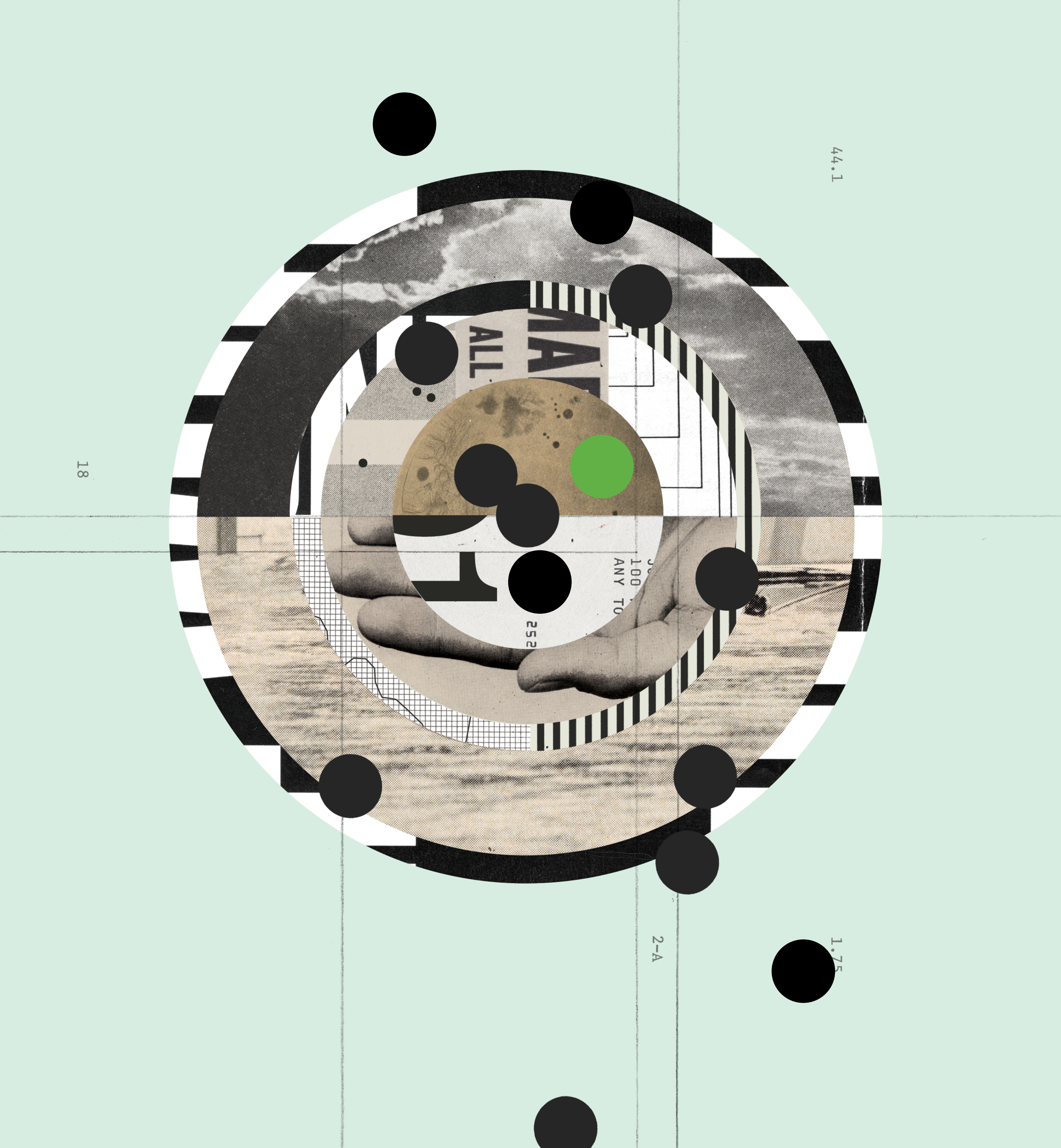
Deloitte **INSIGHTS** *Magazine*

Spring 2021

28

Leading beyond the disruption



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Leading beyond the disruption

As leaders, you're adept at focusing on the horizon, anticipating opportunities, challenges, and disruptions for your organization, and planning accordingly, but a disruption of the magnitude of COVID-19 necessarily broadens your scope. The global pandemic has demonstrated that existential threats should be considered as carefully as new market entrants—that the intangible can wreak just as much havoc as the tangible on your organization's sustained success.

We've collected fresh research, ideas, and perspectives from Deloitte specialists to help you address big, amorphous issues like trust and climate change as well as more proximate and concrete issues like the power of positioning tech leaders as strategic partners to the C-suite.

Trust has evolved from an intangible driver of customer loyalty and employee retention primarily managed through PR and corporate communications into a tangible driver of organizational success. On page 16, Punit Renjen, Deloitte's global CEO, shares his thoughts on how leaders can move from talk to action to invest in, rebuild, and renew trust in their organizations.

Once relegated to companies' lists of corporate social responsibility initiatives, climate change now owns a spot on most firms' strategic agendas. On page 42, Deloitte sustainability specialist Michael Raynor and researcher Derek Pankratz explain how your company can determine where to act and how to have the most impact.

And on page 30, we're bringing you insights from Deloitte's 2020 Global Technology Leadership Study, which found that "tech vanguards"—organizations that lead their peers in digital vision and strategy, technology function maturity, and overall market leadership—are focused on innovation, customers, and growth, and more apt to remain bullish in times of economic adversity.

You might have noticed that this issue looks and feels quite different from our previous publications. We've redesigned our pages and we're continuing to evolve to help surface key insights at a glance. We've also transitioned to 100% recycled paper to ensure that we're living Deloitte's sustainability values while delivering tangible value to you.

We hope you like what you see. Please feel free to send me your feedback, and let me know what topics you'd like us to cover in future issues. Our goal is not just to inform and educate, but to help, engage, and inspire.

Best,

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Punit Renjen is Deloitte's global CEO and a member of the Deloitte Global Board of Directors. Prior to his current role, Renjen served as the chairman of Deloitte LLP from 2011 to 2015. He served as CEO of Deloitte Consulting from 2009 to 2011. Outside of Deloitte, he is a member of the Business Roundtable, the International Business Council of the World Economic Forum, and several not-for-profit boards including the US-India Strategic Partnership Forum (vice chairman). Previously, he served as the chair of the United Way Worldwide.

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1

COVID-19 and the contactless economy

Asia-Pacific consumers go virtual even faster than expected

One of the most marked impacts of the COVID-19 pandemic has been the rise of the contactless economy. On the demand side, people turned to digital technologies that made it possible to virtually operate at scale. On the supply side, organizations pivoted to meet this new demand by leveraging technology to create new offerings and experiences. This phenomenon will likely persist.

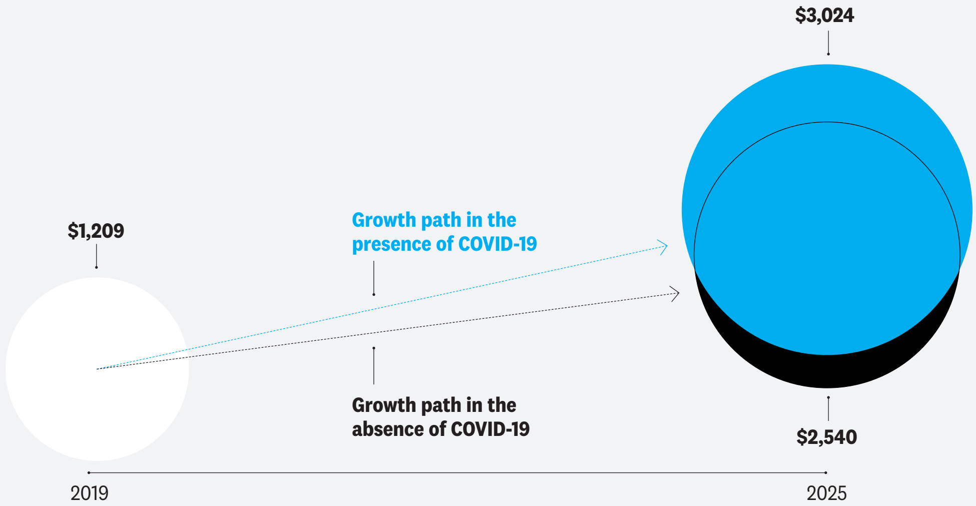
In the Asia-Pacific region alone, "at home" consumption—involving activities such as online shopping and doctor's visits via telemedicine—is poised to become a US$3 trillion annual market by 2025. According to our analysis, that's 20% larger than what it would have been if the pandemic had not struck, representing 30% of the six sectors' revenue in which "at home" consumption is most active.

This gives companies the opportunity to transform their business models to unlock value from the contactless economy's unanticipated rise. However, leaders could face critical decisions to address new sets of complications and risks such as the complexity of identifying their organization's customers, a possible erosion of trust, and legacy technology hindering the transformation.

Read this article online at www.deloitte.com/insights/contactless-economy.

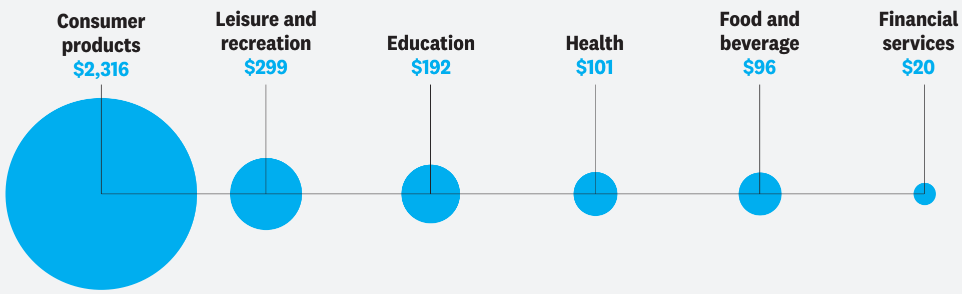
Infographics by Francesco Muzzi

APAC "at home" consumption market size (2019–2025)
US$ billions

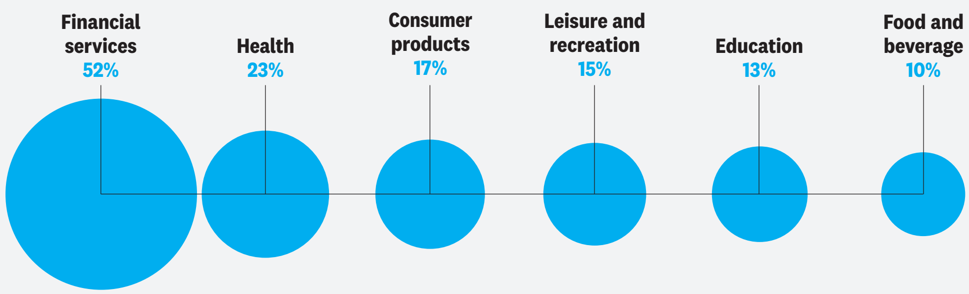


Breakdown of "at home" consumption by category

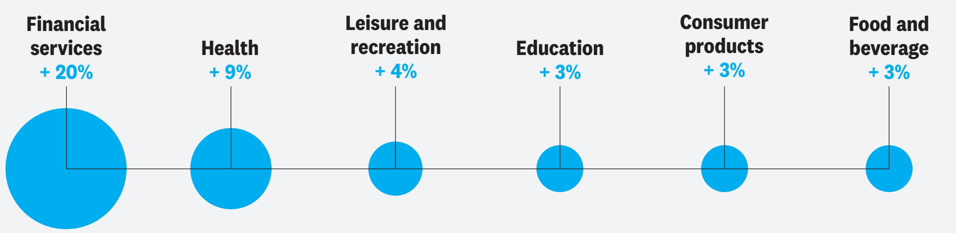
"At home" consumption size by 2025 (US$ billions)



"At home" consumption growth by 2025 (CAGR '20–'25)



"At home" consumption uplift due to COVID-19
(increase in estimated CAGR '20–'25 due to COVID-19 vs. without COVID-19)



Omnichannel shopping for young omnivores

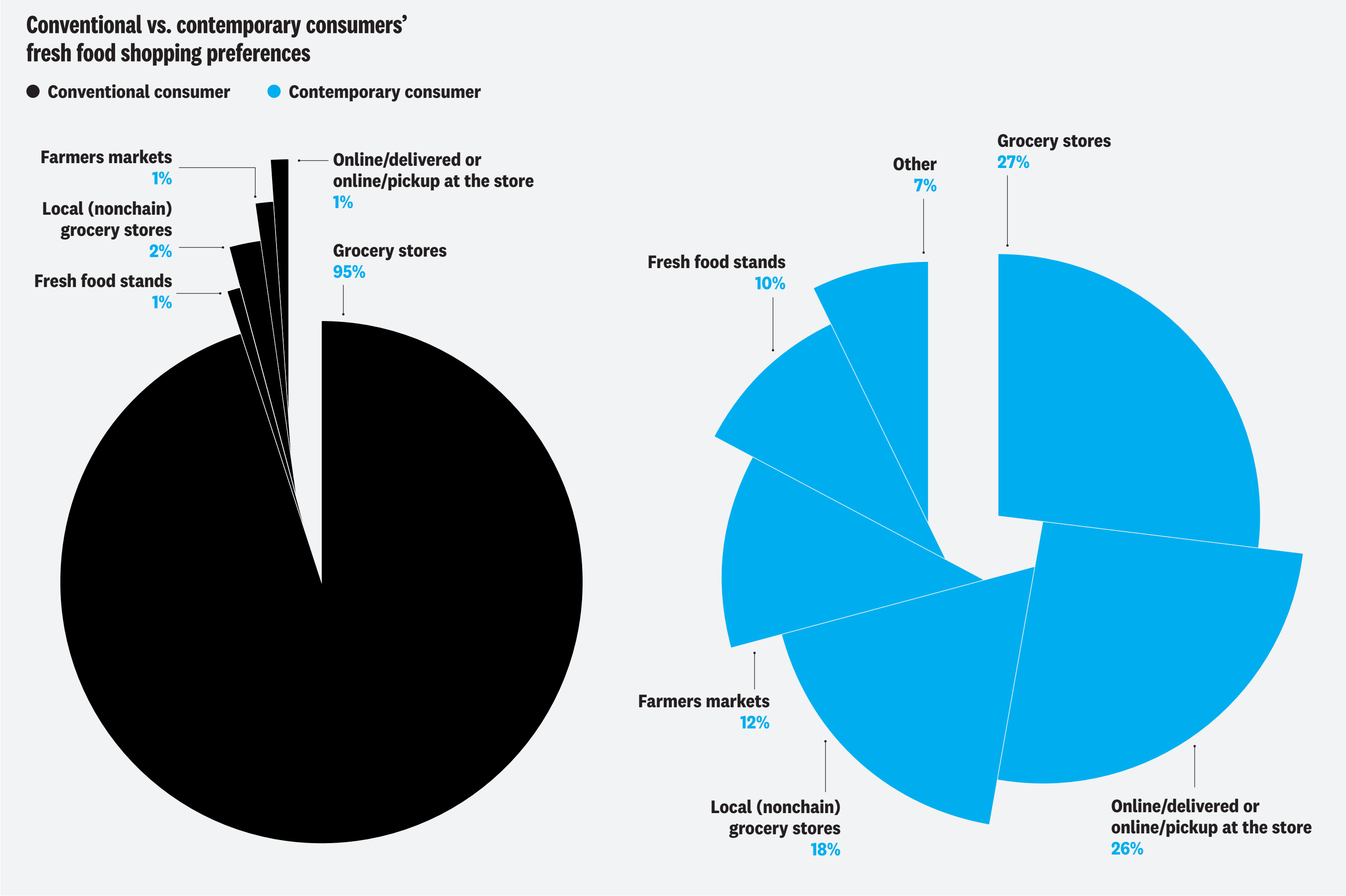
Assessing the fresh food shopping habits of "contemporary consumers"

It's an established fact that younger consumers are inclined to do a significant amount of their shopping online, from clothing to personal products to electronics. However, recent Deloitte research has found that when it comes to groceries, their shopping preferences are more omnichannel.

This category of "contemporary consumers"—younger, more well-off, more urban, and more ethnically diverse than "conventional" consumers—represents 40% of the consumer base, and according to Deloitte's 2020 fresh food consumer survey, they aren't habituated to buying fresh foods just in store or online. Instead, they report shopping for fresh foods from a mix of sources, from brick-and-mortar grocery stores (27% of their fresh food purchases), to online deliveries and curbside pickup (26%), to farmers markets (12%) and fresh food stands (10%). Meanwhile, 95% of conventional consumers' fresh food shopping occurs at grocery stores, with just 1% coming from online shopping, 1% from farmers markets, and 1% from fresh food stands (see figure).

Our research found that contemporary consumers are buying more fresh food than others and are willing to pay a premium for it. They're also keenly interested in convenience and sustainability, and they're open to trying food shopping options like subscription boxes. During the COVID-19 pandemic, farmers in many areas of the United States capitalized on these preferences with direct-to-consumer produce sales. Given the spending power of the contemporary consumer segment and changing shopping behaviors overall, fresh food retailers' innovation in distribution channels is likely to grow.

To learn more about this consumer segment and how to attract it, read "The future of fresh: Patterns from the pandemic" at www.deloitte.com/insights/pandemic-grocery-shopping.

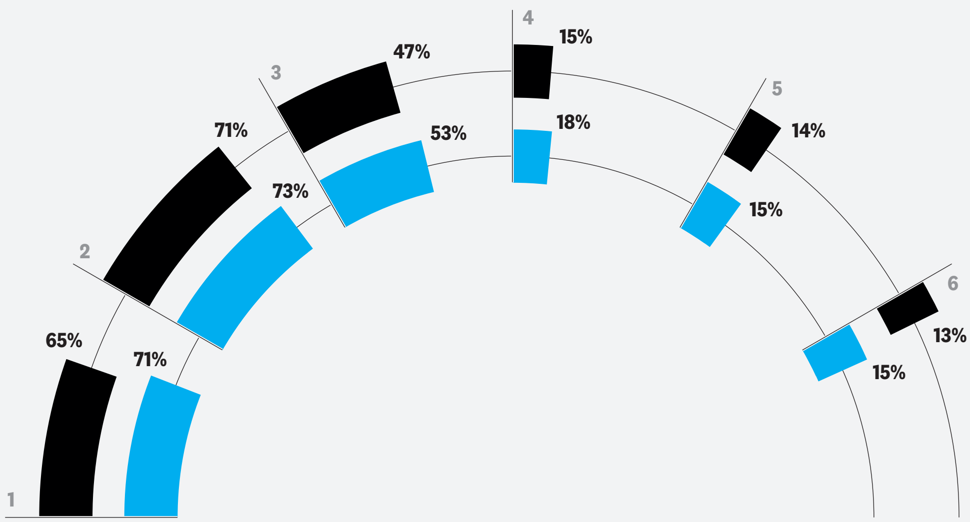


Infographics by Francesco Muzzi

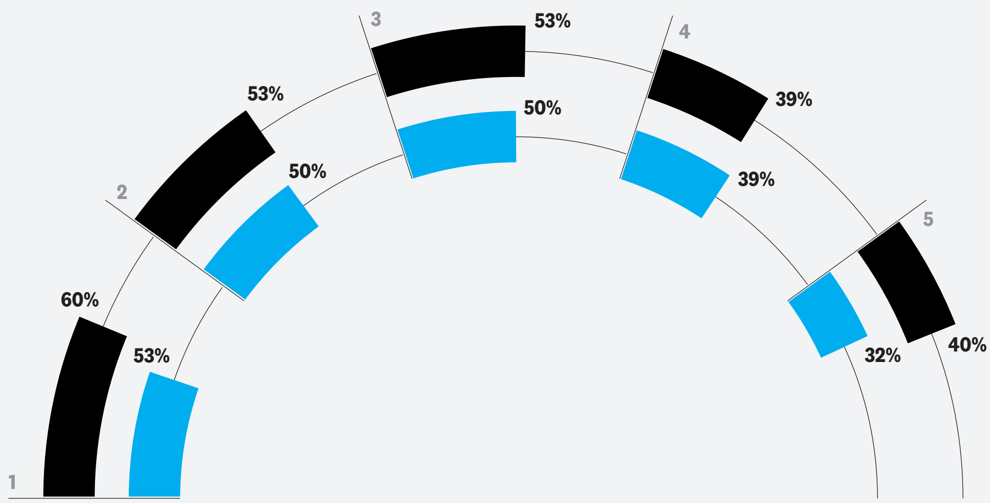
Pass the PII

Consumers are more willing to share health data after the pandemic

More consumers are willing to share personal health information as a result of the crisis



Scenarios where consumers would be willing to share data from fitness and health-monitoring devices



The pandemic has upended consumers' notions about health care and its delivery, pushing the industry closer to the future envisaged by professionals tracking its trends. According to Deloitte's 2020 Survey of US Health Care Consumers, more people are using technology to monitor their health, measure fitness, and order prescription refills—but are they willing to share the data these activities generate?

Insights from Deloitte's COVID-19 survey indicate that after a slight prepandemic dip, consumers are now more willing to share their personal health-related data with health care companies, though they are still wary of doing so with technology companies and retailers.

While this trend is encouraging, it may slow down as the pandemic ebbs. To sustain it, health care players should use this data to better serve consumer needs. Many are frustrated with the inconvenience of their data spread across various channels, none of which talk with each other. Interoperability between organizations that own or store the data is essential to give consumers one-stop access to their medical information and control over data-sharing.

Consumer trust is important as well. Organizations should make it clear that consumers own their data, and demonstrate reliability, transparency, and empathy in their operations.

Read more about health care trends in consumer agency, virtual health, remote monitoring, and data-sharing in "Are consumers already living the future of health?" at www.deloitte.com/insights/future-of-health-now.

Smart security

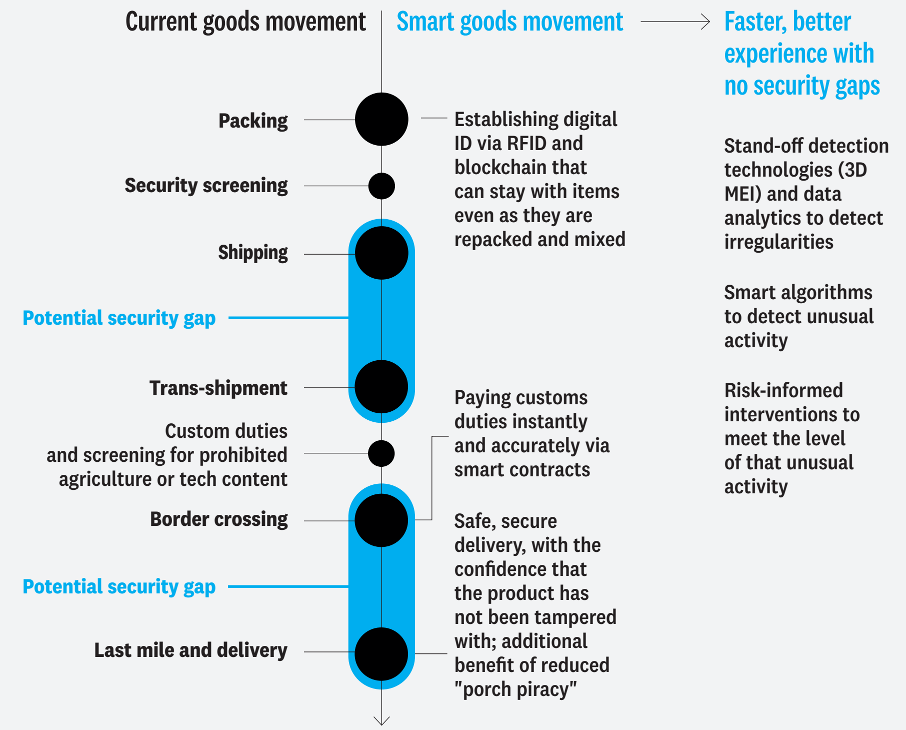
Moving people as safely and seamlessly as online orders

Getting your latest online purchase from manufacture to your front door requires not only efficient delivery networks, but also countless security screenings and inspections, completed quickly and less intrusively thanks to advanced technology solutions. What if the same seamless and secure journey that your package experiences were available to you?

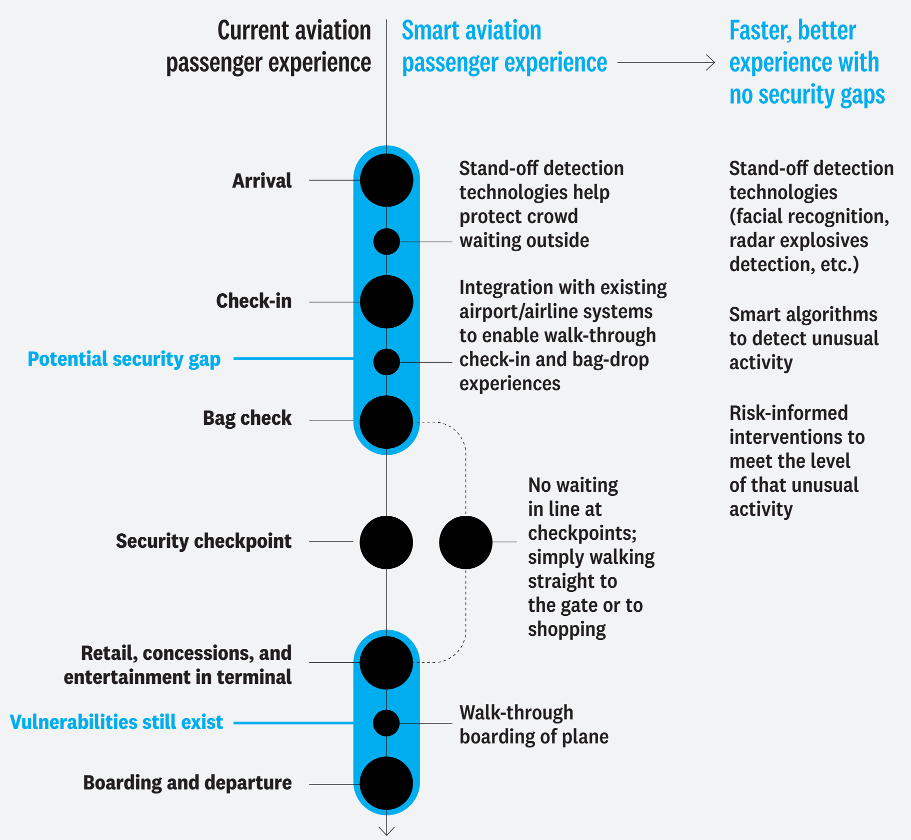
Long screening lines for travelers, sports fans, and concertgoers could be eradicated if airports and stadiums changed their philosophy from checkpoint-based security to a risk-informed, "smart security" model. Better yet, this model actually can provide greater security by closing key gaps in existing methods and adding capabilities (such as health screenings or social distancing) to monitor new threats as they emerge. A smart security model also can help people protect their privacy by giving them control over how their data is used and by whom.

Read more about the benefits of smart security and how to implement it in "Move faster, safer, and more privately with smart security" at www.deloitte.com/insights/smart-security.

The movement of goods is already approaching the frictionless vision of smart security



Smart security improves safety and the passenger experience



Infographics by Francesco Muzzi

Supercomputers on wheels

How software companies can power the future of the auto industry

As in many businesses, value in the automotive industry is increasingly driven by software. Car companies are becoming "automotive technology companies," with the computing power required to process huge amounts of sensor data from cameras, radars, and lidars in autonomous vehicles turning cars into supercomputers on wheels. This presents opportunities for software companies to partner with original equipment manufacturers (OEMs) to help power the future of the auto industry. The figure below presents four potential paths to success.

To lay out a viable road map, software companies should take into account the nuances of the auto industry, such as:

● **Stringent quality and safety requirements:** Regulation-driven requirements pose high entry barriers for new automotive software suppliers, and OEM-imposed prerequisites for supplier qualification are very strict.

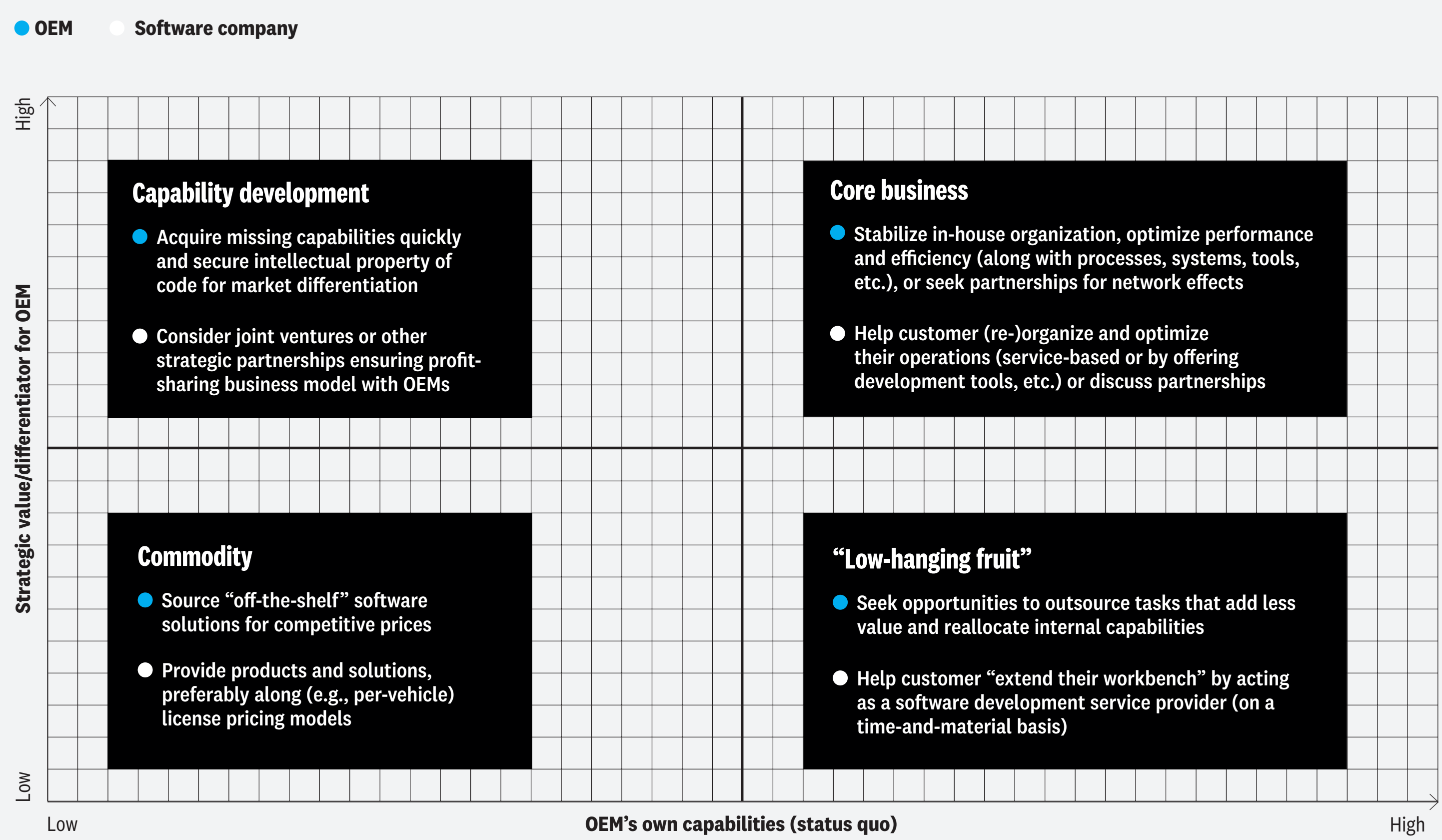
● **No clear visibility of software's value in a vehicle's bill of material:** Software companies' business models typically require them to retain intellectual property or risk endangering their value proposition. How can they price their offerings to reconcile this need with OEMs' view of software-driven features as strategic core areas whose intellectual property they want to own themselves?

● **Substantial upfront investment and lengthy amortization:** OEMs often consider software development costs as upfront supplier investments, only compensated along the product life cycle as part of the unit price. This puts suppliers at significant financial risk, as volume developments may end up lower than initially forecasted.

Traditional automotive giants likely won't be able to transition into data-driven technology companies by themselves in a timely manner. Their future success could very well depend on the capability to continuously deliver software-driven features over the air, many potentially developed via smart collaboration with (pure-play) software companies. This is a trend that is also affecting other industries, from manufacturing and health care to insurance and media. Software is transforming industries, and the race for future business claims is not yet decided.

Read more about strategic options for software companies in the automotive industry in "Software is transforming the automotive world" at www.deloitte.com/insights/auto-software.

Strategic option framework for automotive software companies



2

The value of resilient leadership

Leaders' challenges won't end with a COVID-19 vaccine. With many stakeholders already questioning their social contract with institutions, how can leaders invest in, rebuild, and renew trust in these relationships?

By **Punit Renjen, CEO, Deloitte Global** *Illustrations by* **Dan Page**

> **"The pandemic represents a rare but narrow window of opportunity to reflect, reimagine, and reset our world to create a healthier, more equitable, and more prosperous future."**
> Klaus Schwab, founder and executive chairman, World Economic Forum[1]

Rebuilding the foundations

Our challenge as leaders won't end with a COVID-19 vaccine. Underlying societal issues that have long been simmering below the surface are raising questions and imperatives that will last long after a COVID-19 inoculation is developed. The implicit social contract between institutions and stakeholders is rightfully being questioned. Individuals are frustrated; many don't believe they are being heard by their leaders in government or by corporate institutions—or being treated fairly and equally.

As recent research indicates, these trends were already latent, and just accelerated by COVID-19. For example, according to the Edelman Trust Barometer, 77% of US respondents (as of February 2020) strongly or partially agree that large companies have been guilty of making a quick profit;[2] the May 2020 update indicates that just 38% of global respondents believe that business is "doing well or very well" at putting people before profits.[3] Further, millennials' belief that business is "a force for good" continues to decline: Just 51% of millennials say business is a force for good, a steep drop from 76% three years ago. Amid the pandemic, only 41% of millennials feel that business is making a positive societal impact globally.[4] Trust has fractured across government, business, and other pillars of society; the social contract has frayed—and continues to deteriorate further.

The challenges we are facing today are occurring against a backdrop of *mis*trust. When people trust

Trust is a *tangible exchange of value*, and it is *actionable* and *human* across many dimensions.

each other, however, they work together more effectively and handle conflicts more maturely. In business, leaders are better able to create loyalty and confidence among stakeholders—their employees, customers, and ecosystem partners—and solve problems more quickly. In society, trust is the social glue that creates a sense of community cohesion. Therefore, rebuilding the world's economy, our health and safety, our climate, and human relationships requires a renewed commitment to trust.

Trust is not a static, unchanging force that flows toward leaders from their stakeholders. Both trusting and being trustworthy require us to make conscious, daily choices to invest in relationships that result in mutual value. Trust is a *tangible exchange of value*, and it is *actionable* and *human* across many dimensions.[5] Let's examine how we can invest in, rebuild, and renew trust.

Trust as an exchange of value: Why trust matters to resilient leaders

> "Trust is … one of the most essential forms of capital a leader has."
> Frances X. Frei and Anne Morriss, Harvard Business School

While trust is considered by some to be an ethereal concept, it is, in fact, quite tangible. Therefore, we as leaders need to have a concrete way to talk about and act on trust for *all* our stakeholders: customers, workers, suppliers, regulators, investors, pension holders, society, and the communities we serve.[6] In this regard, we can think of trust as an exchange of value, as a currency. Consider a 20 euro note: In isolation, it is just a piece of paper, but in an exchange, it represents everything from a plate of fish and chips to a birthday gift. Likewise, trust "banked" by itself has no intrinsic value, but when invested wisely by us as leaders in relationships with stakeholders, it enables activity and responses that help us mutually rebuild our organizations and society. At the same time, however, that currency must be nurtured through ongoing transparency and evidence of trustworthy behaviors, not simply saved to spend on excusing bad conduct.

As an asset, trust appreciates when it is invested well (and when it is continuously invested in). For example, in the United States, National Collegiate Athletic Association basketball teams that trusted their coaches were found to win 7% more games than those that did not.[7] In essence, when coaches invested in building trust, players invested by playing better, resulting in a better outcome for all. In business, public companies rated the most trustworthy have been found to outperform the S&P 500.[8] Further, high-trust companies "are more than 2.5 times more likely to be high-performing revenue organizations" than low-trust companies.[9]

The reverse is also true, however. Although the currency of trust is painstaking to accumulate, it can depreciate all too easily. As leaders, we know that failure to invest in trust, and to respond adequately or authentically to ongoing external crises (such as COVID-19), broader societal issues such as climate change or racial injustice, or any other organization-driven breach in trust, can lead to significant risk to the organization's brand, its reputation, the well-being of its stakeholders, and its overall mission. Ultimately, stakeholders—whether customers, workers, individual investors, pension holders, communities, or ecosystem relationships—will be more likely to defect to a competitor when the opportunity becomes available if they don't trust the organization.[10] Eighty-five percent of customers chose brands they highly trust when given the choice of other brands, compared with only 60% who selected brands that lacked their trust, while employees who highly trusted their employers were far more motivated to work.[11] In fact, loss of reputation—i.e., the trust individuals have in the quality of one's character, reinforced over time—is viewed as having the greatest risk-related impact on business strategy.[12] Put simply, loss of trust can affect more than the simple measure of revenue; it can affect the intrinsic value of the organization.

Exchanges in trust and vulnerability go both ways

We sometimes treat trust as a one-way, top-down street: "If they trust us, they will follow us and believe in our mission." But this approach presumes that trust is unidirectional, transactional, *only* based on what leadership does, and that "following" is tantamount to genuine commitment. It also suggests that leaders know better than their stakeholders—and that they need never make themselves vulnerable in the interchange.

Trust, however, is best fortified when there is a "balance of payments" between the two key elements in the definition of trust: vulnerability and response. We expect vulnerability from our stakeholders, and we respond to their needs, but we must be vulnerable in return as they react to our actions. Focusing only on our own commitment to being trustworthy overlooks the vulnerability we must manifest in the exchange. When trust flows in both directions, the stakeholder becomes a vested participant in the success of the organization, not merely a follower. Take, for example, trust among partners and a commitment to each other's mutual success, as demonstrated by the vendors who are implementing new financing services to assist

Driving real, valuable change

Many organizations will have to make major shifts in their business models in a post-COVID world, shifts that will require stakeholders to accompany us into unknown territory. Where do you need to invest further in a mutual journey of trust for stakeholders?

cash-strapped supply chain partners in the current COVID-19 environment.[13] However, not all stakeholders feel they are trusted: Roughly 40% of millennials and Gen Z workers don't agree that their employer trusts them to be productive in a remote environment.[14]

Trust encourages a mutual journey

Today's economic realities are bringing the power of mutual trust to the fore: In some industries, massive layoffs are occurring, or more contract workers are being leveraged; in other industries, automation is on the rise. Those who remain with the organization need to trust that their leaders are committed to both the performance of the company and the career of the professional. This trust also affects longer-term focus areas for the organization, such as innovation: As companies adopt advanced technologies, workers are less likely to commit their minds, energy, and hearts to exploring the possibilities of these new technologies if they are unsure of the impact (such as automation) on their place in the organization. The same holds true for other stakeholders, both direct and indirect, who may be more likely to believe in the organization's future plans when it's an enterprise they know they can trust.

This ecosystem of stakeholders can amplify and extend the value of trust. As leaders, we have the opportunity, particularly during the current pandemic, to do more relationship-building as well as more collaborating across stakeholder groups. At the same time, however, many leaders are not yet harnessing the full power of trust across their whole system of stakeholders. We were surprised, for example, that in Deloitte's most recent climate change survey, only 3% of business leaders said that collaborations among stakeholders (including government, activists, and nonprofits) rather than business leaders and/or other stakeholder groups working on their own will be most successful at making progress on the issue of environmental sustainability.[15] For those who accept the premise that the whole stakeholder ecosystem can be engaged to address big challenges, those who *can* extend trust throughout their networks are perhaps best poised to make the biggest impact.

FIG 1: Understanding the nature of trust

Trust is	Trust is not
Dynamic, continuously shifting	Static, constant
Reciprocal and mutual; an ongoing conversation	Unidirectional; pushed down/out from above
Individual; based on subjective perspectives and current events	Monolithic; based on objective perspectives and rules
Challenging to build	Easily obtained
Relevant at all times	Relevant only in times of crisis
A choice on the part of the trustor	Compliance with rules
Integral to the fabric of business strategy and company culture	Only relevant to external image and reputation
Driven by competence and action, as well as intent	Driven only by intent
Understandable and actionable within context and dimensions such as physical, emotional, digital, and financial	Ethereal or indefinable
Necessary to all stakeholders—not just workers, customers, and other ecosystem relationships, but extending to regulators, communities, and societies as well	Necessary only for shareholders

Source: Deloitte analysis.

Building relationships across different stakeholder groups requires leaders to understand the dimensions (and nuances) relevant to each of them as individuals.

Trust is actionable: Building trust where it matters most

> "The people when rightly and fully trusted will return the trust."
> Abraham Lincoln

Our spring 2020 article on trust in the age of COVID-19 identified the questions stakeholders will need to ask themselves about trust across four dimensions—physical, emotional, digital, and financial—to walk in their stakeholders' shoes, understand their worries, and understand how best to address their individual needs.

And, indeed, in our current disrupted environment, different stakeholders have different concerns related to trust along these dimensions: the physical safety of the worker contemplating going back to the office, the emotional safety of a family venturing to a resort for vacation, or the financial safety of a supplier dealing with uncertain lead times. While some stakeholders may be less concerned about the pandemic, others such as those caring for older family or immune-suppressed children will have no choice but to be vigilant. With so many varied contexts, it is challenging for leaders to engender trust. Building relationships across different stakeholder groups requires leaders to understand the dimensions (and nuances) relevant to each of them as individuals, and to address their specific concerns.

These four dimensions can act as a starting point to understand where stakeholders expect us to invest our time, attention, and energy for their benefit and security. To be sure, each group, whether customers, workers, suppliers, investors, regulators, society at large, or others, will prioritize their needs along the four dimensions of trust differently. Further, the way they prioritize each dimension will evolve with time; the physical dimension, for example, may give way to the emotional and financial as workers adjust to returning to the office and turn their attention to the need for transparency and employment stability. The ability to adjust and respond with agility to stakeholders' needs will thus be crucial.

Driving real, actionable change

Agility isn't just about operating models. It also describes how we need to respond to continuously evolving stakeholder needs. How are you sensing and monitoring the shifting needs of stakeholders along the four dimensions in order to address those needs?

Trust is human: Strengthening trust through connection and experience

> "He who does not trust enough will not be trusted."
> Lao Tzu

When trust breaks down in an organization, it is often due to a failure on the part of leaders and organizations to understand and deliver on the signals that drive and enhance trust. We, as leaders, can demonstrate trustworthiness by being *transparent* with those whom we engage, *reliable* and *capable* in delivering on our promises, and *human*—demonstrating genuine care in the experiences they value most.[16] As noted earlier, different stakeholders will prioritize different needs with respect to trust; the same is true for the experiences they desire from their interactions with us. As leaders, it is our task to ensure we create those touchpoints for our stakeholders and infuse those values throughout our organizations.

In May 2020, Deloitte conducted a survey to understand what was important in signaling trust and found that three-quarters of customers who highly trust a brand are likelier to take a leap of faith to try a new product or service from that brand; 79% of employees who highly trust their companies feel more motivated to work for them. In other words, trust drives experience—which drives behavior.[17]

Research led by neuroscientist Paul Zak indicates that trust and commitment "synergistically improve operational performance" as both trigger regions of the human brain to "motivate cooperation with others."[18] When the culture of the organization is suffused with trust, workers are more committed to driving success. Nicholas Epley and David Tannenbaum note how an organization's culture can influence the behaviors of workers and how policies should "create contexts (within the organization) that promote ethical actions."[19] Leaders can take this one step further, assessing their impact in these areas by measuring, monitoring, and managing trust.[20]

Trust is personal: A call for leaders

> "Without trust, we cannot face the difficult challenges in our world today."
> Antonio Guterres,
> United Nations Secretary General

In the words of British writer George Eliot, "Those who trust us educate us."[21] Truly walking alongside our stakeholders—understanding their concerns and their priorities—involves a willingness to listen, to learn, and to hear. At the outset, we proposed that building trust requires us, as leaders, to make conscious daily choices, and especially to act on those choices …

… Through mutual trust. When we as leaders trust our stakeholders, we enter an exchange that engenders opportunity: We prove our trustworthiness, and stakeholders empower us to take our organizations to new places and new innovations. In essence, mutual trust creates a followership that allows us to break new ground, to traverse the seismic changes taking place, and to emerge, thriving, on the other side of crisis.

… With vulnerability and honesty. Business leaders who are willing to acknowledge what they don't know are more likely to engender trust with their stakeholders than those leaders who mistakenly believe their greatest source of influence is knowledge—or at least acting as though they know.[22] A similar paradox exists for organizations responding to a one-time breach of trust. Stakeholders are likely to regain—and even strengthen—trust in the organization when leaders admit the mistake, are apologetic, and are transparent in how they move forward.[23]

… Where it matters most to your stakeholders. Intent connects the leader to their humanity and the importance of acting with transparency. But at the end of the day, intent is just a promise; leaders must be able to act on that promise, and do so competently, reliably, and capably. And they must be able to do so in the areas—whether physical, emotional, digital, or financial—that matter most to their stakeholders at that given time.

… By connecting as humans. Leaders who aspire to be trusted by their stakeholders take responsible actions that consider and, where possible, acknowledge the needs of each of those stakeholders. This requires an understanding of what is important to different stakeholders, and an ability to walk alongside them rather than an attempt to "walk in their shoes."

If our efforts as leaders lead us back to where we were before the events of 2020, then we have failed. Our goal is not a new future, but a better future. Trust is the foundation for that better future, because it enables stakeholders to believe in the organization and its mission, its competence to succeed, and its intent to do good. Asking ourselves difficult questions as leaders will enable us to plot a path forward, to organize and prioritize our next steps around trust, and to operationalize it within our organization and across our stakeholders. Even when difficult choices must be made, trusted leaders and organizations have amassed the currency—and the courage—to make and stand behind those decisions with conviction and integrity.

Driving real, human change
Just as trust connects regions of an individual's brain to drive cooperation, it also connects stakeholders across time and distance to do the same. Where do we need to intentionally create opportunities for more connections across stakeholders to enhance cooperation?

Embedding trust into COVID-19 recovery
Learn how to apply the four dimensions of trust to strengthen stakeholder relationships and drive your organization's future success: www.deloitte.com/insights/embedding-trust.

Emotional fortitude: The inner work of the CEO

We're living in a time of profound uncertainty. How can CEOs increase their chances of making an optimal decision when all of the alternatives may not be known, time isn't on their side, and emotions play a central role before, during, and after the decision is made?

By **Benjamin Finzi, Mark Lipton, Kathy Lu, and Vincent Firth** *Illustrations by* **Matt Chase**

Whether at a large, established firm or a fast-growing one, making decisions while staring disruption in the face may be the most grueling element of being a CEO. Data feels insufficient. Assumptions feel tenuous. Options feel constrained. Timing feels rushed. Outcomes feel binary: The decision takes the organization in either the right direction or the wrong one.

Yet executives—particularly CEOs—are expected to be the most qualified people in their organization to make decisions. CEOs, perhaps more than those in any other executive role, feel enormous pressure to get it "right." Even the most level-headed CEO is apt to experience sleepless nights and personal doubts about the choices they make and the consequences that result. If the decision ultimately proves to be a poor one, there is no one else to blame. How can CEOs increase their chances of making an optimal decision when all of the alternatives may not be known, when time is not on their side, and when emotions play a central role before, during, and after the decision is made?

In our original research on how CEOs deal with disruption, the most striking stories we heard from the CEOs we interviewed were those that reflected the ways they experience the process (and process the experience) of making big decisions in response to real or feared disruption. Based on these stories, we identified a trait we call *emotional fortitude* as one of the five signature attributes of an "undisruptable" CEO. More than the other four, emotional fortitude truly represents the "inner work" that effective CEOs perform as they journey through the decision-making process and live with the consequences.

The intellectual and emotional tensions of perilous decisions

Before examining what exactly "emotional fortitude" means, it's useful to first understand the context in which it should come into play—the need to make critical decisions under conditions of extreme uncertainty.

When uncertainty is very high, it is often difficult, if not impossible, to comprehend the entire universe of viable options. Similarly, it may be just as difficult to predict accurately the potential outcomes of the *readily* identifiable options. Compounding these difficulties is the need to feel relatively confident that one has engaged in the most thorough "internal homework" to inform one's choice. Yet under conditions of high uncertainty, it is often unclear just how much thinking and analysis, not to mention research and data-gathering, is enough.

Absent unambiguous methods, with the consequences of getting it "wrong" potentially severe, leadership teams and CEOs may face several difficulties. They may suffer from "analysis paralysis," perseverating with the hope (or fantasy) that delay will yield more data, greater clarity, and new options. Or they may decide to "go with their gut," making snap judgments that they may not rigorously examine even if they have data and inputs at their disposal.

Both approaches can relieve the intellectual and emotional stress that accompanies decision-making, either by seeking to reduce uncertainty and doubt or by refusing to consider information that may generate uncertainty and doubt. Yet neither path is likely to consistently help CEOs do what is most needed: act decisively while taking the complexities of each decision into appropriate account. This need to tolerate uncertainty and remain cognizant of conflicts while still making timely decisions is what drives the need for emotional fortitude.

The superpower of metacognition

Emotional fortitude is the art of examining one's own thoughts and emotions surrounding a decision in order to consider those thoughts and emotions themselves as inputs to the decision-making process. A central aspect of emotional fortitude is *metacognition*: being keenly conscious of the thoughts, intuitions, and feelings that arise when one faces a challenge. For CEOs making difficult decisions, this means identifying and analyzing their thoughts and feelings when they need to do things such as considering conflicting data, priorities, or points of view; working with incomplete information; or choosing among options that are all unsatisfactory in some way. The essence of emotional fortitude is the ability to stay clear-headed while exploring one's reactions to these sources of tension.

While the natural temptation may be to suppress the discomfort one feels under such circumstances, those with emotional fortitude not only allow themselves to feel that discomfort, but methodically assess and analyze their distress to see what they can learn from it. They consciously inventory their thoughts and feelings while in the throes of the decision-making process.

A CEO, for example, may feel apprehension, angst, or even fear when called upon to make a complex decision. Rather than attempting to bury these emotions—as jumbled, conflicting, and uncomfortable as they may be—a CEO with emotional fortitude is able to hold these emotions at arm's length and further examine them, which can prompt insights that guide appropriate action. They may realize, for instance, that their anxiety stems primarily from a sense that the options considered were only of the traditional type; that new "out-of-the-box" alternatives had not been created and, therefore, the context to inform the decision was insufficient. Knowing this, they can then proceed to ask more questions to understand where their emotional cues originated—and to determine whether, in fact, a more expansive option set should be considered.

A CEO responding to conditions of extreme uncertainty may even embrace the adrenaline-driven emotional intensity triggered by the awareness of a looming threat (and the awareness of the inadequacy of the current response plan) to unleash radically higher levels of creativity in generating options.

The choice of the term "emotional fortitude" is intended to acknowledge the positive role that emotions play in decision-making. This idea runs counter to the still commonly held view that, not only should decision-making be a purely rational mental process without emotion, but emotions will actively disrupt and jeopardize this rational process. According to this viewpoint, decisions are optimal to the extent they conform to the laws of probability and the axioms of utility theory; emotions can only interfere with arriving at a rational choice. This prevailing cultural ethos is why many people experience the emotion that often accompanies optionality as antagonistic to decision-making. In the minds of

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Being willing to tolerate and examine one's thoughts and feelings surrounding a decision can not only shed light on deficiencies in the process, but also help a CEO consider new options that may have never been envisioned or tested before.

many, feelings disturb rational thoughts, gut intuitions outsmart conscious thinking, and hot affect engulfs logic.

However, as the CEOs who participated in our research confirmed, the belief that decision-making can or should be rational and dispassionate is a myth. Psychologist Paul Ekman's work has shown that, while people would like to be able to choose what they become emotional about and how they behave when they are emotional, we do *not* have that choice.[1]

A contemporary view anchored in neuropsychology research suggests that cognition and emotion are not separate, independent processes, but coexist in processing information and regulating behavior, especially for many types of challenging tasks.[2] This view accords with our own findings from interviews with CEOs, where it was apparent that the mind skills and the mindsets required to imagine new options, predict their outcomes, and choose among them are the result of a "fuzzy" tension between emotions and intellect. The ability to generate new options is generally associated with visualization, empathy, and even courage—attributes fueled by emotions. On the other hand, the equally crucial ability to choose between traditional and newly imagined options is typically associated with logical processes supported by intellect. Moreover, especially when the only options that will provide an acceptable outcome are those that have to be freshly "invented"—and have therefore never been tested—the ability to choose relies, ultimately, on an unpredictable mix of emotional and intellectual intelligence.

The science of decision research, going back to Nobel laureate Herbert Simon's work from the 1970s, shows that emotions are vital to one's ability to make decisions at all, let alone good ones.[3] What shapes effective decision-making, it turns out, is the *appropriateness* of the emotions associated with the decision (see sidebar)—not the absence of emotion.[4]

It is, therefore, essential for decision-makers to develop a clear understanding, first of what their emotions surrounding a decision are, and then of whether or not those emotions are appropriate. One key to this process is to cultivate greater self-awareness—that is, to practice metacognition. In the heat of the moment, people often fail to reflect on their emotions and the behaviors they drive, only afterward saying something like, "Oh, I lost my head." The reality is that one does not lose one's head; one loses *awareness* of what one is feeling at the moment.

But it's not enough to simply be aware of one's thoughts and feelings. Emotional fortitude entails *using the understanding gained from this awareness to more effectively shape the situation at hand.* For CEOs making decisions, this translates into the ability to assess which thoughts and feelings may facilitate and which may debilitate the decision-making process, and why.

Being willing to tolerate and examine one's thoughts and feelings surrounding a decision can not only shed light on deficiencies in the process, but also help a CEO consider new options that may have never been envisioned or tested before. More than that, it can raise a CEO's willingness to consider these freshly generated, unfamiliar, or uncomfortable choices alongside reassuring alternatives rooted in experience and precedent. In this way, emotional fortitude allows the decision-maker to reduce the importance and authority of experience, as well as to balance the dominance of deconstructive logic over generative creativity. In unsafe environments, staying in one's comfort zone by depending on what one knows best often constrains the options under consideration. In the short run, the familiar may feel safer, but over the longer term, the consequences of neither generating nor seriously considering unfamiliar options may prove devastating.

MOOD AND ITS EFFECT ON DECISION-MAKING

- Highly cheerful decision-makers tend to overestimate the likelihood of positive outcomes and underestimate the chances of negative ones.
- The emotions one experiences influence how thoroughly one conducts research before making a decision. Those in a negative frame of mind at the beginning of analyzing a problem or decision tend to be more focused on collecting and analyzing relevant data when confronted with high-risk consequences. Those who feel more optimistic when they first approach a high-risk problem tend to be relatively less focused on research.
- Anger makes people more likely to take risks and to minimize how dangerous those risks will be.
- Angry people are also more likely than people who are not angry to blame individuals, rather than "society" or fate, for decisions gone wrong.
- Research suggests that people experience more regret about a decision that leads to a "bad" outcome than about not having made a decision at all. This dynamic can lead people to delay making a critical decision until it is too late to make a difference.[5]

Learning from self-doubt—and by sharing with others

Perhaps surprisingly, it may be negative emotions such as insecurity and self-doubt that can be the most useful to CEOs when making difficult decisions.

Bold decisions often present a natural breeding ground for doubt. And because doubt eats away at confidence, feelings of insecurity may in turn begin to simmer. But as Galileo noted, self-doubt is actually "the father of all invention." He argued that, rather than becoming "a crippling experience," self-doubt can and should generate creativity and serve as a powerful stimulus to further thought.[6] While allowing self-doubt to lead to indecision or inaction is ultimately self-defeating, harnessing self-doubt to spur exploration and learning can be empowering.

When the CEOs we interviewed discussed some of the most difficult disruption-generated decisions of their past decade, one remarkable commonality was their use of metacognition to learn from self-doubt and other uncomfortable emotions. Their stories suggested that, when faced with difficult decisions, they did not consciously attempt to make their doubts disappear or cure their insecurity. Instead, they used these emotions to mine their doubts for new information. They knew there was value in what their feelings were whispering.

These CEOs described their approach to making decisions where they could not eliminate the tensions raised by those decisions, but had to "hold" and balance them. Rather than hoping that the competitive landscape would eventually come into sharp focus, most understood that wishing for such clarity often results in a dangerous illusion. They stressed the importance of continually scanning their environment and interpreting the meaning of what they saw and heard. They spoke of seeking ways to make the best use of their emotions and finding greater confidence in the decisions they ultimately did make. And when a decision led to unintended outcomes, they were resilient and learned from the experience.

Some CEOs turn to people outside the organization to "outsource" some elements of the self-examination process. For instance, the CEO of a fast-growing technology firm in the northwestern United States has created a small advisory circle of trusted professional colleagues, including two board members, a prominent investor, the CEO's wife, and one of this article's authors. When called upon to make a big decision, this CEO schedules a conversation with each of these individuals to explore the intellectual and emotional tensions related to the decision. The emotions surfaced in these conversations can run the gamut from excitement to anxiety, from sadness to happiness, from anger to ambivalence, from confidence to uncertainty. Each individual brings insights and perspectives the CEO may not have considered before, better equipping him both intellectually and emotionally to make a decision, resolve to live with the consequences, and move on to the next one.

Many CEOs may construe this type of outreach as exposing vulnerability. But it is perhaps the most self-assured CEOs who are willing to expose their internal processes to others, and who gain the most from doing so. By assessing their emotional state *before* making a decision and then testing their fears, hopes, assumptions, and beliefs with credible and trusted others, these CEOs use their emotions to their advantage. Moreover, demonstrating emotional fortitude can also help CEOs strengthen trust with their executive team and the broader organization by helping them more clearly communicate the reasons for their decisions. When a leader presents an honest assessment of the thoughts and emotions behind a critical decision, others experience and appreciate the leader's authenticity.

Business Olympians: The parallel with sports

CEOs are not the only elite group of people who face periods of self-doubt and need to perform under enormous pressure while maintaining herculean levels of resilience. Many world-class athletes, who face similar challenges, make use of metacognition to help overcome the stressors of competition and enhance their performance. At the relative beginning of their careers, top athletic performers first learn to become mindful of their goals when confronted with challenges. As they succeed and progress, they use specific psychological strategies, such as goal-setting, imagery, self-talk, and activation, to monitor and control how they think and feel. For some, doing this is instinctual; for others, it requires practice.

Insight into the inner work of Olympic athletes sheds light on ways that C-suite members can understand their thoughts and emotions and use the clarified tensions and discomforts to their advantage. Many Olympic gold medalists withstand the demands they encounter by placing greater emphasis on evaluating their *own* thoughts and feelings than on evaluating the environment (their competitors).[7] These extraordinary athletes also approach stressors as opportunities for growth, development, and mastery, particularly at the peak of their sporting careers. In the process of stress appraisal—evaluating stressful situations and their own ability to handle them—they

interpret competitive play as relevant to their goals *and* assess the demands they are confronted with to be within their available capacity to accomplish. In this way, they construct meaning and value from the stressors of competition.

Research suggests that Olympic gold medalists and CEOs share a number of personality characteristics,[8] including openness to new experiences, conscientiousness, being innovative, emotional stability, optimism, and being proactive. For both groups, these traits influence and support the mechanisms of stress appraisal and metacognition.

The gospel of a linear relationship between self-confidence and performance is now also being questioned. While one might assume that Olympic champions have extremely high levels of self-confidence, recent data does not support this belief. This lack of abundant self-confidence may reflect an honest appraisal of doubting their advantages over competitors, questioning their conditioning for the event, or experiencing a slightly negative mood that darkened their confidence. But regardless of these factors, they were still able to attain optimal sports performance.[9] By analogy, this suggests that CEOs need not be *completely* sure of themselves before they can effectively make decisions.

Research also indicates that self-confidence at later stages of Olympians' careers is being replaced with higher levels of confidence originating from *external* sources, such as in discussing their thoughts and feelings with teammates or others they trust.[10] Bolstering a person's sense of competence through honest discussions with teammates appears to buffer the potentially detrimental effect of initially lower levels of self-confidence, which subsequently benefits performance. While an Olympic champion may gain a hefty dose of self-confidence from teammates, CEOs may need to look beyond the confines of their organizations for carefully selected trusted advisors—with whom it may feel less risky to be honest and vulnerable.

Building the "muscle" of emotional fortitude: Strategies for developing metacognitive behaviors

It's natural to wonder: "If I am fully conscious of all of my conflicting thoughts and emotions around a decision, won't this 'flooding' lead to fear and self-doubt to the point of being incapacitated?" The simple answer is "Probably"—but only if one increases levels of cognitive and emotional awareness without any systematic method of elevating these thoughts and emotions to a conscious level for better understanding. Developing emotional fortitude therefore requires that we modulate, even curate, our increased awareness, adopting exercises and processes that allow us to heighten our self-awareness and use this data to inform our decisions and actions, while preventing flooding.

Here are some steps CEOs might take to begin to "curate" their thoughts and feelings to help develop emotional fortitude:

Inventory "how you feel," "what you think," and "what you know." The first step toward emotional fortitude is to identify and create a judgment-free inventory of your emotions, thoughts, and understanding attached to a given decision. Ask yourself:

What do I wish for?

What am I afraid of?

What does this decision mean to me?

What will its outcome signify?

What do I already know, and on what assumptions might some of this knowledge be based?

What am I curious about?

What "baggage," personal or organizational, do I bring to this decision?

What physical sensations or responses does this decision trigger?

What inner voices or inner critics do I hear, and what inner dialogue do I have with them?

How would I rank the top five emotions I am currently experiencing as I am about to make this decision?

Acknowledge that self-doubt and other less-desired emotions can become essential tools when inventoried in the context of a decision that comes with steep consequences. Those without such a complete understanding run the risk of not investing their full self in the decision's outcome. As you gain more experience in self-observation and access increasing amounts of data on the topic, verify, clarify, expand, and revise your inventory of emotions, thoughts, and knowledge accordingly.

Talk about feeling and thinking. For some, starting with a written list is an important starting point for metacognition. But talking deliberately about one's feelings and thoughts is essential to gaining a clear understanding of them. Studies suggest that verbalization activates more neural networks than reading or thinking silently. Metacognition can be similar to speaking in a language you have not used for some time; it needs practice and

The first step toward emotional fortitude is to identify and create a judgment-free inventory of your emotions, thoughts, and understanding attached to a given decision.

Explaining your thinking and emotions behind a decision is not an exercise in self-justification. Rather, you should approach it as an opportunity to reiterate your vision and values.

access to the vocabulary. During planning and problem-solving situations, think aloud; this not only helps develop your vocabulary for talking and thinking about feelings, but also allows colleagues to follow your thinking processes. While talking during thinking may not come naturally, especially to introverts, it may be helpful to keep in mind that activating neural networks during problem-solving can enhance the process. The more neural networks you can activate, such as by verbalizing the questions noted in the step above, the more consciously and meaningfully you will be able to connect to the information you are exploring.

“Outsource” part of the metacognition. As Doug Silsbee wrote, “Our world is composed of what we sense and our interpretation of what we sense. Since that interpretation is a result of our unique conditioning, my world is distinctly different from yours.”[11] Thanks to this simple distinction—between the way you experience the world, and the way anyone else does—it can be valuable to talk through the decision challenge with a trusted advisor or executive coach, describing your thoughts and emotions related to the problem. Your “outsourcing” partner’s role is to be present, listen, and ask questions to help clarify thoughts and feelings, paraphrase back to you what they think you are saying, and capture any emotions you may be indirectly conveying through words or nonverbal signals.

Keep a metacognition log. It takes practice to delve into one’s own head and heart. A journal or learning log is helpful to many, but the medium must match the person and context. For some, dictating in-the-moment insights to audio files on a smartphone is most accessible. Others may find a certain time or place most conducive to reflection. One CEO we know finds that his metacognition is particularly acute while taking a shower. He keeps water-soluble markers handy and writes on the shower tiles as thoughts and feelings related to a big decision come into consciousness. Then he transfers the insights to a medium with more permanence. This CEO finds these logs essential for surfacing ambiguities and inconsistencies in the thinking process.

Communicate why you made a decision. Beyond communicating a decision once it is made, you should simultaneously communicate the reasoning you used to reach it. Explaining your thinking and emotions behind a decision is not an exercise in self-justification. Rather, you should approach it as an opportunity to reiterate your vision and values, which should underpin all of your decisions, and to help colleagues understand how and why you reached a particular decision.

Debrief the metacognition process. After you make a decision, certain “closure” activities can enhance your awareness of strategies that you can gainfully apply to other problem-solving and decision-making situations. One three-step method can be useful. First, ask a trusted advisor to guide you through an end-to-end after-action review of the decision-making process. The aim is to gather data on the feelings you experienced, reflecting on both the decision-making *process* and your feelings regarding the *consequences* of the decision (especially if you made the wrong one). Then, identify the thoughts that surfaced in the process and categorize them into related groups. Finally, evaluate your understanding of the “thinking strategies” you found yourself using. Identifying inappropriate strategies is useful since they tend to resurface, while strategies of particular value can be recognized for future use.

Embracing emotional fortitude

Identifying emotional fortitude as one of an undisruptable CEO’s key attributes was both expected and unexpected on our part. We did not enter the study with a hypothesis about emotional fortitude or metacognition; rather, we observed the CEOs engaging in metacognition as they became increasingly comfortable with the interview team. Once we established trust with the CEOs, our conversations with many of them became, in effect, an exercise in metacognition. In real time, we were watching and hearing them discuss and answer many of the questions we suggest asking about one’s own thoughts and feelings—without us ever asking them those questions.

For many CEOs, the most difficult part of developing emotional fortitude may be to share one’s thoughts, feelings, hopes, and doubts with others. We know from cross-disciplinary research that when people monitor their thoughts and feelings leading up to an important decision or action and verbalize them to a trusted colleague, friend, or advisor, the outcomes tend to be better. Yet many CEOs find this level of transparency uncomfortable in a professional context.

Nonetheless, as uncomfortable as it may be, developing emotional fortitude is a task that we see as essential for an effective CEO. The “inner work” that this requires can pay off not just in terms of better decision outcomes, but greater comfort with the process and stronger trust with one’s colleagues. Of the five traits of the undisruptable CEO that we have identified, emotional fortitude may be the most challenging to adopt—but simultaneously perhaps the most important. For it is emotional fortitude, the willingness to undergo self-examination, and put the lessons thus learned to use, that can allow a CEO to become more resilient to the stressors of decision-making under pressure and harness his or her emotions for the good of the enterprise.

Can CEOs be undisruptable?
Flexibility has supplanted steadfast leadership in the C-suite. Here are five characteristics of successful chief executives: www.deloitte.com/insights/undisruptable-ceo.

How technology vanguards outperform competitors

Economic upheaval prompts most companies to hit pause on innovation initiatives and focus on reducing costs. But according to Deloitte's Global Technology Leadership Study, tech vanguards continue to invest in the future—positioning their organizations to thrive.

By **Khalid Kark, Anh Nguyen Phillips, and Mark Lillie** *Illustration by* **Gordon Studer**

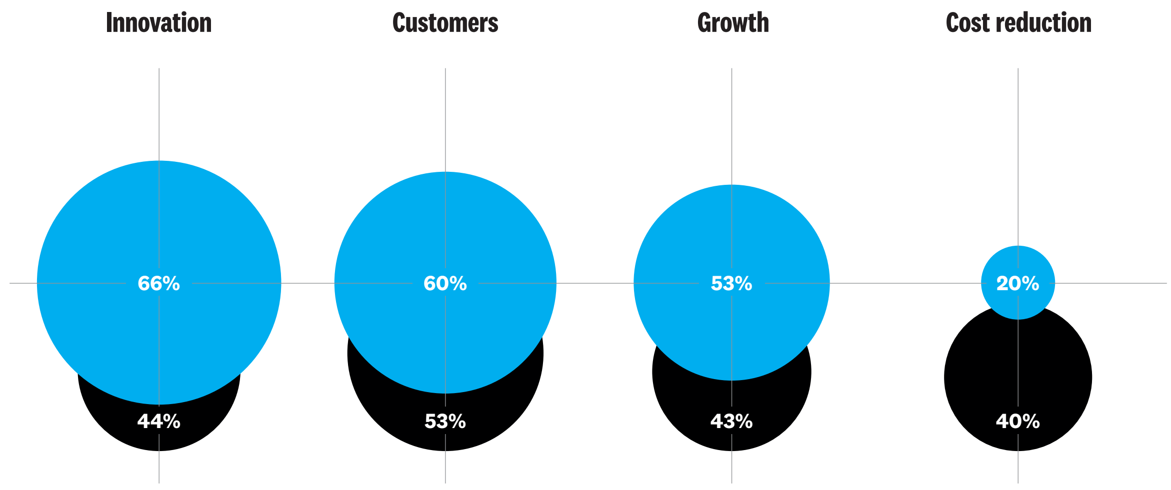
In times of economic crisis, many companies' natural inclination is to contract, slow innovation, and hit pause on major initiatives while weathering the storm and waiting for a return to normal. But, as many business strategists have recently noted, a disruption such as COVID-19 presents an opportunity to rethink, reinvent, and prepare for a better normal.

According to Deloitte's 2020 Global Technology Leadership Study, companies that put technology leaders at the strategic fulcrum of the business are well-positioned to emerge stronger from market disruptions—in large part because rethinking and reinvention require a growth-oriented mindset, a focus on the customer, and the knowledge of how to use tech-powered innovation to create a competitive advantage.[1] We surveyed more than 1,300 participants across 69 countries and 22 industry sectors to explore how leading organizations use technology as a competitive differentiator, and we identified organizations that are ahead of their peers on three dimensions: digital vision and strategy, technology function maturity, and overall market leadership. These *tech vanguards*, representing 11.6% of survey participants, enjoyed stock prices that appreciated 7% more than the industry average from 2016 to 2019 primarily by looking outward—and onward.

FIG 1: Tech vanguards drive growth by prioritizing innovation and customers

● Baseline organizations ● Tech vanguards

What are your executive leadership's top business priorities?



N=1,317.
Source: 2020 Global Technology Leadership Study.

FIG 2: Tech vanguards are more likely to prioritize new business models

● Baseline organizations ● Tech vanguards

What are the primary objectives of your transformation?

N=1,076.
Source: 2020 Global Technology Leadership Study.

> When other organizations are focused on lowering costs and reducing budgets, tech vanguards' orientation toward growth and customers drives them to continue to invest in the future.

Focus on innovation and customers to drive growth

Tech vanguards are single-minded in their approach to growth, looking to innovation to capture new revenues and expand to new markets—rather than focusing on cost reduction. They're customer-first, leveraging technology to improve customer experiences and even engaging customers in the innovation process. When other organizations are focused on lowering costs and reducing budgets, tech vanguards' orientation toward growth and customers drives them to continue to invest in the future. This growth orientation will likely encourage them to continue to invest in the future even as they respond and recover from the current adverse events.

> **"We're seeking growth via new products in global markets, aiming to grow our global customer base by improving customer experiences and quality of engagement."**
> Matthew Bainton, regional head of IT, Greater China, Dyson[2]

Compared to the rest of our survey sample (*baseline organizations*), tech vanguards are more likely to emphasize innovation, customers, and growth (figure 1). Meanwhile, baseline organizations are twice as likely to prioritize cost reduction (40%) as tech vanguards (20%).

> **"Tech leaders have to wear the innovation hat. That means being forward-thinking, helping the organization innovate, and focusing on disruption that's driven by technology. They also need to help the organization's other business leaders stay current on technology trends."**
> Theresa Drew, board member, Cato Corporation and Sonoco Products[3]

Because of the strategic importance of innovation and growth to the overall enterprise, tech vanguard organizations are allocating a greater portion of the technology budget (20%) to innovation than baseline organizations (15%). They also spend a higher percentage of revenue (4.8%) on technology than baseline organizations (4.2%) and they are more than twice as likely (24% compared to 11% for baseline organizations) to have had a more than 20% increase in their technology budgets over the previous financial year.

Likewise, tech vanguards are nearly four times as likely as others (31% compared to 8%) to say their technology function is transformational in its approach to shaping business strategy. For more than half of tech vanguard organizations (52%), transformation efforts are focused on implementing new business models. The majority of baseline organizations (52%) are more likely to focus on revamping existing operating models (figure 2).

In many organizations, COVID-19 suddenly and unexpectedly changed corporate strategy, funding, and prioritization of major initiatives.[4] As they quickly adopted new technologies and tools to mobilize a remote workforce and continue to meet customer expectations, many companies could reallocate technology budgets and resources and revisit priorities. As we publish this report, recovery is still in its infancy and the outlines of a postpandemic society and culture are faint, yet it seems inevitable that new norms for doing business will emerge. As organizations redesign business models, ways of working, and workplaces, tech vanguard organizations may be better prepared to handle these changes.

At Salesforce, implementing new business models means expanding globally. "Salesforce historically has been a heavy US customer-based company, but there's a huge opportunity for us to grow internationally," says Salesforce EVP and CIO Jo-ann Olsovsky. "This generates all sorts of interesting technology-related needs, such as regulatory, privacy acts, or different cultures that we need to support."[5]

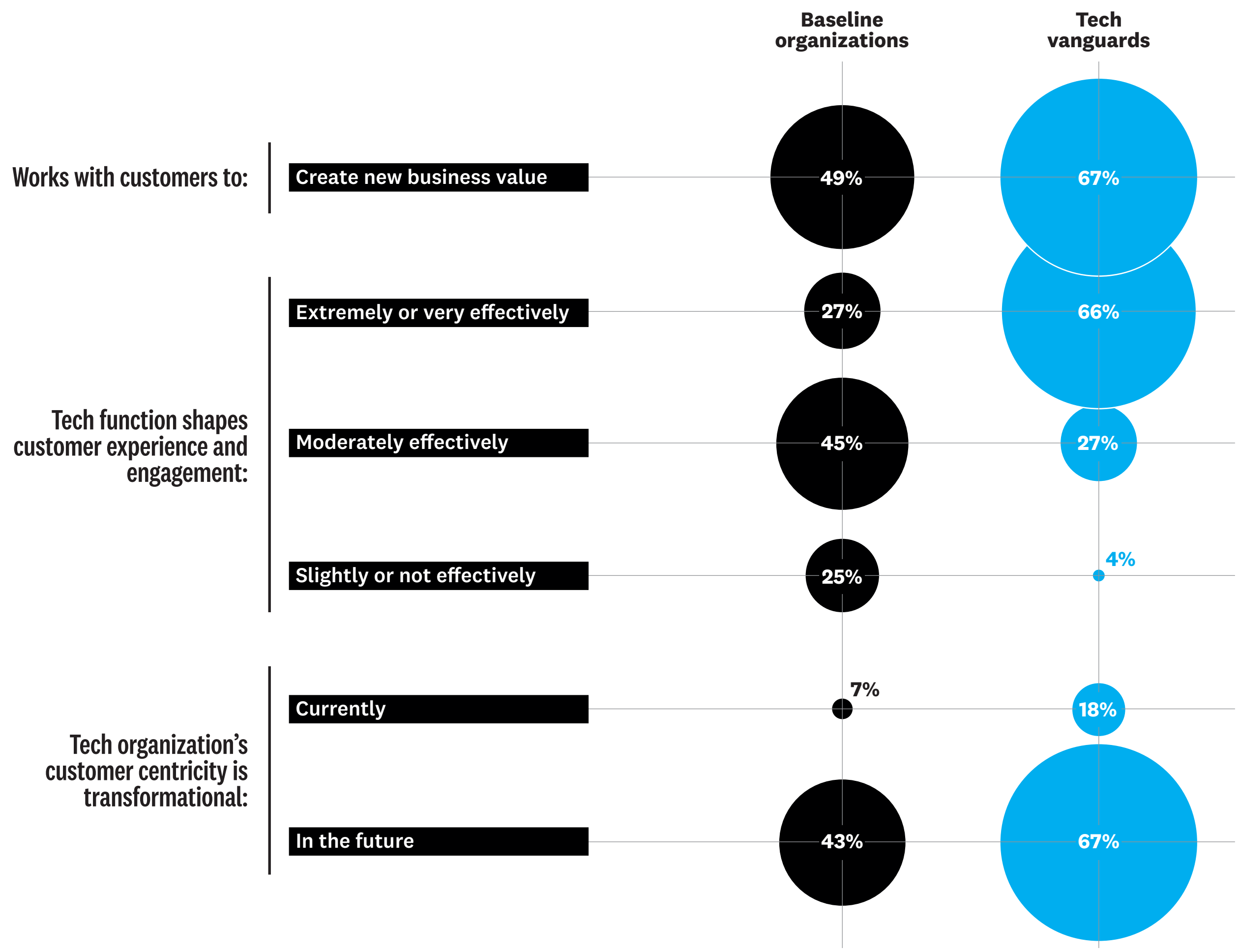
Priorities often overlap to create synergies, making it difficult to discern where one business goal ends and another begins. Gary Matula, former CIO of Koch Industries, sees customers and growth going hand in hand. "I view customers and growth through the same lens," he says. "We as an organization are going to have to get a lot more focused on everything we do—thinking about the customer first."[6]

Olsovsky agrees. "By focusing on innovation and customers, you get growth," she says. "So that becomes the benefit of doing other things."

Tech vanguards (both B2B and B2C) have an unmistakable customer bias—they understand that customers are a key lever for future corporate growth. Establishing customer trust, especially in times of crisis, can be a competitive differentiator and play a pivotal role in customer engagement and loyalty, ultimately driving future growth. Sixty percent of tech vanguards identify customers as their top priority. Nearly three-quarters

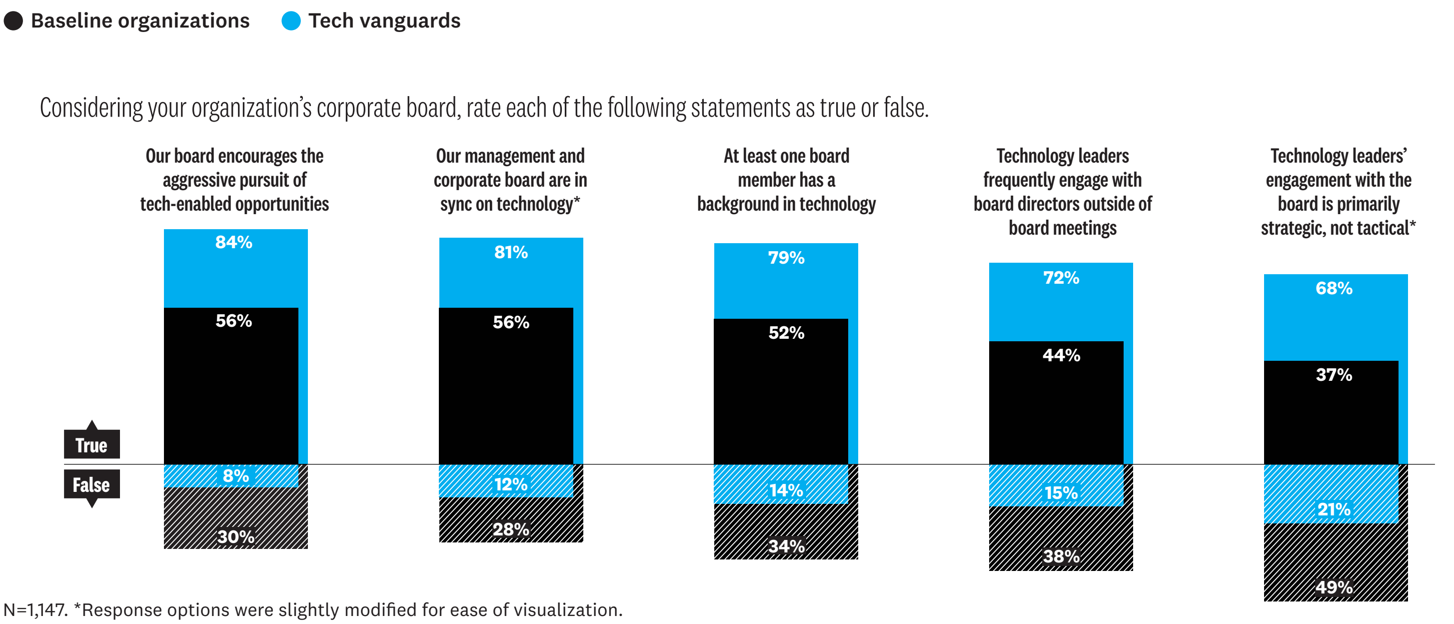
This article is an adapted excerpt from "The kinetic leader: Boldly reinventing the enterprise." *Read the full report at www.deloitte.com/insights/tech-leader-study.*

FIG 3: Tech vanguards have an unmistakable customer bias



N=1,350; 1,311; 815.
Source: 2020 Global Technology Leadership Study.

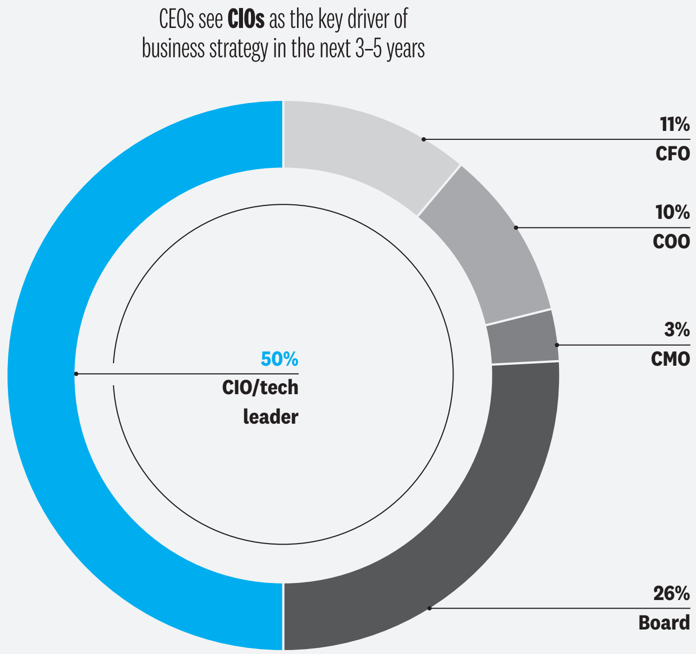
FIG 4: Tech vanguard boards engage strategically and encourage the pursuit of tech initiatives



N=1,147. *Response options were slightly modified for ease of visualization.
Source: 2020 Global Technology Leadership Study.

Sixty-seven percent of technology leaders at tech vanguard organizations expect the tech function to deliver transformational customer centricity in the near future, compared to only 43% of baseline organizations.

FIG 5: CEOs see technology leaders as their primary strategy partner, more than all other C-suite roles combined



N=100; 168.
Source: 2020 Deloitte and WSJ Intelligence global survey.

are partnering with customers to create new business value; in baseline organizations, roughly half collaborate with customers in this way. Tech vanguards' technology functions are nearly 2.5 times more likely to be considered extremely or very effective (66%) in shaping customer experiences and engagement than those in baseline organizations (27%), a capability they expect to increase over time. Sixty-seven percent of technology leaders at tech vanguard organizations expect the tech function to deliver transformational customer centricity in the near future, compared to only 43% of baseline organizations (figure 3).

Boards and C-suites champion and appreciate technology

Technology leaders cannot drive performance in a vacuum. To execute a growth agenda, they typically need support from the entire leadership team. Our survey found that tech vanguard boards are more likely than those in baseline organizations to be strategically engaged and supportive of tech leaders and initiatives. Tech vanguard board members share with technology leaders a bold, tech-enabled vision of the future that guides priorities, decisions, and investments. They actively champion technology-enabled change. On the other hand, boards of baseline organizations are less likely to be in sync with management on technology issues. Their engagement with the organization's tech leaders is more likely to be limited to tactical issues rather than strategic, technology-driven business decisions (figure 4).

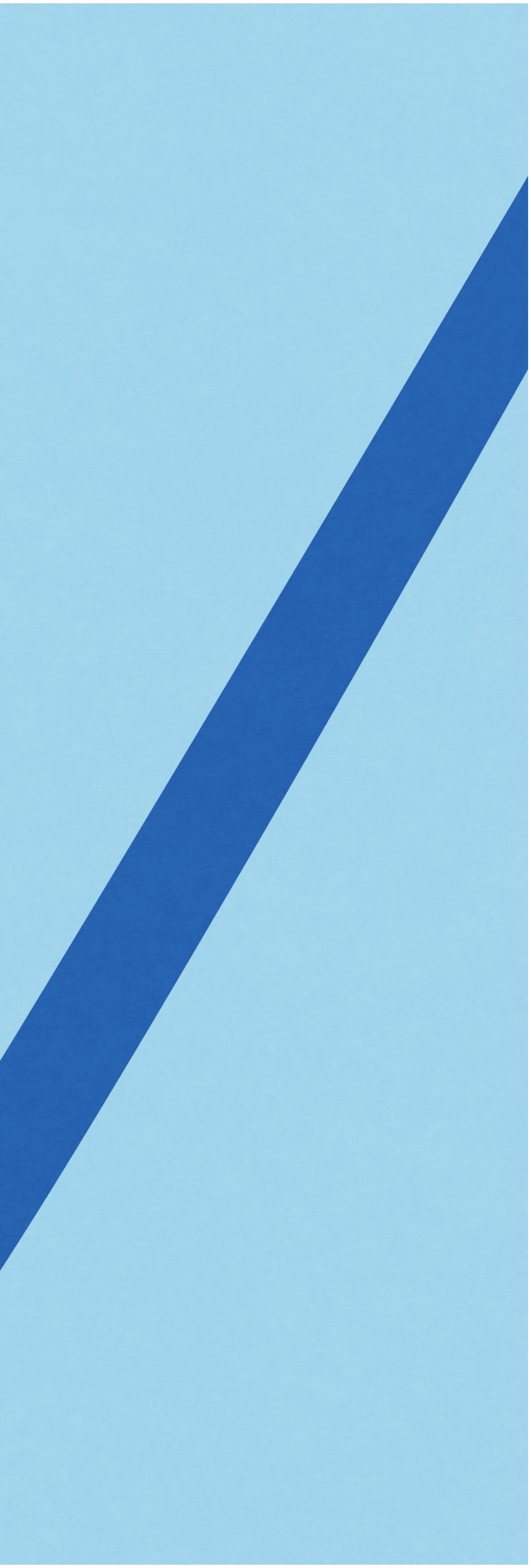
Similarly, in 2018, we found that leaders who had established comprehensive tech fluency initiatives in their enterprises were more likely to have established deeper relationships with the C-suite.[7] Tech fluency likely will become even more important in the future as the board oversees profound shifts in work, workforce, and workplace—and the technology tools that enable these shifts.

A recent report by Deloitte and WSJ Intelligence concludes that high-performing organizations are 2.5 times more likely to prioritize using technology to advance goals (figure 5).[8] Boards of tech vanguard organizations seem to understand this instinctively. They perceive the strategic value of technology and are more frequently engaged in technology issues than those in baseline organizations. For example, these boards are far more likely (84%) to encourage the aggressive pursuit of technology-enabled opportunities than their baseline counterparts (56%). They are 27% more likely to have at least one board member with a technology background, and they are more likely to engage with technology leaders outside of board meetings.

The Deloitte–WSJ Intelligence report found that CEOs and tech leaders are aligned on the importance of technology in driving key business strategy and performance indicators, including customer engagement and satisfaction, efficiency and cost reduction, employee engagement and productivity, top-line growth, and product and service innovation. The study also determined that CEOs see CIOs and technology leaders as their primary business strategy partners. Fifty percent of CEOs said their CIO or tech leader will be the key driver of business strategy—more than those who named the CFO, COO, or CMO as their top partner combined (figure 5).[9]

CEOs here are signaling their support for technology leaders and the tech function to step out of the traditional role of driving operational efficiency and stability, and to instead drive change and deliver value for the organization.

2020 Global Technology Leadership Study podcast
Explore tech leaders' evolution from back-end support to end-to-end change agents: www.deloitte.com/insights/tech-leader-study-podcast



Create opportunity for and with the workforce

With the pandemic making remote working the norm, and digitization and automation continuing apace, the evolution of work is accelerating. Learn how organizations can help develop workers' curiosity, imaginations, creativity, empathy, and courage to achieve real business impact.

By **Jeff Schwartz** *Illustrations by* **Egle Plytnikaite**

If you have ever experienced whitewater rapids, you know the exhilarating sensation of making hairpin turns to avoid rocks; changing direction every few seconds; and trusting your team, your very wet, adrenaline-pumped team, as you cut through rushing currents. Few have navigated the treacherous COVID-19 rapids as deftly as Eric Yuan, CEO of Zoom, the now ubiquitous videoconferencing technology company. Zoom was founded in 2011 when the videoconferencing market was already in full swing. That same year, Microsoft bought Skype for US$8.5 billion.[1] Four years earlier, Cisco, the internet networking giant, bought WebEx, another leading videoconferencing company, for US$3.2 billion.[2] Yet when the world went into quarantine, and businesses and schools relocated to living rooms, everyone learned to Zoom.

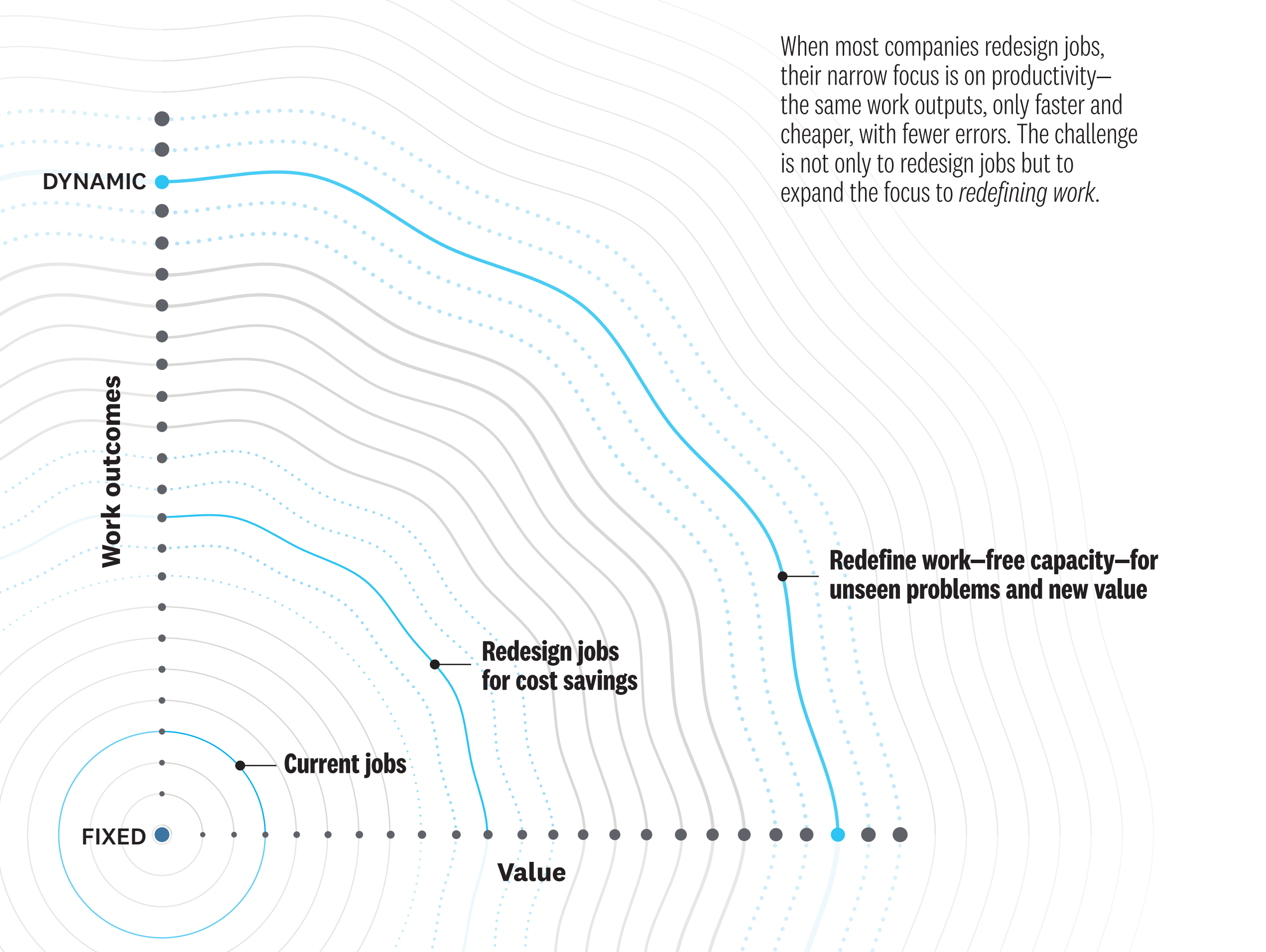
Though Yuan and his team had trained on responding to natural disasters in the run-up to going public in 2019, they never imagined they would face the size of the surge in demand. But they were prepared: Zoom's data centers were set up to handle traffic surges of 10 to 100 times normal, Yuan says. Zoom did not miss a beat when, overnight, everybody realized they needed a tool like Zoom to connect their people. In a typical day early in the pandemic, 343,000 people globally downloaded the Zoom app, compared with 90,000 people worldwide just two months earlier, according to mobile intelligence firm Apptopia. That's almost four times as many downloads in a single day. With engineering teams across the globe, Zoom was able to remotely monitor its systems around the clock.[3]

The job of business leaders today can resemble navigating in unpredictable, turbulent, crowded, and even dangerous waters. Whitewater is named for the bubbly, unstable, aerated, frothy water that appears white. As John Seely Brown, former cochair of Deloitte's Center for the Edge, has reminded us, "We are living in a whitewater world. It's a world that is rapidly moving in often surprising and unforeseen ways." Like a whitewater kayaker, business leaders must learn to skillfully read the currents and disturbances of the context around them, "interpreting the surface flows, ripples, and rapids for what they reveal about what lies beneath the surface."[4]

Navigating the rapids also involves the occasional crash into rocks or capsizing. Yuan, the entrepreneur, experienced such challenges early in the quarantine, including security and privacy breaches. He responded by acknowledging the problems and working harder to address them. He also learned more about his customer base, always a prime focus for Yuan. The typical Zoom client had been a company's chief information officer who had been introduced to the product's functionality, including privacy features, and leveraged them. With the pandemic came many first-time users who thought nothing of posting on social media a gallery view from a Zoom call, which they did not realize included their meeting room and password. Suddenly, complaints of "Zoom bombing" arose, with strangers crashing videoconferencing calls. Yuan and his team quickly realized that

The job of business leaders today can resemble navigating in unpredictable, turbulent, crowded, and even dangerous waters.

FIG 1: Redefine work for new value



Source: Jeff Schwartz, John Hagel III, and Maggie Wooll, *Redefining work for new value: The next opportunity*, Deloitte Insights, December 5, 2019.

“Everyone is talking about the future of work. But few are asking the most fundamental question: What should that work be?”

John Hagel, management consultant and author

COVID-19 crisis brought a different user base to his product, one that did not know about Zoom’s security features. As a result, Zoom shifted to focus on “how to make it easier for first-time users,” Yuan explains. “We changed our practice.”[5]

Companies poised to thrive in today’s whitewater world, and the future world of work, are organized to facilitate quickly creating new products, services, and experiences. They are sensing and building, responding and growing, as they focus on continual improvement. They work in highly integrated teams with a dedicated customer focus and the ability to deliver in sprints. Agile by design, the next minimum viable product is their touchstone.

The rapid rise of Zoom during the first half of 2020 is likely to be a case taught in business schools. And well it should. While Zoom will attract its fans and critics, it is hard to argue that there is not something essential to learn from this evolving story. In uncertain and volatile markets, nimble, entrepreneurial companies can take on corporate giants and reorder industries. This is the growth opportunity of leading in the whitewater world through maintaining an almost fanatical focus on usability and customer experience (“it’s so easy to use”), building for scalability, investing in resilience, and managing a team focused on continual improvement and unseen problems. The Zoom team’s ability to navigate the whitewater environment illustrates the types of challenges in which humans excel, and artificial intelligence, so far, does not.

Key mindset shifts for business leaders

Create value, meaning, and impact, moving beyond cost reduction and efficiency as the main goal

“Everyone is talking about the future of work. But few are asking the most fundamental question: What should that work be?”[6] John Hagel and John Seeley Brown (JSB), former cochairmen of Deloitte’s Center for the Edge since 2007, have been asking questions like this in their work to identify emerging opportunities and big shifts in the business landscape.[7] In their recent research, they dive deeply into this question: The future of work to what end? Their research points out that “far too many initiatives are focused on incremental gains or efficiency-boosting activities.” They call robotic process automation, AI, and machine learning “shiny new tools” that companies can implement to cut costs and work faster with less human labor. However, they caution that “when organizations subscribe to this narrow perspective, the work of tomorrow will be the same as the work of today.” As Hagel and JSB point out, the opportunity is greater than doing more of the same, only faster and cheaper. The big opportunity is to expand notions of value beyond the cost to the company. Companies have additional levers to explore new sources of value and meaning to remain competitive amid rapidly changing market dynamics.[8] Companies that successfully redefine work to focus on our human qualities enable their employees to engage in four types of activities: identifying unseen problems and opportunities, developing approaches to solve problems and address opportunities, implementing new approaches, and iterating and learning based on the impact achieved. The Zoom example powerfully illustrates human beings excelling in each of these four types of activities.

Actions:

- Shift the objective of work beyond efficiency to expand the value and impact delivered to customers, workers, and communities.
- Fundamentally redefine work from executing routine tasks to creatively addressing unseen problems and opportunities.
- Cultivate work to use our human qualities, shifting from skills to capabilities.
- Build relationships within and across teams so that managers and workers can focus on output and impact, not just on workflow and transactional activities. Connect teams so they consider the impact and think about what’s important to customers and workers.
- Instill a culture of tolerance for heterodox ideas and risk-taking.

Focus on redefining work as the way forward, not just redesigning jobs

The application of robots, robotic process automation, and cognitive and AI technologies offers unprecedented opportunities to improve efficiency and productivity. Unfortunately, many companies are aiming their future of work efforts narrowly at *job redesign* for efficiency and cost savings, which will only get them so far, rather than at *redefining work*. In the limited view of redesigning jobs, workers represent cost savings rather than the capacity to create new value for the business and the customer. When most companies redesign jobs, their narrow focus is on productivity—the same work outputs, only faster and cheaper, with fewer errors. The challenge is not only to redesign jobs but to expand the focus to redefining work, including product strategies and business models.

By *redefining work*, employees at all levels focus on finding and addressing unseen problems and opportunities. “The unseen is a key aspect of redefining work,” Hagel and JSB have noted in their research. “Addressing a hidden problem or opportunity has the potential to create more value because it has been neither considered nor understood; there is room for far more learning, and impact, by trying to better understand a brand-new situation than from making incremental improvements on a well-defined issue.”[9]

A critical shift for business leaders is to balance the focus on efficiency and productivity on the one hand with innovation and value on the other. Innovation does not arise from productivity and efficiency unless work teams, managers, and employees are challenged to recognize that better work is not just more of the same. It is something new: new value, products, new services, new experiences—also known as entrepreneurialism. It is a fusion of value for the customer and well-being for the workforce.

Cost savings and efficiency *can* have larger and longer-lasting value when business leaders use the cost savings to fund investments in new products and to strengthen customer relationships and experiences. As we have noted, the proliferation of ATMs resulted in redesigning the jobs of retail bankers so that they offered a different service from the machines. Retail bankers were no longer simply dispensing cash but they could spend more time with customers, introduce them to new products and services, and extend the bank's ability to offer a higher level of customer interaction and service. Doing more of the same, and doing it faster, is *not* where the magic happens—the magic is when workers and teams can solve new problems and create new value, services, and relationships.

Actions:

- Integrate job redesign—for speed and improved output through automation—with work redefinition to create new value with freed capacity.
- Challenge work groups and teams to focus on uncovering unseen problems—not just cost savings.
- Create work group agency so teams have the focus and the flexibility to both produce the product *and* improve the product. As we have learned from the Toyota factory line, among the world's most productive *and* innovative manufacturers, the job of the work group on the line is not just to execute production but to improve production and quality.[10]
- Build work groups and teams around the relationships that will drive innovation, contribution, and well-being, not just efficiency. Design and

Doing more of the same, and doing it faster, is not where the magic happens—the magic is when workers and teams can solve new problems and create new value, services, and relationships.

Adapted with permission of publisher, Wiley, from Work Disrupted: Opportunity, Resilience, and Growth in the Accelerated Future of Work *by Jeff Schwartz, copyright © Wiley. All rights reserved. This book is available through all bookstores and online booksellers.*

As the workforce has expanded to a much broader continuum of employment models, the traditional talent management mindset of "attract, develop, retain" is giving way to new approaches.

connect work groups and teams in networks, within and beyond the enterprise, to create value and opportunity for workers and customers.[11]

Leverage the entire open talent continuum, from full-time workers to freelancers and crowds, along with virtual and digital workplace options

Work and workforces have been increasingly separated from companies as we have witnessed with the expansion of the alternative workforce—managed services, contractors, freelancers, gig workers, and crowds. As the workforce has expanded to a much broader continuum of employment models with people who are working in new ways and in new places, the traditional talent management mindset of "attract, develop, retain" is giving way to new approaches. Historically, the employee life cycle has focused on recruiting the employees we need; developing them with prescribed, linear, career paths; and holding on to them—especially the "critical talent"—as long as possible.

Deloitte Consulting LLP's Workforce Transformation practice is developing a new approach, beyond the traditional employee life cycle, to a workforce ecosystem cycle, shifting to a new mindset: *access, curate, engage.*[12]

Access: How do you tap into capabilities and skills across your enterprise and your broader ecosystem? This includes sourcing from internal and external talent marketplaces and leveraging and mobilizing on- and off-balance-sheet talent.

Curate: How do you provide employees—ecosystem talent—and teams with the broadest and most meaningful range of development? This includes work experiences that are integrated into the flow of their work, their careers, and their personal lives.

Engage: How do you interact with and support your workforces, business teams, and partners to build compelling relationships? This includes multidirectional careers in, across, and outside of the enterprise; and for business leaders and teams, providing insights to improve productivity and impact while taking advantage of new ways of working and teaming and new digital technologies.[13]

Actions:

- Integrate talent and workforce strategies and programs to access, curate, and engage capabilities from within and across the enterprise and ecosystem.
- Explore how to use talent and opportunity marketplaces, not just HR managers and administrators, to deploy people by giving them agency to choose full-time and part-time jobs, gigs, and assignments across your organization.
- Watch workforce engagement rise and the quality of workforce information and analytics improve.
- Develop an organizational culture, as well as manager and team incentives, to encourage development and stretch assignments. Reinforce the concept that employees work for the company, not just one division or one manager.
- Build relationships across the entire talent ecosystem for your industry to be able to broadly access talent and create opportunities for people to move in and out of your organization for jobs and projects.
- Create an environment providing the comfort, connection, and opportunity to contribute that workers are seeking, where they feel they are part of the organization's mission, purpose, and team.[14]
- Recognize that work and teams are increasingly structured around projects. A number of creative industries, including films and media, have moved from vertically integrated studios and companies to a portfolio of projects—where each project can be crafted and constructed to access capabilities and talent from almost anywhere to create unique results.
- Understand that the relationship between work and workplaces are in the midst of fundamental shifts. These changes have been accelerated globally by the COVID-19 pandemic. During the public health crisis, a record number of workers shifted almost overnight to remote and virtual work. MIT research reported that in the first week of April 2020, just under 50% of workers surveyed in the United States were working remotely.[15] A survey of CFOs during that same time period reported that 74% of their organizations expected to move at least 5% of their workers to permanently remote positions post–COVID-19, and a quarter of organizations surveyed were planning to move at least 20% of workers to permanent remote work.[16] Redesigning work for remote and hybrid ways of working is a key action and opportunity for business leaders.

In a world of paradoxes, speed, complexity, and machines, we need to lead by doing uniquely human things. People imagine the future; people compose music, work, and businesses; and people activate curiosity, passion, connectedness, and belonging. We sometimes need to be reminded that we invented all of this technology.

Business leaders can set goals that reach beyond cost and efficiency to include value and meaning. They have the chance to analyze, redesign, and redefine work, workforce, and workplace options that take advantage of the value of automation, alternative talent sources, and collaborative workplaces. And they can align the organization, leadership, and workforce development programs to access skills, curate next-generation experiences, and engage the workforce of the future in long-term relationships and business leaders in new ways of working.

Developing human capabilities to unleash business performance
Learn how developing workers' curiosity, imaginations, creativity, empathy, and courage can achieve real business impact: www.deloitte.com/insights/human-capabilities

A new business paradigm to address climate change

Like the general populace, companies need to reframe their sustainability efforts around the collective, rather than the individual. Here's how to effect positive—and profitable—change across the business ecosystem.

By **Michael Raynor and Derek Pankratz** *Illustrations by* **Brian Stauffer**

The science is as settled as any in the modern canon: Climate scientists are near-unanimous in concluding that human activity is changing the Earth's climate in ways that threaten the natural environment and civilization itself.[1]

Given the stakes, every actor should do what they can to check climate change and adapt to a changed planet, something that more companies are embracing.[2] Moreover, companies' stakeholders, from consumers and employees to lenders and communities, are increasingly demanding action. The regulatory environment is likely to grow more stringent going forward.[3] The climate-related risks to operations, supply chains, facilities, and workers compound as we experience record heat and unprecedented flooding. Most fundamentally for business, unchecked climate change can jeopardize enterprises' stock of social and natural capital. Going forward, a company's societal "license to operate" will likely be contingent, in part, on it being a responsible steward of the Earth.

Being a good steward and averting a disaster of our own making can require us to rethink many of the orthodoxies we have long taken for granted.

Encouragingly, the COVID-19 pandemic has illustrated that many of the constraints we thought were binding—about how and where and when work gets done, and to what end—were far more malleable than we believed. And we increasingly see a business community ready to act quickly to mitigate, adapt to, and create new value amid climate change, with new initiatives being announced seemingly weekly.[4]

While many companies recognize the need to move to a more climate-friendly operating model, organizations often focus too narrowly on common levers to respond to climate change. The business community does not lack for resources, tools, or cleverness. What is often missing is a set of new decision-making paradigms suited to such an unprecedented challenge.

And so, for those leaders prepared to act but struggling to determine how best to proceed, we suggest a new way of thinking about how business can address climate change.

Shifting the business paradigm

For much of at least the last century, companies operating in market-based economies have largely been managed to maximize financial performance, bounded by regulations and with the enterprise itself as the locus of concern. Perhaps not coincidentally, that period has coincided with nearly all of the human-generated climate-warming emissions to date.[5] Indeed, the climate crisis can be understood, as a comprehensive economic analysis of the issue puts it, as "the greatest market failure the world has ever seen."[6] The climate itself exemplifies a "commons problem," whereby a shared and nonexcludable resource is subject to depletion.[7] Countries, businesses, and individuals are subject to free riding, the temptation to avoid contributing to a public good (in this case climate mitigation), and collective-action problems.[8] Greenhouse gas (GHG) emissions are negative externalities that most markets either underprice or don't price at all.[9]

In the last few years, however, there has been a growing movement to reexamine how companies operate—and for whom.[10] "Stakeholder capitalism" imagines corporations as being responsible not only to their shareholders but to their employees, suppliers, communities, and the environment.[11] In that vein, more companies have begun to take action to address the climate crisis. More companies are disclosing more climate-related information in line with the Task Force on Climate-Related Financial Disclosures' recommendations.[12] Nearly 500 companies have approved science-based targets for reducing GHG emissions as of September 2020, for example, a number that continues to grow.[13]

The business community does not lack for resources, tools, or cleverness. What is often missing is a set of new decision-making paradigms suited to such an unprecedented challenge.

THREE DIMENSIONS FOR BUSINESSES' CLIMATE CHANGE RESPONSE

As the causes and consequences of global warming have grown clearer, businesses have begun responding across three (not mutually exclusive) dimensions

Mitigation: In a business context, *climate change mitigation* refers to efforts to reduce or prevent the emission of greenhouse gases. To avoid the worst possible impacts of climate change, people need to limit the rise in mean surface temperature to 1.5°C, which requires dramatically reducing anthropogenic CO2 emissions.[14] Businesses can help by shifting power generation to nonemitting sources, such as solar, wind, and nuclear; electrifying systems that rely on the burning of fossil fuels, including vehicles and building heating; reducing emissions through increased efficiency and decreased consumption of existing GHG-emitting activities; adapting agricultural systems; and capturing and sequestering carbon to offset emissions from sources for which we have no viable nonemitting substitute, and removing past emissions from the atmosphere.[15]

Adaptation: For businesses, *climate change adaptation* refers to the process of adjusting to actual or expected climate change and its anticipated impacts, seeking to moderate harm to business operations and activities. Companies should assess how longer droughts, more severe and frequent flooding and wildfire events, rising sea levels, and a host of other changes in the natural environment ultimately might affect their business and take steps to reduce their exposure to climate-related risks—by, for example, relocating vulnerable links in the supply chain. The severity and frequency of the impacts could increase and compound with time even if global mitigation efforts succeed, adding urgency to business leaders' efforts to make their organizations more climate-resilient.

Value creation: *Value creation* refers to the creation of business strategies, products, and services designed to exploit the beneficial opportunities presented by climate change, or to the design of mitigation and adaptation activities with a resulting commercial benefit in mind. Decarbonizing the global economy is often framed as a costly, painful endeavor that could retard growth, jeopardize jobs, and straitjacket innovation.[16] To be sure, there would be short-term costs, which could be acute for some sectors and individual companies whose business models are currently contingent on fossil fuels and carbon-emitting processes. But tremendous, new opportunities to create and capture value will likely materialize as well. The shift to renewable energy, the electrification of transport, changes to agricultural practices, and the transition to low-emission and higher-efficiency industrial processes are already powering a range of new business models.[17]

Climate change actions at the industry level, working with suppliers and customers to find new solutions, are a prerequisite for mitigating emissions.

Climate and sustainability risks dominated the World Economic Forum's annual meeting in 2020, as seen most prominently in the championing of the effort to plant 1 trillion trees to capture carbon.[18] The list of actions grows almost daily.

The swift and dramatic shift has left many businesses without a set of analytical tools and decision-making mindsets commensurate with this broader purpose. When addressing climate change, applying only the same approaches we have used in the past to manage businesses—navigating between economic incentives and regulatory constraints, and with the individual company as the primary actor—is likely to leave us far short of what most expect is needed to help avoid some of the worst impacts of climate change, or even to prevent material disruption to our current ways of life.

Companies should augment the ways they have traditionally evaluated actions by expanding the scope and scale of activities that are in play. This could mean moving from an approach focused primarily on the enterprise itself to one that encompasses multiple fronts: the individual company, yes, but also acting collectively with others as an industry and across a broader ecosystem of participants.

Each of these levels of action—organization, industry, ecosystem—could require a different set of objectives, constraints, and ways of evaluating success. At the level of the organization, we should consider how we prioritize outcomes and how we measure and capture value. At the level of the industry, we should collectively change the rules of the game—that is, the constraints organizations face when effectively competing—and how we create value in ways that lead to climate-friendly outcomes. And at the level of the business ecosystem,[19] we should change the objectives to ones that put climate mitigation, adaptation, and value creation on at least equal footing with growth and profitability.

These are not either/or choices. The magnitude and severity of the challenge suggest that business leaders should evaluate their options and work on initiatives across all three fronts at once.

Company-scale action: Change how you capture value by rethinking relevant priorities and time horizons

Companies' individual climate actions shouldn't be categorized as just philanthropic efforts. In many cases, these actions can be easily justified in both environmental *and* economic terms. The Carbon Disclosure Project compiled data on roughly 4,800 global companies that collectively reported supply chain efficiency efforts amounting to the mitigation of 551 million metric tons of carbon emissions and cost savings of US$14 billion, with approaches including smarter packaging, product life cycle analyses, and circular design.[20] Research on more than 1,500 companies suggests that those organizations that are more carbon-efficient—using the least amount of carbon for a unit of output—are both more profitable and less vulnerable to macroeconomic risk due to more effective use of resources and decreased exposure to shocks, such as a changed regulatory environment.[21]

But hidden biases often make profitable climate-related investments largely invisible. Perhaps the most potent of those biases is an overemphasis on short-term results, a product of both human biology and cognition[22] and the structure of capital markets.[23] By prioritizing quarterly or even annual growth and profits, business leaders can be blinded to the risks, costs, and foregone gains that accrue over even slightly longer time horizons. But we're playing the long game here. Viewing business implications through a lens of long-term, sustainable profitability and growth may make actions related to climate mitigation, adaption, and value creation more justifiable in financial terms.

Moreover, when companies look at the big picture, they may see that climate-related actions shouldn't be an ancillary effort. By embedding climate-related actions in existing strategy and enterprise risk management practices—using scenario planning informed by detailed forecasts and an understanding of value-at-risk—companies can take a more systematic approach to identifying where they can reduce their own impact and guard against emerging risks. Ultimately, consideration of climate impact can infuse itself into every organizational decision, and business unit metrics and performance management systems should follow suit.

Industry-scale action: Change how you create value by changing relevant constraints

A single company might be too small to, say, prompt its suppliers to shift to less carbon-intensive forms of crop cultivation—or, conversely, to unilaterally move to a more climate-friendly input that comes at greater cost. But what if the entire industry asked together? While estimates vary by country and industry, often the majority of business-related GHG emissions fall under "Scope 3"—indirect emissions related to a company's operations, value chain, and product usage. (Roughly 93% of telecommunications emissions are Scope 3, for example.)[24] In other words, climate change actions at the industry level, working with suppliers and customers to find new solutions, are a prerequisite for mitigating emissions and could have a greater effect than company-scale actions alone.

There are already examples of such industry-level action working to change the constraints within which businesses have

This article is adapted from a longer report, "A new business paradigm to address climate change," *available online at www.deloitte.com/insights/environmental-stewardship.*

traditionally operated. In the United States, agriculture is conservatively estimated to account for about 10% of the nation's total annual greenhouse gas emissions[25] but has the potential to not only become carbon-neutral but to actually sequester carbon.[26] Right now, though, farmers and ranchers have little incentive to adopt carbon-friendly agricultural practices such as no-till and planting of cover crops. With thin margins to begin with and no mechanism to capture the positive externalities associated with climate-positive alternatives, the regenerative-agriculture movement has been slow to gain traction. In an effort to change constraints, producers formed the Ecosystem Services Market Consortium to create a market to reward sustainable agriculture practices in the form of credits, which others elsewhere in the food supply chain could then purchase to offset their carbon footprints.[27] While still in the research and pilot phase, the group includes major industry consortia, nonprofits, and some of the largest US food companies.

To actively shape the decision-making context so that the outcomes are more climate-friendly, we first should identify how organizations in the industry can take steps to reduce their carbon footprint. Then comes potentially the most difficult task: convening erstwhile competitors to collectively change the rules of the game. Consider it a treaty, in which you and your competitors agree not to use certain strategies or tactics even as you continue seeking advantages over them.

In some cases, the actions on the table might be precompetitive, in which case marshaling support might be relatively straightforward. In others, where the changes could affect competitive position, success requires real leadership and perseverance, and the carrot of publicly crediting adopters should be used liberally—which, by extension, could create pressure for laggards to opt in. Industry and trade groups can serve as useful conveners, and can also be powerful voices for encouraging proclimate policies and regulation. The Science Based Targets Initiative has, or is in the process of, developing technical standards for emissions reduction for a variety of industries,[28] while organizations such as the Sustainable Forestry Initiative provide certifications and product labels attesting to certain standards being met.[29]

It may also require hard conversations with industry suppliers (who might also be customers), who could face lower demand or higher costs as a result of the collective's changed approach. The industry should be willing to explore ways to share the burden by, for example, accepting higher prices or less preferential treatment.

In short, you are changing the constraints, but at the industry level. Competition continues apace—but you're all doing business in a more climate-positive way.

Ecosystem-scale action: Change how you define value by changing your objective

Averting calamitous levels of global warming could require large-scale collective action. To realize the most ambitious impacts at a planetary scale would likely require the mobilization of a host of actors within entire business ecosystems, cutting across traditional industry boundaries and often including governments, nonprofits, academia, and others.[30]

That, in turn, requires a decision-making approach with a reframed business objective. Unlike with industry-scale action, ecosystem-scale action means that competitive differentiation matters far less than usual—indeed, cooperation with competitors is often a hallmark. The path to profitability may be murky or may stretch further into the future than standard business thinking typically accommodates. Value is measured not by immediate ROI but by effectiveness in addressing climate change and, ultimately, the enterprise's ability to have the natural and societal resources it needs to remain viable over the long run.

To be clear, this doesn't mean sacrificing your company in the fight against climate change. But climate is an issue that transcends company and industry, even society and country. It is a global challenge that likely requires the contributions of profit-seeking enterprises to help address. The costs of inaction—and loss of a societal license to operate—are likely to be orders of magnitude beyond any near-term outlays. Without collective, ecosystem-scale action, individual-scale success could leave us far short of what's needed to avoid the worst impacts of climate change.

Value is measured not by immediate ROI but by effectiveness in addressing climate change and, ultimately, the enterprise's ability to have the natural and societal resources it needs to remain viable over the long run.

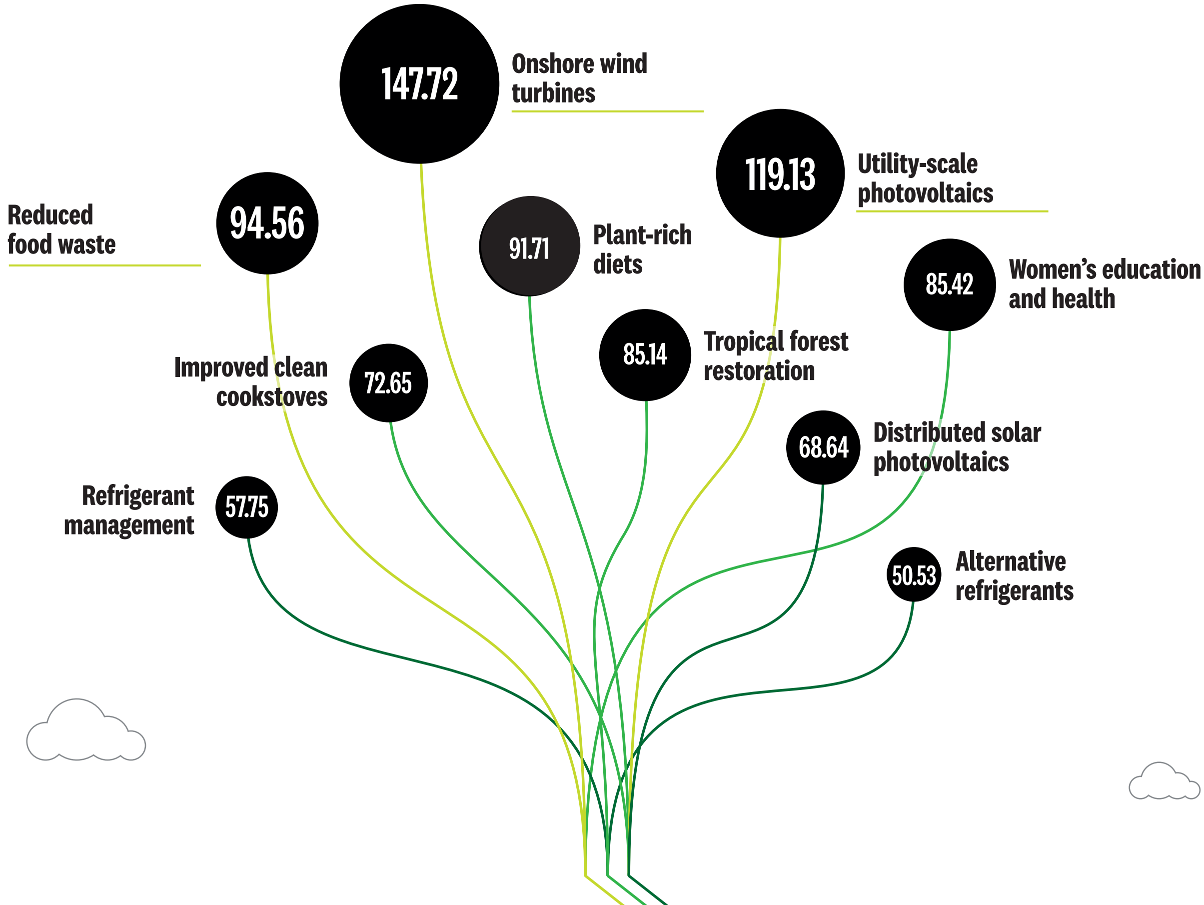
GOVERNMENT'S OVERARCHING ROLE IN CLIMATE CHANGE ACTION

Public policy and regulation addressing climate change are evolving rapidly but unevenly across the globe, and the overall trajectory is toward more and more aggressive approaches to curtail GHG emissions and decarbonize the economy.

In the context of our framework, government action can accelerate, retard, obligate, or obviate particular types and levels of action. It shapes what is required of companies and industries, and what is possible across ecosystems. Tax credits and other incentives can influence consumer and business behavior, putting a broader range of activities into the category of things that "pay" for a company's top or bottom line. Government-set standards can help make coordinated, industry-level constraints unnecessary. Public sector funding and financing can provide the necessary resources for ecosystem-level initiatives to get off the ground.

FIG 1: Leading solutions for reducing atmospheric GHG

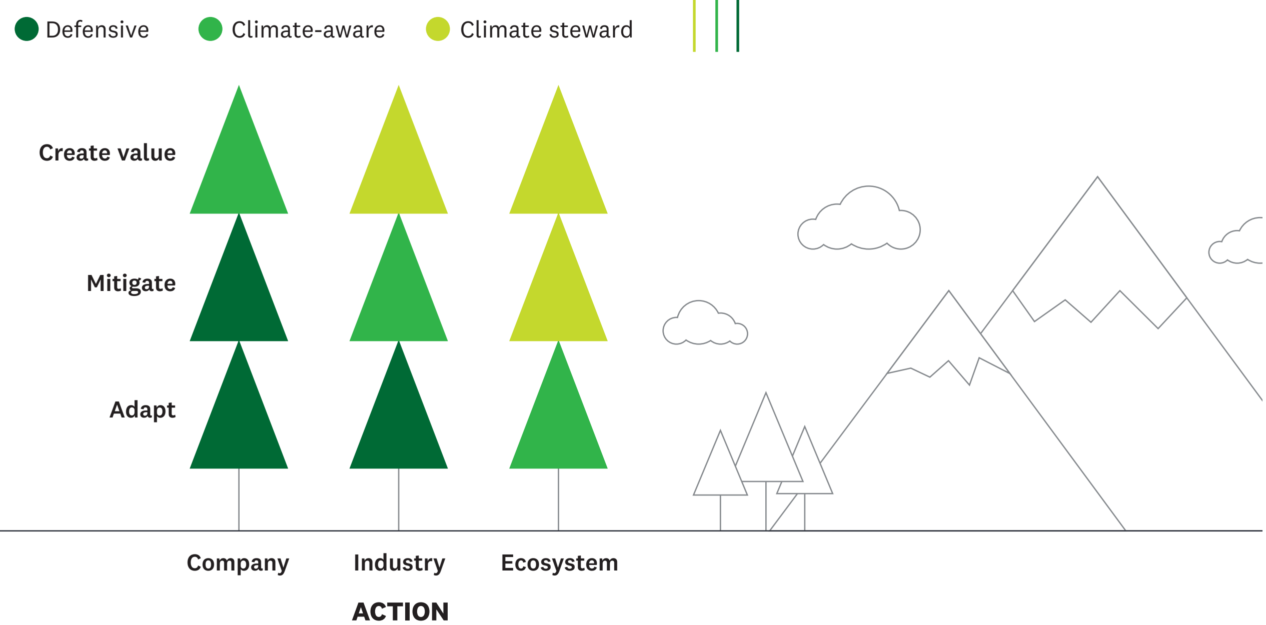
Gigatons CO2 equivalent reduced/sequestered, 2020–2050 (based on 1.5°C pathway)



Source: Project Drawdown, accessed September 2020.

FIG 2: Businesses should aspire to be climate stewards

By thinking through each locus of action—and by infusing a climate-first mindset into every decision—companies can mature to become true stewards.



Source: Deloitte analysis.

Acknowledgments: *The authors would like to thank Sam Baker, Bill Eggers, Steve Goldbach, Meadow Shawnee Hackett, Kate Hardin, Eamonn Kelly, Marlene Motyka, Christine Robinson, Brenna Sniderman, Kristen Sullivan, and Kyle Tanger for providing valuable input.*

> If there is a silver lining, it is this: We have the tools and technology we need to head off the worst outcomes, and a window to do so.

Deep-seated business mindsets can divert even the best-intentioned leaders from acting collectively where it could do the most good. Often, companies want customers and employees to perceive them as "owning" a particular climate solution or having a differentiated position. But the result may be losing sight of the ultimate, existential objective. Questions of uniqueness, differentiation, and ownership are less relevant. These are collective-action initiatives in which followership might be more valuable than leadership.

Where should ecosystem-level action take place? The search should focus first on initiatives that promise the greatest potential impact. When it comes to reducing atmospheric carbon, some leading solutions include reducing food waste, expanding plant-dense diets, reforestation/afforestation, changing agriculture practices, and shifting electricity to renewable sources. (Figure 1 shows the nonprofit Project Drawdown's top 10 solutions.)[31] Many of these solutions are being actively pursued at the ecosystem level, bringing together diverse sets of participants and experts in an effort to achieve broader impact.

Suffusing climate thinking throughout the organization

Enabling new value creation and the most impactful ecosystem-level action means aspiring to be a climate steward, infusing an awareness of and responsiveness to climate impacts into every key decision (figure 2). Ideally, that should include concrete, tangible metrics (such as an internal price on carbon) that factor into each cost-benefit analysis and to which leaders are held accountable.[32]

For many, infusing climate considerations throughout the organization will require a far more sweeping transformation than currently envisioned, with implications for procurement, talent, the supply chain, product development, customer relationships, and more. To succeed, such an effort almost certainly must be championed by the board and led from the C-suite, with the CEO's visible and vocal support. For many, it could constitute a fundamental business model transformation. It necessitates new processes, yes, but also a shift in mindset throughout the workforce, its suppliers, and its customers. This is where many existing corporate sustainability initiatives can play an important role. While things such as distributing (branded) reusable water bottles are often derided as "greenwashing"—and often have only a tangential relationship to climate change—they can be valuable as a form of "sincere signaling" and a way to raise awareness of the organization's impact on the environment.

Addressing climate change challenges conventional ways of managing risk. Typically, many start small—pilot efforts, exploring multiple options—and reassess and accelerate as they learn more. As an emissions mitigation strategy, that might have worked decades ago, but time is running out. The business community should advance aggressively on all fronts at once, since delay can reduce the latitude for action in the future. It might be necessary to make big bets, even if it's unclear that they're the best bets. As organizations learn, they can dial back or adjust.

Remember, the ultimate goals are clear: Decarbonize the global economy by shifting to renewable power generation, electrifying fossil fuel–burning devices, and capturing and sequestering emissions. How a given company or industry can best support those goals will vary. But by thinking through each locus of action—and by infusing a climate-first mindset into every decision—companies can mature to become true stewards.

Embracing a stewardship ethos

Global warming is expected to affect every industry and every country. The pressure from shareholders, financial markets, customers, regulators, and employees to translate words into tangible, substantive actions could only grow more acute. There will likely be new opportunities to capitalize on in the transition to a decarbonized economy, too. And given the stakes, the onus is on each of us to do what we can to mitigate the harm.

More and more, we see signs that the business community is awakening to this responsibility, part of a broader and growing movement to reimagine business's role relative to the environment, society, and the broader economy. This emerging mindset—a *stewardship ethos*—envisions each of us not as owners, managers, or consumers but as temporary caretakers of our organizations and our planet. It asks that whatever enterprise we shepherd positively contributes—and does no unnecessary harm—to the environment and society. It "presumes that resources are finite, and should be used conservatively and wisely with a view to long-term priorities and consequences of the ways in which resources are used."[33]

Grappling with the enormity, complexity, and direness of climate change can be a grim affair. But if there is a silver lining, it is this: We have the tools and technology we need to head off the worst outcomes, and a window to do so. Success is not principally about technological advances. It's about personal and systemic change. Collective action *can* realize rapid, effective outcomes on a planetary scale. We need only change the priorities, constraints, and objectives by which we evaluate actions. Very little is truly off limits, and it's worth questioning every assumption.

Climate change 101 for business leaders
Access this climate change FAQ to help your organization go from awareness to action: www.deloitte.com/insights/climate-change-101

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A fresh look at identifying "unknown unknowns"

Some research and insights have a short shelf life, while others continue to gain color and context. In each issue of Deloitte Insights Magazine*, we look back on research we published and ideas we pitched during the past year, and evaluate whether they've stood the test of time.*

By **Thibault Ducarme**
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What we said then

The more relevant question for companies facing non-traditional competition today is, how can they identify "unknown unknowns" that may render their business model obsolete?

"Identifying 'unknown unknowns': A perspective on nontraditional competition," *Deloitte Review*, April 2020.

What we say now

If ever there was a vivid example of how an "unknown unknown" can rapidly render business models obsolete, it's COVID-19. The pandemic is highlighting preexisting weaknesses in industries, changing the rules of competition, and challenging beliefs about how business works.

COVID-19 has shattered the idea that owning physical premises and networks is a cost of doing business. For instance, while the need for digital banking was apparent well before the pandemic, European consumers' use of fintech apps has risen by 72% since lockdown last spring, indicating that banks likely will face accelerating urgency to digitize their networks.[1]

Or take the biopharma industry: The race to develop a vaccine to solve the unknown unknown of COVID-19 illustrates how quickly the competitive and regulatory environments can shift based on a new external driver. The industry was forced to change course by governments seeking advanced priority and providing early funding for vaccines, and the vaccine race also opened up opportunities not only for small biotech companies or public research units in a space historically dominated by big pharma, but also for industry outsiders (for example, British American Tobacco entering the vaccine competition).[2] It remains to be seen what long-term effect the rapid approvals of COVID-19 vaccines will have on regulatory agencies' attitudes toward risk and whether patients will accept a return to traditional drug approval timelines of seven to 10 years, but it's likely that COVID-related lessons will at least be applied.

A global pandemic is an unknown unknown on an unparalleled scale, but it's also a prime example of how an unexpected external driver—or a non-traditional competitor—can upend your normal course of business. Building the capability to identify and anticipate such threats to your business is more critical than ever.