified how much of its growth resulted from customers' coming back for more—and bringing their friends. The slide showed that existing customers accounted for 50% of the growth in deposit balances, and referred customers another 32%. In other words 82% of the bank's growth in deposits came from delivering great customer experiences. In loans 88% of growth resulted from making current customers happy.

The bank has data on referrals because it asks each new customer about the primary reason for selecting the bank and records the answer in the customer's file. The bank's customer accounting system automatically consolidates households with any related small businesses, so the bank can also easily see how much existing customers' deposits and loan balances have grown. The primary reason First Republic collects this data is to prove to investors (and regulators) that its rapid growth is safe and high quality. The bank has been growing loans 15% a year in an industry that typically grows 2% to 3% a year. In many cases that would raise a red flag, since it might suggest the bank was lowering credit standards to gain share. But the data demonstrated that it was growing without adding risk. Its new business came from customers it already knew well—and from individuals referred by long-term customers.

The presentation slide inspired Reichheld to develop a new metric, *earned growth rate,* which measures the revenue growth generated by returning customers and their referrals. A related statistic, the *earned growth ratio,* is the ratio of earned growth to total growth. That is what First Republic illustrated in its slide—82% for deposits and 88% for loans. Since the bank's total loan growth was 15% a year, its earned growth rate in loans was 13.2%. We predict that few other banks will be able to match First Republic's earned growth performance, but we won't really know for sure until more banks start measuring and reporting their own earned growth statistics. We do know that the portion of new customers generated by referral at First Republic—71%—far exceeds the portion seen at its peers in retail banking (measured through Bain's NPS Prism research), where it ranges from 21% to 53%.

Comparing the Quality of Two Firms' Growth

Companies with the same revenue growth may have starkly different earned growth rates. The hypothetical firms in this exhibit have increased revenue at a similar pace. But by looking closely at the sources of this revenue one can see that Company A has earned its growth by satisfying existing customers who come back for more and bring their friends, while Company B has generated significant revenue by aggressively buying new customers through advertising and promotions.



*To calculate net revenue retention, divide current period revenues from customers who were already on the books at the beginning of the period by total revenues from the previous period.

In a very different industry, Warby Parker, the direct-to-consumer pioneer in prescription eyeglasses, earns almost 90% of its new customers through referrals. Warby was one of the first places where we tested the earned growth framework. The metric helped us appreciate Warby's impressive loyalty-based growth. The company is a longtime practitioner of NPS and plans to continue using Net Promoter Scores as a key metric for internal management. But it also plans to augment its learning with earned growth.

CALCULATING EARNED GROWTH

Although it's possible to estimate earned growth without access to internal company data, investors will demand accurate (and audited) statistics based on actual results. To gather the hard data needed, firms must upgrade their systems to incorporate customer-based accounting.

Basic customer accounting continually tracks costs and revenues for each customer over time, patterns of defection, reductions, and price discounts, along with segment identifiers including tenure. It also captures the reason each customer joined (for instance, whether the customer was "earned" through referral or reputation or "bought" through advertising, promotional deals, or commission sales), along with that customer's acquisition and onboarding costs.

Essentially, this is the core information required to estimate customer lifetime value (CLV). However, CLV is complex and incorporates probabilities and higher math (think actuarial science). Although it can generate powerful insights, its application is dependent on sophisticated expertise. CLV involves a projection about the value you can expect to gain from customers, while earned growth looks at real results and quantifies the value you actually received. Earned growth can help every team learn how it is performing—by keeping track of how much growth results from customers' coming back for more and bringing their friends.

Earned growth has two elements. The first is the back-for-more component captured by a battle-tested statistic called *net revenue retention* (NRR), which is used in several industries, most notably software-as-a-service (SaaS). Once you have organized revenues by customer, you can determine your NRR. Simply tally this year's revenues from

We add a relatively painless step to the process for onboarding new customers: asking them the primary reason they decided to give the company their business.

customers who were with you last year, divide that amount by last year's total revenues, and express that figure as a percentage.

The second component is *earned new customers* (ENC). It is the percentage of spending from new customers you've earned through referrals (as opposed to bought through promotional channels). This component will take a bit more effort because firms must ascertain why new customers have come on board. We have developed a practical solution to this challenge, and while it may require some experimentation and refinement, ENC is important to track. The sooner you have a reasonable estimate of revenues from ENC, you can better focus your customer acquisition investments—and justify more investment in delighting current customers. Firms today undervalue referrals. They treat them as icing on the cake rather than an essential (perhaps *the most* essential) ingredient for sustainable growth.

To determine your earned growth rate, begin by calculating your NRR—since this is usually the larger of the two components. To get a sense of the importance of this statistic, consider the sensitivity of SaaS companies' valuations to modest shifts in their NRR. Firms with NRR over 130% are valued more than 2.5 times higher those with NRR below 110%.

Despite its importance, even experienced SaaS firms report NRR inconsistently. Some use samples of customers, some exclude new customers who also defect within the same period or customers with multiyear contracts, and so on. Our strong recommendation to regulators is to make this a formal GAAP metric with precise reporting rules.

Quantifying NRR may require homework in some industries. For example, not all brands consolidate household accounts across multiple product lines or services. Accounting for customers who join and defect within the same period must be handled consistently. Business-to-business firms will require rules for determining whether separate divisions (or purchasing units) of the same company represent one or multiple customers. But with today's sophisticated CRM technology, big-data tools, and a little analyst elbow grease, all that is doable, and it will require less work than arcane accounting metrics like goodwill and depreciation—which are demanded by GAAP but provide far less useful information.

Now let's consider how best to approach the second component of earned growth: the portion of revenues resulting from newly acquired earned customers. Few firms can quantify this today, so we have pioneered a solution that is proving effective in several ongoing beta tests. We add a relatively painless step to the process for onboarding new customers: asking them the primary reason they decided to give the company their business. By doing this right at the beginning of the relationship, we ensure that the decision is fresh in the customer's mind.

The reasons given are then sorted into earned versus bought categories. For example, if a customer chooses "trustworthy reputation" or "recommendation from friends or family," that customer and associated revenues count as earned. Customers who select "helpful salesperson," "advertisement," or "special deal or promotional pricing" are tagged as bought. Our goal is to develop a universally applicable process so that every firm can use the same methodology, resulting in comparable reported numbers. But for now a good solution is to pick the handful of reasons you expect customers will choose along with an open-ended "other" response where verbatim comments will help you adjust or augment the categories over time.

Tracking the behaviors of customers tagged as earned versus bought will help you determine their relative lifetime value, illuminating which customer segments and acquisition channels represent the best investments. In our consulting work we've seen that most firms find earned new customers to be far more profitable than bought customers, many of whom are revealed to be money losers over their life cycle. This customer-based accounting data is vital for implementing customer strategies such as those developed by our Bain colleague Rob Markey. (See "Are You Undervaluing Your Customers?" HBR, January–February 2020.) Viewing customers as a company's most important asset is just talk until each customer's value is tracked and quantified.

To determine your earned growth rate, add NRR and ENC together and then subtract 100%. Let's look at a hypothetical example. Company A's revenues grew from $100 in 2020 to $130 during 2021, or 30%. In 2021 customers who were on the books in 2020 accounted for $85 of revenues. Some of them expanded their purchases by a total of $5, but that growth was more than offset by other customers who reduced purchases

by a total of $20, resulting in an NRR of 85%. New customers accounted for $45 in revenues—$25 from earned new customers (referrals) and $20 from bought new customers. Adding the NRR (85%) and ENC (25%) and then subtracting 100% results in a 10% earned growth rate.

Next, consider another hypothetical firm with the same reported revenue growth as Company A but very different sources of growth. Company B has an NRR of only 65%—far lower than Company A's. Although the two companies appear to be on the same trajectory, Company B is achieving its revenue growth by aggressively buying new customers. (See the exhibit "Comparing the Quality of Two Firms' Growth.) That will almost certainly penalize current and future earnings and prove to be an unsustainable strategy. Today's GAAP accounting obscures this vital difference.

The real-world business impact of customer loyalty hasn't been lost on savvy investors and executives. By developing auditable statistics, brands will be able to validate significant investments in providing superior customer service. Now we'll look at two actual firms, FirstService and BILT, that have begun using the earned growth rate as a gauge of customer loyalty.

THE LONG-TERM ECONOMIC VALUE OF REFERRALS

When he was just a teenager, Jay Hennick founded FirstService as a pool-cleaning company. Fifty years later, FirstService generates more than $3 billion in annual revenues and employs 24,000 people. It is North America's largest manager of residential communities, such as condominiums and homeowners' associations, and it owns a portfolio of property services, including CertaPro Painters, California Closets, Century Fire Protection, and First Onsite.

FirstService began implementing NPS across all its businesses in 2008. When Reichheld met the current CEO, Scott Patterson, in 2011, Patterson explained that he was keenly interested in finding out more about how NPS could help his business leaders build even stronger relationships with customers. The more we learned about the company, the more intrigued we became (Reichheld eventually joined its board), mostly because it seemed to care about customer loyalty as much as we do. When Patterson heard about Reichheld's plans to develop earned growth, he responded: "That's a great idea. It perfectly reflects the way we think here at FirstService."

FirstService attributes much of its success to a customer-focused culture. All its local business leaders understand the enormous expense required to replace a customer lost through defection. They also know how much more efficient it is to earn new customers through word of mouth from existing customers. Patterson estimates that more than half of all new customers in its Residential business (that is, residential-community management) are referrals. In its California Closets unit, 70% of the quality leads are. In painting, CertaPro finds that 80% to 90% are. Local franchisees know that word-of-mouth leads are likely to result in good business (CertaPro closes on more than 90% of them—about twice the rate for other leads). And because franchisees remain close to the customer, they can learn who made a recommendation and ask the recommender what turned him or her into a promoter.

FirstService provides a compelling example of how investors win with customer loyalty. The firm listed its stock on the NASDAQ exchange early in 1995. When a Bain team examined all U.S. public companies that had revenues of at least $100 million that year—approximately 2,800 companies—and ranked them by their total shareholder return through the end of 2019, FirstService ranked eighth (ahead of superstars such as Apple), with an annual total shareholder return of almost 22% a year. One hundred thousand dollars invested in FirstService stock in 1995 would have grown to $13.6 million by 2019. By tracking and publishing auditable earned growth rates, companies like FirstService will be able to credibly demonstrate the sources of their advantage and thereby help investors understand the sustainability of growth generated by loyalty.

Patterson admits that he struggles to convince investors of the sustainable advantage that FirstService's customer-centric culture delivers. "They hear my words," he says, "but their financial mindset just can't make sense of them. They keep asking for the real secret sauce behind our impressive track record so they can assess our future." He views the development of a measurable science around earned growth as advantageous. He's not worried about giving away the secret sauce—after all, a service-based culture is hard to build and maintain.

By developing auditable statistics, brands will be able to validate significant investments in providing superior customer service.

BILT PIONEERS EARNED GROWTH REPORTING

In 2016, BILT launched a mobile app to replace paper instructions with step-by-step 3D instructions for products requiring assembly, installation, setup, repair, or maintenance. Manufacturers and retailers send BILT computer-aided design files for products, and BILT converts them into digital animations with voice instructions and text prompts.

Amazon, IKEA, and Wayfair have acknowledged the negative impact that poor assembly processes have on customer experiences, and they've tested new methods to simplify home assembly. In 2017, IKEA purchased TaskRabbit, an online marketplace that today provides access to more than 100,000 freelancers, to make it easier for its customers to hire a handy person during the checkout process. Wayfair has partnered with Handy.com to offer a similar service. Earlier this year, Amazon began experimenting with a premium service that automatically includes assembly upon delivery.

BILT helps retailers eliminate the added expenses associated with assembly and customer support calls, and it gives buyers the knowledge and coaching needed to put items together on their own. BILT even keeps track of the time that people spend on each instruction screen, which helps manufacturers and retailers identify steps in the assembly process that are confusing or nonintuitive so that they can modify and improve the experience. The app also provides consumers with a virtual filing cabinet for all product registrations, warranty information, instructions, and troubleshooting tips. Updates to instructions saved in the filing cabinet are made in real time, so they never become obsolete. In other words, BILT helps retailers and brands improve customer experiences even after a product is assembled.

At the end of the assembly process, the BILT app generates a classic NPS survey asking how likely the consumer would be to recommend the product on a scale of 0 to 10, with an open-ended question about the reason for the rating and how the experience could be improved. Because of this, the app can provide retailers with rich customer feedback linked to specific SKUs and customer purchase records.

The firm's mission, according to its website, is to create "an experience so enabling and empowering, it transforms consumers into promoters of the brands we serve." It's fascinating to see the emergence of a business entirely devoted to helping other companies improve their NPS results.

When Reichheld first encountered BILT, in early 2020, its revenues were growing more than 175% a year. As happens at most start-ups, the business was eating up cash. But BILT's NRR was running at 150%, and most of its new customers came through referrals—resulting in an earned growth rate of 160%. That evidence persuaded Reichheld that the company's growth was sustainable. Since then, he has made a substantial investment in BILT and joined its board of directors.

PROSPER BY HELPING OTHERS

We had no idea how far-reaching our impact on the customer-centricity movement would be when Reichheld began writing about loyalty in *Harvard Business Review* more than three decades ago (in "Zero Defections: Quality Comes to Services," September–October 1990). We're proud of what we've helped companies accomplish, but we realize there is still very far to go. Early on, we saw that customer loyalty had little to do with marketing gimmicks and slick advertising, and we later proved that it generates bountiful economic advantages, including efficient customer acquisition.

Today we can establish that business success begins with leaders who embrace a fundamental proposition that their firm's primary purpose is to treat customers with loving care. That approach begets loyalty, which powers sustainable, profitable growth. It underpins the financial prosperity of great organizations and helps make them great places to work, but its effect has been notoriously difficult to quantify. It's time to get serious about measuring (and reporting) the progress made toward fulfilling that purpose and to recognize that improving the lives of the people we serve is the only way to win.

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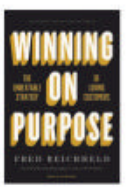

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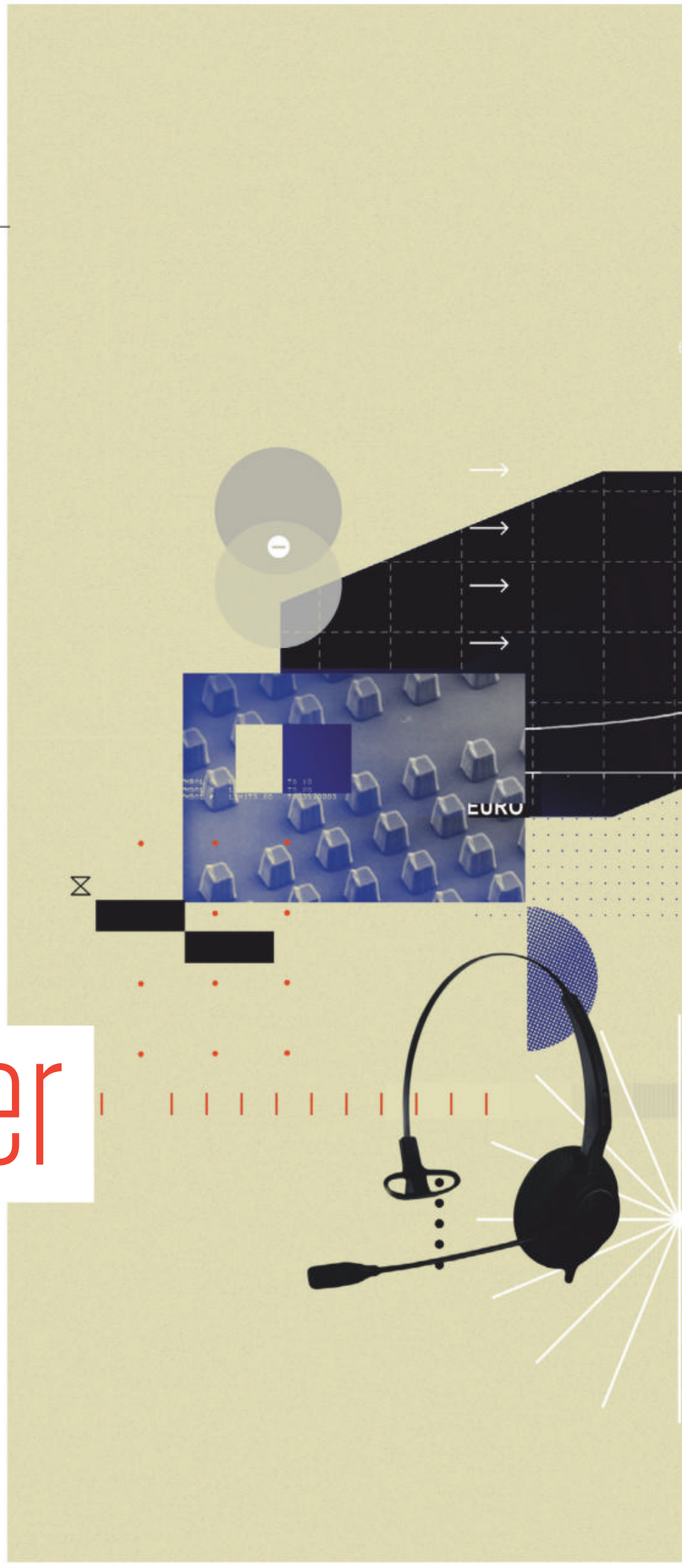
ILLUSTRATOR SKIZZOMAT ILLUSTRATION

Fighting Bias on the Front Lines Learn to detect subtle discrimination in your customer service.



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HELLO
Yes

Companies go out of their way to provide exceptional customer service, and for good reason: Time and again, research has shown that it "greases the wheel" for future interactions. Zappos thus encourages service reps to build a connection with each customer, no matter how lengthy the phone conversation. At the Ritz-Carlton, any employee can spend up to $2,000 to solve a customer issue or improve a guest's experience. Similarly, every employee at Alaska Airlines is empowered to dole out miles, money, and restaurant vouchers to resolve passengers' complaints.

In a 2021 IBM survey of 3,000 global CEOs, the highest-performing leaders cited customer experiences and customer relationships as their top two priorities. Yet when executives discuss how to do better in those areas, they often fail to recognize that customer-employee interactions are vulnerable to bias. In 2018, for example, a Starbucks manager summoned police to arrest two Black men who hadn't ordered anything; the manager assumed they were loitering, but they were merely waiting for an acquaintance. Just a year earlier, Sephora settled a class action lawsuit filed by Asian customers who claimed that the company blocked their accounts because it mistakenly suspected them of purchasing items in bulk to resell.

People today increasingly go online to share their negative service experiences, airing their grievances far and wide. That heightened visibility poses risks for firms: Any suggestion that they discriminate against certain customers can lead to outsize public anger and a loss of business. In 2020 LendingTree surveyed more than 1,000 Americans and reported that nearly a quarter said they had stopped patronizing a company because it was accused of racism.

Firms may also incur steep costs as a result of legal complaints. In the early 2000s Cracker Barrel agreed to an $8.7 million settlement for denying service to Black customers or segregating them in the smoking section. In 2017 JPMorgan Chase agreed to pay more than $50 million after its mortgage brokers charged thousands of Black and Hispanic borrowers more than what they charged white borrowers, on average, for home loans.

Public outrage about discrimination does create opportunities for companies, though. If they confront bias head-on, they can potentially attract new customers, maximize employees' service capabilities, and become leaders in promoting equality in the consumer marketplace. However,

Whether it's the priority a waiter gives to certain customers' orders or a flight attendant's selectivity in greeting passengers as they board, biased behavior may be hard to recognize.

in our experience, too few retail and service providers are able to identify and understand biases that persist every day on their front lines—in call centers, at cash registers, on help desks. Whether it's the priority a waiter gives to certain customers' orders or a flight attendant's selectivity in greeting passengers as they board, biased behavior may be hard to recognize because it is often subtle and not tracked by traditional metrics of customer success.

In this article, we share research about how bias can emerge within three aspects of customer service that together comprise what we call the service equity framework. We explain how managers can use this framework to systematically detect inequities in the way they treat customers, and we offer recommendations to help companies mitigate bias among frontline employees.

Understanding Where Discrimination May Occur

Customer service can be broken down into three key dimensions: exchanges (the provision of core products and services), extras (help that exceeds the minimum required), and etiquette (the manner in which service is delivered). All three are prone to bias, as illustrated in the exhibit, "The Service Equity Framework."

Bias in core exchanges. What we know about discrimination against customers comes primarily from studies exploring whether frontline workers are more likely to provide goods or services to some people than to others. In the 1990s and early 2000s, for instance, researchers hired Black and white actors to inquire about potential purchases in different industries. Stephen L. Ross, John Yinger, and other economists exposed racial discrimination in housing: Real estate agents were less likely to show Black customers homes in certain neighborhoods—such as those that were predominantly white—and mortgage lenders were less likely to approve their loan applications. Meanwhile, Ian Ayres and Peter Siegelman found that car dealerships gave Black customers higher quotes for new cars than they gave white customers.

Other researchers have investigated gender bias. Marketing scholars Thomas Ainscough and Carol Motley studied retail transactions and discovered that women had better outcomes than men did when trying to return CDs to department stores. In the auto repair industry, Meghan Busse, Ayelet Israeli, and Florian Zettelmeyer found that when employees encountered male and female customers with little knowledge of market prices, they generally gave higher repair quotes to the women.

While it may seem as if these kinds of discriminatory practices should be less common online (in the absence of face-to-face interactions), this is not necessarily the case. A study of Airbnb by Ben Edelman, Michael Luca, and Dan Svirsky revealed that hosts disproportionately turned down guests whose names suggested they were Black. Another study, by Yanbo Ge and colleagues, showed that Uber drivers were less likely to accept ride requests from Black customers

IDEA IN BRIEF

A GROWING RISK
Companies are increasingly suffering reputational harm, lost business, and legally imposed financial penalties because of discriminatory customer-service practices.

SPOTTING TROUBLE
By having conversations with customers, analyzing data, and conducting experiments, firms may find bias in their provision of core products and services, their proffering of extra perks, and the manner in which they deliver service.

TAKING ACTION
To curb bias among frontline service employees, companies can consider exposing them to more cultural diversity, setting standards for interactions with customers, and fostering a sense of responsibility for equitable service.

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B
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Although 28% of hotel reps went above and beyond for customers with white-sounding names, only 16% and 4% did the same for seemingly Black or Asian customers.

than white customers, and Black customers endured wait times that were 35% longer.

Bias in service extras. Of course, frontline employees' interactions with customers go beyond simply completing economic transactions. In every encounter, employees must be attuned to customer needs and respond to questions, concerns, and requests with the appropriate level of service. Keeping customers happy might entail providing perks, such as upgrading a hotel room or giving a free appetizer to someone dining in a restaurant. It might mean sending a detailed message in response to a potential client's inquiry, or following up with shoppers to see whether their complaints have been satisfactorily resolved. Exemplary service can even involve behaviors that are not directly linked to an employee's job, as when a waiter offers a patron information on local museums or when a gas station attendant provides directions to a driver at a rest stop.

To better understand to whom extra help gets extended, we contacted concierges in nearly 8,000 hotels across the United States, using fictional email accounts. The names we used signaled different customer characteristics, including gender, race, and education (think "LaToya Washington" versus "Brad Anderson" versus "Mei Chen, MD/PhD"). In our emails, we asked a simple open-ended question—"Do you have local restaurant recommendations?"—without indicating any intention to stay at the hotel. All inquiries were identical except for the name of the customer.

We then analyzed whether hotel representatives went out of their way to reply and, if they did, what sort of information they provided. If there was no bias toward particular groups, then all inquiries should have received roughly the same number of responses and there should have been no difference in the quality of the responses.

This was not the case. Although characteristics such as gender and education had no effect on the response rate, customers with stereotypically white names received 8% more replies than customers who could be assumed to be Black and 18% more than those who could be assumed to be Asian. Racial bias affected the extent of assistance, too. Although 28% of hotel representatives went above and beyond by providing additional information (about the town's main attractions, for example) to customers with white-sounding names, only 16% and 4% of hotel personnel did the same for seemingly Black and Asian customers, respectively.

It is not just racial bias that contributes to disparities in extra assistance. In another study, we sent fictional requests to more than 6,000 public libraries in the United States asking for a library tour. We found that regardless of their assumed race, people with foreign-sounding names (such as "Tomo Yamato" or "Odongo N'Dungu") were less likely to receive a response than people whose names sounded more American ("Matthew Yamato" or "Jamal Washington").

Bias in service etiquette. Frontline workers are, by definition, the first points of contact for customers, serving as the face of a brand, so to speak. Therefore, how they interact with customers—their tone of voice, body language, courteousness, and so forth—matters. Across our studies, we have observed bias in these aspects of service interactions too.

Since our studies were conducted online, we measured the politeness of email responses by comparing their form of greeting. We discovered that people making inquiries to hotels were most likely to be addressed personally—by their first name or with an honorific such as "Ms." or "Dr."—when they had white-sounding names. Similarly, in our study of libraries, we found that when workers replied to people seeking tours, they used a personal greeting more than half the time when the individuals had American-sounding names—far more frequently than when the inquiries came from people with foreign-sounding names. We found similar patterns in our study of hotels: Customers who might be assumed to be white were addressed by name 74% of the time; the comparable numbers were 61% and 57%, respectively, for customers who were presumably Black or Asian.

In another study—this one investigating discrimination against overweight customers—Eden King and colleagues hired white women to visit stores in a large shopping mall. They outfitted each of these women in casual and professional attire, with and without padded suits to simulate obesity, while holding everything else about the actors constant. Results showed distinct variations in how frequently the salesperson smiled, exhibited friendliness, made eye contact, seemed rude, or ended the interaction prematurely. Those customers wearing padded suits (the "obese" customers) were more likely to face discrimination than those who did not.

Before asking "What can we do to address bias among customer-facing employees?" it is critical for organizations to pose a different query: "What biases, if any, exist?"

Diagnosing Bias on the Front Lines

Our research, and that of other scholars, suggests that focusing on any single dimension of the service equity framework is not enough to ensure that all customers are treated equitably. Simply charging the same price to everyone, say, does not mean that salespeople are behaving without bias. Furthermore, because the kinds of bias uncovered in the research tend to be expressed in subtle ways, even proactive managers are likely to miss disparities in service unless they employ a systematic approach to detecting them. Considering core exchanges, service extras, and service etiquette together can offer a north star, guiding companies in delivering the most equitable service.

Oftentimes, leaders start by asking, "What can we do to address bias among customer-facing employees?" But it is critical for organizations to pose a different query first: "What biases, if any, exist?"

The approaches we outline to answer this question are complementary, but it is not necessary to use all three. If you are starting from scratch, however, you will likely benefit from implementing them in conjunction with one another.

Talk to your customers. As a first step, talk to customers from a wide range of backgrounds to learn more about how they experience the three dimensions of service equity. In addition to posing standard questions about service, you also want to consider how people's identities could affect the treatment they receive. To pinpoint areas most susceptible to bias, consider asking:

• How easy is it for you to obtain the products and services our company provides? What roadblocks, if any, have you experienced? How do you think those roadblocks compare with the ones other customers encounter?

• In your opinion, what are the ways that our company goes above and beyond for customers? How have you personally experienced above-and-beyond service? How do you think your experiences compare with those of other customers?

• How pleasant have your interactions with service providers been? What kinds of behaviors (such as mannerisms, language, tone) have shaped those interactions? To what extent do you think other customers have had the same experience in their interactions?

Such questions can illuminate aspects of service that weren't previously on your radar. For instance, you might learn that being asked "Where are you from?" rubs some customers the wrong way. Others may feel disrespected if they get a mere "Thank you" while those ahead of them in line got a "Thank you, sir." And being directed to on-sale items may make some people feel as though they are second-class citizens.

What you learn from customers about their service experiences can also help you see patterns in larger data sets. You might then choose new measures to begin monitoring—measures traditionally overlooked as performance metrics. For example, you might be focused on whether your call center employees resolve issues (exchanges), but in the process you might miss the varied greetings that representatives use with different customers (etiquette) or the refunds they issue to some customers and not others (extras).

Examine existing data. If you know the demographic characteristics of your customers, it is likely that you already have the data you need to see where bias might exist in your customer service. (If your company does not have this

The Service Equity Framework

To avoid bias in customer service, companies should focus on interactions in three key dimensions.

DIMENSION	Exchanges	Extras	Etiquette
DEFINITION	*Provision of core products and services*	*Help that exceeds what's required*	*Manner of service delivery*
BIAS MIGHT OCCUR IN...	+ Appointment scheduling + Price quotes + Loan approvals	+ Room upgrades + Discounts + Detailed responses to inquiries	+ Use of formal title + Eye contact + Tone of voice

data, but it does administer customer satisfaction surveys regularly, then add a few questions to the surveys to collect demographic information.)

The variables you choose to examine could vary by the kinds of service interactions frontline employees have. But make sure you are taking a comprehensive look at all three dimensions of the service equity framework. Examine your core exchanges: Does a call center field your customer inquiries? If so, compare outcomes such as the number of times different types of customers are put on hold. Check the extras: Are your frontline workers empowered to provide customer perks (upgrades, discounts, free gifts, and the like)? In that case, review how they distribute those perks. Consider etiquette too: Does an online-chat feature on your website employ people who respond directly to customer queries? Then track outcomes such as response speed and the use of honorifics and polite language. Do purchases and returns happen in person? If so, observe the body language and facial expressions of employees as they interact with customers.

Conduct experiments. Experimentation can help you home in on how a specific customer characteristic (race, for example) affects an outcome (whether people are, say, greeted upon entering a store). Experiments are especially useful when trying to identify exactly what is causing discrimination. For instance, if you see that elderly people typically have to wait longer than other customers for food delivery, it's possible that they are experiencing some sort of discrimination; it could also be that they live in suburban areas farther away from restaurants. An experiment would allow you to isolate the precise reason for the longer waits.

Try taking tools you are already using and adapting them to run experiments. With mystery shopping, for example, you can hire shoppers from different demographic groups (people of varied races, genders, ages, and so forth) to interact in person with customer service employees and then report back on their experiences. Mystery shopping can also be done online: Create email accounts in different names and send messages to your service agents, or fill out online inquiry forms with names signaling different backgrounds, and see what kind of responses you get. You might check the U.S. Census and other population surveys for lists of common names by race and gender.

When you experiment, any bias you detect should not become fodder for confronting specific employees (in fact, we strongly encourage you to anonymize the data so that it is not linked to individuals). The goal should be to see in aggregate whether different treatment by customer background is occurring systematically across your workforce so that you can take measures to fix it.

Addressing Bias in Customer Service

Let's say you've diagnosed the issues across all three service equity dimensions and discovered there *are* areas of bias on your front lines. What do you do about it? We have three recommendations, based on academic research on mitigating bias and prejudice.

Maximize exposure. For decades researchers in social psychology and sociology have built on the work of the Harvard psychologist Gordon Allport, who showed that fostering contact and facilitating learning between members of different groups can, under certain conditions, reduce prejudice. If bias on your front lines occurs because your service workers lack familiarity with a certain group, then increasing their exposure to and understanding of this group may be helpful.

You could start by taking a close look at your existing training materials and revamping them as necessary. Who is featured as your archetypal customer? Do your training programs provide opportunities to expose employees to customers from different regions or cultures? Do you emphasize the importance of pronouncing customer names correctly and offer tips for handling unfamiliar ones (for example, do you teach employees what an X sounds like in Chinese or what a J sounds like in Spanish)?

Another way to maximize exposure to people of different backgrounds is by paying attention to the composition of your workforce. How homogeneous are employees on the front lines? What about those in managerial and leadership positions? Do your frontline personnel have a chance to interact with coworkers who are not of the same race,

Research has shown that discrimination is less likely to occur when employees have formal protocols to follow.

ethnicity, or gender (perhaps through cross-training, rotational programs, or global teams)? Regular encounters with a diverse group of colleagues can make people less likely to rely on stereotypes that could bias their behaviors. But diversifying your workforce is, alone, not a panacea. Be sure that when training your staff, you communicate the importance of respecting the identity groups of the consumers you are trying to reach.

Standardize how employees interact with customers. Research has shown that discrimination is less likely to occur when employees have formal protocols to follow. (That's consistent with findings about the benefits of structured interviews in hiring.)

So if you observe that giving employees wide leeway in service protocols is leading to inconsistency and bias, try providing specific language for them to use in their interactions with customers. You might also formalize the ways in which frontline workers give perks to customers so that they rely less on their own judgment. Although autonomy in making such decisions can be motivating and engaging for employees, you also want to make sure that "extras" get evenly distributed across different customer groups and that the quality of service interactions is such that every patron feels special.

Standard protocols can do more than help ensure service equity; they can also remind employees of their relationships to customers and offset any uncertainty they may experience when assisting people of different backgrounds. Especially when you see evidence of racial bias, implementing protocols can serve a dual purpose of setting terms for interactions and making employees feel less anxiety about interracial encounters, helping them be more engaged service providers as a result.

Foster accountability. Studies have shown that people are less likely to behave in biased ways when they believe they will be held accountable for the fairness of their actions. For instance, Emilio Castilla found that monitoring managers' compensation decisions and providing feedback on how fair they were reduced gender and racial disparities in employees' pay.

Consider ways to apply these findings to the front lines of customer service. Our view is that instilling a sense of responsibility—and subsequently driving change within the organization—is possible only if you have metrics that allow you to detect bias and only if you signal to employees that you are serious about eliminating discrimination. Do you specifically ask your customers about their relative service experience (that is, how they think they've been treated compared with other customers)? When you receive customer satisfaction surveys, are you routinely checking for correlations between customer demographics and reports of excellent service? And do your frontline employees know that you track these metrics and are running these analyses? Having the right measures and being transparent about them helps you build a shared vision of exemplary service and demonstrates that service equity is a company priority.

Asking individuals to provide concrete reasons for their actions may also help reduce biased behavior. In one experiment, Galen Bodenhausen and colleagues found that study participants who believed they would need to justify their evaluations of a Hispanic student were less likely to stereotype the student. So if your employees, like those at the Ritz-Carlton and Alaska Airlines, have the opportunity to give customers extra perks, make sure they note which customers they are rewarding and why. Doing so might encourage them to rely less on stereotypes.

WHEN YOU THINK about how your company defines exceptional customer service, remember that it might not be the same as *equitable* service. Even if most of your customers are happy, you aren't necessarily treating everyone fairly. In fact, through the smallest gestures at the front lines, you might inadvertently be perpetuating inequality. But by focusing on the key dimensions of service equity (exchanges, extras, and etiquette), digging into your company's data, and then employing some of the techniques that can help reduce bias, you can work toward providing customer service that's evenhanded as well as excellent.

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HEIM
GÄSTE

How Direct-to-Consumer Brands Can Continue to Grow

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STRATEGY

They need to revise the marketing innovations that gave them early momentum.

ABOUT THE ART

Robert Goetzfried's photo series looks at bowling and Kegelbahnen (ninepin alleys) in southern Germany. His photographs evoke a sense of nostalgia, symmetry, and speed.

Emily Weiss's personal blog was never supposed to become a $1 billion brand.

The 24-year-old Condé Nast assistant considered *Into the Gloss* a hobby, a stage for her personal beauty recommendations for fellow Millennials. The blog, which she started in 2010, featured how-to tips, daily routines, and information typical of beauty publications. By 2014 it was attracting more than 10 million page views a month. Using *Into the Gloss* as a springboard, Weiss founded Glossier, a direct-to-consumer (DTC) line of beauty products. By providing both recommendations and home delivery of the products they featured, Glossier disrupted the traditional two-step distribution chain, in which a customer might receive advice from a department-store beauty consultant and then buy a product from the shelf. Endorsed by Kim Kardashian, and with product waiting lists that have been more than 10,000 customers long, Glossier has surpassed $100 million in annual revenue and has been valued at more than $1 billion.

Success stories like this one led to the burgeoning of upstart DTC brands. As of 2018, *Inc.* magazine reported, more than 400 of them had sprung up, including unicorns such as Allbirds, Casper, Dollar Shave Club, and Warby Parker. Since then the number has continued to grow. The potential for DTC brands to steal market share from incumbents has inspired venture capitalists to invest $8 billion to $10 billion in them since the start of 2019, according to TechCrunch. Commentators hail DTC's online-only, social-media-promoted, no-middleman model as the future of marketing. At the peak of the hype, the Interactive Advertising Bureau announced the advent of a "direct brand economy."

But the success of these brands has inspired intense competition from incumbents and new entrants. Whereas Casper was among the first to sell mattresses online, in 2014, today it has more than 200 rivals. The advantages of being an early mover on digital media have been eliminated, as incumbents with vast resources have copied and mastered DTC strategies on blogs, search engines, and social media. Many brands have also struggled as they've grown. Much of what they achieved early on was possible because they challenged traditional marketing principles and chose new avenues for customer acquisition and distribution. Marketing principles may be bypassed some of the time, especially when entering a new market, but they cannot be ignored all the time—and especially not when trying to scale up a profitable business. As they have faced new challenges, DTC brands have had to reevaluate the direct-to-consumer model

IDEA IN BRIEF

THE PROBLEM
Despite early success, many direct-to-consumer brands have struggled as they've grown.

THE CAUSE
Intense competition from incumbents has eliminated the advantages of being an early mover on digital media. And shortcuts taken to bring the brands' products to market later complicated their progress.

THE SOLUTION
As successful DTC brands mature, they should be very careful about aligning themselves with large e-commerce platforms or making product extensions. Above all, they must maintain an intense focus on customer loyalty.

and adapt their strategies to remain successful in a field of aggressive and diverse rivals.

In this article we will show how successful DTC brands violated some of marketing's sacred principles during their early years, and we'll analyze the core challenges they faced as they attempted to grow. We'll also propose four principles they should follow to ensure continued success.

A NEW BREED

Allbirds is a success story powered by product innovation and a keen understanding of customer values. Athletic footwear is a $65 billion industry, with heavy advertising, prominent logos, and advanced technology accompanying its various products. In contrast, Allbirds footwear is unpretentious: The shoe uppers are constructed primarily from merino wool fibers, the soles manufactured from materials that substitute sugarcane for petrochemical foam, and the laces made from recycled polyester. The shoes lack unnecessary detailing and are priced at a reasonable $95. By providing sustainable, affordable, and comfortable products, Allbirds built an emotional connection with consumers. With annual sales above $100 million, it is valued at more than $1.7 billion.

Brands like Allbirds are digitally native challengers. They interact directly with consumers via social media, they build and refine their products on the basis of continual customer feedback, and they rely on quality customer service to help promote their value. DTC brands are a small subset of the nearly 6 million enterprises that peddle their wares online. They have no presence beyond the digital: The brand is the channel, and the channel is the brand. In fact, selling through third parties can erode the uniqueness of a DTC brand.

Several major forces helped these brands penetrate their respective markets. The rise of the internet and mobile telephony, coinciding with the demographic shift from Baby Boomers to Millennials, sparked a revolution in how people consumed media and behaved in the marketplace. Changing demographics also led to the rapid growth of social media.

Younger consumers are less likely than Baby Boomers to take shopping advice from celebrities in paid commercials and more likely to heed influencers on Instagram and TikTok. In keeping with the rise of digital media over the past 15 years, advertisers shifted their spending to channels such as Google, Facebook, and Twitter, where they were increasingly able to target and microsegment in a manner that the mass media never allowed. And when one channel became expensive, they could shift to newer ones, such as Instagram, Snapchat, and TikTok.

The DTC entrants targeted mature markets—including shaving, cosmetics, sneakers, eyeglasses, and mattresses—featuring a few dominant players that commanded high prices and margins. (Before Dollar Shave Club and others entered the razor market, for instance, Gillette held a 70% market share, and many consumers complained about the high cost of blades.) Little R&D or product design was built into the entrants' offerings. Their supply chain strategy often consisted of locating factories that could sell them excess inventory and offering it to customers at a lower price than traditional brands were charging at retail stores. Another important trend was the rise of scalable fulfillment options to make shipping online orders easier. Shopify and similar online platforms provide storefront and back-office operations. Flexe and Loop joined the ranks of UPS, DHL, and FedEx. Payment providers such as Stripe and Plaid, and email marketing firms like Mailchimp, stepped in to provide on-demand distribution and fulfillment for a wide variety of DTC brands.

As the brands implemented this strategy, they deviated from traditional marketing approaches and took shortcuts to deliver products to their customers. Those tactics were instrumental in achieving their early success, but they caused problems as the brands attempted to scale up. Let's consider how their original decisions came to complicate their journeys.

The "iron law of distribution." This law dictates that consumers be able to learn about, see, buy, and service a product somewhere along the distribution chain. It argues that although the stages may be rearranged (for example, the consumer might view a product in a store before researching it online, or vice versa), all of them are necessary for a brand to be successful.

Younger consumers are less likely than Baby Boomers to take shopping advice from celebrities in commercials and more likely to heed influencers on Instagram and TikTok.

Casper completely upended this law when it began selling its mattresses online and shipping them directly to customers. Brick-and-mortar retailers had been charging large markups for a stage of the buying process that seemed essential: permitting customers to test or lie down on mattresses in a showroom before deciding which one to buy. Instead, Casper gave customers up to 90 days to return their purchases if they were dissatisfied.

DTC brands have consistently ignored the iron law of distribution. Warby Parker, for instance, has shifted part of the optician's job to the customer. It asks new customers to take a selfie while holding a credit card under their nose to measure pupillary distance—a key step in fitting someone for eyeglasses that once required assistance from an optician in the store. Shortcuts like this have enabled DTC brands to cut costs and offer products at a lower price. But they work only for customer segments that don't value whatever function has been cut. Casper succeeded because lots of consumers didn't care about sampling a mattress in a retail location. But over time the company found that many other people do want to test one for firmness or softness before buying it, which is why the company began opening pop-up stores in 2018, only four years after its launch.

Although DTC brands showed ingenuity in finding ways to break the iron law of distribution, they did so at a cost. As they became successful and attempted to scale up, service gaps limited the size of their markets, so many of them had to find alternative distribution paths.

Fundamentals of branding. Before Hubble, a DTC retailer of contact lenses, knew anything about its customer base, it secured a supplier of contact lenses in Taiwan. Next it defined the right price point to persuade consumers to switch from rivals. Later it engaged an agency to develop the brand, the packaging, and the digital experience. Realizing that it needed optometrists to prescribe and fit its contacts, Hubble recruited doctors online. Only then did it start selling lenses on its website. After discovering that most of its early customers were suburban Millennial women, the company used social media and data-driven marketing to retain them while seeking to attract new segments.

Hubble reversed one of marketing's fundamental rules, conveyed by the acronym STP (segmentation, targeting, and positioning). This systematic three-step rule had always been key to brand development. Ordinarily STP holds that a marketer should assess the addressable market segment to gain a sense of the commercial possibilities and then carefully target a subset of customers within that segment with whom to differentiate itself from competitors. With its unique value proposition on offer, the company should begin to acquire conversions. Over time, as it consistently delivers value, a relationship is built.

Hubble turned this sequence on its head. It took a fast track to filling a perceived gap in the market, which is what venture capitalists traditionally look for when investing in start-ups. But that approach is a poor substitute for the fundamentals of STP. Certain customers are so easy to reach through digital channels that an initial wave of sales occurs before the brand even understands the buyers' motivation for purchasing.

Hubble's method brings no insight into how customers view a product and its benefits. Only after that first wave of sales occurs can a brand learn who its core customers are and why they made a particular purchase. In other words, some DTC brands back into a value proposition. They skip the up-front marketing effort and expenditure and replace it with a learning-by-doing approach. Because digital media is initially cheaper and more precise than mass media, this approach leads to efficient customer acquisition and a temporary advantage. Unfortunately, the competition has caught up, as incumbents have dedicated their vast resources to driving up the price of digital advertising and acquiring customers through similar means.

Business profitability metrics. Marketing has traditionally assessed financial success by budgeting all the direct costs up front. Even advertising and other long-term investments are usually expensed. On the basis of those figures, and knowing the potential range of margins on a product, marketers usually estimate how much of the product they need to sell, over what time period, to recover costs and make a profit. When that number, a projection of break-even volume, has been determined, marketers intuitively understand the size of the market, their target market share, and the sales effort required to succeed.

DTC brands use a different logic. They base their calculations on projected customer LTV (lifetime value) and how much headroom the LTV margin affords, given projected

customer acquisition costs (CAC). Calculating LTV requires making several significant assumptions. One is that the customer will stay with the brand for an average amount of time (the "lifetime") and make purchases at regular intervals. But such estimates can vary tremendously: Razor blades are replenished regularly, sneakers less often, and mattresses as infrequently as once a decade. As a result, most LTV calculations are speculative at best. They also don't account for competitive dynamics and natural price erosion. In their eagerness to justify their growth strategy, DTC companies often transfer what should legitimately be part of their CAC, such as up-front payments or commissions to influencers, to the selling, general, and administrative (SG&A) expense bucket. That allows investors to feel secure that the LTV is a healthy multiple—usually triple or more—of the (underestimated) CAC. Even a cursory analysis of the income statements of a few DTC companies that have gone public reveals that the true CAC is significantly higher than they admit.

What exuberant DTC brands often appear to forget is that costs incurred are real, but future revenue is just a projection. Unlike conventional accounting calculations, which frame the unit economics within the context of quarterly or annual profit-and-loss calculations, the financial projections of these brands extend over multiple years. The moment of truth occurs when one of two things happens as the brand transitions from launch to growth. Either LTV stabilizes and then starts to increase faster than CAC does, or LTV can't keep pace with CAC, and cash flow is negative.

DTC brands shouldn't abandon their reliance on customer valuation metrics. That data is useful for projecting cash flow. But relying on customer valuation without critically examining the sensitivity of underlying parameters can lead to an overly optimistic view of unit economics. Good, old-fashioned queries regarding the path to profitability and the payback period should not be passed over.

FOUR PRINCIPLES FOR CONTINUED SUCCESS

Despite the counterintuitive ways in which they managed their marketing and operations, shrewd DTC brands learned valuable lessons about using their business model to help them build, grow, and sustain success. Some of them determined that it would be critical to provide value for customers beyond the purchase transaction. Offering a cheaper alternative to incumbent products would not be enough to earn long-term brand affinity. So some brands built intimate connections all along the customer's journey. Some also selectively expanded the channels through which they sold their products, as Casper and the bedding vendor Resident did when they moved from online-only to include brick-and-mortar retail. Finally, some DTC companies improved on their core product to increase wallet share—as Warby Parker did when it introduced premium additions to its line of eyeglasses.

As DTC brands continue to scale up, they should keep four principles in mind.

1 **Focus on deepening customer relationships, not just making comparisons with competitors.** In 2011 Dollar Shave Club's founder, Michael Dubin, concentrated on selling inexpensive razor-blade subscriptions to digitally savvy customers on social media. By producing a simpler product and skipping retail margins, he was able to offer his company's products at a steep discount. In less than five years Dollar Shave Club had stolen significant market share from the once-invincible Gillette, shrinking the profitability of the grooming category and eventually forcing Gillette's owner, Procter & Gamble, to lower prices and take a multibillion-dollar write-down on a century-old brand. In 2016 Unilever purchased Dollar Shave Club for $1 billion.

Despite its tremendous success, Dollar Shave Club got one thing wrong: It built much of its brand identity on differentiation from its incumbent competitors. It claimed that its razors were less expensive because they didn't have "the shave tech you don't need" (meaning Gillette's). Negative comparison with rivals can serve a purpose in the initial stages of a brand's introduction to the market, but eventually the brand must develop its own identity. Luckily for Dollar Shave Club, its initial success came from targeting a younger audience at a reasonable price on social media, and it delivered its products through a convenient and unique subscription model. It stayed connected with its base by regularly responding to both positive and negative feedback on social channels.

The lesson is clear: DTC brands must convey value along the entire purchase journey, beginning when customers first

Despite its tremendous success, Dollar Shave Club got one thing wrong: It built much of its brand identity on differentiation from its incumbent competitors.

encounter them as market innovators and continuing into the postpurchase relationship. Many entrants fail to realize that the initial stage of the process is as much about knowing the customer as it is about differentiation, if not more. Those that come on the market proclaiming how they are different may never be more than a cheaper alternative. Even worse, as wealthy incumbents manage to lower prices by reducing the costs of production and customer acquisition, DTC alternatives are left with no brand identity or differentiating characteristic whatsoever.

2 **Accompany the customer beyond the initial transaction.** Although few entrants have the deep pockets to lead with revolutionary product innovation, they have a process-innovation advantage that incumbents can't match. They can accompany their customers all along the decision journey, following through on product use and experience after a sale. Because DTC companies don't rely on middleman retailers, they have access to customer information, which allows them to conduct intimate and direct conversations with customers—something with which incumbent brands struggle.

Founded in 2012, Peloton has transformed its business model to follow DTC sales of hardware, mainly its $2,500 exercise bikes, by offering annual subscriptions costing roughly $500 for access to exercise classes via livestream and on demand, delivered by expert, charismatic instructors. The company is more than a retailer of fancy exercise bikes. Its model revolves around the notion of "consumption by a community." When Peloton customers exercise with a virtual community of peers and instructors, the brand's meaning extends far beyond what they would experience with the bike alone. Even though its customers are in different locations, Peloton can use data from the workouts to improve and refine its content and features and to provide personalized training plans for each rider. These features help foster a strong sense of personal connection. But they also do much more: Peloton generated $1.8 billion in revenue last year.

DTC brands have the benefit of being in direct communication with their customers as they consider, evaluate, choose, and experience products. As a result, the brands sit on troves of information about shopping and usage preferences—data that incumbents only wish they had. The brands should actively use the resulting insights to spur innovation, strengthen the value chain beyond the initial transaction, and deliver satisfaction at every possible touchpoint.

3 **Omnichannel is about value addition, not cost reduction.** Resident was founded in 2016 as an online brand of memory-foam mattresses. Like Casper, it started by delivering mattresses directly to consumers. But the two were early movers among online mattress brands in becoming omnichannel. Within three years Resident's mattresses were available in more than 250 brick-and-mortar stores. Today they're available in more than 1,000 stores in the United States.

The two companies' shift to omnichannel selling represented a conscious attempt to acknowledge the iron law of distribution. Although both brands had success selling online, a large segment of consumers still absolutely want to touch a real mattress before they order it. As the online market matured, and the industry increasingly ran out of first-time Millennial customers, Casper and Resident began serving the needs of the traditional consumers who dominate the $17.3 billion mattress industry.

Omnichannel ought to be anathema to DTC brands, because it is the opposite of how they came into existence—with a clear focus on a singular method of reaching customers. However, because of the reach and convenience of third-party merchant platforms on Amazon, eBay, and Walmart, DTC brands have rushed to market in any way possible. That's fine for the thousands of small merchants and entrepreneurs who simply want to engage in profitable e-commerce, but it's a flawed strategy for any brand that wants to build a strong DTC personality. Amazon provides instant scale but simultaneously commoditizes brands with uniform merchandising and intense price comparisons.

Even for the most differentiated DTC brands, Amazon's gravitational pull has become difficult to resist. By the end of 2020, reportedly 63% of all product searches on the internet were beginning with the e-commerce giant. To avoid forfeiting that demand to a competitor, many DTCs have begun to embark on a hybrid strategy. The idea is to protect their core offerings by selling limited selections

of merchandise on Amazon with the goal of intercepting product searches and migrating the relationship back to owned channels. This strategy is not risk-free. The DTC brands must be highly confident and disciplined about regaining customer relationships and resisting the temptation of sales volume.

Mass merchants have recently started selling DTC brands in their physical stores to appeal to Millennial shoppers. Lola, a DTC brand that sells sustainably sourced products such as tampons, sanitary pads, and condoms, chose to make its products available in 4,600 Walmart stores. Casper sells its mattresses through 1,200 Target stores. Public Goods, a maker of sustainable home goods, sells through 2,000 CVS stores. But DTC brands should be wary of being drawn into the traditional retailing business model, whereby their products fight for scarce space on store shelves. There, the supplier with the deepest pockets usually wins. Such arrangements may give the brand an initial boost powered by the retailer's reach, but the long-term advantages are questionable.

Brands should follow Resident and Casper's strategy: Channel extensions that address gaps in the customer's journey should be the real purpose of omnichannel selling. Providing important presale or postsale services such as inspecting, fitting, repairing, or upgrading is symbiotic and furthers the DTC brand mission. Omnichannel extensions must be carefully thought through and part of a deliberate growth strategy—not merely an attempt to reduce CAC by increasing reach.

4 **Strengthen the core first; consider extensions later.** Warby Parker introduced nationwide product sampling in 2010 with a program called Home Try On. Customers can go online and choose five pairs of eyeglass frames to be delivered to them for inspection, free of charge. Since the try-on frames feature clear-glass lenses, not corrective ones, the program is well suited to customers with minor vision problems who prefer an online shopping experience. They choose the frames they want to buy and upload a prescription to fill the order. They can also choose

Direct-to-consumer brands should be wary of being drawn into the traditional retailing business model, whereby their products fight for scarce space on store shelves.

not to make a purchase and return the frames without charge (which costs Warby Parker approximately $15).

Because Warby Parker maintained close relationships with its customers, it learned that people with complex prescriptions preferred to shop for glasses in person. The same was true for customers who preferred a wider selection of frames than they were able to sample through Home Try On. That provided a good rationale for shifting to an omnichannel strategy, and after three years of selling exclusively online, Warby Parker opened its first brick-and-mortar locations.

But the company learned another valuable lesson from interacting with and listening to customers: People were willing to pay a premium for products it wasn't selling. So it extended its inventory to include more-expensive progressive lenses, blue-light-filtering lenses, and light-responsive lenses. It also launched a line of contact lenses. In this way the retailer extended its product line and added revenue sources without weakening its core value proposition.

Product line extensions are a great way to increase order sizes and keep customers coming back for more. But many brands routinely make them without first ensuring that the core value proposition is on a sound footing. Brands must be careful with extensions: Sometimes they have a tendency to creep over into items that don't connect well to the core product. Almost every DTC mattress brand offers pillows, sheets, and accessories. Some even offer glow lamps and dog beds. While many of these are fine products, few would pass muster as a robust addition to the core brand. Worse, some may lead to a proliferation of SKUs and add to supply chain costs.

Allbirds started out by selling sustainable shoes, but it recently added a clothing line of T-shirts, sweaters, jackets, underwear, and socks. The first three categories make sense, since customers could potentially wear shoes and clothing as an ensemble while making a statement about sustainability. Allbirds shoes and clothing share supply chain principles regarding natural raw materials, so the clothes have the potential to contribute significantly to revenues. But underwear and socks don't fit. They belong in a different basket.

If managed well, product extensions are useful for bolstering customer loyalty. But if they are ill-conceived, they can feel like inauthentic cash grabs. Brands must carefully weigh potential incremental revenues against supply chain costs. For a DTC brand to succeed, the market must be large enough for the core product and its direct extensions beyond the launch period. If a stretch into accessories and product extensions becomes critical to profitability, then the original business model was untenable.

THE FUTURE OF DTC

DTC brands are here to stay. They have creatively found a weakness in the marketing citadel of incumbent brands. By using data gleaned from daily interactions with customers, these brands have been able to adapt how they serve their unique customer communities across a start-to-finish purchase journey. The best of them have parlayed this ability into a profitable business model applied across multiple channels and customer segments.

But as successful DTC brands mature, they must recognize the need to evolve. They must closely monitor their strategies, revise when necessary, and maintain an intense focus on customer loyalty. They should not take on the cloak of a technology player or base their entire brand identity on negative comparisons with an incumbent competitor. They should not rush to align themselves with large e-commerce platforms like Amazon or base their business models on adding accessories and extensions. They must first focus on product and service innovation while maintaining the ideals of their core customer base. From marketing to production to postsale services, DTC brands should embrace their independence and their direct connection to customers in everything they do.

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Rethinking

A smarter way to split the pie

Negotiation

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NEGOTIATION

Negotiation is stressful. A great deal is at stake: money, opportunity, time, relationships, reputations. Often that brings out the worst in people as they attempt to take advantage of the other side or try to look tough. So wouldn't we all be better off if there was a way to treat people fairly in a negotiation and get treated fairly in return? In the following pages we'll offer a simple, practical, field-tested approach that enables you to do just that.

The managerial bible on negotiation is Roger Fisher and William Ury's *Getting to Yes*. Published in 1981, it taught the world how to craft successful agreements by focusing on interests, not positions. But it left unresolved the messy problem of how to share the gains created. We propose that the answer lies in accurately identifying what's really at stake in a negotiation: the "pie," which we define as the *additional* value produced by an agreement to work together. It's the value *over and above* the sum of the two sides' best alternatives to a negotiated agreement, or BATNAs.

The notion of "dividing the pie" is commonplace in negotiations, but most people look at the wrong pie. The pie they typically have in their heads is the total value available to be split. Because of that, they argue over the wrong numbers and issues, taking positions that they think are reasonable but are in fact self-interested. When negotiators don't understand the pie correctly, it's much harder to reach agreement.

Our approach is based on one key principle: *The parties in a negotiation have an equal claim on the pie, so they should split it*. This is true regardless of what they can accomplish on their own. Because an even split fundamentally changes how people look at power, there will be resistance—especially from those who benefit under the status quo. However, that resistance can be overcome, as we will explain.

The pie framework will allow you to see a negotiation more clearly and more logically. It will help you make arguments that persuade others by highlighting inconsistencies in their approach. And though it sounds simple—perhaps too simple—we'll show how it applies in a variety of increasingly complicated scenarios. But first let's look at a very basic example that explains the pie logic.

POWER VERSUS FAIRNESS

Imagine that Pepe's will give Alice and Bob one of its famous 12-slice clam pizzas if they can agree on how to divide it up. If they can't, Pepe's will give them half a pie, but with four slices going to Alice and two to Bob. Most people adopt one of two perspectives regarding how Alice and Bob might negotiate an agreement.

The first is the power perspective. Alice has more power—her fallback of four slices is twice as big as Bob's—which

IDEA IN BRIEF

THE PROBLEM
People don't understand what's really at stake in a negotiation. Their misconceptions make it much harder to reach an agreement.

WHY IT HAPPENS
Negotiators focus on the total amount to be divided, not on the value created by an agreement. That leads to conflicting views on power and fairness.

THE SOLUTION
Recognize that the gains to be shared are the additional value the agreement creates over and above the sum of the two sides' best alternatives. This negotiation pie should be divided equally, because both sides are equally essential to creating it.

The notion of "dividing the pie" is commonplace in negotiations, but most people look at the wrong pie. The pie they typically have in their heads is the total value available to be split.

suggests that she should get twice as much pizza: eight slices versus four for Bob. The second is the fairness perspective. In this scenario they divide the total in half: Each gets six slices.

Neither approach is truly defensible. The power perspective confuses power *outside* the negotiation with power *inside* it. While 8:4 seems like a reasonable split because it mimics the ratio of the fallbacks, there's no inherent reason why the outcome should be based on that ratio. Some might argue that Bob is in a weaker bargaining position since he will get fewer slices than Alice if there's no deal, but that argument misses the point. If they don't reach a deal, Alice will get nothing *more* than her four slices, just as Bob will get nothing more than his two. Effective negotiation is about beating your fallback. Alice and Bob need each other equally to do that and so are equally powerful. One can also see the weakness of the ratio approach by imagining a differently situated Bob who would get only crumbs if there were no deal. In that instance, mimicking the ratio of fallbacks would lead to an absurdly high proportion of slices going to Alice. Bob could reject that deal at almost no cost. Because Alice still couldn't beat her fallback without his agreement, Bob could hold out for more of the gains.

Splitting the total in two is an oversimplified view of fairness. Alice and Bob are not in equal positions; she has a better fallback. If 6:6 were really a viable approach to fairness, it should work for any set of fallbacks. It doesn't. Consider what would happen if Alice's fallback rose from four to seven slices while Bob's stayed at two. She'd reject the deal with the 6:6 split and keep her seven slices. We can see that as a rule for fairness, dividing the total value by two is fundamentally flawed, since it doesn't work for all fallbacks.

Our principle points to a new way to divide the 12 slices. If Alice and Bob reach an agreement, they'll have six more slices than they would without one. That increase is what we've defined as the negotiation pie: the additional value created by the deal. Both Alice and Bob are needed in equal measure to get it. Alice does not have a greater (or lesser) claim than Bob over it. Correctly understood, both power and fairness dictate that the six extra slices should be split evenly, with Alice keeping her fallback of four slices and Bob his fallback of two. This means Alice ends up with seven slices and Bob with five.

Simply reframing negotiations in terms of our definition of the pie is a big step forward. Without it, the norm is a simple power or fairness heuristic that varies with the situation

and who is making the proposal. The results are offers that appear fair to the side making the proposal but not to the other. Our approach provides one consistent framework that is fair to both sides and reflects their equal power.

In our pizza example, it's easy to see the pie. But how do you persuade someone to follow this logic? Our next case shows how.

FAIR INTERESTS?

Anju and Bharat were celebrating the holidays together. After dinner, Bharat turned to Anju for some financial advice. He couldn't decide how to invest his money. The stock market was volatile. So he was considering putting $20,000 into a one-year CD at 2% interest, which would net him $400.

Anju had the same problem. She had been planning to buy a one-year $5,000 CD. Because she had a smaller amount to invest, the bank was offering her only a 1% rate. While $50 in interest was better than nothing, it wasn't that much better.

The two quickly agreed that it made sense to pool their funds and invest together. With a bit of online searching, Anju found they could get a better rate—3%—if they purchased a $25,000 CD. Now they had to figure out how they would divide up the $750 interest. (See the exhibit "How Big Is the Pie?")

Bharat presented what he thought was a fair solution and what pretty much all our MBA students propose: Each of them would earn 3% on the money invested. Anju would get $150 in interest (3% on $5,000), while Bharat would get $600 (3% on $20,000). Bharat was dividing the $750 in proportion to the money invested, much like dividing the pizza slices in proportion to the fallbacks. This, he argued, was fair because the two were getting the same interest rate.

But was it fair? Anju saw things differently: Investing together would create $300 in value. The two of them were able to earn $450 before they decided to pool their funds; teaming up would increase that total to $750. Anju was equally responsible for the $300 increase. She wanted the $50 she could earn on her own plus half the extra value created by the deal, or $200 in total.

In response to the pie argument, Bharat pointed out that without his help, Anju would be stuck at $50. She should be happy to make $150. Anju was ready for this. Without her help, Bharat was stuck at $400 in interest. He was asking for $200 of the $300 increase, or two-thirds of the pie. He was the one being greedy.

At this point Bharat offered to split the difference between his proposal and hers and give Anju $175 in interest. Halfway between unfair and fair is still unfair, so Anju wasn't ready to give in. "Bharat," she said, "imagine for a moment that a $25,000 CD pays the same 2% interest rate as a $20,000 CD, so there's only $500 to divide. It would still make sense for us to invest together in that scenario, since it would lead to an extra $50 from getting 2% interest on my $5,000 contribution rather than 1%. But it wouldn't make sense for you under the scheme you proposed, where we would each earn 2% on the money invested. That means you would still get $400, and I would be going up from $50 to $100. I would be getting *all* the gain. That wouldn't be fair to you. Instead, I'd split the extra $50 with you." (See the exhibit "How Big Is the New Pie?")

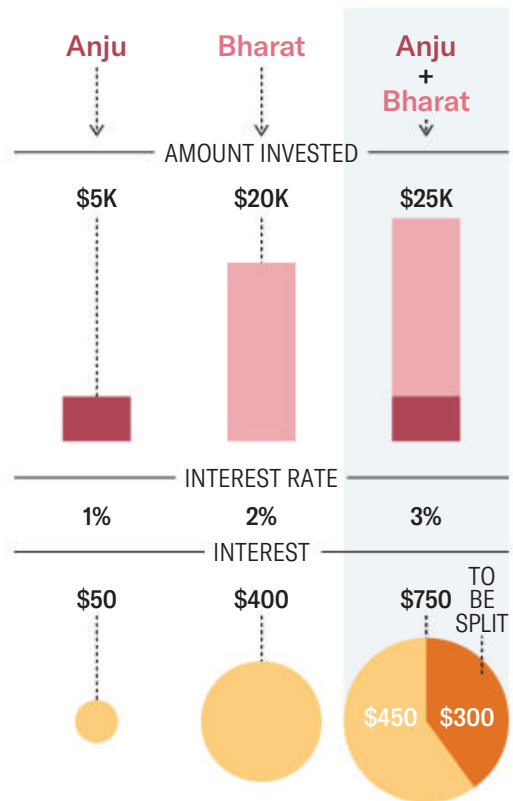
It was game over. Bharat realized that he couldn't ask to pick proportional division in one setting where it favored him but then reject it in another where it didn't.

Bharat's original proposal, equal interest rates, sounds fair because it treats all the dollars involved as the same. But Bharat's dollars could earn 2% on their own, while Anju's could earn only 1%. Their dollars aren't really the same. Before the two sides figure out how to split the total, each side must first be compensated for what he or she could earn alone. Then the excess return should be divided equally. The $300 gain is equally reliant on the two parties, not proportionally reliant on the amounts contributed.

You can certainly change a deal outcome by finding an alternative partner. Bharat might team up with someone else

How Big Is the Pie?

This chart compares the interest payoffs **Anju** and **Bharat** could earn as they decide whether to invest together to buy a CD. Teaming up will create a negotiation pie of **$300**, which is the total interest on their combined investment ($750) less the sum of what they could have each earned investing separately ($450). This $300 materializes only if they agree to coinvest—so they have an equal claim on it and should split it.



with a $5,000 investment and work out a better deal than he'd get with Anju, who couldn't as easily find a better deal with another $20,000 investor.

If, say, Chiragh will invest $5,000 with Bharat and take his 3% offer, then Bharat can earn $600 on his $20,000. That's an improvement for Bharat, but it could still make sense to do a deal with Anju—especially if Chiragh won't accept anything less than $150.

Anju would have to undercut Chiragh, but she could hold out for more than the $50 she'd earn on her own. If Bharat does the deal with Chiragh, he will earn $600, and Anju will earn $50 on her own, for a total of $650. This is $100 below the $750 Anju and Bharat could make together. That's the new diminished pie. Anju could offer to split that $100 with Bharat, collecting $100 ($50 on top of her $50 fallback) while he collects $650.

Bringing other parties into a negotiation changes the pie and what each side ends up with. If Anju and Bharat are the only two people who can come together to make the deal possible, the pie is $300, and Anju, even with the worse fallback, is equally entitled to half. If there are more people present, it's a new negotiation with different fallbacks and a smaller pie, but Anju and Bharat still split the pie.

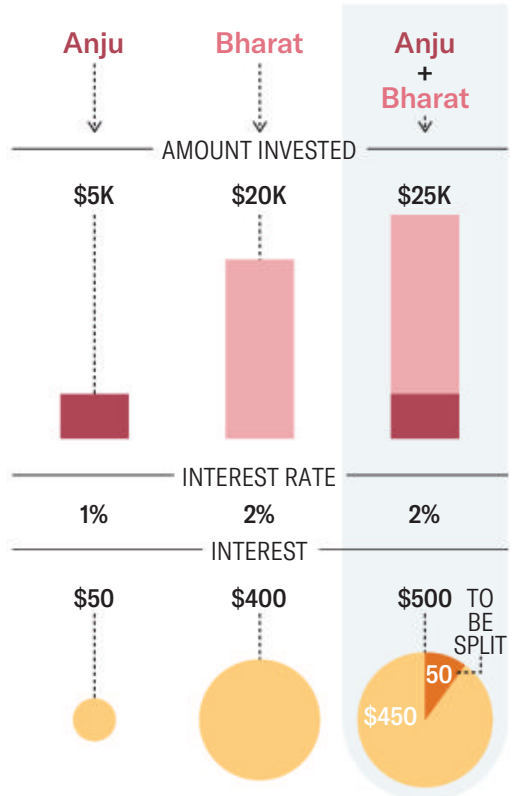
THE CONTRIBUTION TRAP

Anju and Bharat's story highlights a critical issue in negotiations: People have a hard time seeing equality when parties bring what look like very different contributions to the table. And often people don't appreciate that they're getting less than half the pie. Our next two examples look at negotiations where there is a presumptive split that is uneven but should not be.

Buying an apartment. In the city of New York, a person taking out a mortgage pays a 1.8% recording tax on mortgages below $500,000 and 1.925% on mortgages at or above $500,000. That ends up being a lot of money. But the tax code makes it possible to reduce the bill by doing a CEMA—a consolidation, extension, and modification agreement. Under a CEMA, the buyer takes responsibility for the seller's mortgage and deducts the mortgage amount from the sales price. This decreases both the buyer's recording tax and the New York state transfer tax the seller owes, which is 0.4% of the price.

How Big Is the New Pie?

Let's say that **Anju** and **Bharat** can combine their funds to buy a $25,000 CD at 2%. In this scenario the interest rate is the same one Bharat would get if he invested alone. Buying the CD together would still create additional value because Anju's funds would earn a higher rate. The total interest would increase from $450 to $500; the additional **$50** is the negotiation pie that Anju and Bharat should split equally.



Consider a case where the buyer is planning to take out a $1 million mortgage and the seller has an existing mortgage of $600,000. If the buyer were to take over the seller's mortgage, the recording tax would then apply only to the new part of the mortgage—$400,000—and the tax would fall from $19,250 to $7,200, saving just over $12,000. Meanwhile, with the new, lower sales price, the seller would save $2,400 in transfer tax.

All told the CEMA would save $14,400 in taxes. That is the pie. Yet few buyers and sellers see themselves contributing equally to it. The buyer thinks she is creating $12,000 in savings while the seller sees himself creating $2,400. Consequently, the seller accepts an uneven split according to the default tax savings for each side: $12,000 to $2,400, or 5:1.

Sellers accept the default split all the time. They shouldn't. Both parties are equally responsible for the tax savings. The CEMA works only if the seller has an existing mortgage. The buyer has to get her lender to agree and the seller has to give permission to his lender too. The savings should be split 50:50, or $7,200 to each. Savvy sellers know to ask for a payment that divides the pie evenly.

A merger of equals. In standard merger-of-equals agreements, the parties split synergy gains in proportion to their premerger sizes. Here's an example loosely based on an actual proposed merger. Two industry giants, Adelaide and Brisbane, could achieve large cost savings by consolidating their overlapping operations. Under the status quo, Adelaide has a market capitalization of $240 billion, and Brisbane's is $160 billion. If they merge in a stock-for-stock deal, their combined market capitalization will be $430 billion, with the extra $30 billion representing the joint cost savings.

Our approach still applies even when the size of the pie is uncertain, the parties see very different pies, or they have reputations at stake.

In a merger of equals, each side retains its proportionate share in the combined enterprise. Since the size ratio of the companies is 60:40, Adelaide will end up with 60% of the new entity and thus 60% of the $30 billion, or $18 billion. Brisbane will get the other 40%, or $12 billion. Adelaide will garner 50% more of the gains because it was 50% larger.

Many professionals think this is a perfectly reasonable outcome. We disagree. It's true that if Adelaide walks away, there will be no deal and the full $30 billion will be lost. But it's equally true that if Brisbane walks away, there will be no deal and the full $30 billion would be lost. There is no sense in which Adelaide is more important to realizing the cost savings. Since their contributions are equal, the split of the pie should be too: Each should get $15 billion.

One solution would be for Adelaide to pay $3 billion up front to the Brisbane shareholders. That, added to their 40% of whatever gains arise from the merger (which should be $12 billion), would bring their total to $15 billion, the same amount that Adelaide shareholders would expect from their 60% of the gains after the $3 billion payment. There's still a risk that the gains won't come out exactly as predicted, but the risk is limited to 10% of the total (the $3 billion payment). That isn't zero risk, but it is manageable.

However, to determine the right payment, the two sides must have a similar view of the potential pie. And while they could agree in principle that their contributions are equal, they might still disagree about the size of the pie. With mergers and many other kinds of deals, correctly calculating the pie means knowing what the two sides can accomplish together and on their own, which may require them to share confidential information.

If the relevant numbers in a deal are hidden or hard to confirm, it creates the potential for bluffing and misrepresentation. In some of these situations, especially mergers, the parties may choose to reveal the numbers. All the facts were on the table in the actual negotiation on which the Adelaide-Brisbane example is based, a proposed merger between the mining giants BHP and Rio Tinto. Far from trying to keep its estimate of potential synergies hidden, BHP publicized it. The company wanted to provide shareholders, regulators, and the public with its rationale for the merger. The pie was relatively easy to estimate since there were no comparable options to create synergies with other firms. The fallback values were just the two companies' valuations prior to the merger. Ultimately, though, there was no pie because the European Commission blocked the deal.

BUT WHAT IF...

So far, we've focused on deals where the parties agree on how to value the pie and aren't looking beyond the one deal. Our approach still applies even when the size of the pie is uncertain, one side cares more about the pie, or the parties have reputations at stake.

The size of the pie is uncertain. When a large consumer products company, say Coca-Cola, partners with a start-up, it can use its buying power to greatly reduce the cost of packaging. Let's assume Coke can cut the start-up's cost for a plastic bottle from 19 cents to 11 cents. For a start-up with sales of 100 million bottles a year, the savings would be $8 million annually. But if the $8 million pie were split in proportion to firm revenues, the result would be quite lopsided. Coke's share could well be 2,000 times as big as the start-up's. In that case, Coke would get $7,996,000 and the start-up $4,000!

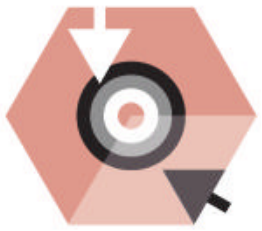
Who is more responsible for those savings? Coke is bringing its vast purchasing power to the table, but is it contributing more than the start-up?

No. Coke's clout is essential, but it needs the start-up's customers because it has already harvested all the savings on its own bottles. For Coke to create $8 million in additional savings, it must find someone who is paying too much for bottles and needs a lot of them. It's only by putting Coke's purchasing power together with the start-up's customers that $8 million can be saved. The two sides are equally essential, and therefore the savings should be split evenly: $4 million to each.

But this ignores the uncertainty. The size of the pie is an estimate—and Coke wouldn't want to pay out $4 million only to discover the start-up's sales are 50 million bottles. A good solution here is to split the pie as it's being created. If Coke provides the bottles at 15 cents each, rather than 11 cents, then Coke and the start-up each gain 4 cents a bottle. This way they evenly split the pie whatever size it turns out to be.

People often resist the idea of equal power when one party is a great deal bigger than the other. Many believe that the larger party is better positioned to find an alternative

Many believe that the larger party is better positioned to find an alternative partner. That's not always the case.



partner. That's not always the case. Coke could certainly find another start-up, but the start-up could just as easily approach Pepsi, which might offer it a deal at 15 cents a bottle, improving the start-up's fallback from 19 cents a bottle to 15 cents. Coke could still bring value to the table by offering 11 cents a bottle, but the pie would shrink from $8 million to $4 million since the additional savings would be only 4 cents a bottle on 100 million bottles. In this case the pie should again be split 50:50. If the start-up's fallback is now 15 cents a bottle, it should get $2 million or pay 13 cents a bottle to Coke. The start-up does even better.

One side cares more about the pie. The biggest objection people have to our approach is this: What if one party cares more about the outcome than the other?

Let's go back to Coke. When a start-up is negotiating with a large established firm, the money involved will be life changing (if not lifesaving) for the start-up but not material to the big player. The large player will use that asymmetry to argue that the small player should be happy to accept less than half the pie, since even a modest slice creates a lot of value for it. Such thinking underlies the view that the larger party has more power in a negotiation. The larger player says, "You need this deal much more than we do," and the smaller side goes along.

We'll put some numbers on the Coke and start-up deal to illustrate the point. Let's say they're still negotiating over $8 million in savings, but the start-up cares seven times as much about each dollar. Coke will argue that giving $1 million of the total savings to the start-up and keeping $7 million for itself leads both parties to achieve the same effective gain.

But any argument the larger party can make about getting more can be flipped into one for giving it less. If Coke contends it should get more because it cares less, the start-up can reply, "If you care so little, give us $7 million of the $8 million. Money matters a lot more to us, and you would hardly miss it. The $1 million we are giving up feels like $7 million. So that's an equal sacrifice given how much more each dollar is worth to us."

Our solution—$4 million to each—cuts through this impasse. The split doesn't depend on how much either side cares. The two sides value the $4 million differently but can agree that each is getting half the pie as it sees it. Each is halfway between getting its worst outcome (no savings) and its best outcome (all the savings). Even though the start-up cares more, it doesn't end up with less.

A reputation is at stake. Many negotiations are of a one-off nature, but there are clearly situations where one or both sides want to develop a reputation for how they negotiate. Even if Coca-Cola won't negotiate with the start-up again, it may care about how it's perceived by other ventures it might do future deals with.

We find that the concern over reputation generally reinforces equal-share outcomes. A party might be willing to agree to an unfavorable split in a one-off negotiation. But if it's likely to be involved in similar future negotiations, it will not accept a disadvantageous deal, because it won't want to be seen as an easy mark. In other circumstances one party might have the opportunity to end up with more than half the pie but refrain from seizing it out of concern that future potential deal partners wouldn't want to do business with it.

WE FULLY APPRECIATE that most people don't negotiate in the manner we've discussed. We know our approach is novel. The pie framework reveals the otherwise-hidden equality of power. It will allow you to negotiate more logically and more clearly and make arguments that persuade others. It works whenever there's an opportunity to cooperate with another party to maximize the value you create together. It also works when negotiating with people who don't care about fairness. They will have no good counterarguments against the pie principle, and refusing to accept your case for equal division will paint them as inconsistent or intransigent and may cost them the deal. But you will have to hold firmly to this principle.

Because the pie approach is fair, it eliminates the traditional posturing that happens in negotiations. By resolving the issue of division, it frees parties to focus their energies on creating the biggest possible pie. **HBR Reprint** R2106H

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Accounting for Climate Change

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The first rigorous approach to ESG reporting

PHOTOGRAPHER MICHAEL SCHAUER

THE AUGUST 2021 REPORT OF THE UN'S INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE WARNS THAT POLLUTION CAUSED BY HUMANS HAS LED TO AN INCREASE IN EXTREME EVENTS SUCH AS HEAT WAVES, HEAVY PRECIPITATION, DROUGHTS, AND TROPICAL CYCLONES.

Greenhouse gas (GHG) emissions from global economic activity are at the heart of climate change, with atmospheric CO_2 already 50% above its pre-industrialization levels.

Unsurprisingly, corporations face growing pressure—from investors, advocacy groups, politicians, and even business leaders themselves—to reduce GHG emissions from their operations and their supply and distribution chains. The nearly 200 CEOs of the Business Roundtable, representing some of America's largest and best-known companies, have responded by issuing a collective statement on their commitment to "the purpose of a corporation," which includes better environmental performance. This commitment is seemingly backed up by action: About 90% of companies in the S&P 500 now issue some form of environmental, social, and governance (ESG) report, almost always including an estimate of the company's GHG emissions.

But ESG in its current form is more a buzzword than a solution. Each of its three domains presents different measurement opportunities and challenges, a fact not adequately addressed by existing disclosure standards. As a consequence, few ESG reports engage meaningfully with the moral trade-offs within the three domains and with the company's profits. Companies also selectively present metrics that portray themselves in a favorable light, resulting in the widespread perception that ESG reporting is awash in greenwash. Not surprisingly, auditors of these reports often resort to double negatives—"We found no evidence of misreporting in the company's ESG report"—and the reports themselves have had little impact on either corporate actions or external stakeholders.

We propose that companies tackle ESG reporting in a more targeted and auditable way. They should first develop specific and objective metrics for the most important and immediate ESG problems, rather than produce catchall reports that are often made up of inaccurate, unverifiable, and contradictory data. GHG emissions are the ideal starting point for such an approach. They represent the most immediate danger to the planet, and they are among the easiest of ESG items to reliably measure and interpret.

Among the companies that already provide GHG estimates in their reporting, most—including 92% of the *Fortune* 500 in 2016—rely on an approach called the GHG Protocol. Introduced in 2001 and updated several times since, this protocol established a common language for GHG measurement that enabled companies to start their environmental reporting journey. It is the default methodology underlying most ESG disclosure standards. But as we show in the following pages, the protocol has serious conceptual errors: The same emissions are reported multiple times by different companies, while some entities entirely ignore emissions from their supply and distribution chains. Indeed, the poor accountability of ESG reports stems partly from the flaws in the GHG Protocol.

The good news is that the defects in the protocol can be fixed. The solution we present here integrates recent advances in measuring emissions by environmental engineers, the introduction of blockchain technologies to accounting and auditing, and two centuries' worth of progress in financial and cost accounting practices. If implemented, our solution will enable GHG reports to approach the relevance and reliability expected of today's corporate

ABOUT THE ART

Michael Schauer's project "Shrouds" depicts the veils of sheets that cover parts of the Rhône glacier, in the Swiss Alps, to protect it from melting in the summer sun.

financial reports. What's more, much of what is learned through this process can help companies better measure other environmentally damaging outputs—and many socially damaging ones as well.

WHAT'S WRONG WITH THE GHG PROTOCOL

The protocol identifies three types of GHG emissions and gives explicit guidance for measuring and reporting them.

Scope 1: Direct emissions from sources that are owned or controlled by a company, such as its production and transportation equipment.

Scope 2: Emissions at facilities that generate electricity bought and consumed by the company.

Scope 3: Emissions from upstream operations in a company's supply chain and from downstream activities by the company's customers and end-use consumers.

Scope 1 emissions are the easiest to measure and the most relevant for companies that directly produce large quantities of GHG: fossil-fuel energy companies; mining, metallurgical, and chemical companies; and large-scale agribusinesses. Most other companies, including those in the services sector, produce only small amounts of Scope 1 emissions.

Scopes 2 and 3 essentially cover all GHG emissions indirectly linked to a company's operations. The GHG Protocol carved Scope 2 emissions out of Scope 3 because they are easily measured and allocated to specific companies. Several hundred companies currently report their Scope 1 and 2 emissions. Scope 3 emissions are the fatal flaw in GHG reporting. The protocol's creators included them to encourage companies to exert influence over emissions that they don't control directly. For example, they could buy from or sell to companies with lower Scope 1 emissions, and collaborate with their suppliers and customers to reduce GHG emissions along their value chains. But the difficulty of tracking emissions from multiple suppliers and customers across multitier value chains makes it virtually impossible for a company to reliably estimate its Scope 3 numbers.

Consider the challenges faced by a manufacturer of car doors. Protocol for Scope 3 reporting requires the company to track all GHG emissions from the processes of its upstream suppliers, including the extraction of metallurgical coal and iron ore, the transport of those minerals to a steel producer, the production of sheet steel from the coal, iron ore, and other inputs, and the transport of that steel to its own production facility. The car-door company must also estimate the GHG impact of downstream activities, including transport of the car door to its customer (the automotive-assembly factory), manufacture of the finished car, transport of the car to a showroom, and operation of the vehicle, for perhaps 15 years, by the end-use consumer.

Estimating all those upstream and downstream emissions—especially for companies with long, complex, and multi-jurisdictional value chains—introduces high measurement error, opening the door to bias and manipulation. Moreover, the Scope 3 protocol requires each company in a value chain to estimate and report GHG emissions from the same activity, which is not only inefficient but generates the duplication mentioned above—an obvious defect in any accounting system.

Not surprisingly, many ESG-reporting companies ignore Scope 3 measurements entirely. But that limits any

IDEA IN BRIEF

THE PROBLEM

Climate change is an existential threat to life as we know it, but corporations' progress in reducing greenhouse gas (GHG) emissions remains slow, despite the time and energy companies spend on their ESG reports.

WHY IT HAPPENS

The GHG Protocol—used by more than 90% of Fortune *500 companies for those reports—has numerous basic accounting problems, resulting in a misleading picture.*

THE SOLUTION

An alternative, comprehensive system, based on established accounting practices, enables the measurement and transfer of GHG emissions along an entire corporate value chain. The authors explain their E-liability *system and describe its considerable benefits, for both corporations and society at large.*

meaningful contribution to mitigating total emissions across their supply and distribution chains. It also skews responsibility to those suppliers with high-emitting extraction, production, and distribution processes while absolving their customers and consumers of accountability for using heavily polluting components.

We can fix this problem by examining how cost and financial accountants estimate a company's value added—a fundamental corporate measurement task.

When our car-door manufacturer calculates its value added, it does not estimate all the prices paid by all the organizations across all the stages of its value chain. Rather, each organization records only what it pays for goods and services from its immediate suppliers and what it receives when it sells products to immediate customers.

Let's assume, for simplicity's sake, that all transfers of materials in the manufacturer's value chain are made at cost from stage to stage (eliminating the profit margin in the sale and transfer). In this case, the manufacturer's acquisition costs from its immediate suppliers include the total cost of extracting the original materials (incurred by the mining company) plus all the labor, machining, and indirect costs for the materials as they were handled and processed by the sequence of suppliers until the materials reached the car-door manufacturer. The manufacturer adds its own labor, machining, and indirect costs to the acquisition costs to calculate the total manufacturing cost of the door when sold and transferred to the automotive-assembly company. This process continues down the value chain until the car's eventual purchase by a consumer.

The same idea can be applied to GHG emissions.

TRACKING EMISSIONS ACROSS AN ENTIRE VALUE CHAIN

To illustrate, start with the car-door manufacturer's furthest-removed supplier, a mining company in (let's say) Perth, in western Australia. That company extracts the metallurgical coal and iron ore that eventually find their way into the door. It measures its total Scope 1 emissions during a reporting period using a combination of chemistry and engineering, and then, combining that science with cost accounting, assigns its total emissions to the tons of coal, iron ore, and all other minerals extracted during the period. The latter

The E-liability accounting system eliminates the duplicative counting of emissions. It also reduces incentives for gaming and manipulation.

process is similar to the way it estimates the unit production costs of its outputs in a standard activity-based costing system (more on this below). The calculation produces an estimate of GHG emissions per ton of each type of material produced. Whereas financial accounting would record the monetary cost of producing a ton of material as inventory—an asset on its balance sheet—we label the GHG units emitted per ton of extracted material an *E-liability,* reflecting their environmental cost to society.

When the mining company transfers the coal and iron ore to a shipping company, the shipping company assumes the E-liability from the mining company on its E-accounting books (much the way it assumes production inputs as inventory on its financial-accounting books). If the mining company transfers all the materials it mines in the reporting period to downstream entities like the shipping company, its E-liability account at the end of the period will match what it was at the beginning.

As its ocean barge travels from Perth to, say, Port Talbot, Wales, the shipping company adds to its E-liability account the quantity of GHG produced to power the barge's engines. Using basic cost-accounting methods, it assigns the barge's total E-liability to the materials carried on board. At Port Talbot, if the company transfers 38% of the barge's iron ore and 6% of its coal to a steel producer, it will, on its E-accounting ledger, also transfer the same percentages of their E-liabilities to the steel company, which now "owns" those liabilities.

The steel company produces its own Scope 1 emissions by operating furnaces and rolling mills to produce sheet steel. Through the same accounting process, it allocates its bought and incurred E-liability to each ton of sheet steel produced. When the steel is transferred to a railroad company for transport, each ton carries its share of accumulated E-liability—from the mining company, all transportation so far, and the GHG emissions from the steel-production process.

When, several days later, the steel is processed through the receiving dock of the car-door manufacturing company in, say, Solihull, England, the steel's E-liability—which now includes its per-ton share of the emissions from the railroad company's transport from Port Talbot to Solihull—is transferred to the car-door company. This process continues until the consumer who buys the finished car receives a report card on the quantity of GHG emissions produced throughout its manufacture and transportation.

Some companies may choose to directly eliminate GHG from the atmosphere—for instance, by engaging in carbon capture or reforestation. A company that does so can subtract that amount from its E-liability account, subject to auditing, thus reducing its liability transfers along the distribution chain to, eventually, the end-use consumer.

MEASURING AND ALLOCATING EMISSIONS

This new accounting system requires two basic steps: (1) Calculate the net E-liabilities the company creates and eliminates each period, adding them to the E-liabilities it acquires and has accumulated, and (2) allocate some or all of the total E-liabilities to the units of output produced by the company during the reporting period. For the first step, environmental engineers can estimate the quantity of GHG emissions from a company's primary-source activities, such as burning hydrocarbons for electricity, heat, and transport; producing metals, cement, glass, and chemicals; agriculture involving livestock emissions and deforestation or reforestation; and waste management.

The second step is identical to activity-based costing (ABC) for assigning overhead and other costs to the multiple products and services produced in a given period. Let's assume that the shipping company transfers only two products from Perth to Port Talbot—coal and iron ore. The company acquires the E-liabilities associated with those products from the mine on a per-ton basis. Since the products are also transferred to the steel mill on a per-ton basis, the cost accounting is straightforward—the E-liability transfer is analogous to a direct cost in an ABC system.

But as noted, transportation from Perth to Port Talbot generates additional GHG, which must be allocated to the cargo. Iron ore is denser than metallurgical coal, so the E-liabilities associated with transporting the two differ. An ABC-inspired allocation system can apply cost drivers associated with weight, volume, and distance to calculate the precise apportionments.

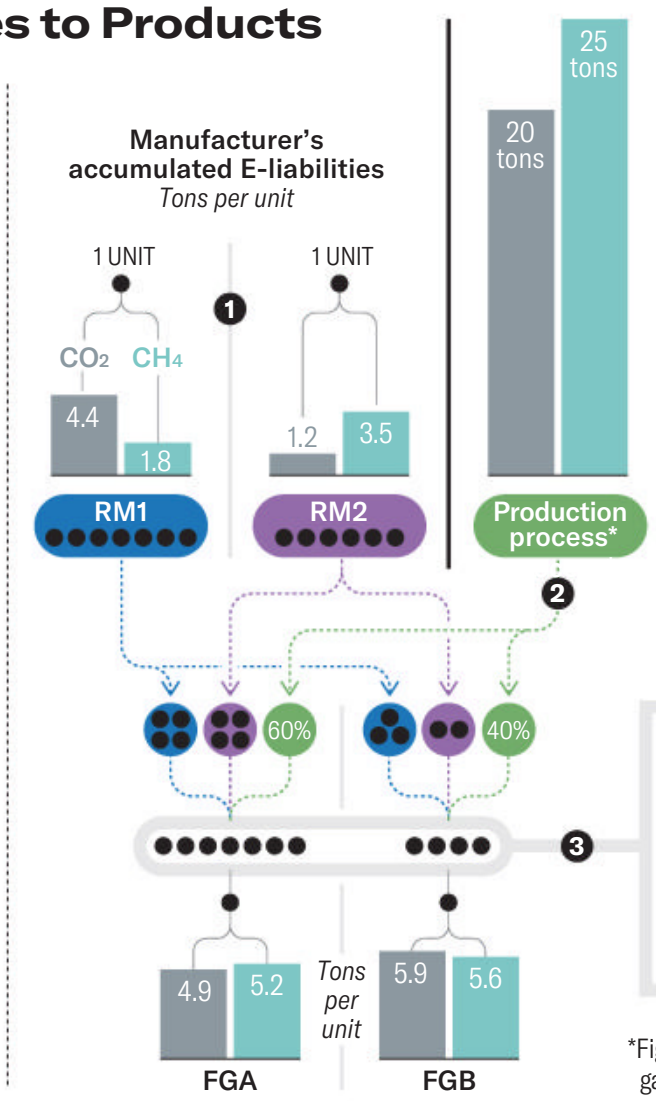
As with physical inventory, E-liabilities acquired or produced but not transferred to customers in a given period are held for future transfer. This feature of E-liability accounting

Allocating E-Liabilities to Products

This exhibit shows how cost accounting would assign to two finished-goods products the E-liabilities associated with their raw materials and production process. For simplicity, we focus on two finished products and two greenhouse gases (CO_2 and CH_4), but the method can be scaled to multiple products and gases.

❶ The manufacturer's beginning-of-period E-liability includes that of two purchased raw materials (RM1 and RM2), created through the extraction, production, and distribution processes used by upstream suppliers.

❷ The manufacturer's production process converts 7 units of RM1 and 6 units of RM2 into 7 units of finished good A (**FGA**) and 4 units of finished good B (**FGB**). This process itself generates 20 tons of carbon dioxide (CO_2) emissions and 25 tons of methane (CH_4) emissions, which include E-liabilities purchased from the manufacturer's electricity supplier and depreciation of E-liabilities associated with capitalized equipment.



❸ The calculations below show how the E-liabilities of inputs RM1 and RM2, plus the E-liabilities from the manufacturer's production process, are transferred to the E-liabilities in CO_2 and CH_4 tons/unit of the two finished goods, **FGA** and **FGB**, as a function of input quantities and proportion of production time. As these finished goods are sold to the manufacturer's customers, **FGA**'s and **FGB**'s E-liabilities for CO_2 and CH_4 are subtracted from the manufacturer's E-liability accounts (see the exhibit "The E-Liability Statement") and added to those of its customers.

Finished Good A

RM1 RM2 PRODUCTION

CO_2: (4.4 x 4 + 1.2 x 4 + 0.6 x 20) / 7 = 4.9

CH_4: (1.8 x 4 + 3.5 x 4 + 0.6 x 25) / 7 = 5.2

Finished Good B

CO_2: (4.4 x 3 + 1.2 x 2 + 0.4 x 20) / 4 = 5.9

CH_4: (1.8 x 3 + 3.5 x 2 + 0.4 x 25) / 4 = 5.6

*Figures shown represent total greenhouse gases produced during production process.

allows companies to hold and depreciate GHG emissions from fixed assets such as plant and equipment. Consider a steel mill that installs a blast furnace, thus incurring GHG liabilities—such as for emissions from the production and transport of bricks used to line the furnace. These "capitalized" GHG liabilities can be depreciated over each period of the furnace's useful life. In a calculation that replicates cost accounting's allocation of the furnace's acquisition and installation costs to outputs produced during its operation, the E-liability system assigns a proportion of the furnace's E-liability to each period's production.

WHAT COMPANIES REPORT

With the two accounting steps addressed, companies can report on the stocks and flows of their E-liabilities just as they report on their opening inventory, annual purchases of raw materials, finished goods produced, cost of goods sold, and closing inventory. The equivalent items would be net E-liabilities at the beginning of a period, E-liabilities acquired, net E-liabilities produced during the period, E-liabilities disposed of (sold), and net E-liabilities at the end of the period (see the exhibit "The E-Liability Statement").

Some environmental activists may fear that transferring a company's entire Scope 1 emissions to downstream customers will enable the company to escape scrutiny for GHG-intensive operations. But just as a good financial analyst looks beneath a company's net income to analyze cost of goods sold and changes in inventory levels, an environmental analyst could interpret the details of a company's purchase, production, and disposal of E-liabilities.

THE BENEFITS OF E-LIABILITY ACCOUNTING

The E-liability accounting system offers several advantages. Most important, it eliminates the duplicative counting of emissions that is embedded in current Scope 3 measurements. It also reduces incentives for gaming and manipulation. A company cannot reduce its reported Scope 1 emissions simply by outsourcing production and then, as is currently possible, ignoring its Scope 3 emissions on the grounds of high measurement error and lack of access to

The E-Liability Statement

This table shows hypothetical changes to a car-door manufacturer's booked E-liabilities during one accounting period. The opening balance reflects its liability owing to actions in prior periods. Emissions produced by the company from its operations and those transferred to it from its suppliers, including emissions arising from capital investments, are added to the opening balance. Emissions from products purchased by car-assembly plants are then subtracted, and the result is the company's closing E-liability at the end of the period.

E-liability flows	Tons of CO_2
Opening E-liabilities	**3,600**
Add E-liabilities acquired from suppliers	39,800
Electricity	*5,600*
Sheet steel	*10,600*
Glass	*5,400*
Fabric and plastic	*1,200*
Other supplies/components	*4,800*
Capital equipment	*12,200*
Add E-liabilities directly produced through operations	2,600
Subtract E-liabilities transferred to customers	(32,600)
Closing E-liabilities	**13,400**
Change in E-liabilities during period	9,800

distant suppliers and customers. In the E-liability system, any GHG emissions produced by an outsourced supplier will be transferred to the company upon purchase. What's more, a company can't benefit from understating the E-liability transferred to its customers, because its own end-of-period net E-liability would steadily escalate, suggesting that the company's products are more heavily polluting than customers will accept. Conversely, a company attempting to overstate E-liability transfers to downstream customers would meet with resistance from buyers that preferred to engage with less-polluting suppliers.

The system also allows for its own materiality standard. Currently, several major ESG reporting standards require companies to disclose whenever environmental considerations pose a material *financial* risk to a company. That allows many GHG-intensive processes to go unreported when they have no material impact on a company's financial statements. The E-liability system can apply a materiality threshold specific for GHG, regardless of the financial impact.

Finally, a company's end-of-period E-liability balance can be audited in much the same way that its financial asset and liability accounts are. The external auditors (preferably a team including environmental engineers and cost accountants) can verify the company's internal GHG measurement and allocation models and its purchases and transfers, particularly of GHG-intensive products and services, and reconcile E-liability balances at the beginning and the end of the period. Auditors can cross-check a client's E-liability transactions with corresponding activity in the financial accounts: A red flag would be raised if E-liabilities booked seemed unusually small, relative to industry peers, for the scale of the client's inventory movements in a period.

Blockchain technology, starting with the first stage of production, can be used to accumulate and transfer E-liabilities from stage to stage, reducing accounting and auditing costs across the entire system. Blockchains are especially useful in recording Scope 1 emissions at each stage so that subsequent E-liability transfers must always reconcile with the total Scope 1 number in a value chain. The E-liability system is unlikely to introduce burdensome record-keeping, because it can run on a company's existing financial-reporting and cost-accounting infrastructure, simply using a different unit of measurement: the quantity of GHG emissions rather than the amount of cash and cash equivalents.

DEPLOYING E-LIABILITY ACROSS THE ECONOMY

The pressure to do sustainability reporting has been put primarily on publicly traded companies, by their investors and analysts. But restricting the reporting of GHG emissions to such companies would motivate some to go private (and the private ones to remain so) to avoid environmental measurement and disclosure. Thus all companies should be encouraged to report on their E-liabilities, including large private ones such as Bechtel, Bosch, Cargill, Koch, and Mars and those financed through joint ventures, limited partnerships,

venture capital, or private equity. Only very small companies with negligible quantities of acquired and produced GHG should be exempt from E-liability reporting.

But corporations are not the only traders in GHG emissions. State-owned enterprises and government agencies, including defense, transportation, energy, and health care, produce and consume many tons of emissions, and they too should be expected to adopt E-liability reporting.

Reliable GHG reporting would also help banks and investment funds respond to demands that they report the emissions of their portfolio companies. Standard-setters such as the Financial Stability Board's Task Force on Climate-Related Financial Disclosures have created formulas for determining how to weight various investment assets on the basis of features such as the nature of the security (debt versus equity, for example) and the degree of control exercised by the investment vehicle over that security. But although those formulas can be useful, the current measurement of the underlying pollutants—the sum of a company's Scope 1, 2, and 3 emissions—remains fundamentally flawed, for the reasons we have described. The E-liability system provides a more reliable way of calculating the total pollution from assets under management as a weighted total of the portfolio companies' end-of-period E-liabilities. Banks and investment funds using the system would have a far better foundation for influencing and reporting on their portfolio companies' environmental impact.

The E-liability approach to GHG accounting would obviate the simplistic labeling of certain sectors, such as fossil fuels and mining, as "sin" industries from which ethical investors should divest. That practice is unlikely to contribute to reducing global emissions, because those industries would not exist at their scale were their outputs not used by "clean" (low Scope 1) companies for their own production and consumption. Our proposed approach recognizes the integrated nature of pollution activities across the economy and encourages all businesses, regardless of sector, to take GHG emissions into account in their product design, purchasing, and selling decisions.

While waiting for new reporting regulation on E-liabilities, large companies—especially signatories to the Business Roundtable's corporate-purpose statement—can put their rhetoric into practice by voluntarily adopting this system and requiring their large suppliers and customers to do the

same. That could create competitive advantage by signaling to environmentally sensitive consumers and investors that the company is making auditable progress in reducing total-value-chain GHG emissions. The power of demand- and supply-side markets and competition, informed by E-liability reporting, could encourage corporations to engage in verifiable climate-change action rather than simply issue greenwashed ESG statements.

If governments judged that competitive forces unleashed by robust environmental disclosures were insufficient to achieve targeted reductions in global GHG emissions, the E-liability system would provide them with the tracks on which a variety of carbon-based tax trains could run. They could assess a VAT-like tax on the difference between a company's E-liability transfers and its acquisitions. Companies attempting to avoid the tax by outsourcing the production of heavily polluting products would most likely encounter higher purchase prices to compensate suppliers for the higher taxes being levied on them. Governments could also assess a capital-gains-like tax on large buildups in a company's end-of-period E-liability balance caused by customers' unwillingness to buy the products of heavily polluting production processes. A third option would be to tax the total E-liability of consumers' purchased products and services to raise their environmental sensitivity even further. (Per capita carbon-tax dividends would mitigate the burden on low-income consumers.)

Carbon taxes are not without problems, however. A tax not imposed and enforced globally could engender a flight of corporate activity to nontaxing countries. Offsetting noncompliance with pollution tariffs would be difficult to implement given current international trade laws. And a worldwide carbon tax seems a distant goal in light of geopolitical considerations and issues with enforceability—such as avoidance by state-owned enterprises, especially in countries with less-than-transparent legal systems that already subvert global agreements with hidden subsidies for domestic employers. Driving market-based corporate action on climate change through E-liability reporting may be the fastest way to start systemically reducing GHG emissions.

GOING BEYOND E

Insights from the widespread deployment of E-liability accounting could inform standards for broader ESG reporting. Of course, no single reporting solution will be relevant for all components of ESG: As noted, ESG is not a single concept. From a reporting perspective, the only thing that E, S, and G have in common is that none is a financial metric. And developing a reporting, evaluation, and investment system for metrics united only by what they are not is hardly a recipe for success.

The lack of a common framework for the three elements leads to contradictions even within a single ESG report. Consider a company under pressure from stakeholders to reduce GHG emitted from its fleet of fossil-fueled vehicles. The company may switch to electric vehicles, resulting in a lower carbon footprint. But what if the battery suppliers for the

Of ESG's three components, **environmental** is the most amenable to rigorous corporate reporting.

electric vehicles use conflict raw materials—tin, tantalum, tungsten, and gold (3TG)—mined by indentured prisoners? Or consider a company that has been criticized and excluded from investment portfolios because its ESG report indicates a high rate of workplace accidents. The company may solve its problem by introducing automation and outsourcing, with the result that its report the following year shows many fewer accidents. But what about the unmeasured and unreported loss of employment among former workers and the economic impact on local communities and suppliers?

Some advocates for ESG reporting want to go beyond disclosure to estimate the monetary value of components for inclusion in the company's income statement. Such a statement, they argue, would represent a more comprehensive measure of the true profits of a company. But it is far harder to calculate the value of many ESG components—the impact of a company's labor practices, workforce diversity, and governance, for example—than it is to estimate the accruals based on future cash flows that underlie basic financial reporting.

Consider the decades-long efforts of some accountants just to put human resources on a company's balance sheet, in an attempt to quantify a CEO's statement that "employees are our most valuable asset." Those efforts failed because the measures of employee value were either irrelevant (such as how much was spent historically on hiring and training employees) or they were subjective and unverifiable. Moreover, it would be even harder, if not impossible, to find a formula to *aggregate* the value of ESG's diverse components: Doing so would require some universally accepted ethical code for navigating the intra-ESG trade-offs alluded to above. By treating diverse nonfinancial performance as a single concept, ESG advocates have arguably inhibited fundamental and rigorous thinking about how best to measure and disclose each of ESG's distinctive components.

So how can we move forward on ESG reporting? We propose to start with a few important dimensions on which we can agree about what are "good" and "bad" outcomes and that we can already measure well. Of ESG's three components, *environmental* is the most amenable to rigorous corporate reporting, because it involves objective, physical measurements of the amounts of gases, solids, and liquids that companies use and produce. This is good news, because the easiest component to measure presents the most urgent threat to humanity.

Measuring a company's *social* impact is also amenable to the approach outlined here, but reporting it presents a far greater challenge, because opinions regarding desirable and undesirable corporate behavior differ widely. As with GHG emissions, we can start with those aspects of adverse social performance that almost everyone agrees should be reduced or eliminated: unsafe working conditions, child and slave labor, and bribery and corruption, for example. Despite nearly universal condemnation of those practices, many companies still implicitly accept them in their global supply chains. An S-liability reporting system that captured their incidence in value chains could motivate companies and consumers to be more proactive in eliminating them.

The *governance* component of ESG is the most problematic of the three. Governance is a process, not an outcome. Good governance is valuable only if it leads to better financial, environmental, or societal outcomes. Until good-governance advocates produce valid metrics for outcomes, we believe that companies should treat governance as they now treat internal controls under Sarbanes-Oxley, with qualitative disclosure and external audits of a company's compliance with statutory standards.

IN FOCUSING ON GHG measurement, we do not deny the relevance of other environmental degradations of soil, water, and biological diversity. Nor do we seek to downplay the benefits of improving companies' societal outcomes and governance practices. But we advocate focusing on what we can and must do well now: improve the measurement and reporting of GHG emissions in an integrated, comprehensive, and auditable way. And in time, the lessons from applying our approach can serve as a model for measuring and tracking other environmental and social outcomes arising from business operations.

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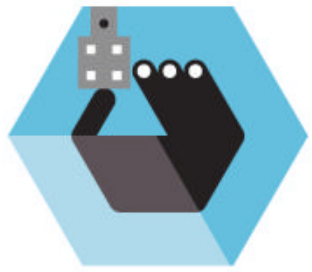

ETHICS

BUILDING AN *ethical* COMPANY

Create an organization that helps employees behave more honorably.

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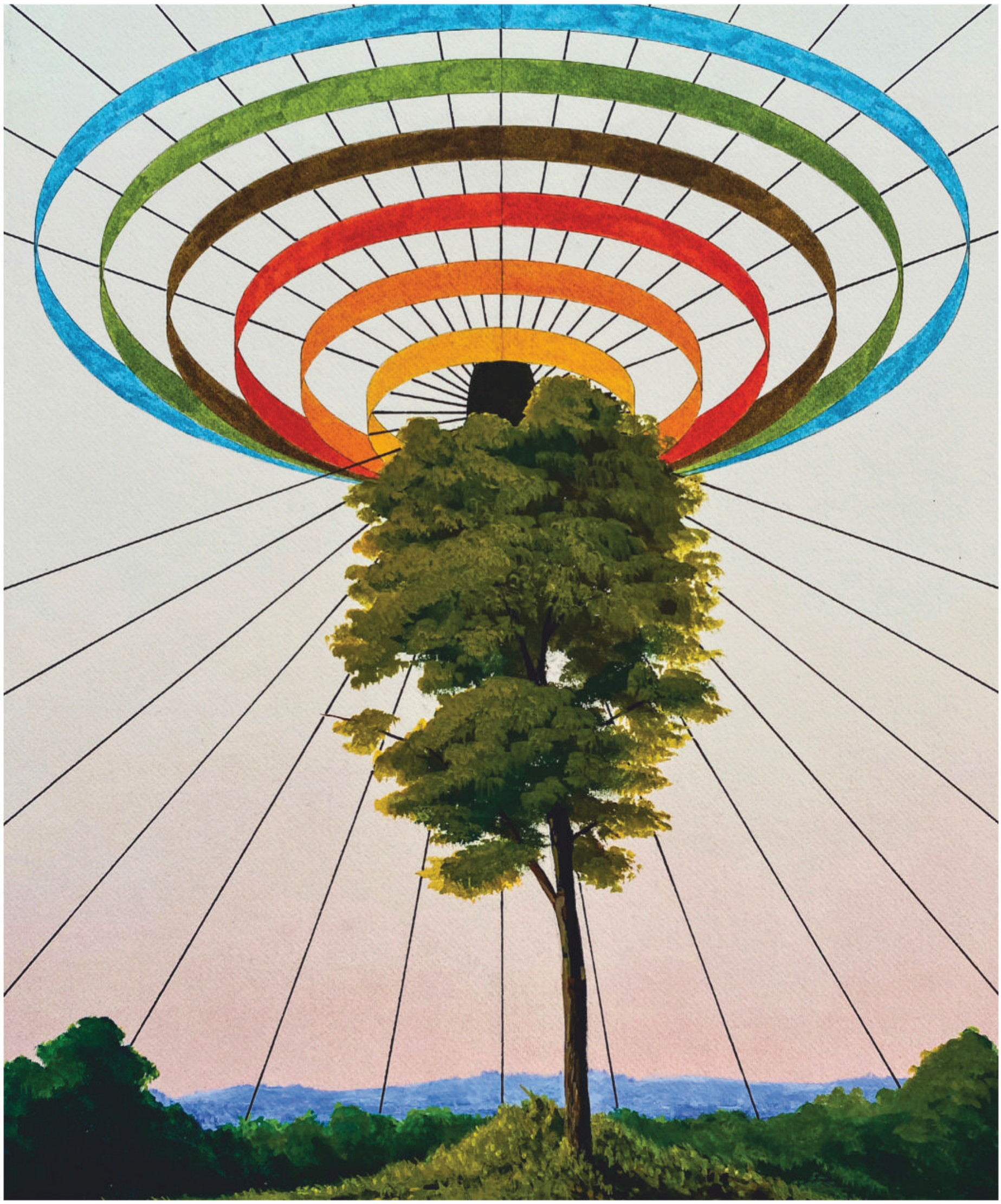
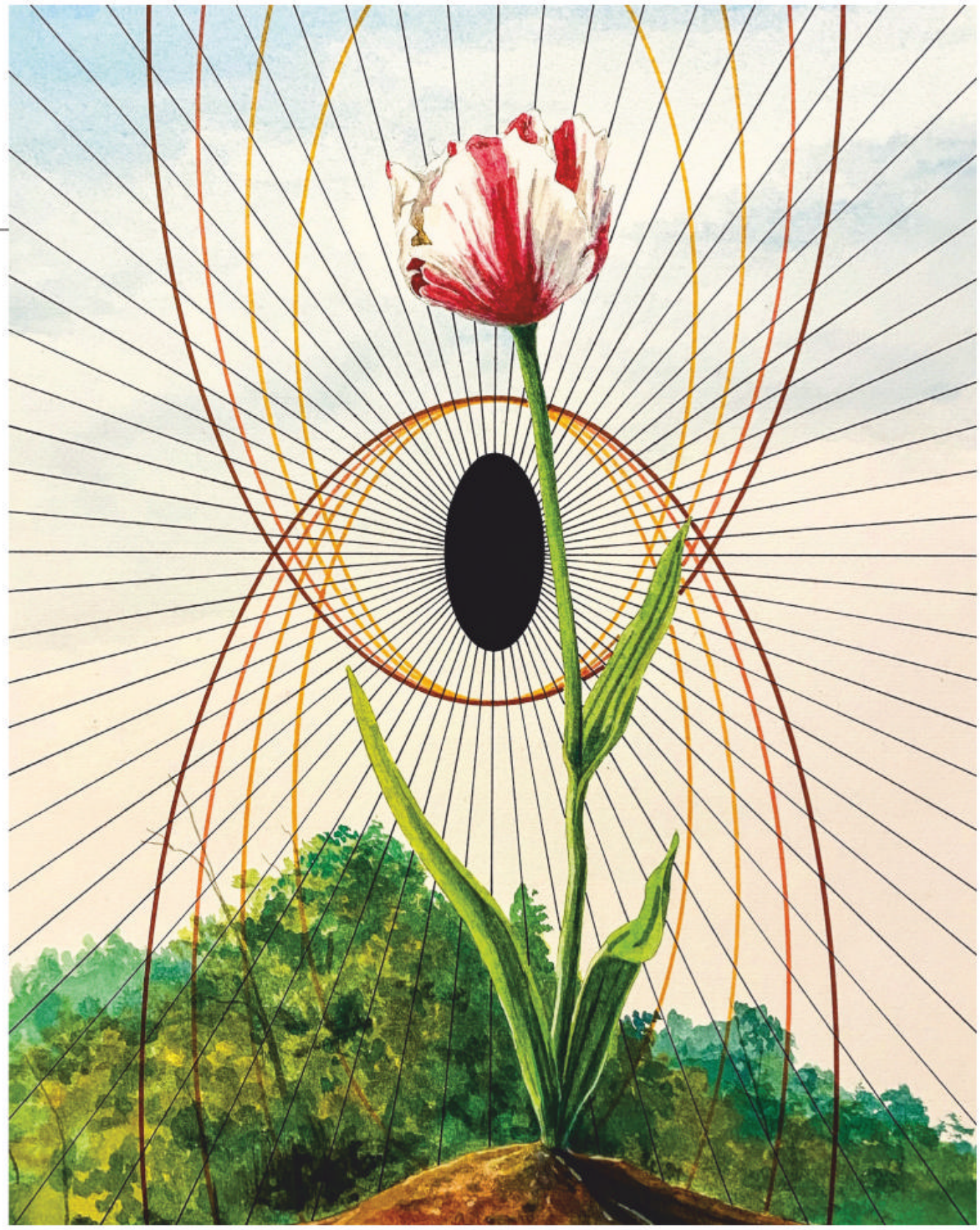




Courtesy Naked Good Galley

People don't enter the workforce with a fixed moral character. Just as employees can nurture (or neglect) their skills and abilities over time, they can learn to be more or less ethical. Yet rather than take a long-term view of employees' moral development, many organizations treat ethics training as a onetime event, often limiting it to the onboarding process. If they do address ethics thereafter, it may be only by espousing codes of conduct or establishing whistleblower hotlines. Such steps may curb specific unethical actions, but they don't necessarily help employees develop as moral people.

IDEA IN BRIEF

THE OPPORTUNITY
Just as people entering the workforce can develop job-related skills and abilities over time, they can learn to be more ethical as well.

WHY IT'S OFTEN MISSED
Many organizations relegate ethics training to the onboarding process, perhaps also issuing codes of conduct and establishing whistle-blower hotlines. Such steps may curb specific unethical acts but don't necessarily help workers grow as moral people.

HOW TO CAPITALIZE ON IT
Managers can provide experiential training in ethical dilemmas, foster psychological safety when (minor) lapses occur, conduct pre- and post-mortems for initiatives with ethical components, and create a culture of service by encouraging volunteer work and mentoring in ethics.

Ethical learning doesn't happen by rote. Employers should foster an environment that encourages workers to become more ethical by practicing moral reflection.

Ethical learning is a lifelong process, and it doesn't happen by rote (do this, don't do that). Neuroscientific research suggests that when faced with moral quandaries, we fall back on prototypes, or mental models. Our moral evolution requires us to add to and update those prototypes as we gain experience. So in addition to preparing people for onetime moral challenges, employers should foster an environment that encourages them to become more ethical in the long run by practicing moral reflection.

The benefits of ethical organizations are well documented: Such organizations are more attractive than others to employees, are less likely to become embroiled in scandals, and are more likely to be rewarded by investors, who increasingly focus on good governance and strong cultures as sources of sustainable value creation. In a previous article, "Building an Ethical Career" (HBR, January–February 2020), we wrote about a bottom-up approach to ethics, describing how individuals could take ownership of their moral development at work. In this article we draw on evidence from hundreds of research studies in business, psychology, and ethics to present a top-down approach to helping workers build moral character. Together the two approaches highlight the workplace's potential to be a moral laboratory where people can find the opportunities and support to learn and grow.

RECOGNIZE THE ROLE OF WORK IN OUR LIVES

Some Protestant theologians hold that work is inherently edifying. We would not go that far, but we do agree with the idea that work is an effective place for ethical learning, for several reasons.

First, work plays a huge role in many people's lives. Houses of worship, therapists' offices, and conversations with close friends and family are traditionally where moral learning occurs. We're not suggesting that those settings are no longer relevant or important. But a typical full-time employee spends far more time at work than in a mosque, church, or counselor's office. Indeed, many of us spend the majority of our waking hours there. How could work not affect our moral thinking and actions?

Second, work and life are more tightly intertwined than ever before (a trend exacerbated by the pandemic). The boundaries between our personal and professional lives have become blurred. That has happened not only because we spend so much time at work but also because of a push, especially among Millennials and younger workers, for greater authenticity—a desire to "bring one's whole self to work." Activism on the job is on the rise, with employees banding together at companies including Facebook and Google to encourage leaders to address issues such as diversity, immigration, and political discourse.

Third, we are likely to face ethical situations at work that we might not encounter anywhere else. Will we bribe a government official to secure a lucrative contract? Will we pad our expense account or "cook the books?" Will we speak up if we witness a boss bullying or harassing a subordinate? And more recently, should we enforce mask wearing? Can our employees work from home? At our jobs we have regulations to follow, customers to serve, contracts to uphold, and communities to engage with. Experience with each can foster ethical learning over time.

How can employers help their employees use the workplace as a laboratory for character development? To answer that question, we'll start by examining the role that experience and reflection play in the evolution of moral character.

LET EXPERIENCE BE A TEACHER

The University of Washington's Scott Reynolds has described a model of ethical decision-making based on research into how the brain processes novel stimuli. According to his model, we all have certain prototypes in our minds that guide our moral judgments. When facing a morally relevant situation, we automatically—often unconsciously—engage in a pattern-seeking process, looking to match the situation with one of our prototypes. If we find a match, we make an intuitive judgment. We then use our more conscious, higher-order reasoning to justify that gut reaction.

When we face a moral decision for which we lack a prototype, our higher-order reasoning kicks in sooner, to

assess and resolve the situation. Our existing prototypes then undergo an updating process. The more experience we have with varied moral situations, the more opportunities we have to learn and to refine our prototypes.

However, many employees—especially those new to an industry or an organization or to work itself—lack experience with or training about the unique ethical issues that may arise on the job. Approaching the workplace as a moral laboratory, then, requires giving employees opportunities to learn from new experiences, both simulated and real. The goal is to help them build prototypes that they can apply to an array of circumstances.

One way to do this is through experiential training. Whereas traditional teaching is didactic (think of a textbook, or a teacher at a blackboard), experiential training is hands-on and immersive, with the teacher playing a guiding role. To learn the laws of buoyancy through experiential training, for example, one would build a boat rather than read Archimedes.

Despite its proven effectiveness in academia and in corporate training programs, experiential learning has been slow to catch on as a tool for organizational ethics and compliance training. When researchers examined the ethics training at 71 large U.S.-based companies, they found that much of it was delivered in short doses and infrequently, such as annually or only during new-hire orientations. And often the training was solely online or lecture-based.

What would an effective experiential-training program look like? Companies could regularly offer classroom-based programs using real-world case studies. At Lockheed Martin, employees watch videos of scenarios involving everyday ethical challenges they might encounter at work. Small groups discuss the scenarios and explore techniques for upholding moral values, such as asking questions, reframing issues to take various perspectives into account, and developing guidelines about when and how to report violations.

CREATE A SAFE PLACE FOR REFLECTION

To turn your organization into a moral laboratory, however, you must move beyond scenarios and simulations and let employees learn on the job. Reflection is key. As the philosopher John Kekes has written, "insufficient reflection leads to loss of self-control, ignorance of oneself, and to a failure to align one's ideals and moral vision." Management scholars have identified reflection as a critical capacity for developing ethical expertise at work. Drawing on psychological concepts such counterfactual thinking (envisioning alternatives to events that have already occurred), social comparisons (evaluating one's attitude, abilities, and traits in relation to others'), and mental simulation (projecting oneself into hypothetical realities), they have persuasively argued that employees cannot learn from experience without engaging in moral reflection.

Honestly contemplating one's actions can be an uncomfortable process. But a now-familiar management concept can help overcome resistance to doing so: psychological safety, or an environment in which people aren't afraid to speak up, ask questions, admit mistakes, and seek help. Organizational leaders can create psychological safety by framing workplace ethics as a learning process and acknowledging that we must learn from failures as well as successes. Managers can encourage employees to speak up when they witness moral indiscretions. They can reassure workers that it's OK to ask questions when facing moral uncertainties—preferably before making any consequential decisions. And they can model humility by acknowledging that they don't have all the answers.

Of course, psychological safety is not a green light allowing employees to make as many egregious mistakes as they want to. Clear violations of ethical standards should be handled promptly and punished consistently. Research shows that tolerating unethical behavior sends the wrong signal to employees and can spark further misdeeds. Having a psychologically safe environment for ethical learning doesn't mean granting deviants free rein; it means giving well-intentioned people a space where they can learn through reflection.

INSTITUTIONALIZE GROUP DISCUSSIONS ABOUT ETHICS

Research has identified three core features of systematic reflection that lead to learning. The first is self-explanation—a process in which learners analyze their behavior to understand what happened and why. The second is data verification, whereby learners think through multiple interpretations of a given experience or experiences. The third is feedback, meaning both reactions to past performance and recommendations for future improvement.

To maximize learning, managers can make ethics an explicit part of postmortem meetings, also known as

Managers can make ethics an explicit part of postmortem meetings. They might ask: Did the outcomes of this project align with our values? Did we cross any ethical lines?

after-action reviews. They might ask: Did the process and outcomes of this project align with our values and code of conduct? Did we cross any ethical lines? Were any stakeholders unduly harmed? Reflecting on such questions can help seasoned members of the organization evaluate their current practices and decisions and help new members learn from their more experienced colleagues.

Postmortems can also be helpful in situations involving ethical dilemmas: instances in which right and wrong are not clearly defined. Sometimes employees must do something uncomfortable—lay off an underperforming worker who has a sick child, for instance, or cancel a contract with a longtime supplier after a more attractive option comes along. They may face quandaries when asked to balance the legitimate but competing interests of employees, shareholders, suppliers, and customers. In such situations, discussing how and why they reached their decisions can add nuance and wisdom to their ethical worldviews.

CONDUCT ETHICAL PREMORTEMS

Companies can also institutionalize a preemptive type of moral reflection—what the psychologist Gary Klein calls a premortem (see "Performing a Project Premortem," HBR, September 2007). Key decision-makers meet before a project to think through ways in which it could lead to ethical lapses. Consider the experience of a young strategy consultant working in-house for a large health care system. During his first year on the job he identified an opportunity for the system to legally sell anonymized utilization data on a secure third-party marketplace. His colleagues commended him for the idea, but in keeping with the organization's standard practice, the key decision-makers held a two- to three-hour premortem to ensure that the proposed initiative was ethical and aligned with the organization's values.

At the start of the meeting, all participants were asked to identify their strategic goals around the initiative and to reflect on how their own agendas might bias their perspective. For example, those representing the organization's financial interests might be motivated to overlook any morally questionable aspects of the project if it appeared that it would add significantly to the bottom line. The participants were then told to set aside those goals and biases as the group discussed the moral implications of the initiative and its impact on all stakeholders. To the surprise of the freshly minted strategy consultant, by the end of the meeting participants had determined that although selling such data was legal, third parties might use it in ways that were inconsistent with the health care system's values. The group decided not to move ahead.

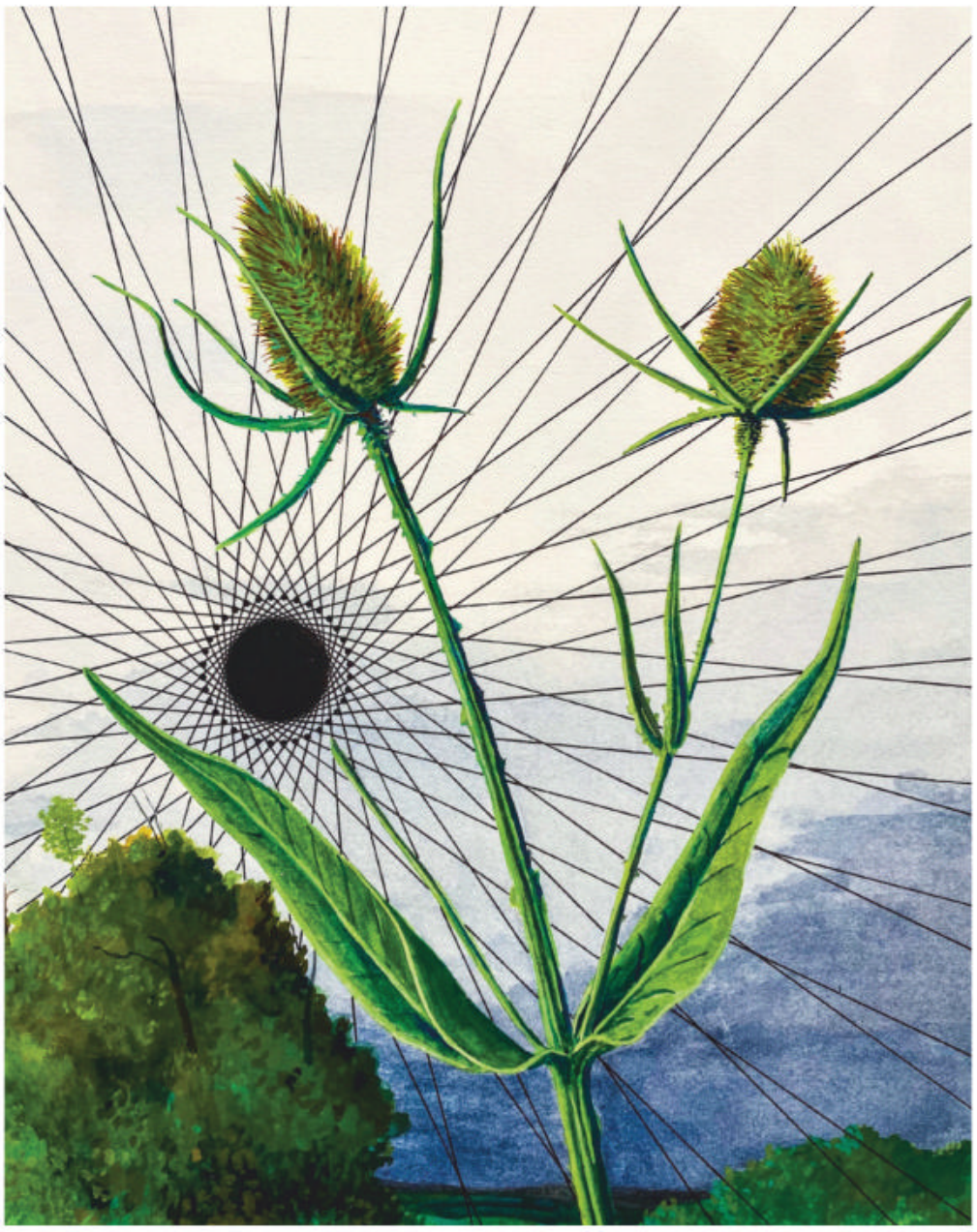
The premortem allowed the young consultant to participate in ethical learning: He acknowledged his potential biases, heard others' points of view, and reflected on moral considerations that he had not accounted for in his strategic model. By following a formal process of moral reflection, leaders of the health care system try to ensure that its employees and contractors always uphold the organization's stated values.

FOCUS ON SERVING OTHERS

Building a truly ethical culture involves more than just helping people to avoid doing bad things; it also requires empowering them to do good things. Research has shown that serving other people can reduce self-focus and raise awareness of moral concerns. It also contributes to psychological flourishing; studies have demonstrated a link between volunteer service and improved mood and well-being.

Universities often provide students with service-learning opportunities, such as consulting projects with nonprofit organizations, to help them gain practical skills while making a positive difference in the world and, it is hoped, becoming committed to service along the way. Research finds that such programs have a spillover effect on moral character. In one study undergraduate students who participated in a summer service-learning project outperformed their peers on a moral-reasoning assessment.

Companies can likewise provide opportunities to serve—something Salesforce has done since its founding, in 1999. Each year employees receive seven paid days off for volunteer work in their communities. They are also encouraged



to offer their skills, free of charge, to help nonprofits better utilize cloud technologies. And they can apply for Salesforce Foundation grants to help organizations they care about. The company reports that since its inception, employees have donated more than 6 million hours of service. It encourages other companies to join it in pledging 1% of equity, time, products, and profits to deserving organizations, communities, and causes. Although corporate volunteerism is not a foolproof inoculation against scandal, it's probably no coincidence that of all the Silicon Valley tech giants, Salesforce has been one of the least tainted by scandal in recent years.

The Pay It Forward campaign at the Savings Bank of Walpole, in which teams of employees are given $700 to perform random acts of kindness in the community, is another good example. The teams then report back and share uplifting stories with their colleagues.

Another way of nudging employees to look outward—and keep their selfishness in check—is to help them see the positive social impact of their everyday work. The Wharton professor Adam Grant has shown that connecting employees with the beneficiaries of their work helps them see the positive impact they are having and increases what psychologists call prosocial motivation—a desire to expend effort to help others. Deere & Company has invited farmers to speak to assembly-line workers about the difference its equipment makes to their farms and families. The fine stationery manufacturer William Arthur has shown employees video testimonials by customers (often the owners of stationery boutiques) expressing gratitude for the reliability and quality of the firm's offerings and for how its products help people prepare for some of the most important days of their lives.

ENCOURAGE MENTORS TO ADDRESS ETHICS

Dozens of studies have demonstrated the positive effects of mentoring on employee outcomes such as job satisfaction,

promotions, and salaries. Yet we suspect that very few organizations explicitly incorporate ethical issues into their mentoring programs and relationships—a missed opportunity.

Formal and informal mentors alike should be encouraged to discuss ethics and moral character with their protégés. By developing strong, trusting relationships, mentors can bring their vast experience to bear on the ethical learning of others. They can ask questions, share experiences, and offer meaningful insights that help mentees reflect on their own actions. They can also encourage mentees to conduct postmortems, again in an atmosphere of psychological safety.

SOME BELIEVE THAT a competitive business context brings out the worst in people. We argue that with the right environment and support, workplace experiences can also bring out the best. Organizations can be designed to help workers learn and evolve into their most moral selves. And as we've discussed, explicitly focusing on employees' ethical growth might not only keep an organization out of the spotlight for scandals but also lead to rewards from investors.

Although we have presented practical suggestions for creating an environment conducive to ethical learning, our intention was not to write a definitive "how to" article but to spark a shift in mindset about character development in the workplace. Acknowledging that work can serve as a laboratory for lifelong ethical learning highlights the role an organization can play in helping employees become their best selves. Organizations may not be obliged to provide such help—but we think that the chance to do so is a very promising opportunity.

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Harvard Business Review

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Stop Sabotaging Your Ability to Innovate

Avoid these psychological traps.

by Cyril Bouquet, Jean-Louis Barsoux, and Michael Wade

IN 1974 a young Kodak engineer named Steven Sasson was assigned a seemingly low-stakes task: to see if there was any practical use for a recent invention capable of turning light into data. He built a device that could capture images and digitally display them on a screen and eagerly presented it to his bosses. But he made a tactical blunder: He billed the new technology as "filmless photography." That positioning clashed with the very raison d'être of his audience—executives whose careers depended on the sale and processing of film—all but guaranteeing a tepid response. Instead of seizing an advantage in the consumer market, Kodak held off for nearly two decades, by which time several competitors were contesting the market space.

Why did Sasson make such a deeply flawed pitch? He was carried away by enthusiasm for his invention. He later said, "It never occurred to me that I was

Illustrations by **OLIVIA FIELDS**

at odds with the fundamental mission of the company for the last 100 years."

Innovators like Sasson can be their own worst enemies, derailed by personal traits, such as confidence and optimism, that are essential to creativity but can be toxic when taken to an extreme, and by emotions such as fear, doubt, regret, and frustration, which are typical when trying something new but can too easily stall or destroy an effort.

Having interviewed and studied hundreds of successful and unsuccessful innovators, we've learned that many don't appreciate, and therefore struggle to manage, psychological hurdles like these. And although practical advice abounds on how to innovate, from design thinking to lean start-up and sprint methodologies, in-depth guidance on conquering the mental challenges involved is harder to find.

In what follows, we draw on published interviews, videos, and speeches to describe the obstacles encountered by some high-profile entrepreneurs and illuminate the paths by which they moved forward.

THE FEAR OF GETTING STARTED

Fear can strike at any time, but it may be particularly pronounced as you contemplate crossing the threshold from thinking to doing. Pursuing your idea almost certainly involves risk—to your savings, your reputation, your career. Jeff Bezos has recalled telling his manager at the hedge fund D.E. Shaw about his notion to sell books online. "I think it would be a better idea for somebody who didn't *already* have a good job," his boss replied. For Bezos, that comment distilled the dilemma: Should he jeopardize his current comfort, status, and security for the uncertain prospect of future gains? When facing similar doubts, the following tactics can help.

Consult your future self. People are hardwired to avoid risky choices by magnifying the negative consequences that might ensue. An especially potent magnifier is what's called *future regret:* We imagine the self-recrimination we'll feel if our venture turns out badly. The desire to avoid that feeling encourages conservatism—but you can counteract it. Instead of focusing on the pain that would accompany a failed effort, imagine how you'll feel years hence if you play it safe and shelve your idea.

Bezos struggled for a couple of days before finding a productive way to frame his decision. He pictured himself as an old man reflecting on his life. "Would I regret leaving this company?" he asked himself. "I thought, *When I'm 80, I'm not going to think about that; I'm not even going to remember it. But… I know for a fact, I have this idea, and if I don't try, I'm going to regret [it].* As soon as I thought about it that way, I knew I had to give it a try." By projecting himself into the future, Bezos got a taste of the existential regret that comes from choices that run counter to our convictions or need for growth.

Let fear be a teacher. Compounding fears about what you're giving up, you may also worry about the odds of success. You might question the viability of your idea, your capacity to develop it, or your ability to break into an established market or influence a mature industry. Such fears may crystallize into a generalized foreboding that can bring you to a standstill. A common tactic for managing them is to suppress them and carry on regardless. But research shows that in doing so, you may miss important red flags. Fear isn't just an inhibiting force; it can be a powerful teacher, signaling that you are underequipped or underinformed. So pinpointing the source of your angst is critical to addressing it.

As Bezos committed to pursuing his venture, he was plagued by fears that it would fail. He told his parents that there was a 70% chance they would not get their seed money back. He was confident in the soundness of his idea, having rigorously analyzed the landscape and determined that books were the most viable products to sell online, but he was less sure that he had the knowledge to successfully execute on it. He realized that he could bolster his chances by securing access to a rich pool of tech talent and a wide array of books, so he relocated to Seattle—home of Microsoft and just a few hours' drive from the largest book distributor in the United States. His fears drove him to work out key technical and logistical challenges in advance.

By contrast, Bill Gates had great confidence in his ability to execute on the idea that would become Microsoft, but he had to overcome two personal liabilities: introversion and a youthful appearance. So when he pitched his (yet to be written) software to the makers of the Altair kit computer—making the call from his Harvard dorm—he introduced himself as Paul Allen, his unofficial and two-years-older business partner. Gates knew that if the customer showed interest, the more outgoing and mature-looking Allen would take the meeting. Years later Allen told the *Harvard Gazette,* "I had my beard going and at least looked like an adult, while Bill still could pass for a high school sophomore." Although Gates and Allen later fell out, Gates has said that entering into their partnership was the best business decision he ever made.

Fear can be a powerful teacher, signaling that you are underequipped or underinformed. So pinpointing the source of your angst is critical to addressing it.

Once you've identified the source of your fears, you can seek information or partners to compensate for your shortcomings in terms of competence or credibility or both.

THE FRUSTRATION OF SETBACKS

You've probably heard the adage about learning from failure. But as Indiana University's Dean Shepherd has emphasized, the process is not automatic: It requires conscious effort and discipline. These steps can guide you.

Dissect your failure. The trouble with failure, beyond the obvious, is that it generates negative emotions that impede learning: denial, anger, despair, and self-blame. Innovators are especially prone to those feelings because they identify so closely with their projects. To avoid that pitfall, start by dissecting your failure. Exactly what went wrong, and why? Which premises were false? Which ones held true?

Jimmy Wales was keenly frustrated in 2000 about the snail-like progress of his first online encyclopedia venture, Nupedia. He and his editor-in-chief, Larry Sanger, assumed that it "needed to be superacademic, or people wouldn't trust it." The entries were indeed on a par with academic publications—but so was the pace of production. "I spent about $250,000 getting the first 12 articles through the process," Wales has said. Eventually he decided to investigate the problem by writing an entry himself. He realized that the peer-review system was incredibly cumbersome for his contributors, who were unpaid. At that moment Wales understood that his initial plan wouldn't work. It was the first step in coming to terms with his disappointment and finding a path forward.

Face your grief head-on. As an innovator, you'll experience major letdowns, reversals, or rejections as threats to your dream and your ego. To deal with those deeply felt losses, our IMD colleague George Kohlrieser proposes a three-step process based on research with thousands of executives. It requires first bringing the grief to conscious awareness—putting a name to what you're feeling and discussing it with family, friends, and others to make sense of it. That will help you take the next two steps: accepting and then letting go of the loss, and taking action in a new direction.

Shortly after Wales's eye-opening experience with Nupedia, he and Sanger created a separate encyclopedia website powered by wiki software—technology that allows multiple people to work interactively on drafts. In just two weeks 600 entries came in. The contributors were not recognized authorities, and there was no way to control the quality of their submissions. "If I had tied my ego to the original design...I would have stopped," Wales has said. But because he was already half-resigned to moving on from Nupedia, he was able to shift gears. And so Wikipedia was born.

Reframe rejection. When James Dyson, inventor of the vacuum cleaner that bears his name, presented his product to the leading vacuum brands, he expected them to jump at the chance to license the first bagless sweeper. But he received the same sort of frosty reaction that Sasson had gotten from his bosses at Kodak, and for a similar reason: The new technology was seen as a threat to the companies' business model, whereby customers paid for machines once and for bags on a regular basis. Dyson reframed the rejections, focusing on what the companies *hadn't* said: They'd offered no compelling rationale for turning him down. "If they'd given me a really good reason, then I would have got nervous," he has recalled.

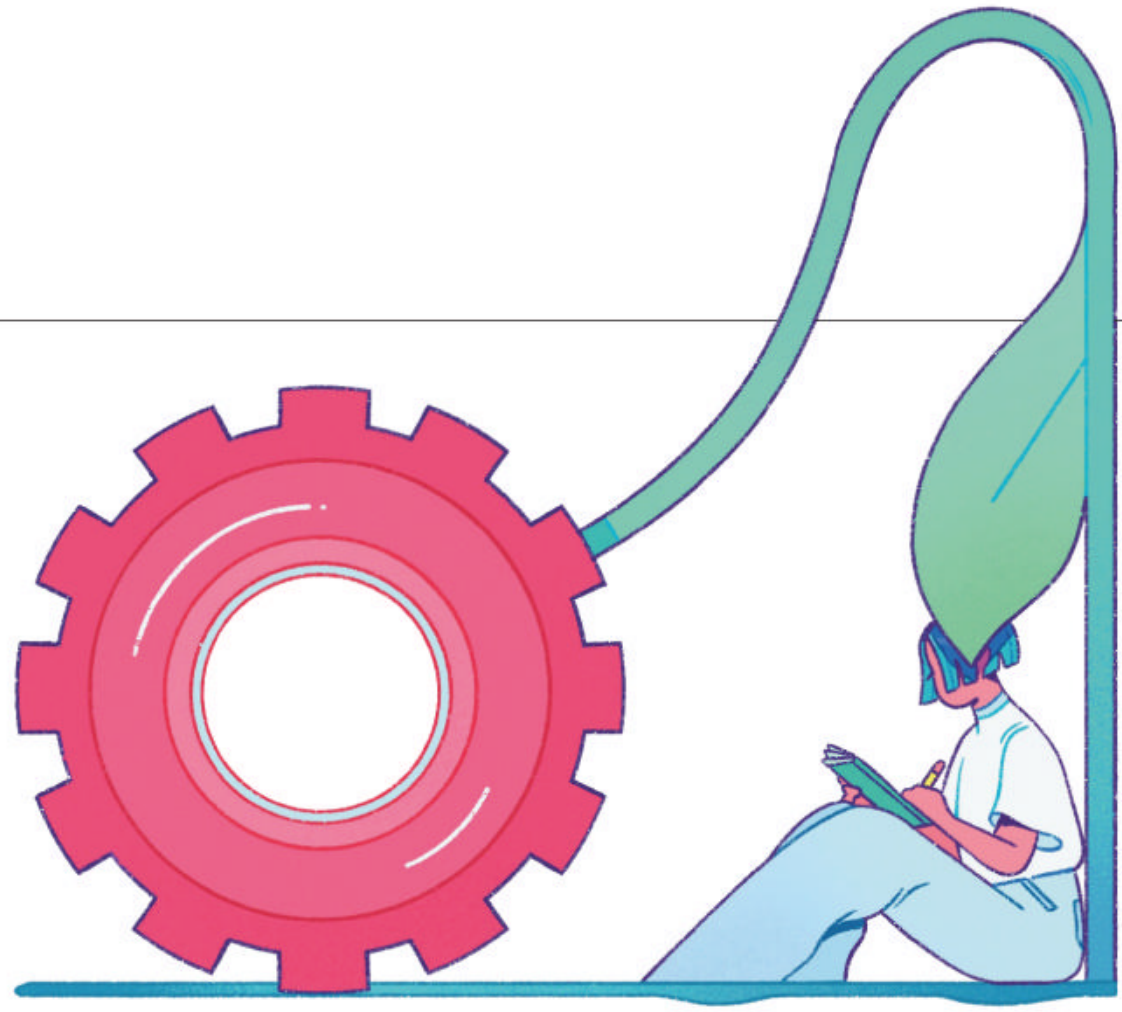
Dyson eventually licensed his design to a Japanese company with no history in vacuum cleaners and thus no reason to protect the sales of bags. It marketed the sweeper as a futuristic appliance to upmarket consumers exclusively in Japan, under the label G-Force. The royalties from that niche success helped Dyson manufacture a mainstream product under his own name.

Failure can present an opportunity for a turnaround. But if you're stuck in your grief, you may miss the chance.

AN EXCESS OF CREATIVITY

Creativity is, of course, indispensable to innovation. But too much of it can backfire. Your appetite for new ideas may override the need to stay on course. "I'm always superoptimistic about every new idea," Wales told *Wired,* "which is great, as long as you're mature enough to be able to say, 'I was superexcited about this two months ago and obviously I was on crack.'"

Creativity relies on curiosity and openness. Curiosity drives your questioning and sensemaking—the search for patterns, causality, and opportunities, and your efforts to bridge the gap between what you know and what you



don't. But unbounded curiosity can lead you astray in two ways. You may get drawn down a rabbit hole and lose sight of your original purpose. Or you may become mired in reflection, trying to plan for every contingency.

Openness to new experiences and ideas inspires you to ask *What if?* questions and connect the dots between unrelated concepts or domains. But an excess can cause you to jump from one idea to the next or bombard you with irrelevant details. If you've bogged down in your main endeavor, it can lure you away with the siren call of novelty.

To ensure that your creativity remains a useful fuel rather than a dangerous distraction, you can:

Recognize the moment of greatest peril. The biggest challenge in controlling your curiosity and openness comes as you are shifting from reflection to action—a time when you can ill afford to be distracted. This can be a struggle even for successful entrepreneurs.

Take Elon Musk. After making his fortune as a software entrepreneur, he founded SpaceX in 2002, aiming to lower the cost of space travel enough that one day Mars might be colonized. As he was getting the venture up and running—moving into its active phase—a project to create an electric roadster caught his eye. He invested in Tesla, became its chairman, and led its fundraising efforts. By 2008 he was the CEO of two cash-guzzling start-ups. Although both ultimately became viable businesses, the stress pushed him to the brink of a nervous breakdown that year, and the businesses' dueling demands nearly caused both companies to go under. "We only narrowly survived," he has said.

Musk concedes that his overactive imagination is as much a curse as a blessing. "It's like a never-ending explosion," he said on *The Joe Rogan Experience,* one that makes maintaining focus on his two flagship ventures a struggle. "Prioritizing has usually been out of desperation, not choice." The takeaway for innovators is that the same inquisitiveness and expansive thinking that fuel your creativity can lead you to overreach, not only jeopardizing your venture but also taking a dangerous personal toll.

Set limits on your involvement. Recognizing a tendency to let your creativity distract you is the first step in harnessing it. You can counteract it by limiting your involvement at the testing and implementation stages of your project. Jimmy Wales learned that his talent for coming up with new ideas did not necessarily help when it came time to execute on them. "In terms of both... Wikipedia [and] Wikimedia [the parent foundation], there's a CEO who actually runs things on a day-to-day basis," he told an interviewer. "I try not to be a bottleneck in any process."

Wales takes a similar hands-off role with his other ventures, such as Fandom and WikiTribune, often acting more as a catalyst than as a traditional leader. "This gives me the freedom to go out and evangelize," he has explained. "These are things I'm good at: talking to people and getting people excited about our work....That means that most of the headaches belong to...people who are actually good at [execution]."

This isn't to say that creativity has no role in the later stages of innovation. But it should be on tap, not on top.

Enlist a counterweight. Another option is to find a partner who can offset your creative exuberance. Wales hired Sanger to provide the linear thinking and rigor his encyclopedia ventures needed. Steve Jobs chose the calm, consistent pragmatist Tim Cook as a foil for his rampant creativity.

Of course, not all innovators can just hire or promote someone to be a counterweight. For those working in

The immersive nature of innovation can distance you from reality, causing you to neglect close relationships that are important sources of sustenance.

an established organization—intrapreneurs—the solution may be to seek a colleague's perspective. Recall that in his enthusiasm, Sasson neglected to step back, analyze his innovation in light of Kodak's existing business model, and tailor his presentation to win his bosses' support. Had he balanced his excitement with input from sales or marketing, he might have made a far more compelling pitch. "I was all ready to answer questions about how it worked," he has said. "They asked me questions about what the impact of this would be, what the ramifications would be, why would anybody want to look at their picture on a television set?...Well, I really hadn't thought about any of that."

AN ACCELERATION INTO HYPERDRIVE

Drive—a mix of tenacity and passion—is another core quality needed to breathe life into big ideas. But as with creativity, you can overdo it.

Demis Hassabis, founder of the pioneering AI start-up DeepMind, regards tenacity as table stakes for entrepreneurs. "You've got to go through the pain barriers to get anywhere useful," he has said. Passion supports tenacity by sustaining your energy amid setbacks and doubts. But if unbridled, it can hamper critical thinking.

Identify what's most important—and let other things go. Unbounded drive may lead you to persist with a dead-end goal or aim at an unachievable target. Before launching DeepMind, Hassabis started a gaming company to build on the success of *Theme Park,* for which he'd been the lead programmer and a codesigner. He set out to create a nation-building game from the ground up, with no holds barred. "I wanted to create new graphics engines, new AI engines...make an artistic statement," he has recalled. The result, *Republic,* took twice as long as expected, embodied only a fraction of the original vision, and got lukewarm reviews. It made money for its publisher but never for Hassabis. "We bit off too much," he has acknowledged. "You want to pick what dimension of innovation are you going to push hard."

Commit to breaks. The immersive nature of innovation can distance you from reality, causing you to neglect close relationships that are important sources of sustenance. You may alienate your personal support group—what Kohlrieser calls your *secure base*—as your fervor makes you less approachable and less willing to listen.

The conventional remedy is to take time for rest and reflection. But an intention to do so often crumbles as the pressure mounts. The *future* benefits of taking a break *right now* cannot compete with the immediate payoff of solving your latest problem—a cognitive bias called *hyperbolic discounting.* Over time you may forfeit not just your health and well-being but any opportunity to reorient your approach.

Knowing that you may resist "pausing" when it's most needed, you can commit in advance to doing so, scheduling breaks and asking others to hold you to them. More generally, you can tell your team that your passion and determination sometimes get the better of you and ask them to provide the perspective and flexibility you are inclined to lose. Rely on them to help you question your assumptions, envision alternative solutions, and possibly pivot or cut your losses. "Pay attention to negative feedback and solicit it, particularly from friends," Elon Musk said in a TED talk. "Hardly anyone does that, and it's incredibly helpful."

AS YOU PURSUE your breakthrough idea, you'll experience periods of anxiety, confusion, and discouragement that may stall your efforts. At other times, when signals are positive, you may get blindly carried away. We have focused on renowned innovators to show that they, too, must learn to cope with these swirls of emotion. They must leverage their best qualities and shore up or work around their shortcomings.

Whatever your own strengths and weaknesses, you can manage them only if you know what they are. Research on leadership shows that a lack of self-awareness doesn't just mean that weaknesses may push you off track; it can turn strengths into derailers as well.

You must become mindful of your habitual ways of thinking and behaving, your outlier tendencies and bad habits, what gives you energy and what frustrates you. Armed with those insights, you can reach out for feedback or mentoring—for help in becoming a more skillful version of yourself.

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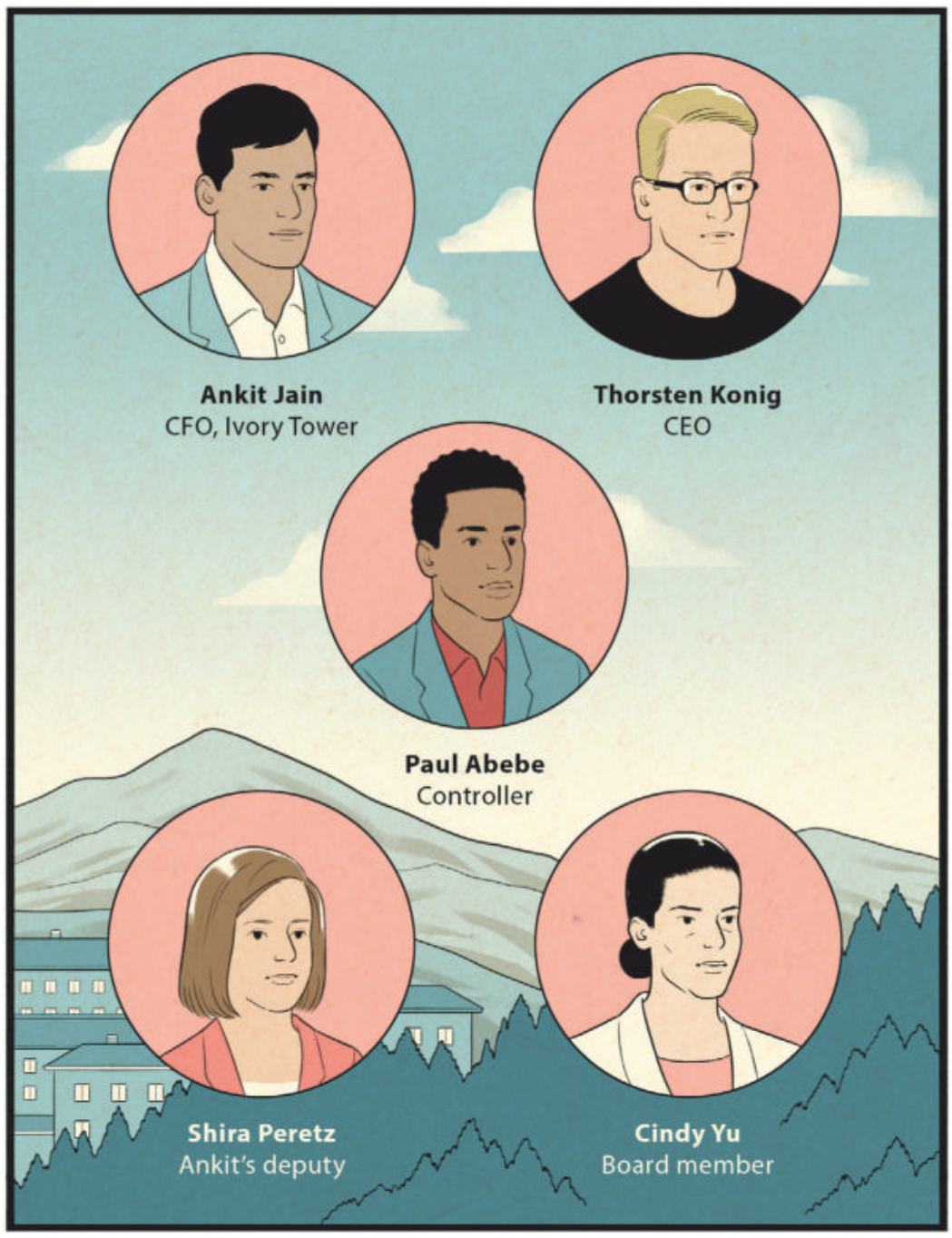
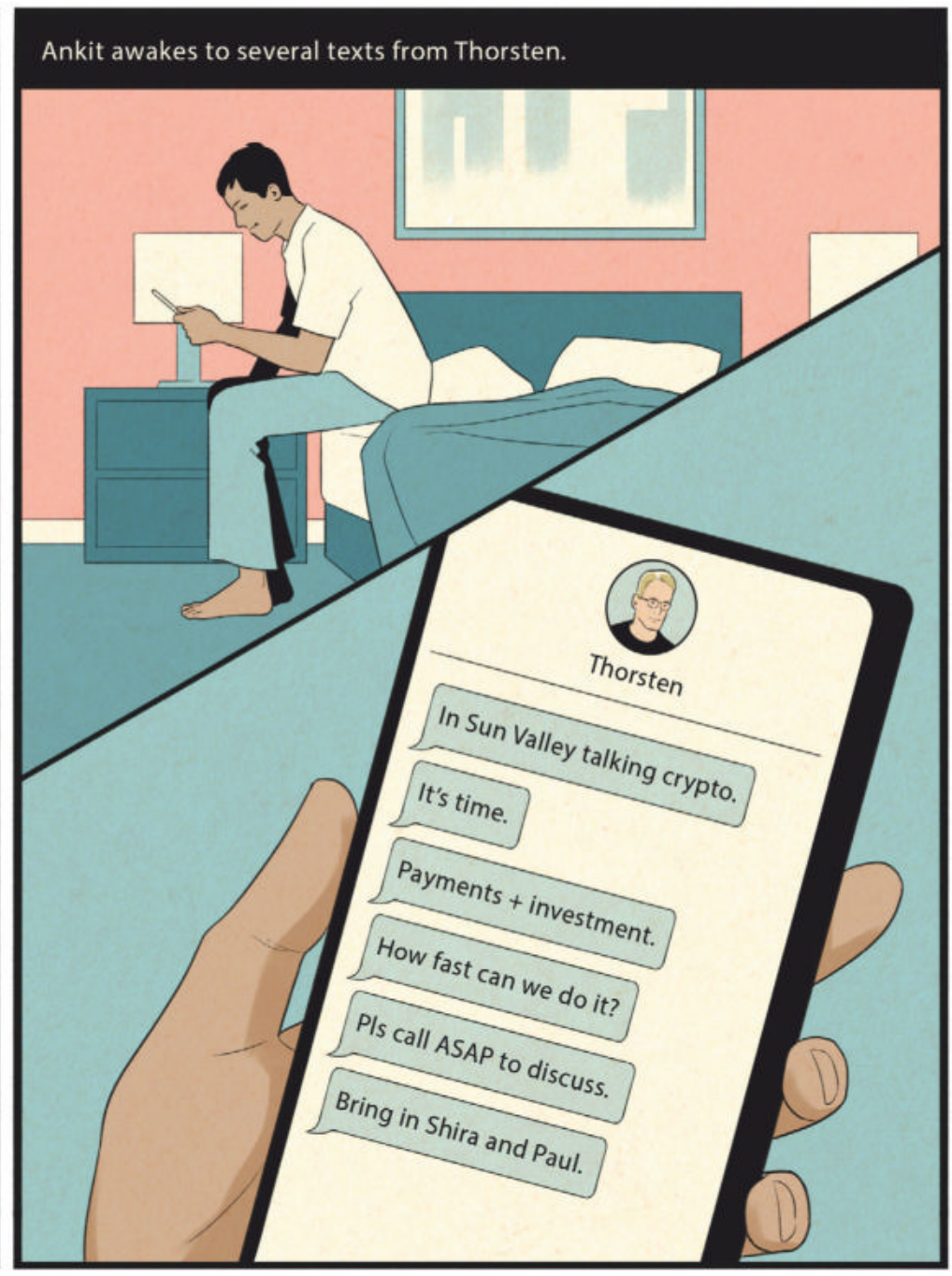




Case Study
Should We Embrace Crypto?

by Charles C.Y. Wang

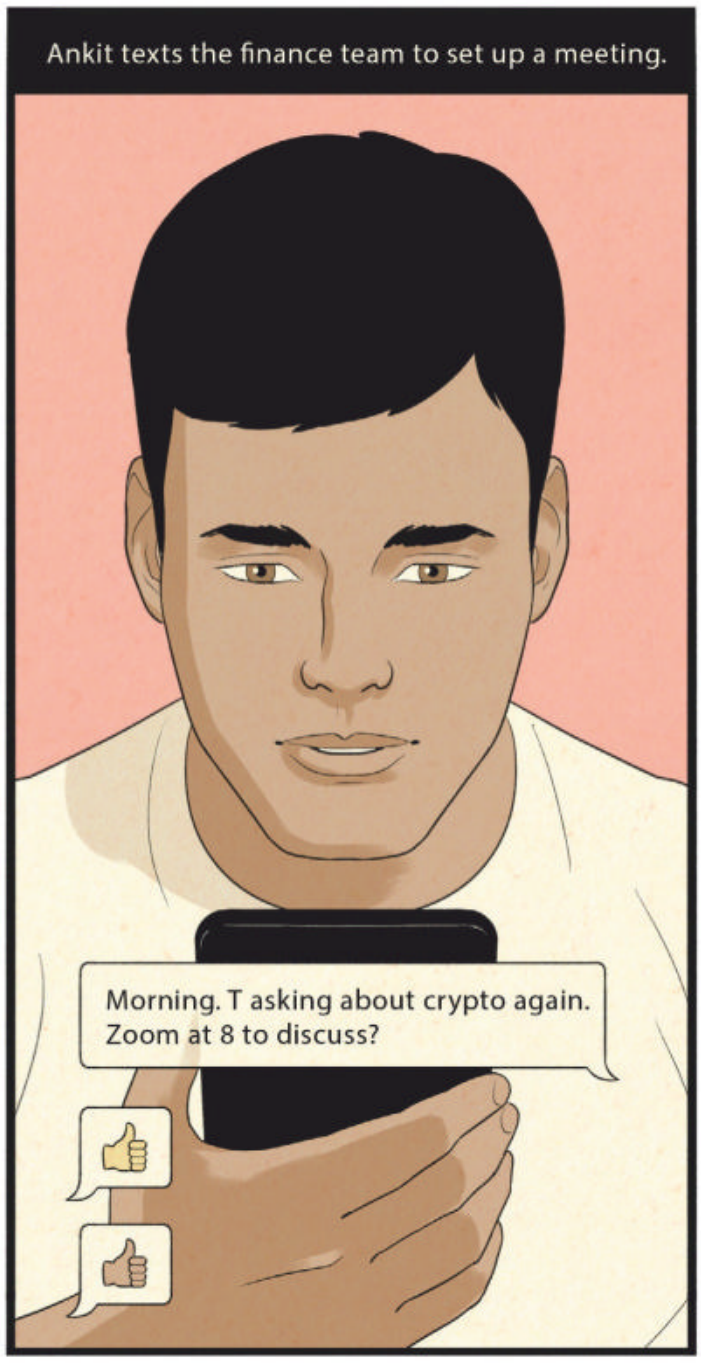
HBR's fictionalized case studies present problems faced by leaders in real companies and offer solutions from experts. This one is based on the HBS Case Study "Accounting for Bitcoin at Tesla" (case no. 121074-PDF-ENG), by Charles C.Y. Wang and Siyu Zhang, which is available at ***HBR.org****.*

THE PHONE BUZZED on the nightstand—once, twice, three times—waking Ankit Jain from what had been a restful sleep. Before he could reach the phone, three more texts came through. He knew who it would be: his boss, Thorsten Konig, the CEO of Ivory Tower, the world's leading online education platform.

In Sun Valley talking crypto.
It's time.
Payments + investment.
How fast can we do it?
Pls call ASAP to discuss.
Bring in Shira and Paul.

Ankit sighed. Thorsten was a brilliant technologist who had started and sold DayTradz, one of the first online retail trading platforms, before he was even 30. Ivory Tower was his second, also hugely successful, venture—one that was disrupting higher education by offering high-quality college and graduate-school courses to students around the world. Some, such as the intro to economics class taught by a Nobel Prize winner donating his time, were extremely affordable, while others, such as classes on personal branding with Kris Jenner and on M&A with Carl Icahn, were obscenely expensive. The idea was to have the platform's wealthiest users subsidize its poorest. The impact Ivory Tower

Illustrations by **ANUJ SHRESTHA**



had achieved in the five years since its launch—and in the 13 months since its IPO—was amazing. But sometimes being the CFO of a fast-moving company led by a "crazy genius" was exhausting.

For months now Thorsten had been talking about integrating cryptocurrency into the business. He was a huge proponent of Bitcoin[1] and had put about 5% of his own portfolio into it. Several weeks ago the CEO had asked Ankit to have his team look into accepting tuition payments and keeping some of Ivory Tower's cash reserves in crypto. In media interviews, Thorsten had also started alluding to "our crypto future," sparking speculation that he would build or buy a crypto trading platform.[2] But Ankit knew that Thorsten was committed to Ivory Tower for at least the next few years; he just wanted to combine it with his new passion.

To Thorsten, taking fees and making investments in Bitcoin were simple matters—akin to doing business in euros as well as dollars, which Ivory Tower already did. Bitcoin adoption could allow the U.S.-based company to further hedge itself against dollar inflation.[3]

Ankit knew that things were much more complicated. Although cryptocurrencies were gaining mainstream appeal, even established ones like Bitcoin were highly volatile, with value swings that made them look more like speculative stocks. Sure, it was possible to take payment in Bitcoin and then convert it to dollars, but the company had to figure out whether it made sense to build the internal capability needed or to hire a third-party vendor to handle transactions. And investing earnings in crypto was another thing entirely. Ankit's head hurt just thinking about the financial-reporting challenges. Then there was his fiduciary responsibility as CFO: Did shareholders really want Ivory Tower to bet on crypto if doing so might risk the capital needed down the road for developing better technology and courses and expanding the company's reach?

Unfortunately, Thorsten rarely took no for an answer. So Ankit rolled out of bed and texted his teammates. "Morning. T asking about crypto again. Zoom at 8 to discuss? He'll join at 8:30."

Within a minute, he'd received two thumbs up. By now everyone was used to Thorsten's impromptu meetings. Ankit just hoped this one wouldn't end with an edict.

Experience

EVALUATING THE OPTIONS

"I mean we *can* accept tuition payments in Bitcoin." Paul Abebe, Ivory Tower's controller, had jumped in immediately on the Zoom call. Everyone had been working from home since the start of the pandemic, and the company had decided it wouldn't require anyone to return to its Manhattan headquarters. "It's annoying—not as liquid as nondigital currencies, obviously. There would be IRS reporting and anti-money-laundering compliance issues to consider. But the question is: Why *should* we do it?"

"Thorsten says it fits with our ethos: embracing the future, spearheading new technologies, shaking up the stodgy educational community," Shira Peretz, Ankit's deputy, said. "Edo loves the idea too." She was referring to Edo Sanger, Ivory Tower's CMO. "He thinks it will make for great press."

"And will that translate into more users and revenues?" Paul asked skeptically. "What percentage of our students even care about this?"[4]

"Well, our blockchain and crypto courses are actually some of our most popular, but Thorsten admits that at this point most people probably won't pay in

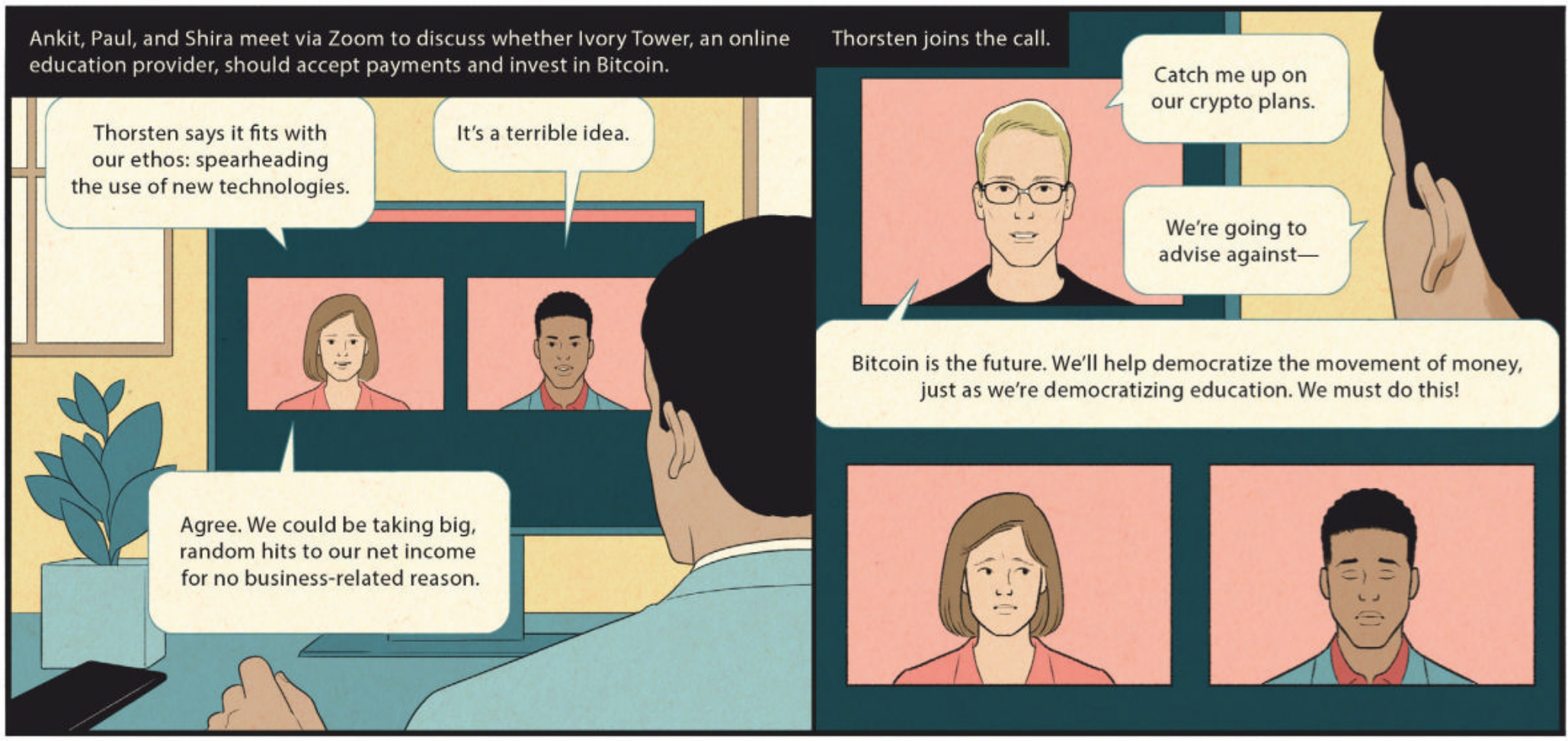
Case Study Classroom Notes

1. *Bitcoin is the first cryptocurrency, created in 2009. Users on its network can send Bitcoins to one another without intermediaries such as banks. Transactions are facilitated by blockchain technology, which allows a computer database to securely track and verify transfers of ownership.*

2. *Popular cryptocurrency trading platforms include Coinbase, Gemini, and Binance. Each currently has a trading volume in the billions of dollars.*

3. *In the second quarter of 2021, U.S. inflation rates rose sharply, roughly doubling, while Bitcoin's dollar value fell 41%.*

4. *A 2020 survey by Gemini found that about 14% of the U.S. population owned cryptocurrency.*



5. *What would make students more likely to pay in crypto-currency?*

6. *The U.S. Generally Accepted Accounting Principles and the Financial Accounting Standards Board do not offer guidance on the treatment of digital currencies. Companies must interpret how existing standards apply to them.*

Bitcoin,"[5] Ankit said. "He's more interested in investing our excess cash in it. Thoughts?"

"It's a terrible idea," Paul said.

"Agree," Shira said. "There's no GAAP guidance on how to account for this stuff yet.[6] But the AICPA says Bitcoin isn't considered cash or a cash equivalent, inventory, or a financial instrument, so it needs to be treated like an intangible asset, which means that if its value falls, we have to mark it down on our balance sheet. But if it goes up, we report those gains only when we sell. So if we're meaningfully invested, we could be taking big, random hits to our net income for no business-related reason. Communicating the company's performance will get more complicated."

"But if Bitcoin goes up in the long run, could it give us gains that smooth out or boost profitability?" Ankit asked. "Our shareholders aren't looking for perfect quarterly results. They want us to invest wisely to grow the company."

"I'm sorry, but an asset that goes from a valuation of $60K to $30K in one month cannot be considered a prudent investment," Paul countered. "How do we know that Bitcoin will be worth as much next year as it is now? And will we use just Bitcoin or also Ether or any of the thousands of other cryptocurrencies?"

"For now, Thorsten's talking only about Bitcoin," Ankit said. "It has the largest user base and longest history. And he's convinced it will go up in value."

"If our shareholders want to bet on crypto, they can do it directly," Paul said. "When we filed our S-1 for the IPO, we didn't say anything about a Bitcoin treasury."

"Well, we'd disclose it, and investors could sell if they're not on board," Shira said. Then she shook her head. "But I agree that it's too soon, too volatile. I vote for accepting Bitcoin payments—if it's doable without too much compliance and IT complications. Investments, no."

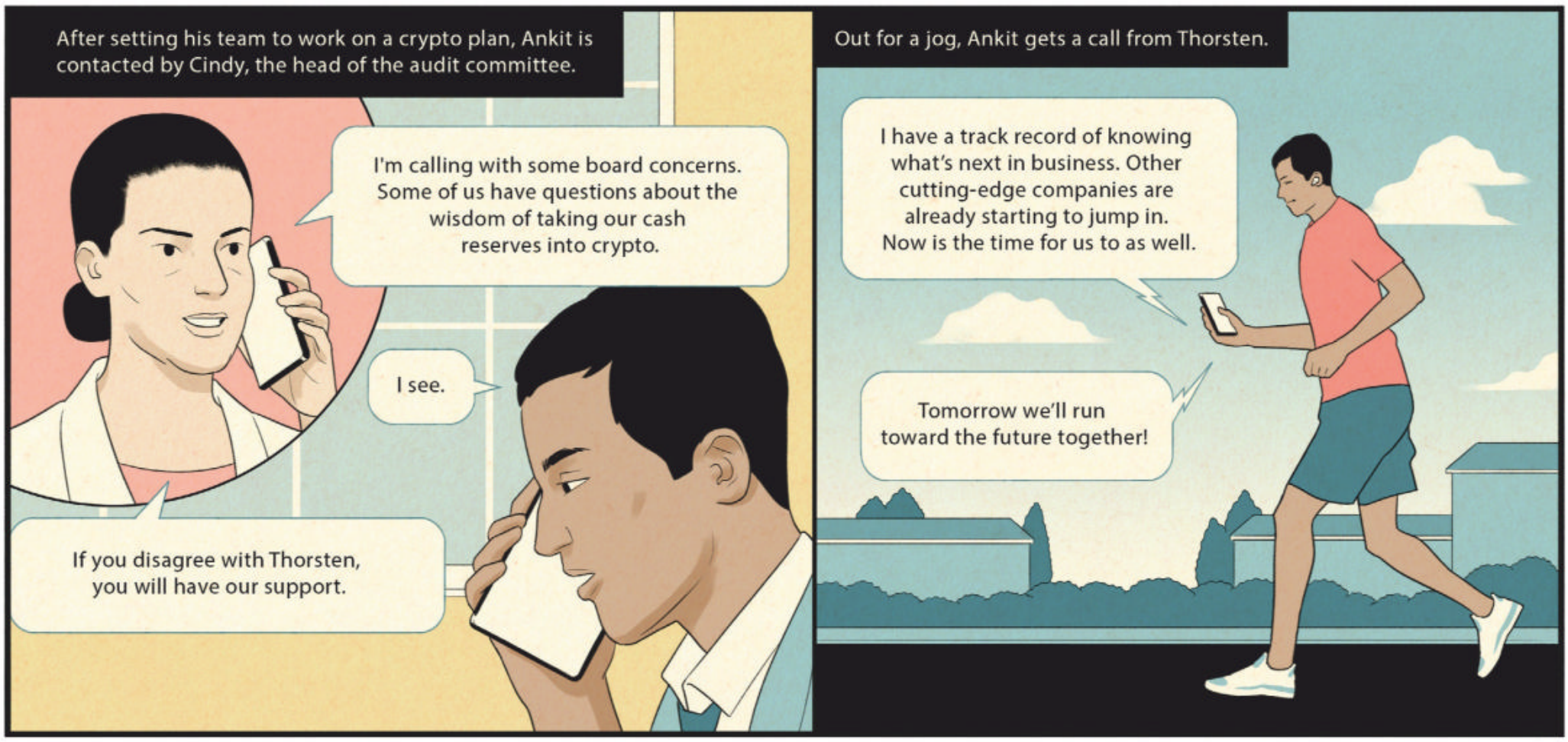
"I'm a no and a no," Paul said.

Just then, Ankit saw that Thorsten was in the Zoom waiting room. "OK, guys, here comes T," he said, letting the CEO in.

"Hello, friends!" Thorsten said as his face popped up on-screen. "What a fabulous day to be talking about the future. Catch me up on our crypto plans."

Ankit took the lead. "We've evaluated our options, and while we appreciate the potential benefits of Bitcoin, we're going to advise against—"

"Aha! I knew you guys would say this. Your job is to worry about the spreadsheets. I understand. But that's why I'm here: to help you see the big picture. Bitcoin is the future. There is no world in which it underperforms relative to major currencies over the next



decade.[7] We have so much cash in reserves. Why wouldn't we put some of it into assets that produce high returns we could invest in the company? We could get appreciation up to 10 times what we'd otherwise see. We'll help propel Bitcoin forward and democratize the movement of money, just as we're democratizing education. We must do this!"

Ankit could tell that Paul and Shira were deflated, if not surprised. This did seem like a fait accompli. What Thorsten wanted, Thorsten usually got.

THE BOARD'S CONCERNS

After setting his team to work figuring out how to take crypto payments and spending a few hours modeling various levels of investment in Bitcoin, Ankit checked his email. Cindy Yu, the company's newest director and the head of its audit committee, had sent a message asking him to call her.

"Cindy, hi! I just saw your message. What's up?"

"Hi, Ankit. Thanks for getting back to me. I'm calling with some board concerns. Can we speak off the record?"

"Of course."

"Thorsten has mentioned to several directors that he's interested in making Bitcoin a bigger part of Ivory Tower's business. At the same time, he's personally—and not insignificantly—invested in Bitcoin. Some of us are worried that this at least has the appearance of a conflict of interest."[8]

"I see."

"More important, some of us have questions about the wisdom of taking our treasury into crypto. Obviously, I expect that we'll discuss this at the board meeting next week, but I wanted to give you a heads-up. I suspect that Thorsten has asked you to present a plan to us. However, we want your candid opinion. He has his allies, of course. But as nonexecutive directors, we have to make decisions in the company's best interest, and we expect the finance team to make recommendations based on the same criteria."

"Of course."

"I know Thorsten is a force of nature and doesn't make it easy to disagree with him.[9] But if you do, the board needs to hear it, and you will have our support."

PRESSURE FROM THE CEO

At 7, Ankit was out for a jog when his phone rang: Thorsten.

"Ankit. Hope I didn't catch you at a bad time. I wanted to reconnect on crypto."

"Just on a run. No problem."

"Ah, keep running. I can talk as you go," Thorsten said. "I want you to know that I understand your hesitancy. And we can take

7. *What evidence does Thorsten have to back up this prediction? How can Ankit get him to envision a different future or the risks Bitcoin imposes?*

8. *Is there a problem when corporate executives invest in the same assets that their companies do?*

9. *What might taking a stance against his CEO mean for Ankit's career at Ivory Tower and beyond?*

Experience

it slow. But I have a track record of knowing what's next in business. First DayTradz, now Ivory Tower—both big successes, though many didn't believe they could be. You can trust me again now. Bitcoin has outperformed the dollar since its inception, is gaining popularity with our user base, and in my opinion will be more efficient and secure than regular currencies. Other cutting-edge companies are already starting to jump in. Now is the time for us to as well. Our support will help the crypto movement. We'll take power from large institutions and put it into the hands of the people. This fits perfectly with our mission."

Ankit wasn't sure how to reply, but Thorsten didn't press any further. "OK, continue your exercise, my friend. And tomorrow we'll run toward the future together!"

After the call, Ankit picked up his pace and tried unsuccessfully to zone out to his iPhone music. Was Thorsten right? If monetary exchange was going to move toward crypto, Ivory Tower should certainly get ahead of the shift. But what if governments clamped down on cryptocurrency? If Bitcoin lost all its value? The board members were right to ask hard questions. And Ankit wasn't at all sure how to answer them.

CHARLES C.Y. WANG *is the Glenn and Mary Jane Creamer Associate Professor of Business Administration at Harvard Business School.*

Should Ankit back Thorsten's Bitcoin plans or not? The experts respond.

AMRITA AHUJA *is the CFO of Square.*

Ankit should support the push into Bitcoin—as both an accepted form of payment and an investment on the balance sheet.

At Square we believe there's a high probability that the internet will have its own native cryptocurrency, and Bitcoin is the strongest contender. It's the most secure and resilient, with a principled, decentralized, transparent, and consensus-based development model. We foresee a future in which companies won't have to navigate fiat currencies and local rules and regulations that create complexity and high costs for consumer transactions across borders. Cost, time, and security inefficiencies will fall away, and companies that accept Bitcoin payments will be able to serve anyone in the world, including people who have historically been marginalized by financial systems or

who distrust federal banks (as in Latin America and certain other regions). This fits perfectly with Ivory Tower's mission of bringing quality higher education to underserved communities globally, and the company should get ahead of the game.

Thorsten's also right that having Bitcoin on the balance sheet will demonstrate to customers, employees (present and future), shareholders, and onlookers that it has "skin in the game" and will help make a more inclusive internet currency a reality. In addition, Bitcoin can provide attractive diversification and act as an inflation hedge.

Square invested 5% of its cash and cash equivalents in Bitcoin. We believe that the long-term opportunity is worth any near-term volatility and that our investment will enable us to learn and help improve the system while increasing trust in it. To that end, Square has set up the Crypto Open Patent Alliance to increase access to cryptotechnology through a collaborative patent library; Square Crypto, an independent team solely focused on contributing to the Bitcoin open-source work; a $10 million Bitcoin clean-energy initiative to incentivize miners to use renewable sources; and a $5 million endowment to fund education about Bitcoin and promote its adoption. Ivory Tower could similarly be at the leading edge of network development, building good relationships with regulators to enable consumer protection and address bad actors while also fostering innovation and figuring out how to master custody, insurance, exchange, accounting, payroll, tax reporting, and compliance.

Ankit, of course, needs to address all the concerns that his team and Cindy Yu have raised. But with Thorsten's support and a clear strategy and execution plan, he can make the case that the company has the opportunity to be at the forefront of this rapidly emerging trend. This is the time for him to truly lead as CFO.

ROXI WEN *is the CFO of Invitae.*

The case *against* Ivory Tower's moving to accept and hold Bitcoin is far stronger than the one *for* it.

Ankit should oppose the plan—but only after having a frank conversation with Thorsten to outline the downsides and explore other ideas.

Paul is right that cryptocurrency is too volatile to be of balance-sheet quality. If Ivory Tower wants an inflation hedge, many alternatives—gold and real estate, for example—are less risky. Moreover, managing Bitcoin transactions and custody will require the finance department to build entirely new capabilities, such as safe storage for Bitcoin keys, and it's unclear that that would be a good use of staff time. And the regulatory environment is extremely uncertain; difficult disclosure rules or divestment requirements could crop up at any time.

I also find it hard to believe people will want to pay tuition in Bitcoin. Most buyers of crypto want to hold it for capital appreciation and as an inflation hedge, just like Thorsten. Why would customers use their holdings to pay for courses, logging taxable capital gains now?

Thorsten thinks Bitcoin will be more secure and efficient than currencies backed by governments. But that's debatable, since fiat payments, particularly in developed countries, move securely and often more rapidly than Bitcoin blocks do.

Sure, Bitcoin may someday trade as frequently and easily as dollars, euros, and yen. Ivory Tower might get useful marketing value from being ahead of the curve and solidifying its reputation as a forward-looking innovator. However, given the complexities surrounding Bitcoin, I think there are more-effective ways to gain competitive advantage.

Ankit needs to artfully manage Thorsten. When you work with a smart, fast-moving leader who is full of ideas, you often feel your job is to constantly say no. But that's not a productive relationship. Instead, you want to have candid strategic conversations.

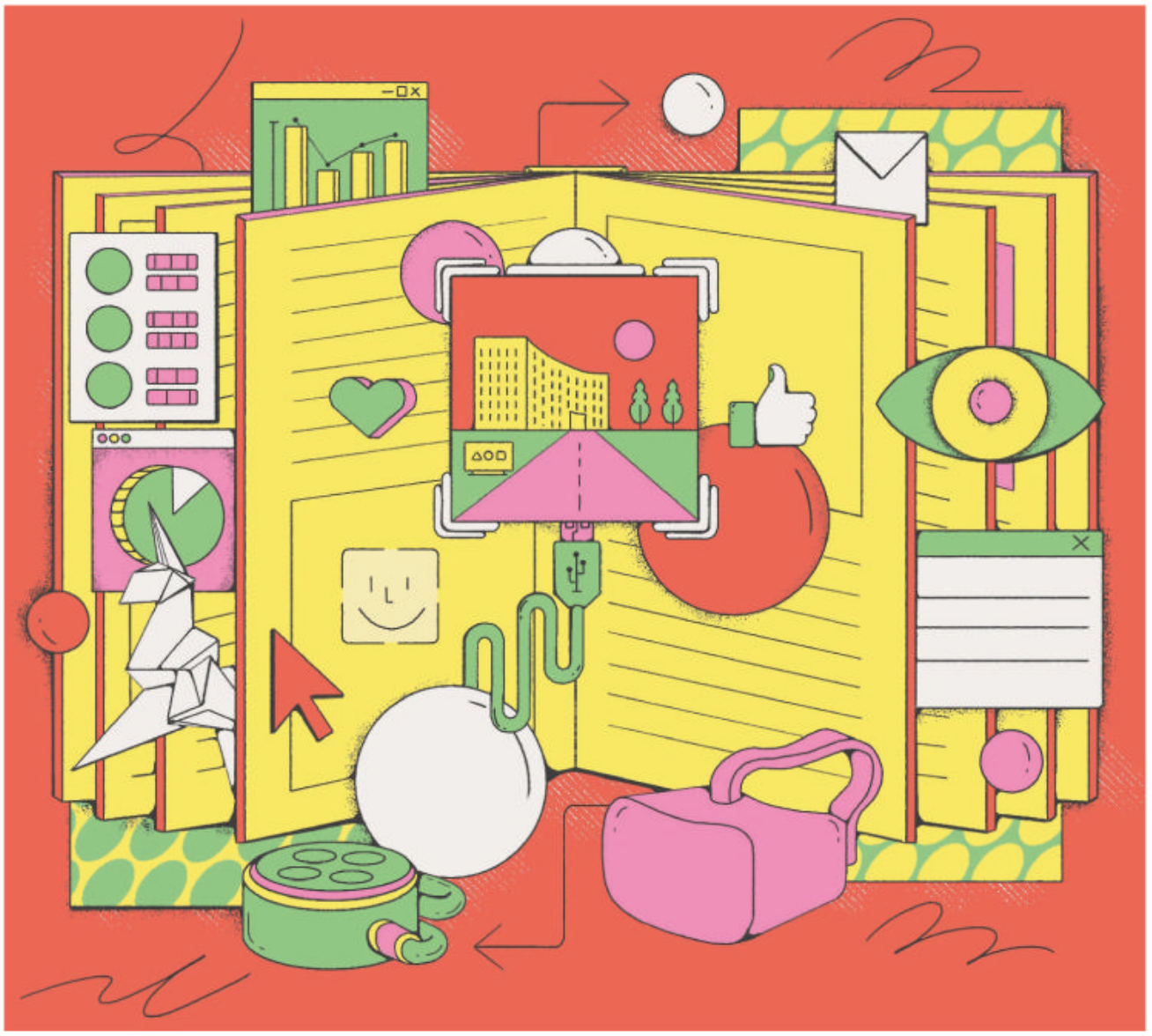
The two men should talk about what Thorsten really wants. Is it to embrace Bitcoin? Or to become part of the blockchain revolution? And if it's the latter, is there another way to deploy the technology in the business? For example, could it be used to set up an open, distributed operating system where users could create their own classes? Could payment collection happen via blockchain even when customers pay in traditional currencies? These are much broader questions, and Thorsten's answers might help Ankit find a way to honor the CEO's wishes without doing exactly as he says.

At my company my colleagues have lots of ideas about what to do with our significant cash reserves, but no matter how wild their suggestions are, I never just reject them. I sit down with people, ask what they're trying to accomplish, and brainstorm how to achieve those goals even if it's in ways different from what they've suggested. Ankit should do the same with Thorsten.

Of course, the CEO could put his foot down and persuade the board to back him. Elon Musk was able to do that with Bitcoin investments at Tesla. But even then, Ankit could pitch a lower-risk experiment—perhaps creating a small, separate holding company to test Bitcoin in.

The CFO has authority and credibility with Thorsten and the board. He shouldn't be afraid to use it.

HBR Reprint R2106M
Reprint Case only R2106X
Reprint Commentary only R2106Z



SYNTHESIS

Time to Rein in Big Tech?

by Alison Beard

IN DAVE EGGERS'S new novel, a global internet platform (the Circle of his previous book) has acquired a massive online retailer to create the Every—a company that has perfected the business of monitoring and monetizing the behavior of its billions of users. Its campus is dubbed Everywhere; those within it control the world and its wealth. Those outside—well, they're Nowhere, either mindlessly connected to technology or fruitlessly trying to fight it.

What a perfect summation of our growing fears about Big Tech.

In the past decade we've seen the Big Five—Facebook, Google/Alphabet, Amazon, Apple, and Microsoft—extend their reach in amazing ways. They dominate most segments of the tech market and in 2020 collectively earned income of nearly $200 billion on revenues of more than $1 trillion. Their founders have huge fortunes; their VCs and bankers, slightly smaller ones. Early employees cashed out on valuable equity; current ones (those who work on computers, not in factories or warehouses) are paid handsomely.

Meanwhile, many of the people whose personal data the tech giants profit from aren't faring as well. Lower and middle class wages have stagnated; small businesses are struggling; infrastructure, education, and health care remain underfunded; cybercrime is on the rise; and society is increasingly polarized owing to online misinformation and vitriol. From developed to emerging markets, those outside tech are capturing only a tiny fraction of the value it creates.

The widening gap between digital-age haves and have-nots is the subject of much current discussion. Two terrific podcasts—***Sway,*** featuring the tech journalist Kara Swisher, and ***Pivot,*** which she cohosts with New York University professor Scott Galloway—tackle these issues regularly and expertly. Swisher interrogates executives about their stances on privacy, hate speech, and anticompetitiveness, while Galloway, who wrote the 2017 book *The Four,* about Facebook, Google, Apple, and Amazon, rants articulately about the threats they pose.

This fall also brings new books that dig deeper into the challenges associated with Big Tech's reign.

Illustration by **ANA PÉREZ LÓPEZ**

Eggers's ***The Every*** is the most fun because it's fiction, cleverly speculating on the dystopia we'd face if these firms joined forces. The protagonist, Delaney, hates the Every for having "transformed proud and free animals—humans...into endlessly acquiescent dots on screens" while "never [seeming] sorry for any regulatory crime" or "misery-causing use of their products." She gets a job at the firm, intending to destroy it from the inside, but unfortunately the Every has already achieved what she described in her college thesis (a ploy to get noticed by Every leaders) as "Benevolent Market Mastery"—"symbiosis between company and customer...where all desires were served efficiently and at the lowest price," thus rendering antitrust action moot. After all, "if a company knows all and knows best, shouldn't they be allowed to improve our lives unimpeded?"

Her plan to ruin the Every involves suggesting crazy ideas (such as AuthentiFriend, which tracks your interactions with loved ones to gauge whether they love you back) that her unscrupulous colleagues unsurprisingly embrace. Though she hopes there's some privacy-invading line that users won't allow the Every to cross, she's wrong. And that's not a spoiler, because we see it playing out every day in the real world.

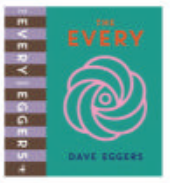
How can we curtail Big Tech? For that, let's turn to nonfiction.

Azeem Azhar, host of the HBR-affiliated podcast *Exponential View* and author of ***The Exponential Age,*** believes that our global economic and political systems, laws, and regulations need serious and speedy strengthening to counteract a technology ecosystem that is being invented and expanded at an ever-faster pace in ever-cheaper ways, leading to winner-take-all markets dominated by "superstar companies" that garner increasing returns on scale. Already, he worries, they could be "eroding our most cherished values."

Like Eggers, Azhar understands that consumers are willingly trading their data and cash for convenience, but he points to other big problems: the tendency of the behemoths to exploit smaller-scale producers and buy up nascent competitors, thus making the broader economy less dynamic. Plus they don't pay nearly enough in taxes.

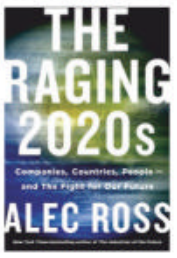
His proposed solutions are ambitious but compelling: Empower antitrust bodies to carefully review all big company acquisitions, and if an approved one proves anticompetitive, allow for a breakup. Demand interoperability between platforms so that people aren't tied to just one and can try new entrants. And increase international cooperation to ensure that companies do protect privacy and pay taxes.

You'll find similar themes in ***The Raging 2020s,*** by the innovation expert Alec Ross. He writes of a "power creep" that has left us ruled "more by companies than by governments" and led to "a cratering of economic prospects for hundreds of millions." Tech giants aren't the only culprits, but they're some of the biggest. In his chapter on tax avoidance, for example, Ross shows how Google saves billions by funneling money through various countries. One enraging data point: World governments lose more than $500 billion each year to these legal shenanigans. Like Azhar, Ross wants to see global institutions band together to protect regular people from rich corporations.



The Every
Dave Eggers
Vintage, 2021

The Exponential Age
Azeem Azhar
Diversion Books, 2021



The Raging 2020s
Alec Ross
Holt, 2021

System Error
Rob Reich, Mehran Sahami, and Jeremy M. Weinstein
Harper, 2021

Sway
New York Times

Pivot
Vox Media

"The future can still be molded to the benefit of most of us—or it can wind up serving only a select few," he warns. "It's up to us."

Maybe the technologists themselves will do better. That's the hope of Stanford professors Rob Reich, Mehran Sahami, and Jeremy M. Weinstein. In ***System Error*** they explain how the engineers building Big Tech (who become the investors funding it and the executives managing its expansion) have historically been taught to focus exclusively on optimization and efficiency. The authors would like to see a shift toward asking which problems are worth solving and which are too important to be reduced to a computational solution.

"Today the focus may be on... antitrust," they caution, "but there are...hundreds of would-be Zuckerbergs...in the pipeline to build the next world-changing... and potentially socially deleterious product." To avoid that future, they say, we need an overhaul of tech education, a radical rethink of algorithms and privacy, and an industry commitment to values-based design, including a code of ethics and licensure. The authors are decidedly pro-regulation, too, but they see an opportunity for meaningful, willing change from within.

I'm still skeptical, as are a chorus of others—not just podcasters and authors but also an increasingly vocal group of politicians and consumer and labor advocates who, in the absence of self-imposed reform, may finally move to beat down Big Tech before it becomes the Every.

HBR Reprint R2106N

ALISON BEARD *is a senior editor at HBR.*

SPOTLIGHT

Better Project Management

Projects have displaced operations as the economic engine of our times, but despite this shift, many leaders still undervalue project management. Companies need to reinvent their approach, embracing a new set of tools and principles. | page 37

Each article in this Spotlight is available as a single reprint. The complete Spotlight is also available as a package.

HBR Reprint R2106B

The Project Economy Has Arrived

Antonio Nieto-Rodriguez
page 38

By 2027, some 88 million people around the world are likely to be working in project management, and the value of project-oriented economic activity will have reached $20 trillion.

But research shows that only 35% of the projects undertaken worldwide are successful—which means we're wasting an extravagant amount of time, money, and opportunity.

To take advantage of the new project economy, companies need a new approach to project management: They must adopt a project-driven organizational structure, ensure that executives have the capabilities to effectively sponsor projects, and train managers in modern project management.

HBR Reprint S21061

Agility Hacks

Amy C. Edmondson and Ranjay Gulati | page 46

In the past 20 years, the agile approach to improving products, services, and processes has swept the business world. Rooted in software development, agile has spread to many other functions, and some companies have turned much of their organization, including the C-suite, into agile teams.

But agile is not suitable for all circumstances, particularly in carrying out the many key operations and functions of an organization that require consistency and efficiency.

This article describes how large established companies can use *agility hacks* to temporarily bypass their standard processes to act quickly and effectively while leaving the overall system alone.

HBR Reprint S21062

Make Megaprojects More Modular

Bent Flyvbjerg | page 50

In conventional business and government megaprojects—such as hydroelectric dams, chemical-processing plants, or big-bang enterprise-resource-planning systems—the standard approach is to build something monolithic and customized. Such projects must be 100% complete before they can deliver benefits: Even when it's 95% complete, a nuclear reactor is of no use.

On the basis of 30 years of research and consulting on megaprojects, the author has found two factors that play a critical role in determining success or failure: replicable modularity in design and speed in iteration. The article examines those factors by looking at well-known megaprojects, both successful ones and cautionary tales.

HBR Reprint S21063

HOW WE DID IT

HOW WE DID IT

The CEO of Chipotle on Charting a Culinary and Digital Turnaround

by Brian Niccol

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The CEO of Chipotle on Charting a Culinary and Digital Turnaround

Brian Niccol | page 32

Niccol was the CEO of Taco Bell before he became the chief executive of Chipotle, in 2018. He had watched Chipotle's launch and rise with fascination and had enjoyed its burritos and bowls. But now he saw that it needed to get its business back on track fast. Customer lines were moving slowly. Some workers didn't seem properly trained. The marketing was unmemorable. Niccol and his team focused on strengthening the company's culinary culture and harnessing the power of digital to enhance its fledgling mobile app. They reconfigured the restaurants to allow for skip-the-line pickup of online orders and created a second "kitchen" to prepare those orders, freeing the regular staff to attend to in-person customers. And they shifted marketing spend from a defensive, expensive, promotion-focused approach to social media and television, where the message has become much more resonant. Chipotle's to-go and delivery operations have been a vital source of revenue during the pandemic, with digital sales representing 46.2% of all sales in 2020.

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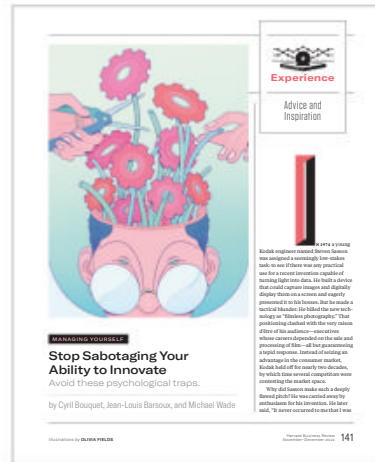
MANAGING YOURSELF


Experience

Advice and Inspiration

MANAGING YOURSELF

Stop Sabotaging Your Ability to Innovate

Avoid these psychological traps.

by Cyril Bouquet, Jean-Louis Barsoux, and Michael Wade

141

Stop Sabotaging Your Ability to Innovate

Cyril Bouquet, Jean-Louis Barsoux, and Michael Wade | page 141

Innovators can be their own worst enemies, derailed by personal traits, such as confidence and optimism, that are essential to creativity but can be toxic when taken to an extreme, and by emotions such as fear, doubt, regret, and frustration, which are typical when trying something new but can too easily stall or destroy entrepreneurial efforts. And although practical advice abounds on how to innovate, in-depth guidance on conquering these mental challenges is harder to find. The authors draw on published interviews, videos, and speeches to describe the obstacles encountered by some high-profile entrepreneurs and illuminate the paths by which they moved forward. They explore practical tactics for overcoming the fear of getting started, the frustration of setbacks, an excess of creativity, and a tendency to go into hyperdrive. Innovators must become mindful of their habitual ways of thinking and behaving, the authors argue. Thus armed, they can reach out for feedback or mentoring—for help in becoming a more skillful version of themselves.

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Features

NETWORKING

How to Succeed Quickly in a New Role

Rob Cross, Greg Pryor, and David Sylvester | page 60

A role transition, whether it's a promotion, a move to a new organization, or a fresh challenge in an existing job, can be a huge boost to one's career. But in today's hyper-collaborative and dynamic workplaces, successful moves aren't as easy as they once were, even for the most qualified, hardworking people. After analyzing employee relationships and communication patterns across more than 100 diverse companies, and interviewing 160 executives in 20 of them, the authors discovered an overlooked prerequisite for transition success: the effective use of internal networks. That involves five practices: *surging* rapidly into a broad network by asking a lot of questions and discovering boundary-spanning, innovative people across the organization; *generating pull* by understanding, energizing, and adjusting to new connections; *identifying* how to add value, where one falls short, and which people in the broad network can help fill any gaps; *creating scale* by using the network to engage other key opinion leaders, expand the scope and impact of one's projects, and more efficiently deliver outsize results; and *shaping* the network for maximum thriving by making connections that enhance one's workplace experience.

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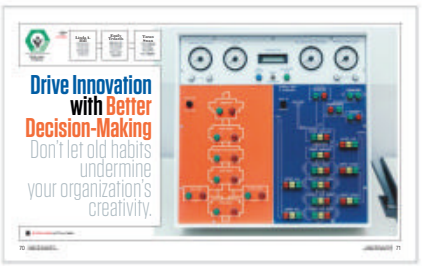
DECISION-MAKING



Drive Innovation with Better Decision-Making

Linda A. Hill, Emily Tedards, and Taran Swan | page 70

Despite their embrace of agile methods, many firms striving to innovate are struggling to produce breakthrough ideas. A key culprit, according to the authors, is an outdated, inefficient approach to decision-making. Today's discovery-driven innovation processes involve an unprecedented number of choices, from which ideas to pursue to countless decisions about how to conduct experiments, what data to collect, and so on. But these choices are often made too slowly and informed by obsolete information and narrow perspectives.

To align their decision-making processes with agile approaches, businesses need to include diverse (customer, local, data-informed, and outside) points of view; clarify decision rights; match the cadence of decisions to the pace of learning; and encourage candid conflict in service of a better experience for the end customer. Only then will all that rapid experimentation pay off.

The article suggests best practices for these interventions, drawing on the story of the transformation at Pfizer's Global Clinical Supply, which would go on to play a critical role supporting the rapid development of the pharma giant's Covid vaccine.

HBR Reprint R2106D

MARKETING

Net Promoter 3.0

Fred Reichheld, Darci Darnell, and Maureen Burns | page 80

Since its introduction, in 2003, the Net Promoter System, which measures how consistently brands turn customers into advocates, has become the predominant customer success framework. But as its popularity grew, NPS started to be gamed and misused in ways that hurt its credibility. Unaudited, self-reported Net Promoter Scores undermined the usefulness of NPS. Over time its creator, Fred Reichheld, realized that the only way to correct this problem was to introduce a hard, complementary metric that drew on accounting results. In this article he and two colleagues from Bain introduce that metric: the *earned growth rate,* which captures the revenue growth generated by returning customers and their referrals.

To calculate their earned growth rates, firms must have systems that gather data on the costs and revenues for each customer over time and must ask all new customers why they came on board. If the reason is a referral or recommendation, a customer is "earned"; if it's advertising, a promotional deal, or a persuasive salesperson, the customer is "bought."

Earned growth rates reveal the real-world impact of customer loyalty. Because they're auditable, they can help firms validate investments in customer service and convince investors of their businesses's underlying strength.

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DIVERSITY

Fighting Bias on the Front Lines

Alexandra C. Feldberg and Tami Kim | page 90

Most companies aim for exceptional customer service, but too few are attentive to the subtle discrimination by frontline employees that can alienate customers, lead to lawsuits, or even cause lasting brand damage by going viral.

This article presents research about the way bias occurs in the provision of core products and services ("exchanges"), the furnishing of help that exceeds the minimum required ("extras"), and the manner in which service is delivered ("etiquette"). By breaking customer service into these three dimensions, the authors offer a framework for identifying and addressing frontline bias in your own organization. They recommend talking to your customers, examining available data, and running experiments to get a better sense of what biases exist among your customer service workers. Armed with that information, you might try to mitigate prejudiced behavior by broadening employees' exposure to people of diverse backgrounds, giving them standard procedures to follow when they interact with customers, and encouraging a sense of responsibility to act fairly.

HBR Reprint R2106F

STRATEGY

How Direct-to-Consumer Brands Can Continue to Grow

V. Kasturi Rangan et al.
page 100

Direct-to-consumer (DTC) brands such as Allbirds, Casper, Peloton, and Warby Parker have creatively found a weakness in the marketing citadel of incumbent brands. By using data gleaned from daily interactions with customers, these brands have been able to adapt how they serve their unique customer communities across a start-to-finish purchase journey. The best of them have parlayed that ability into a profitable business model applied across multiple channels and customer segments. But as successful DTC brands mature, they must recognize the need to evolve. The authors offer four principles for continued success: (1) Focus on deepening customer relationships, not just making comparisons with competitors. (2) Accompany the customer beyond the initial transaction. (3) Omnichannel is about value addition, not cost reduction. (4) Strengthen the core first; consider extensions later.

HBR Reprint R2106G

NEGOTIATION

Rethinking Negotiation

Barry Nalebuff and Adam Brandenburger | page 110

For decades, negotiators have been working out agreements by focusing on interests, not positions. But the messy problem of how to share the gains created by deals has remained unresolved—until now. The answer, argue Yale's Nalebuff and NYU's Brandenburger, lies in accurately identifying and sizing the negotiation "pie," which they define as the *additional* value produced by an agreement to work together. It's the value over and above the sum of the two sides' best alternatives to a negotiated agreement, or BATNAs.

The pie most people have in their heads, however, is the total value available to be split. Because of this, they argue over the wrong numbers and issues, taking positions that they think are reasonable but that are in fact self-interested.

Once the pie is properly understood, the allocation rule is simple: *The parties in a negotiation have an equal claim on the pie, so it should be divided evenly.* This is true regardless of what they can accomplish on their own, because both are equally needed to create the gains. This principle can be applied in a variety of increasingly complicated real-world scenarios, which the authors walk readers through in this article.

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SUSTAINABILITY

Accounting for Climate Change

Robert S. Kaplan and Karthik Ramanna | page 120

Corporations are facing growing pressure—from investors, advocacy groups, politicians, and even business leaders themselves—to reduce greenhouse gas (GHG) emissions from their operations and their supply and distribution chains. About 90% of the companies in the S&P 500 now issue some form of environmental, social, and governance report, almost always including an estimate of the company's GHG emissions. The authors describe these as "catchall reports that are often made up of inaccurate, unverifiable, and contradictory data." They propose a remedy: the *E-liability accounting system,* whereby emissions are measured using a combination of chemistry and engineering, and principles of cost accounting are applied to assign the emissions to individual outputs. The authors provide a detailed method for assigning E-liabilities across an entire value chain, using the example of a car-door manufacturer whose furthest-removed supplier is a mining company, which transfers its products to a shipping company, which transports them to a steel company, and so on until the car reaches the end customer.

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ETHICS

Building an Ethical Company

Isaac H. Smith and Maryam Kouchaki | page 132

Just as people can develop skills and abilities over time, they can learn to be more or less ethical. Yet many organizations limit ethics training to the onboarding process. If they do address it thereafter, it may be only by establishing codes of conduct or whistleblower hotlines. Such steps may curb specific infractions, but they don't necessarily help employees develop as ethical people.

Drawing on evidence from hundreds of research studies, the authors offer a framework for helping workers build moral character. Managers can provide experiential training in ethical dilemmas. They can foster psychological safety when minor lapses occur, conduct pre- and postmortems for initiatives with ethical components, and create a culture of service by encouraging volunteer work and mentoring in ethics.

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Innovation Won't Wait for You

BY MICHAEL MIEBACH

MICHAEL MIEBACH IS THE CEO OF MASTERCARD

To read more insights from Mastercard's Become Index research with Harvard Business Review Analytic Services, visit:

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The pandemic took many of our daily routines by storm—even chocolate.

Mars Inc., the maker of M&M's and Snickers, sells a lot of candy at checkout counters and during Halloween. But as with many other norms the pandemic changed, candy sales dropped significantly in 2020 as people avoided going to stores.

The company needed to find new opportunities to get in front of its customers and give them new ways to buy. So it recreated Halloween as a virtual event, letting customers buy digital credits that trick-or-treaters could redeem for real candy.

This response to the pandemic was representative of the intense creative disruption going on across industries. Businesses cast aside old models and quickly created new ones to take their place. Innovations that usually take years were rolled out in weeks.

As the world gathers its strength after the initial shock of the pandemic, there's now an opportunity for businesses to consider what they've learned through the peak of the crisis and where we all can—and should—act.

The most important insight: Innovation won't wait for you. Nor will consumers. In survey research for our Become Index, people said they would seek out companies and businesses that invest in the latest digital tools and prioritize data privacy and security. They're willing to pay more for a better experience—and willing to move away if they're let down. Many businesses are responding to these interests: We saw an increase of over 10% in executives putting a high priority on innovation, even at the height of the pandemic.

At the same time, many brands weren't meeting customers' demands last year. Our research found that plenty of companies missed opportunities either by failing to roll out new technologies their customers were looking for, like contactless payments; not making product returns easier; not building intuitive digital experiences that go beyond apps; or underestimating needed investments in data security.

There are useful instances of companies that focused on the right strategies. Take the example of European telco Vodafone and its accelerated investment in data networks. During the pandemic, Vodafone saw traffic on its networks spike 50% as people turned to e-commerce, remote work, and remote learning. While some companies might look to conserve cash in a crisis, Vodafone's customers needed more bandwidth, so the company built it out.

McDonald's also moved quickly to provide new digital tech that focused squarely on its customers. It invested in drive-through express lanes for mobile app users and GPS alerts for restaurant workers to prepare orders in time for a mobile-app customer's arrival.

At Mastercard, our work focused on safely moving billions of dollars in transactions that migrated to e-commerce and bringing touchless payments to stores around the world to give people more peace of mind.

These types of investments in digital tools and infrastructure were important when socially distanced services became a must. But they also increased choices and convenience for customers. Those types of innovations that serve a need in times of crisis and add long-term value are by far the most beneficial.

Of course, not every new concept will meet that high bar, but it's necessary to keep testing to uncover such innovations. That will help companies prepare for customers' changing needs and help them find their way through if a new storm hits.

"I do about five drafts of each book. The process is good. It's like marinating and seasoning."

Brigitte Lacombe

Danielle Steel

*Working on an old Olympia typewriter that she's had since the start of her career, Steel has written 170 novels. Her debut—*Going Home*—was published when the first of her nine children was a toddler, and she completed many of the rest while her kids were at school or sleeping, often juggling multiple drafts of different books at once. Her latest is* Flying Angels. *The best-selling author attributes her popularity to being able to write honestly about "the things that hurt us or scare us" while always giving her characters "safe harbor" and her readers "a sense of hope."*

Interview by Alison Beard

HBR: Why and how do you produce at such a crazy pace?

STEEL: I used to not do as many books because I was bringing up nine children. But people were saying, "Can't you write more?" My publisher asked me to go from four to six books a year, and I thought, *There's a challenge.* I've always worked on several books at once anyway—like an artist working on different canvases, putting them aside and coming back. I have a lot of energy, and I don't sleep a lot. I have no hobbies. I don't do gardening or macramé. I've never taken piano lessons. I'm very, very disciplined. I work about a 20-hour day. I take five days off at Christmas and a week in summer. Part of it is that my house emptied out. When your kids are young, you're running to ballet class, soccer practice, the orthodontist. But when that's gone, it's like *What do I do now?* My marriage ended around the same time the kids left, so I just worked more and more. I don't have anything else to do!

When did you realize writing could be a career?

I was working in an ad agency, and one of our accounts was a magazine. The publisher told me, "You write very well. You should write a book." I was 19, married with a new baby, and I thought, *Oh, OK.* Youth is so bold; you think you can do anything. I tried it, and I enjoyed it. My husband had a friend whose father-in-law was an important agent, and I gave him my book. He took forever to get back to me and finally said, "This isn't your talent. You should enjoy your baby, learn to cook, blah, blah." Then I found a second agent—a woman—who was very interested and sold the book to Simon & Schuster. By that point I'd already written another book. Then I wrote five more, but those didn't sell, so don't ask me why I kept at it. I just got hooked. Finally, after about 11 years, I decided to see if I could make a career of my writing. And I did.

Did you have any mentors?

That man who told me to forget about writing was actually Alex Haley's agent, and Alex, who wrote *Roots,* became my mentor. We met at a luncheon, and he read my first book and said, "You're going to be famous one day." He was a good friend and a father figure to me. I'm a terrible night owl, and he was too. He used to call me at 3 in the morning: "Are you working?" "Yes, I'm working." "OK, good." Then he'd hang up. That support was important, because my husband did not like that I was writing. He thought it was inappropriate. So my job was this dark secret, and I was always tiptoeing around trying not to inconvenience anybody. But it became very awkward when I suddenly had this massive career and was famous.

With so many best sellers, are you always chasing another?

In a word: yes. I'm always afraid that my next book will be the one everyone hates, and then I'm so thrilled when it isn't. I mean, I don't go into hysterics if it doesn't hit number one. But I think, *Why didn't that do better? Should I have done something differently?* I'm very driven to compete with myself. I guess I chase excellence.

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