

**MAKING
HUMAN
CENTRICITY
HAPPEN**

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Making human centricity happen

For decades, industrialization, automation, AI, and machine learning have prompted conversations among leaders about employees' relationship to the technologies that power their organizations. Customer centricity has made headlines as organizations think critically about the needs they're meeting in the marketplace and the experiences they're delivering to end users. Yet history very likely will mark 2020 and 2021 as a tipping point because it's no longer just about employee centricity or customer centricity. Human centricity has become a differentiator.

Around the world, COVID-19 and social justice movements forced a reckoning. And even as more organizations transition back to—or at least toward—business as usual, issues like climate change; health and well-being; diversity, equity, and inclusion; and building organizations with purpose remain top of mind for C-suites. The Great Resignation and the ensuing competition for talent are accelerating trends in new work models and flexible work arrangements. Activists' and investors' voices are growing louder and more influential in board governance. More than ever, customers are influencing not only what organizations sell, but what it's made of and how it's delivered.

Organizations know that they need to take a more human-centered approach to business. In this issue, we offer actionable insights on how to make it happen.

Read on, and please tell us what you think—and what kinds of data and insights would be most helpful to you. After all, we're working hard to be reader-centric.

Best,



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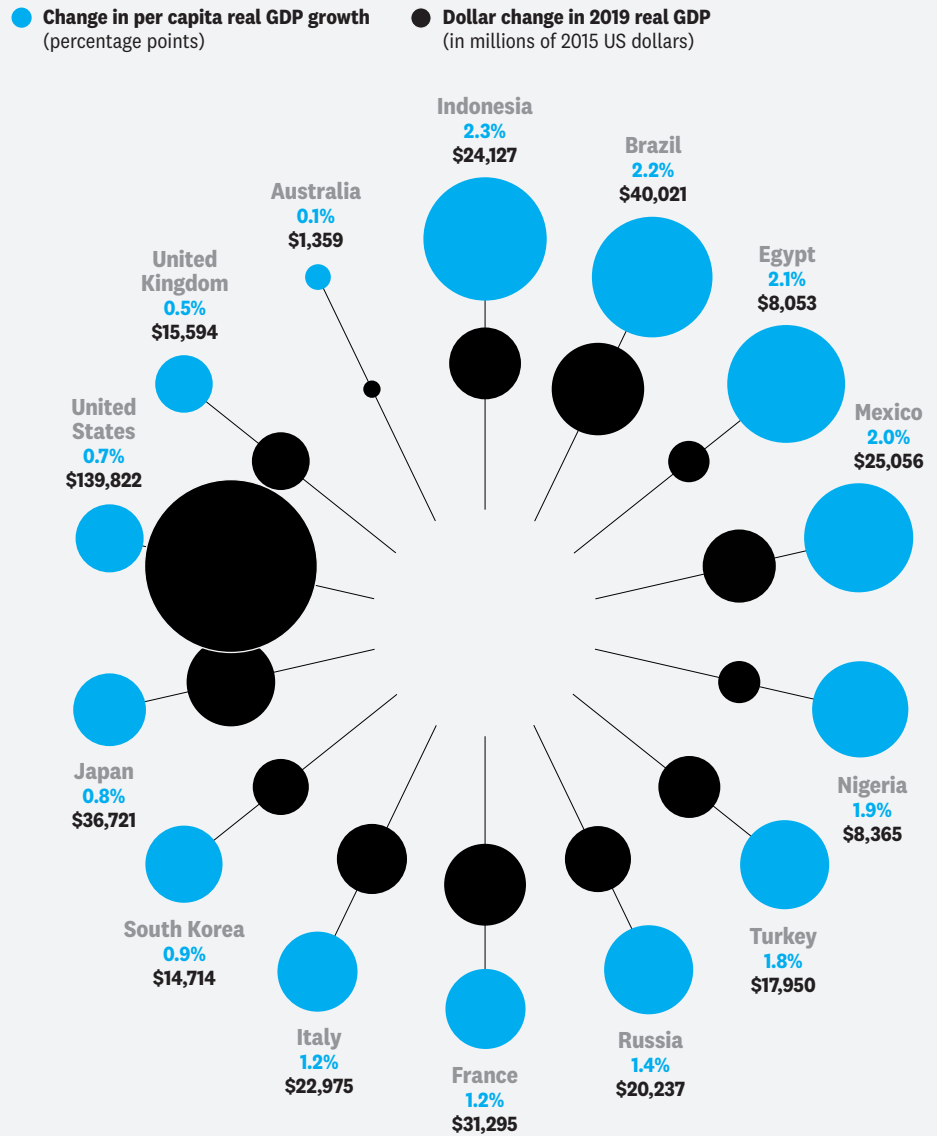
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1

Repairing global trust has economic advantages

How to quantify trust's impact on economic growth across global markets

Changes to economic growth if 50% of the population "trusts most people"



Sources: Conal Smith, "Trust and total factor productivity," *International Productivity Monitor* 38, 2020, pp. 3-28; World Values Survey Wave 7; Oxford Economics; Deloitte calculations.

Trust is foundational to the functioning and prosperity of all organizations, as they thrive on the cumulative trust of their stakeholders. In this sense, trust is like an interdependent web that connects all actors in an economy and influences how they work together to drive growth.

Yet the world has become a less trusting place. The share of the global population that believes "most people can be trusted" fell by roughly 20% over the last 15 years.¹ Rising inequality, political polarization, and a higher frequency of what were previously considered once-in-a-lifetime disruptions, such as the COVID-19 pandemic, have exacerbated this downward trend.

What's the potential economic impact of increasing trust? Using trust among individuals as a proxy for the level of trust built within a country, macroeconomists have shown that as trust improves, economic prosperity grows. From a supply-side perspective, there are just

two ways to raise per capita GDP growth— increase business investment or raise productivity—and trust affects both. A rise in trust not only increases the quantity of business fixed investment, but also boosts productivity growth through higher-quality investments, human capital accumulation, organizational improvements, and internationalization.

One meta-analysis of economic literature shows that a 10-percentage-point increase in the share of trusting people within a country should raise annual per capita real GDP growth by about 0.5 percentage points.² That's a substantial gain, given that annual global per capita real GDP growth averaged about 2.2% between 2015 and 2019.³ For a country such as Brazil, raising trust to attainable levels seen in other countries would ensure that its per capita real GDP growth rate would be at least that of the global average, adding more than US\$40 billion to its 2019 output.

Trust has clear implications for the macro-economy, and it's built from the actions taken by businesses and the leaders that guide them. Here are six actions to consider when working to increase organizational trust with stakeholders and society:

- Make trust a strategic priority.
- Develop an understanding of trust within and outside the enterprise.
- Identify the stakeholders with whom you have or want to have trusted relationships.
- Measure and quantify levels of trust.
- Invest proactively in repairing, rebuilding, and enhancing trust.
- Reassess where you are, as managing trust is not a one-time event.

Read the full article at www.deloitte.com/insights/trust-and-economic-prosperity

Well-being's return on investment

US health care's focus on well-being could yield significant savings by 2040, Deloitte research finds

● Treating the whole patient—from their physical and mental health to their social, emotional, equitable, spiritual, and even financial health—to lower the incidence of disease and decrease the need for medical interventions has obvious benefits at the societal level. And this tech-enabled, prevention-focused, consumer-empowered health care model also could yield significant savings for the US economy.

Deloitte's health care actuaries collaborated with leaders from our health sector to develop models projecting the potential impact of well-being-based care. By 2040, we anticipate that US health care spending could reach US\$8.3 trillion—US\$3.5 trillion lower than projections based on numbers from the Office of the Actuary at the Centers for Medicare & Medicaid Services (CMS) focused on traditional health care.

We estimate that spending on well-being-based care will constitute 18.4% of the United States' gross domestic product in 2040, seven percentage points lower than if current health care spending trends were to continue.

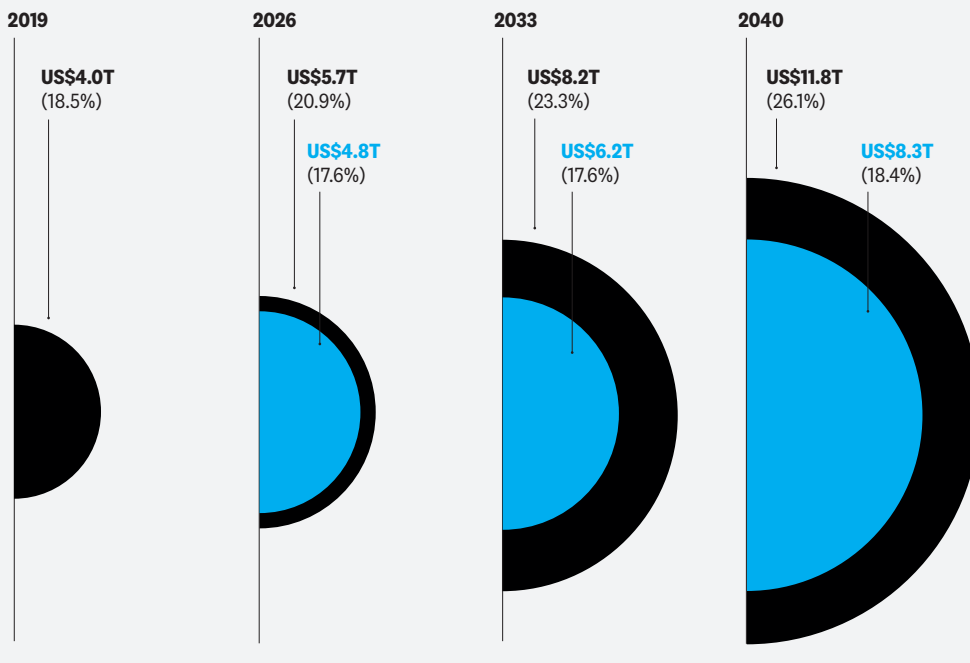
The US\$3.5 trillion difference between our model and CMS's projection (continued to 2040) is what we call a well-being dividend: the return on investment for tools, systems, or protocols that help consumers take an active role in their health and well-being.

Historically, the US health care system has been geared toward treatment. For every US\$100 spent on health care, about US\$80 currently is spent on the diagnosis and treatment of patients after they become sick. By 2040, we expect spending on well-being to account for two-thirds of total health expenditures.

Health care spending will likely see a marked decline by 2040 (Numbers in parentheses are health spending as a percentage of GDP)

▶ Projected health spending based on historical trends

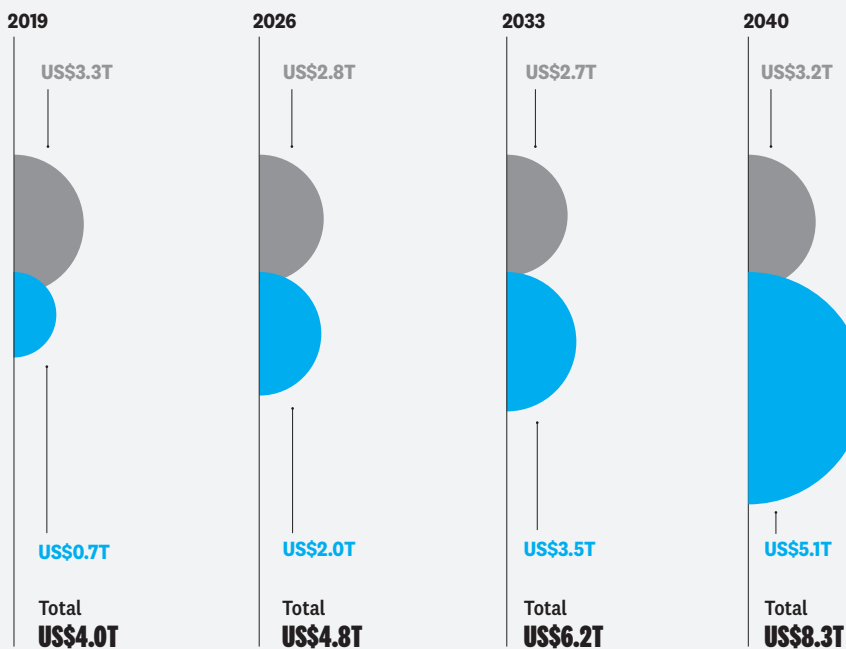
▶ Projected health spending based on "future of health" trends



By 2040, two-thirds of health care spending will likely be on well-being and early detection of diseases

▶ Well-being-focused spending

▶ Care- and treatment-focused spending



Source: Deloitte analysis based on national health spending, Office of the Actuary estimates, CMS.

While Deloitte's projection runs counter to historic trends, we believe the US health care system's transformation is already underway. We expect investments to increase in data and algorithms that help generate health and well-being insights, including devices and apps that nudge behavior promoting

well-being—and also in initiatives that address the drivers of health and help address disparities in health outcomes, such as housing, transport, and diet.

For more insights on the future of health care, read *Breaking the cost curve* at www.deloitte.com/insights/HCSpending

Could decarbonization become one of Asia Pacific's most profitable exports?

A new Deloitte analysis quantifies the economic impact that decarbonization could have on the region

The countries of the Asia-Pacific region have the most to lose from unchecked climate change than any other part of the world, but they're also the best positioned to lead the global transformation toward a low-carbon economy, according to a new analysis by Deloitte's Access Economics team, an Australia-based research and advisory group that's part of the Deloitte Economics Institute.

The team prepared an economic modeling in their report, "Asia Pacific's turning point: How climate action can drive our economic future," and found that without immediate action to blunt rising emissions, climate change will diminish the region's GDP by more than 5.5%—US\$3.4 trillion—by mid-century, amounting to US\$96 trillion in losses by 2070, equivalent to almost seven times the economy of China today. Instead of investing in value-adding innovations and infrastructure, productive capital and knowledge would be spent


repairing climate damage and managing communities' health and well-being.

However, if the region sees decarbonization as a potential growth driver—or an export unto itself—and commits its technology, talent, and capital to the effort, it has the power to change the trajectory of the global economy.

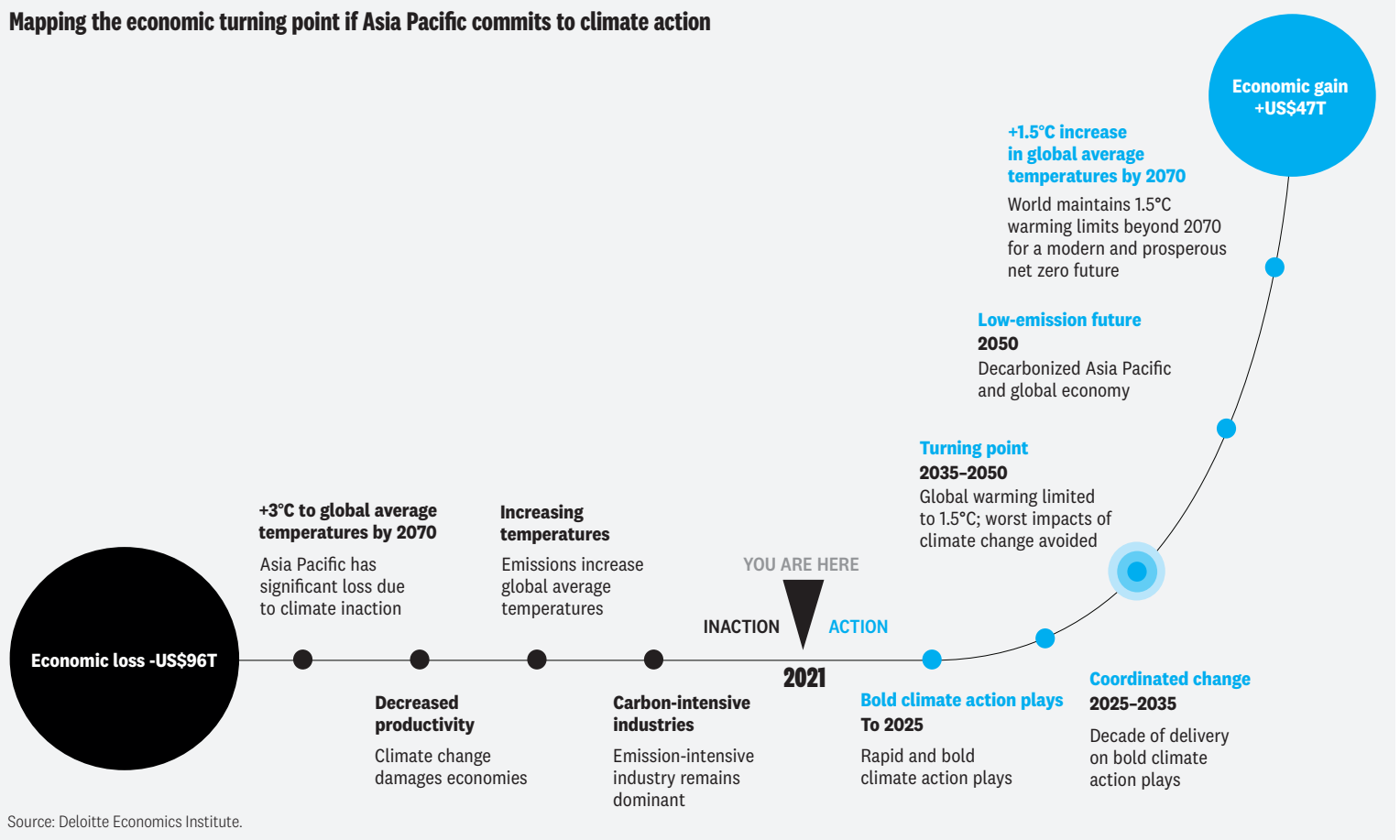
The new report challenges one of the main concerns about acting on climate change: the cost. The research reframes the debate and shows a direct connection between action on climate change and future economic prosperity. According to Deloitte's analysis, the decade between 2025 and 2035 would involve the most challenging shifts in industrial policy, energy systems, and consumer behavior, while demonstrating the payoff to some Asia-Pacific economies as they start exporting decarbonization technologies and goods to the world. By 2050, Asia Pacific's early investments in

decarbonization could help stabilize global temperatures, and by 2070, those investments could yield US\$47 trillion in net economic gain for the region.

The five largest contributors to Asia Pacific's current economic growth—which account for about 75% of its GDP—are emissions-intensive, so "the choices made today [in Asia Pacific] are the choices that will determine the next decade—the narrow window of time to choose the change that will prevent the worst consequences of a warming world," the authors state. "It's no exaggeration to say that the fight against climate change will be won or lost in Asia Pacific."

 This is the first of our regional reports on the economic impact of climate action. Access the report here: deloitte.com/ap-turningpoint

Mapping the economic turning point if Asia Pacific commits to climate action



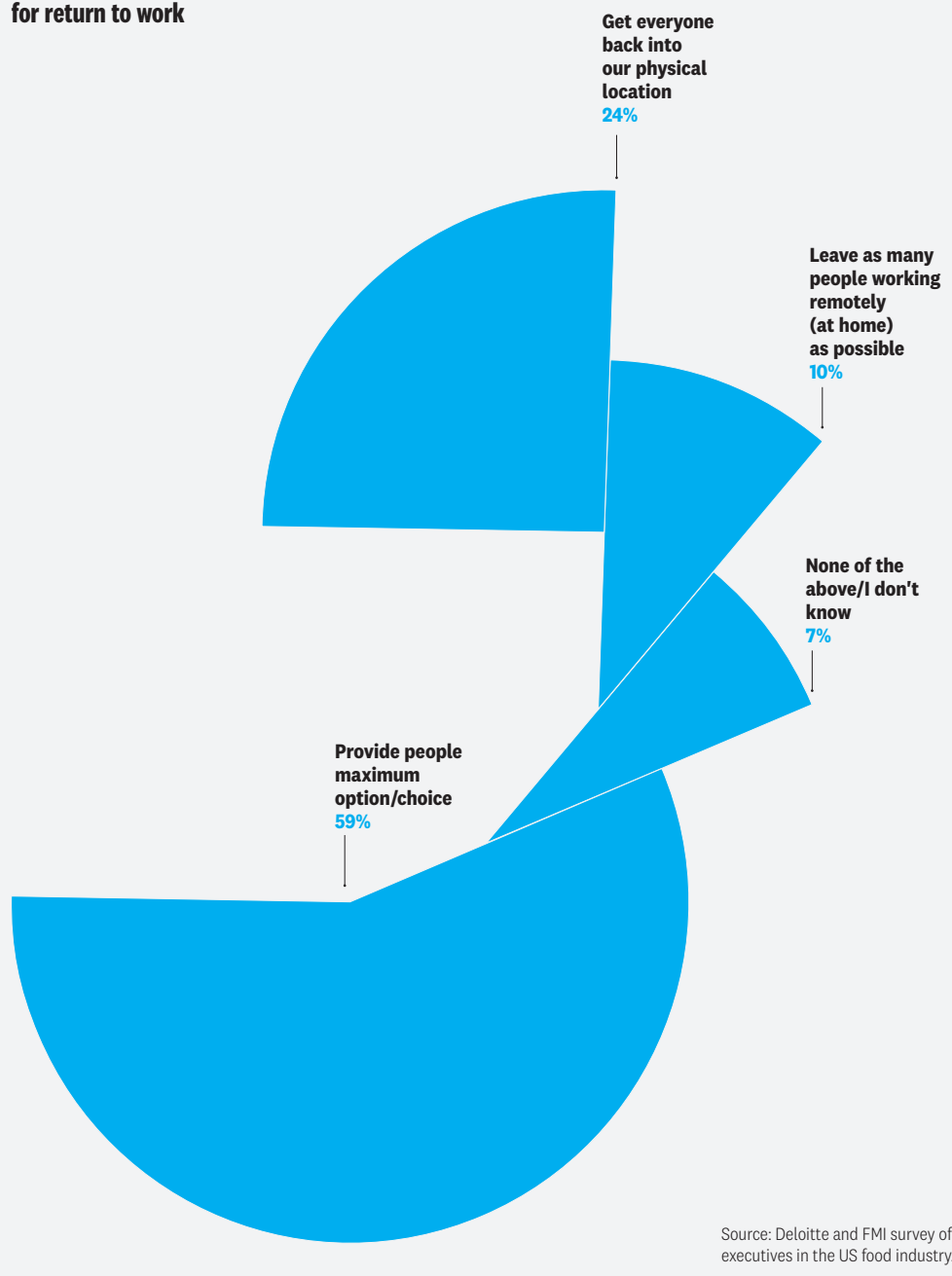
The US food industry serves up new workplace options

Examining one industry's plans to put employees' preferences first

When COVID-19 made cooking at home a necessity for many US consumers—and a growing passion for others—US food retailers' front-line workers continued their work in warehouses and darkened stores to meet consumers' demand for fresh and packaged goods while workers behind the front-lines transitioned out of corporate offices to work from home. With workplaces opening back up, food industry executives have to determine how and when remote workers will return.

To get a sense for what food retailers and product suppliers are planning, Deloitte and food industry association FMI surveyed more than 150 US-based executives and interviewed another 15 in April and May of 2021. The top return-to-work goal for close to 60% of the executives we surveyed

The US food industry's goals for return to work



is to provide the maximum amount of options and choice to employees. Another 10% of executives likely will let those working remotely continue. As in other industries, the food industry plans to continue with remote and hybrid working options because the talent war is on, and building an adaptive workplace is imperative to win it.

But not everyone agrees. Roughly 25% of food industry executives are looking to get everyone back into physical locations. Some executives believe in-person work is more effective, and others think that it's only fair to ask office workers to come back to their in-person locations since their essential worker peers—who stocked shelves or operated on production lines—never really left. Regardless of the goal, the industry is expecting about double the level of remote work after the

pandemic compared with 2019, according to the executives we surveyed.

Wherever employees are working, the industry has an obligation to keep its employees, partners, and consumers safe—and many are putting more decision-making power into employees' hands. At the time of our survey, 18% of both food retailers and product suppliers said they would be requiring COVID-19 vaccination, while many others are taking the carrot approach instead of the stick. "We're not demanding, but we encourage," one executive said. "And the way we encourage every employee that gets the vaccine is we give them a hundred dollars."



Learn more about how food producers and retailers are planning for the future at www.deloitte.com/insights/food-industry-workers-return

Shop local—and social

Many European consumers still value the in-store experience

While digital shopping continues to increase in popularity the world over, many European consumers still want to do more in-store than just pick up their online order, according to data from Deloitte's Global Consumer Tracker.

Decreases in in-store shopping intentions prompted by the pandemic aren't leading to permanent behavior change in the consumers we surveyed. When asked about their plans to shop in-store as opposed to online, more consumers reported their intentions to return to stores as lockdowns eased across the continent. For example, by June 2021, more than half (53%) of

respondents buying clothes and almost half (46%) of respondents wanting electronic goods intended to shop in-store.

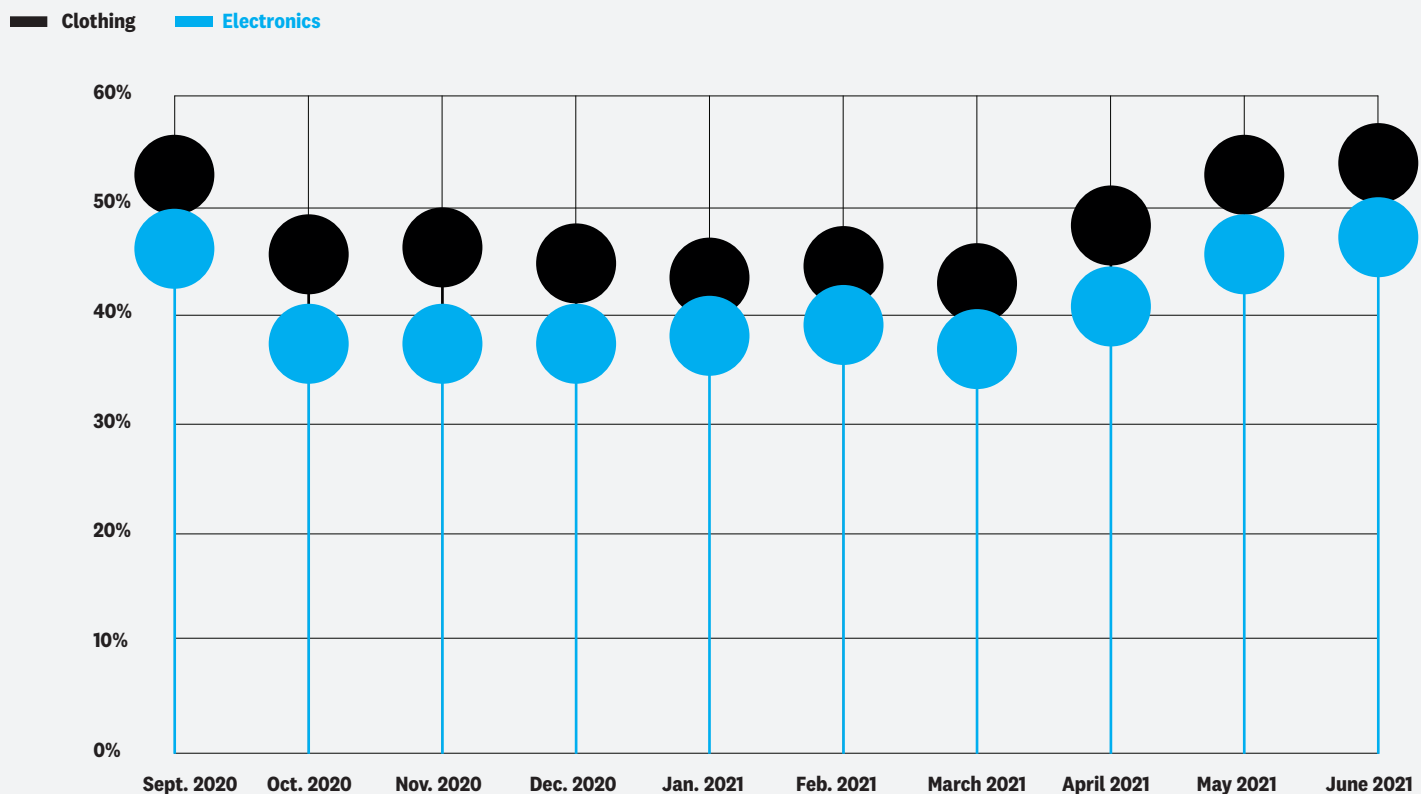
Of course, it's easier to appraise a dress or a pair of trousers in the changing room, and even purchases of electronics goods may benefit from the ability to tap a few keys, ask for expert advice, and see the size and brightness of the display. But Deloitte's analysis of consumer trend research found that another driver of consumers' ongoing desire to shop in-store is the opportunity to socialize: As with previous generations, many of today's European consumers still consider shopping with

friends and family to be an event-like experience, a chance to get out, take a stroll, and grab a coffee together—and the joy of a communal activity looks attractive to consumers the world over when the pandemic's restrictions ease.

What does that mean for companies that are designing the retail experience of the future? Our data indicates that even as the retail industry continues to digitize, it needs to humanize.

For more insights, read *European consumers after the pandemic: What sort of recovery will we get?* at www.deloitte.com/insights/post-pandemic-consumer-behavior

Share of respondents who reported their intention to shop prevalently in-store within four weeks



Source: Deloitte, European consumer survey, 2021.

US board diversity is a work in progress

Incremental gains may not satisfy growing demands for equitable representation

While the call for greater diversity in *Fortune* 500 boardrooms isn't new, it's sounding a lot louder. In 2020, a culmination of events in the United States—including the social justice movement and stakeholder and shareholder demands—seems to have highlighted and amplified the need for change in boardroom composition. Shareholders and stakeholders are increasing demands for greater gender, racial, and ethnic diversity in the private sector, and one of the first places they're looking is a company's leadership ranks.

Since 2016, Deloitte and the Alliance for Board Diversity have collaborated on the "Missing pieces report: The board diversity census of women and minorities on *Fortune* 500 boards." This year's edition shows the year-over-year change in the representation of women and minorities on public company boards of directors across America's largest companies. The report found that, among the *Fortune* 500, there are 200 companies with greater than 40% diversity in their board membership, meeting the goal initially set by the Alliance for Board Diversity in 2004. Overall, however, advancement is still slow and incremental. At the current rates of change, it would take decades to achieve proportional representation to the US population based on 2020 US Census data.

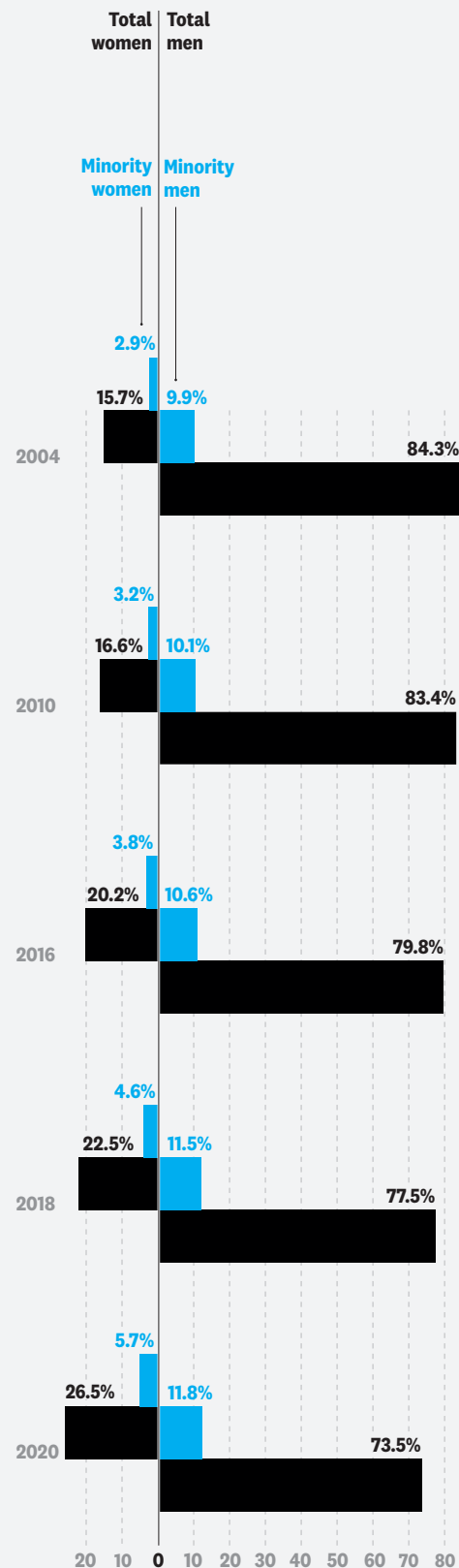
The pace of progress isn't the only issue, however. It seems that gender is far outpacing race and ethnicity as the diversity-based component of new board additions. White women gained more board seats in the *Fortune* 500 companies than any other group or gender, up 21% (or 209 seats) since 2018. And while there was a significant rise in Asian, Pacific Islander, and Hispanic/Latina women on boards, for every board seat newly occupied by a minority woman, white women occupied three seats.

Minority men show no substantive increase in their rate of representation in boardrooms: Their seats have been growing at less than 0.5% per year since 2010. In fact, African American/Black men lost five seats since 2018.

This snapshot of board diversity reveals an opportunity for today's companies and board leadership to broaden the range of professional backgrounds considered for board member positions, which would allow them to attract more diverse directors who bring a wide array of skills—and new perspectives to help prompt and sustain organizational innovation.

Get more takeaways from the sixth edition of the census on the necessary changes for board composition and board diversity, and how companies can accelerate this change at www2.deloitte.com/insights/board-diversity

Fortune 500 board seats by gender and minority status



Source: Deloitte and the Alliance for Board Diversity.

Infographics by Francesco Muzzi

Paying heed to the voice of all banking customers

When courting the underbanked, financial firm strategies and consumer preferences may be out of sync

Most financial services firms have started their journey toward inclusive finance. In a recent Deloitte Center for Financial Services survey of senior industry leaders, 96% said their firms have at least some financial inclusion initiative underway, and 17% said that they achieved what they set out to do.

However, not all of the inclusive finance offerings may align with unserved and underserved customers' needs. A recent Deloitte consumer survey revealed that underbanked customers are most interested in different types of products, more relevant lifestyle-oriented rewards and offers, and competitive pricing or low fees. While senior executives in the banking and capital markets sector also have prioritized different types of products for the unserved or underserved, our research shows that they're more focused on helping customers achieve their financial goals and offering financial literacy education than on the priorities identified by underbanked consumers.

These findings suggest that there could be an opportunity for financial firms to better align their inclusive finance offerings and initiatives with underbanked consumers' preferences.

For more information, read *Accelerating toward greater financial inclusion* at www.deloitte.com/insights/financial-inclusion

Preferences of underbanked customers compared to priority areas for banking and capital markets executives

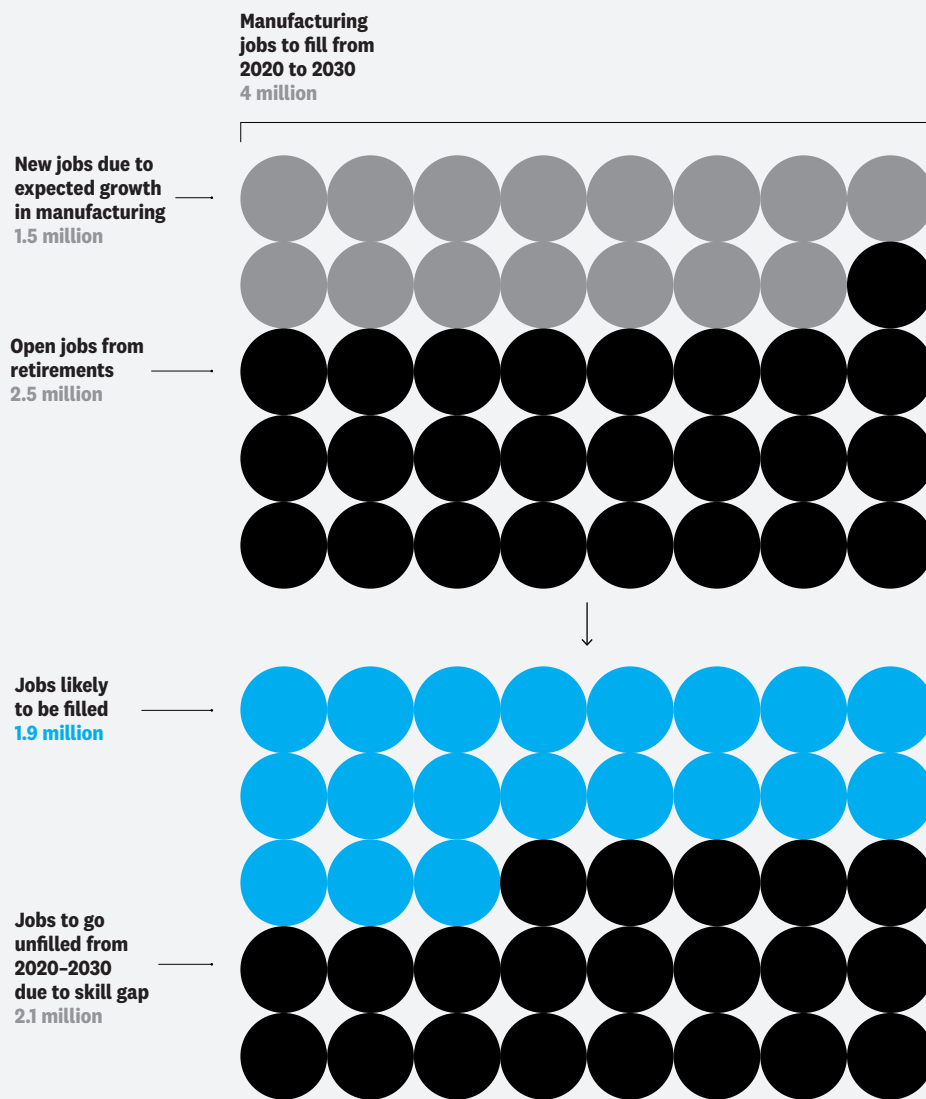


Sources: Deloitte Center for Financial Services analysis and Courtney Davis, *Accelerating toward greater financial inclusion: Stronger together*, Deloitte Insights, September, 28, 2021.

The manufacturing workforce deficit

Open positions are piling up in the US manufacturing industry, and talent challenges abound

An estimated 2.1 million open manufacturing positions may prove difficult to fill by 2030



Source: Deloitte analysis of data from the Bureau of Labor Statistics and estimates from a Deloitte economic analysis using the Oxford Global Economic Model.

There is an acute talent shortage in manufacturing—a trend that persists even as the total number of manufacturing jobs in the United States, both filled and open, decreased in 2020 during the COVID-19 pandemic. After netting a loss of 578,000 total positions in 2020, some 800,000 US manufacturing jobs remain open.* And current estimates suggest that, as the industry expands again over the next decade, some 2.1 million jobs will remain unfilled by 2030.

Leaving so many manufacturing jobs unfilled can impact everything from productivity and innovation to competitiveness and GDP. By 2030, open jobs could cost the US economy US\$1 trillion.

To gather these insights, Deloitte teamed up with The Manufacturing Institute to take a closer

look at trends in US manufacturing talent. Our survey and interviews of more than 800 US manufacturers, secondary research on labor supply and demand, and economic projections uncovered both short-term drivers and larger forces at play. The industry is addressing short-term drivers such as work/life balance issues; a narrow talent pipeline; and a comparative lack of diversity, equity, and inclusion. Longer-term forces include a lack of entry-level workers, the changing nature of jobs due to digital transformation, an inability to attract skilled workers, and workers' pending retirement.

While training and reskilling to meet the demands of today's digitally enabled work are part of the solution, according to our research,

more focus needs to be given to the analog side of the business as well. Initiatives can include making it easier for entry-level employees to get in the door via apprenticeships, making the workplace more welcoming for a more diverse workforce, and building pathways to the future of work.

For more insights, read *Creating pathways for tomorrow's workforce today* at www.deloitte.com/insights/beyond-reskilling-manufacturing

*At the time of writing the original report, the number of open jobs stood at 500,000 (August 2020–January 2021); since then, the number has exceeded 800,000 (April–June 2021).

Adapting your supply chain to the era of disruption

Completing complex projects in Africa's challenging environment requires balancing the technical with the interpersonal

Capital project leaders in Africa are used to operating amid challenges and disruptions, including climate, geographic, and infrastructure issues. For example, only 25% of Africa's road networks are paved.¹ A World Bank study highlighted that the poor state of infrastructure in sub-Saharan Africa reduced business productivity by as much as 40%, resulting in the continent having the lowest productivity levels in the world.² In large capital projects, decreased productivity could result in cost overruns and project delays.³ Other challenges such as logistics and delivery disruptions can result in a shortage of materials, delays in project completion, increased project costs, and misaligned communication, especially for remote projects.

The onset of the COVID-19 pandemic added an extra layer of complexity to capital projects in Africa, with travel bans, border closures, and the prohibited movement of people and goods. Yet

in some countries, despite restrictions that were applied, work continued apace and capital projects weren't significantly affected, according to our analysis.

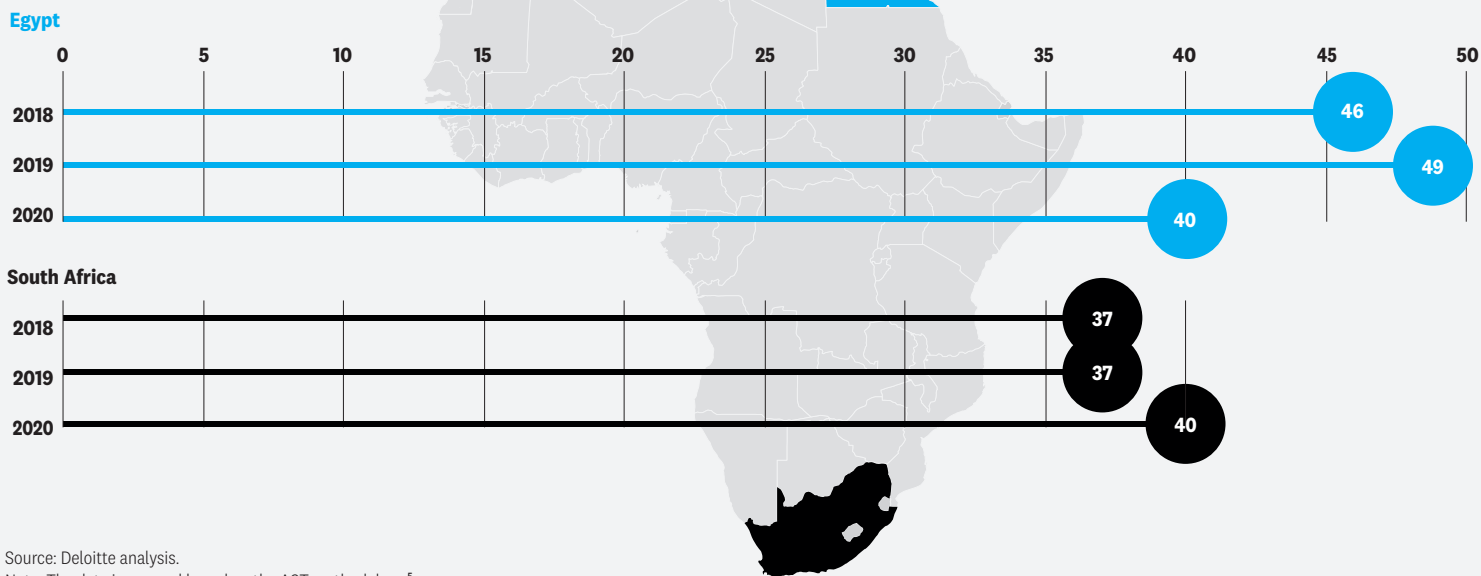
Deloitte South Africa's latest Africa construction trends report found that as the pandemic began spreading across the globe in 2020, the number of capital projects remained relatively strong in certain regions of the continent. In South Africa, for example, which was the African country most severely affected by the pandemic, the number of capital projects even increased slightly in 2020 compared to the previous two years, thanks in large part to a robust and resilient supply chain. Based on our research in the South African market, building resilient supply chains can improve project delivery time by up to 30%, reduce project costs by up to 20%, and improve the project's return on investment by up to 30%.⁴

Technical factors such as procurement's involvement in project planning and strategy, sufficient integrated control systems, and digital supply chains are crucial in managing capital projects through disruptions. Yet technical elements alone won't suffice. Supply chains in capital projects include a network of humans, so interpersonal skills, effective leadership, and fostering trust-based relationships are equally critical in dealing with project risk and improving project performance.

According to Deloitte specialists who advise on capital projects in Africa, building trust-based relationships is one of the key success factors for weathering any disruption—as is being prepared for possible supply chain risks and disruptions to help alleviate and pre-empt a range of challenges.

To access the full report, visit www.deloitte.com/2020-africa-construction-trends

Top two countries in Africa by number of capital projects



Source: Deloitte analysis.
Note: The data is sourced based on the ACT methodology.⁵



Putting more stock in good governance

Long-term investors expect more from boards on environmental and social issues. Amy Borrus of the Council of Institutional Investors shares her thoughts.



Illustration by
Kate Copeland

“The headline news is that 2021 is shaping up as another big year for shareholder initiatives on environmental and social issues.”

Big investors have big expectations of corporate boards, and they're being more and more vocal about what they want to see: good governance, strong shareholder rights, and policies that will keep companies stable and paying dividends for a very long time.

The Council of Institutional Investors (CII) has been a leading voice for over 35 years for corporate governance and sensible financial regulation. CII's members include pension funds, endowments, foundations, corporations, service providers, and many of the big asset managers, so it has a unique view into the minds of shareholders. In May 2021, CII Executive Director Amy Borrus shared her insights with Robert Lamm, an independent senior adviser for Deloitte LLP's Center for Board Effectiveness, on what sorts of shareholder proposals are likely to gain traction, why we're seeing an uptick in shareholder activism, and what types of company activities might bring increased scrutiny.

Q: Back in the early 2000s, in one of the few forums where companies could actually meet with investors, I was with a company that had never gotten a shareholder proposal. How do you think things have changed since then?

A: I believe there have been many positive changes over the last two decades in how directors think about their jobs and what they do behind closed doors. Your shareholders will continue to engage you on issues they believe affect long-term value because you are their elected representatives. Sometimes directors and investors will not see eye to eye, but I think we need to recognize how far governance practices and standards have improved, and we need to keep in mind that investors and directors are essentially aligned on wanting companies to be successful over the long term. Strong boards that are accountable to their shareholders are more likely, for example, to monitor and take steps to mitigate climate change's [impact on] the company's business and operations, and to invest in the workforce.

Q: What are some of the most recent trends related to shareholder proposals filed?

A: The headline news is that 2021 is shaping up as another big year for shareholder initiatives on environmental and social issues. Shareholder support is trending higher, especially from mainstream asset managers so far this year. Climate change, diversity, political lobbying spending: These issues continue to dominate the environmental and social arena.

This year we're seeing what may be a new high watermark for environmental proposals: 136 shareholder proposals filed on climate change risk alone this year. Shareholders are voting in record numbers for climate-related environmental proposals,

racking up majority votes—three climate proposals at big energy companies—which is really a first. For example, a shareholder resolution filed by a social fund asked large chemical companies to report on their spills of plastic pellets into the environment. At one company, that received 81% of votes. That more activist bent, if you will, is likely to persist for some time. There's no question that there's ongoing pressure from socially responsible investors on leading money managers to walk the talk.

Diversity is another big category for shareholder proposals. There are growing shareholder expectations around diversity in companies. It started, maybe, five to 10 years ago with a focus on women on boards. But over time, the investor lens has widened beyond gender to encompass race and ethnicity, and beyond the board to disclosure on diversity in the C-suite and now the workforce generally. Just look at all the shareholder proposals asking companies—mostly, but not entirely, in the financial sector—to do independent racial audits. Published reports assessing diversity and inclusion efforts are also attracting significant support.

The catch is that diversity isn't just about recruitment; it's also about making employees feel welcome and comfortable, and that they can advance. That's the harder part. It's not the board's responsibility to do that; it's the board's responsibility to make sure that management has the processes and the approaches in place to hire and retain and develop the best workforce—the best talent pool—it can.

Early voting suggests that shareholders are also scrutinizing executive compensation more closely this year. The *Financial Times* reported that more than 100 S&P 500 companies have rewritten bonus plans for executives as a result of the pandemic,¹ which has not gone unnoticed by investors. You have to recognize that, in some companies, more negative votes have partly been a reaction to rising pay for CEOs in the midst of layoffs and other hardships for mainstream employees during COVID[-19].

Q: You've mentioned a number of major developments that took place this year. Which, if any, of those came as a surprise to you? And do you think that those surprise items are likely to continue to have traction beyond 2021?

A: I'm surprised that Say on Climate is not getting a little more support. A lot of US practices have come over from Europe. In the United States, there's more skepticism about Say on Climate,² and I don't see any sign that that'll change. It's a European import, and US asset owners and asset managers are very ambivalent about these, and are approaching them on a case-by-case basis. They're highly skeptical, partly based on their experience with say-on-pay votes. Say on Climate throws it back on investors to do a deep dive into a company's climate plan. This is just a heavy ask.

Q: It's always amazed me that small and mid-cap governance practices are radically different from those of the larger-cap companies. You look at statistics about board diversity and it's almost totally different universes. What do you say about a possible trickle-down of some of those leading practices at large-caps to small-cap companies?

A: Active investors tend to focus on S&P 500 companies because they're the largest chunk in the portfolio and they also have these brand names, so well-known companies get more attention in the media. So unfortunately, small and mid-cap companies don't get asked as much.

I became aware of this at an event where I was asked to speak a few years ago: I was sitting at lunch next to the corporate secretary for a midsized furniture maker public company, and we got to talking that this company still didn't have majority voting for directors. He said, "I think that's a great idea." I asked, "Then why haven't you changed?" And he said, "Well, none of our shareholders have asked us to."

I think it's partly because investors haven't paid enough attention to small and mid-cap companies. But there are other factors, more recently with IPO companies: Particularly in those high-tech companies and unicorn companies where there's a lot of promise or perceived promise, and founders want as much control as possible, the gatekeepers—the investment bankers and lawyers who help them go public—are only too willing to give [this control] to them.

Q: The Council of Institutional Investors finds a bottle with a genie in it: What are your three wishes?

A: First, I would wish for sunset provisions for dual-class companies. We'd love to see [US] Congress grant the SEC [Securities and Exchange Commission] the authority to approve listing standards for companies trading on US exchanges such that if the listed companies are dual-class, then they have to have provisions to sunset back to one share, one vote within seven years. And that's based on some academic research that suggests pretty strongly that while dual-class may have value appreciation in the short run, after a few years, that gain dissipates. "One share, one vote" is a fundamental principle of good corporate governance.

I guess the second would be more transparency and safeguards around executive trading in company stock. CII has petitioned for years for the SEC to close some of the loopholes of the so-called Rule 10b-5 trading plans.³ CEOs have traded in company stock without being liable for insider trading on a preset, predetermined basis, but there have been some reports on overlapping plans and questionable disclosure around these plans, so the SEC could help there.

My third wish would be that, by some miracle, the SEC embraces more robust disclosure and can withstand a legal challenge to international standards for disclosure of climate change,

human capital, or ESG [environmental, social, and governance] metrics. I think the world is moving, money is fungible—we all invest around the world—and the idea that there will be different regimes and different standards for disclosure in the US versus Europe or other markets is frustrating. While I don't hold out much hope for that, I'll be very happy to have standard metrics coming out of the SEC.

Q: The prior administration saw the SEC transition from the traditional rules-based disclosure approach to a principles-based disclosure one. I know you said earlier that you can't speak for all of your investors, but can you generalize what your members are thinking about principles-based disclosure?

A: At CII, we think the ideal approach to regulations is a mix of both principles- and rules-based, and I do think that this SEC puts more of an emphasis on rules. I think that's in part because investors and, to a certain extent, companies want standardized metrics. Gary Gensler, the [new] SEC chair, at his nomination hearing when he testified on the Hill, kept repeating, "Consistent, comparable information." Investors need consistent, comparable information and you don't get that from a sustainability report. That's narrative; that doesn't help you compare companies peer to peer. For companies, frankly, it leaves you open to continuing to get different questionnaires from different investors about different information that you're supposed to provide, instead of a standardized format. I do think we'll see the SEC propose a requirement for disclosure of climate change and human capital metrics in some sort of standard format.

Q: We have seen a lot of advice on how to be the best board, hopefully, if you're checking all the boxes in doing diversity, equity, inclusion, and ESG. Yet we still see boards not deliver shareholder value. Why do good boards fail, and what insight can you provide us?

A: Good governance doesn't guarantee good performance, and poor governance doesn't guarantee poor performance. We tend to think of it as "good fences make good neighbors." Good governance helps to deter bad behavior and improves behavior [overall].

As I mentioned before, we need to keep in mind that investors and directors are essentially aligned: Both want companies to be successful over the long term. ●



Listen to this interview in the Deloitte Insights podcast *Long-term investors* expect more from boards on environmental and social issues at www.deloitte.com/insightspodcasts

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"We tend to think of it as 'good fences make good neighbors.' Good governance helps to deter bad behavior and improves behavior [overall]."

Learning resilience from the pros

Professional athletes build resilience by using data to find and fine-tune strengths and weaknesses, developing multiple tools and talents to help maintain a competitive advantage, pushing boundaries, and thoughtfully approaching every action, according to sports performance specialist Marcus Elliott. Organizations can follow the same playbook.

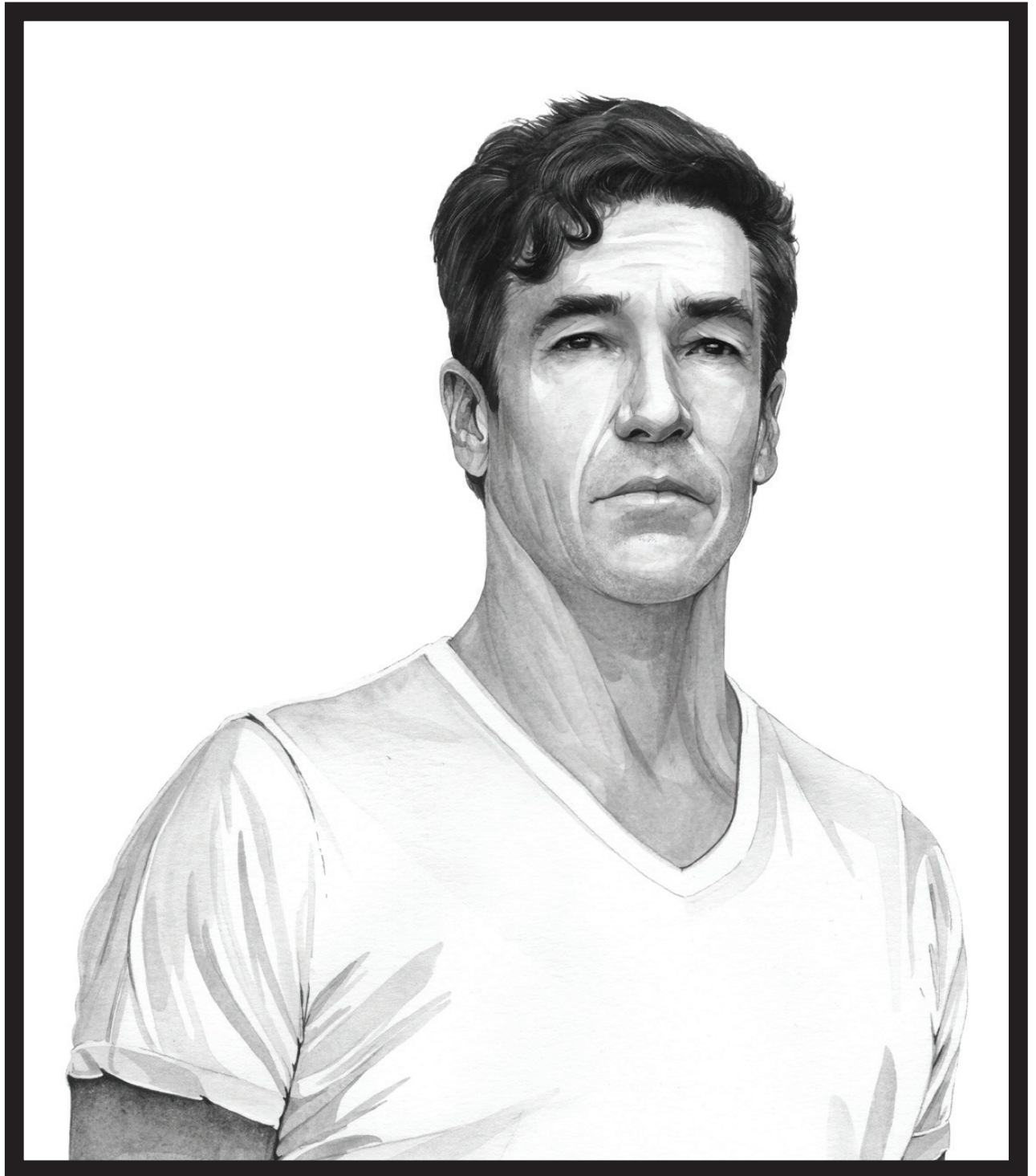


Illustration by
Kate Copeland

When Marcus Elliott graduated from Harvard Medical School, he embarked on a career with one overriding mission: to extend the playing lives of athletes by utilizing better data and technology. In the decades since, his Santa Barbara, Calif.-based sports performance company, P3, has become a destination for off-season players looking to boost performance and longevity in the professional ranks (60% of players on 2021 NBA rosters have been to P3).

In the process, P3 has amassed a trove of data on basketball players, football players, and other competitors as it measures the way they move through the basic actions that make up their sport. Elliott can pinpoint precisely how each athlete stacks up against peers but, more important, he can compare their biomechanics and assess whether they're putting themselves at risk of a career-ending injury. He then prescribes training regimens to address those deficits.

Drawing parallels between how Elliott helps build resilience in athletes and how organizations can increase their own resilience, it seems that both rely on actionable, data-driven insights and on understanding—and possibly reframing—the challenges we face.

Q: What are the biggest career-enders for professional athletes?

A: The idea that chronic or acute injuries are random events—and that there aren't strong signals—just never made sense to me. It comes down to physics. The physics behind the game dictates whether these guys are able to survive in really harsh environments. Everybody takes note when a player has a giant injury, like a ruptured Achilles, as the basketballer Kevin Durant had. That's a big, traumatic injury. Everybody watches to see if an athlete in that situation, when he comes back, if his productivity goes way down.

What most people don't see is that a lack of resilience in professional sports is usually more a matter of these small decrements in the physical systems of performance. Usually, players wash out of the professional leagues because of a death by a thousand cuts. It's not one traumatic injury. It's more that you had this bad ankle sprain and now you can't finish at the rim off your left leg. That part of your game is taken away. Or imagine you've lost some ankle mobility on your left, forcing you to compensate in lateral driving movements, and now you're not able to create as much lateral force moving to your right. And that means you're not as good a defender on the perimeter moving to your right. A lot of times, it also often means that you're creating more injury risk due to this compensation.

You have these small pieces of your game that are whittled away to the point where you become a marginal player, and then you get dropped out of the league. And that's usually how these things work. In our work, because we collect

all this granular data on these physical systems, we can see whether a system has gotten a little better, or if it's a little bit worse, as a new compensation pattern emerges. We can see any perturbation in these systems year to year. We take the guesswork out. The athletes that are able to maintain the same movement patterns—more or less the same physical systems, even if they're a little bit less powerful, a little less forceful—if they don't have significant mechanical compensations, they're the ones who are able to play for a long time.

Q: Are there common characteristics among athletes who are able to have these extended careers?

A: When we collect all these thousands of data points on these athletes, we put all that data into a machine learning algorithm and it clusters these players based on similarities of physical systems. Let's take a player like Steph Curry in basketball. That's a guy who I would predict is going to play for a long time. Steph is in a cluster called kinematic movers. The players in this group don't jump really high. They're not players who run really fast. They're not players who do anything that really stands out physically. They don't seem exceptional. But it turns out that their superpower is that they don't have any significant holes in their physical systems. They can do everything. They can jump pretty well. They can second jump pretty well. They can move to their left well. They change direction off their left well, they can move to the right well, they can change direction off their right, they can rotate well on either side, and so on. They do everything pretty well. They're in the 50th to 67th percentile in everything. That ends up being its own superpower.

We think of these players as the Swiss Army Knives of athletes. C. J. McCollum is in that cluster. Trae Young is in that cluster. These are basketball players who are usually undervalued coming out of college because they're not very flashy and they don't seem like incredible physical specimens, but they have the right tool for the job in almost any situation, so when a small opportunity presents itself in a game, they have the exact right tool to take advantage.

In our research, the athletes with the longest productive careers are kinematic movers. When those guys lose one physical system—maybe now they don't move as well to their left laterally—they may lose one of their blades, but they have 17 other great blades to reach for. Compare that to someone whose superpower is much more singular, and that power starts getting diminished. That's a problem. They have one go-to competitive advantage. The players that have a lot of tools, those are the ones that tend to survive the longest. By traditional measures, they're the most resilient.

Q: Some truly great athletes seem to have another power they can draw on, something psychological or spiritual that gives

“The players that have a lot of tools, those are the ones that tend to survive the longest. By traditional measures, they're the most resilient.”

“By testing your boundaries, by finding out where your edges are, you get this insight that almost always shows you’re able to do much more than you thought possible by getting far out of your comfort zone and risking failure.”

them the will to eke out victory. How do you deal with that nonphysical element in your work?

A: We know we can’t measure everything that’s important in performance, especially when it comes to the mental and spiritual components. To build mental and spiritual fortitude, we started bringing athletes on what we call misogi challenges. It’s based on an ancient Shinto religious concept. It’s the idea of a purification ritual that usually involves some repetitive process. It teaches you that you can tolerate much more than you thought was possible. We took that concept and really turned it into an intense physical challenge. I had been doing these for a couple of decades before we started bringing athletes along.

I called it a physical challenge, but that’s actually not right. It’s more of a spiritual and psychological challenge that masquerades as a physical challenge. The idea behind it is that by testing your boundaries, by finding out where your edges are, you get this insight that almost always shows you’re able to do much more than you thought possible by getting far out of your comfort zone and risking failure. You’re developing a tolerance for taking on really challenging, difficult, and possibly failure-inducing activities. You learn things about your fortitude, about your potential, that you had no idea existed.

I believe we evolved gene sets that predispose us to these kinds of extreme challenges. It’s the same superhuman effort that gets you over the mountain pass before the first snow comes because you need to settle your tribe in the valley on the other side. Almost anything great that gets done by humans, at the onset of that great thing, there is a high probability of failure. Overweighting the risk of failure stops us from taking on a lot of things that could result in something great. This is certainly true in the world P3 operates in—professional sports—but it’s true in many others as well.

Q: What are some examples of misogi challenges?

A: The misogi challenges are always different and they’re pretty simple. We have two rules. First, you have to find a challenge that gives you about a 50% chance of making it if you do everything right. And the second rule is you can’t die. So, if you’re doing something where dying is a possibility, you have to mitigate that risk. We did this underwater rock-hauling challenge where a group of us tried to carry these two boulders—82 and 84 pounds—five kilometers underwater. There was a risk of underwater blackout, so we had a dive team out there to keep an eye out in case one of us passed out. We did another misogi where we paddleboarded across 27 miles of open water from an island to shore. The way the winds work, there was a good chance of being blown out to sea, so we had a boat trail us. The concept is simple: You have to find something really hard.

Q: Both of those challenges sound intensely physical. Where’s the psychological and spiritual element?

A: A misogi looks like a physical challenge, but once you start, you realize it’s very much a challenge above the neck. You don’t have to prepare for one, which takes away all the excuses. Maybe you never carried a rock underwater before. Neither did anyone else. With the rock carry, you had to dive down 10 feet and pick up the rock. It was really heavy, it sort of held you on the bottom, and then you had to carry it as many steps as you could, and then go up and take a breath. And then you had to go down and pick it up again.

When we were 45 minutes in, you just thought you were done; you really thought you had maybe one or two more carries in you. But then we went another four and a half hours, which is how long it took us to make the five kilometers. In almost every misogi that I’ve done, I have had this perception that the edge is really close, and it usually turns out that the edge is so much further out than where you thought it was. At maybe 20% or 25% into it, you think you’re finished.

But there’s something that happens when you give yourself over to the process. When we did the underwater rock carry, at just short of an hour, there was this sense that we couldn’t go on anymore. I think that it’s just the planning part of your brain that’s trying to do all this work and trying to calculate things that it doesn’t have enough information to calculate because you’re doing something that’s so far outside of anything you’ve ever done before. There’s just not enough data for it. And trying to work that out is really draining. But at some point, when you give yourself over to the process, you’re not planning, you’re not thinking 10 steps out. You’re only thinking about what you’re doing right now.

Kyle Korver, the NBA player, did the paddleboard misogi, and that next season, he set an all-time record for the most consecutive games making a three-point shot. When he was asked how he did it, he talked about the challenge of paddling almost 30 miles with a big crosswind. He said when he was doing it, he eventually just stopped thinking about even trying to get all the way to land. Instead, he was thinking about the moment: “I’m just going to try to have one perfect stroke and then one more perfect stroke. And the next thing you know, you’re on the other side of the ocean.” ●



This is an interview excerpt. For more insights on resilience, visit www.deloitte.com/resilience

The views and opinions expressed by interview subjects are solely their own and do not reflect the opinions of Deloitte. This interview provides general information only and is not intended to constitute advice or services of any kind.

Teaming your way through disruption

Digital tools and capabilities have been credited with helping many organizations weather the COVID-19 disruption, but there's also an analog source of innovation and adaptability in trying times: cross-functional collaboration

By **Gerald C. Kane, Rich Nanda, Anh Nguyen Phillips, and Jonathan R. Copulsky**



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The past 18 months have felt like a series of massive disruptions, one after the other, yet some companies have emerged stronger because they were able to use the disruption as an opportunity to innovate. While technology has been a key enabler of this innovation, organizational change will have long-lasting impact on which companies will maintain competitive advantage.

One key to innovation in the face of disruption is the use of cross-functional teams. These teams drive innovation in similar ways in both chronic and acute disruption by increasing the ability of the organization to sense changes in the environment and respond quickly to them.

A cross-functional team starts with people from multiple departments. Rather than answering to the line manager to whom they're officially assigned, the team might answer to a project manager or a corporate innovation executive. Along with adaptability, a key advantage to cross-functional teams is the enhanced access to resources, such as diverse perspectives, broader skill sets, and new ideas, according to research we conducted in collaboration with *MIT Sloan Management Review*.

Eighty-three percent of digitally maturing companies in our survey reported that they use cross-functional teams, compared with 71% of developing companies on the digital maturity spectrum and 55% of early-stage organizations. The increasing reliance on cross-functional teams is associated with a decrease in the perception that organizational processes interfere with the organization's ability to be nimble.

Prior to the acute COVID-19 disruption, CarMax—the Richmond, Virginia, auto retailer—had embraced cross-functional teams so thoroughly that its technology organization has basically dispensed with traditional planning. Instead, CarMax expects innovations to bubble up through its product teams, says Shamim Mohammad, the company's chief information and technology officer. “If you think about how fast technology is changing and how fast customer expectations are changing, to deliver what the customers are looking for, you have to organize as cross-functional teams,” he says. “No single-function team can really deliver at the speed the customer is expecting.”

CarMax's product teams are small, typically seven to nine people. A team can pull in staffers from any pertinent function or department, but every team includes a product manager, a lead engineer or developer, and a user experience expert—roles Mohammad calls nonnegotiable.

CarMax executives provide teams with goals but not elaborate instructions. As Mohammad describes it: “We tell them what to achieve but not how. ... One of the benefits of the empowered teams is that we set the strategy, but we empower them to figure out how to get it done. Our teams experiment directly with customers and associates to test and learn, which enables us to build and deliver the capabilities they truly want and love.”

The value of this approach to empowerment is borne out in our research: Executives and managers at digitally maturing companies, compared with developing and early-stage ones, say these teams are more likely to have considerable autonomy regarding how to accomplish goals: 69% of digitally maturing companies report this higher level of autonomy, versus 53% of developing companies and 38% of early-stage firms.

Another important aspect of cross-functional teaming is that senior leaders create a supportive environment for their teams and evaluate them as a group. Our survey data shows that 73% of digitally maturing companies create an environment where cross-functional teams can succeed, compared with only 48% of developing companies and 29% of early-stage companies. As Mohammad says, “A reason our teams are thriving is because they know that the company has their backs and the company is providing them the support they need.”

Michael Arena, former chief talent officer at General Motors, cautions that while cross-functional teams are an important source of innovation at his former company and other digitally maturing ones, they're not a panacea. Operating via cross-functional teams poses new kinds of management challenges. More than half of our survey respondents cite problems with team alignment and an unsupportive culture as the biggest barriers facing cross-functional teams.

Also, as Arena notes, innovation is a process, it occurs in stages, and the proper approach varies. “For organizations to be adaptive,” he says, “the very first thing we need to do, especially as we're talking about org design and practices, is to ditch the one-size-fits-all mindset.”

Arena studies organizational network analysis and the impact of organizational design on innovation. He notes that cross-functional teams may be brought together to address one aspect of innovation (say, ideation), but team members may have a different role when it comes to other aspects of the innovation process (say, diffusion).

“It could be that, for six weeks, we're pulling people together for a specific purpose,” Arena explains. “They've got these milestones and, for six weeks, they're dedicated to getting something across the finish line and that's the design for that six-week interval. Then those team members are going back to their steady-state jobs where we're going to ask them to help diffuse this out across the broader organization.”

Another potential benefit to cross-functional teaming is the opportunity it provides to be more experimental. As companies face a novel business environment, they need opportunities to try new things to determine what works in that environment. Cross-functional teams allow the company to test and learn in the new environment to help find ways to respond.

The digitally resilient organization is one that is continually sensing, testing, and adapting to find its way forward in a turbulent business environment, requiring both technological tools and organizational capabilities to do so. At times, this necessitates unlearning practices and processes that were fundamental to the success of prior “versions” of the organization—just as how people work together is undergoing a fundamental shift that can better equip organizations to innovate in even the most challenging times. ●

 This is an abridged excerpt from *The Transformation Myth: Leading Your Organization Through Uncertain Times*, published by The MIT Press. Learn more at mitpress.mit.edu/books/transformation-myth

Leadership lessons from Leonardo

Tapping into the convergence of art and science can help improve everything from strategic planning to performance management, but how do you do so? Let's go straight to the source. Here are five leadership lessons gleaned from a Renaissance master.

By **Bill Marquard**

In 1482, Leonardo da Vinci sent a job application letter to Ludovico Sforza, the archduke of Milan. Knowing his future employer was enmeshed in frequent military battles, the letter described Leonardo's prowess at designing war machines, diverting rivers, building bridges, and designing weapons. He concluded his resume with the greatest understatement in art history: "I can also do ... painting."¹ Indeed.

A pioneer in disciplines including fluid dynamics, optics, cartography, engineering, aviation, and anatomy, it was Leonardo's ability to bring his science to art—and his art to science—that distinguished him in such a range of fields.

Leadership in these complex times similarly requires an adept mix of art and science—gut instinct balanced with data-driven decision-making, creativity coupled with systems thinking. And we can look to the works—and workstyle—of this Renaissance master to glean insights on how to deftly blend art and science in our own leadership.

Lessons from Leonardo were already apparent in one of his earliest paintings, the *Ginevra de' Benci*, a portrait of a 16-year-old Italian aristocrat³ currently exhibited at the National Gallery of Art in Washington, D.C. It's believed to have been painted between 1474 and 1478, and is the only painting by Leonardo in the Americas.

Exploring this painting reveals five lessons in leadership.

Find unexpected connections

In the *Ginevra*, Leonardo enhanced the realism of the portrait by making unexpected connections across multiple disciplines. For example:

Optics: Into the early Renaissance, most paintings were flat and two-dimensional. Because of Leonardo's painstaking studies of the geometry of optics, he was one of the first major artists to achieve visual depth via one-point perspective⁴ by painting with reference to a single vanishing point on the horizon.

The artist also recognized atmospheric perspective: Objects that are farther in the distance appear to have less distinct edges, and a color shift toward blue occurs due to the atmosphere—both of which appear in the distance in the *Ginevra*. Leonardo's observation skills may have been well-honed at a young age since both phenomena were apparent when viewing the town of Vinci from the porch of his birthplace.⁵

Fluid dynamics: Leonardo was also committed to the study of fluid dynamics.⁶ His journals abound with sketches of the flow of water—such as around the abutments of a bridge spanning the Arno River—and his famous whirlpool in *The Maelstrom*. The curls of Ginevra's hair mimic multiple such water studies,

an image Leonardo also emulated in the curls of the angels' hair in his famous *Virgin of the Rocks*.

Psychology and physiology: Leonardo even connected the dots (apologies to the Impressionists) with psychology and physiology. Through dissection, he learned about the 27 different muscle structures in the face. By painting the faint nuances of those muscles in Ginevra's face, he was able to communicate lifelike emotion.⁷

While you might not turn to fluid dynamics or physiology in your day-to-day work, Leonardo demonstrated that finding unexpected connections requires a leader to intentionally engage non-traditional disciplines. Research finds that "there's great power in bringing together people who work in fields that are different from one another yet that are analogous on a deep structural level."⁸ For example, philosophy has much to contribute to business, and some corporations now engage epistemological philosophers to advance AI and cognitive capabilities, and ethicists to help with purpose and moral decision-making amidst complex societal challenges.⁹

Challenge your frame

The *Ginevra's* provenance demonstrates the damage leaders can cause when they try to fit every issue into their own frame. The *Ginevra* is displayed in a 15-inch by 15-inch square frame, but removing the painting from the frame reveals that the painting was sawed off on its right side and bottom. A significant portion of one of the greatest art pieces in the world was destroyed, presumably because it didn't fit into an owner's predefined frame. Art experts have tried to determine what the original painting may have looked like by connecting the dots between Ginevra's silhouette and a related sketch of a woman's hands found in Leonardo's journals.¹⁰ Imagine how this expanded view could have added to the emotions evoked by the painting just by the positioning of this young woman's hands.

Leaders should consider challenging the strategic frames within which their organization operates and redraw those frames out of either opportunity or necessity. During the pandemic, Airbnb broadened its frame from booking vacation rentals to providing virtual travel experiences. Uber expanded its frame from moving people to moving food too. And medical doctors globally redrew the physical boundaries of diagnosis and treatment from office to home via telehealth.

Sometimes organizations also need to tighten their strategic frames. Since its inception, Zoom prioritized the ease of customer experience, such as by displaying the meeting ID in the upper corner of the screen to share with new invitees. In the

"Principles for the development of a complete mind: Study the science of art. Study the art of science. Develop your senses—especially learn how to see. Realize that everything connects to everything else."²²

Leonardo da Vinci



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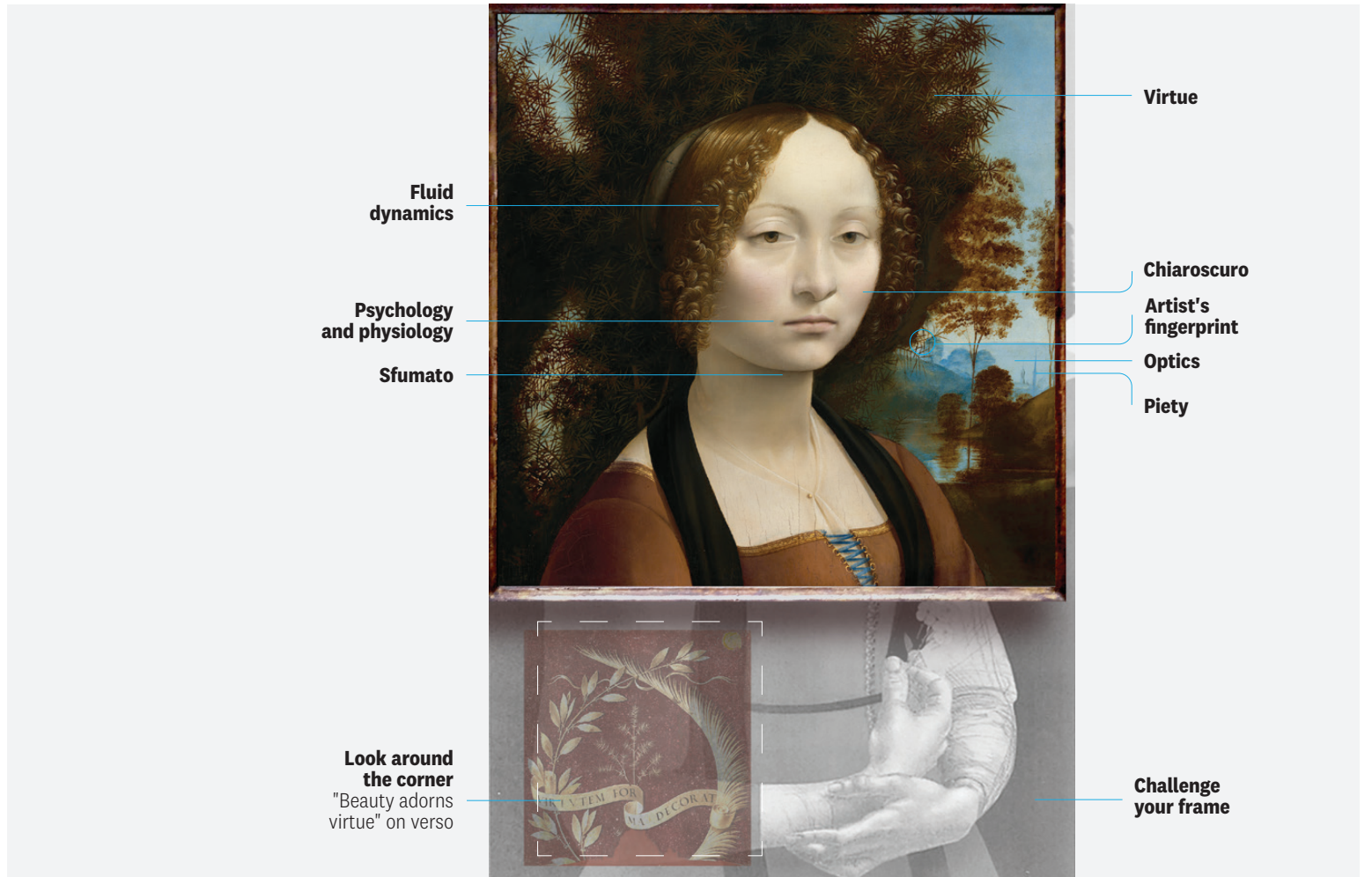
early days of the pandemic, the virtual meeting provider had to rapidly redraw its boundaries to tighten security and confidentiality when users—including world leaders—began sharing screenshots on social media of their virtual meetings during lockdown, unintentionally revealing their meeting IDs.¹¹

See through others' experiences

What a viewer sees in the *Ginevra* depends on the lens they bring to the painting. An artist may notice techniques perfected by Leonardo to depict depth, such as chiaroscuro (the use of shadows based on how light falls on images) and sfumato (smokiness rather than hard lines on the subject's jaw). A symbolist

might recognize how Leonardo was communicating the subject's character: The church steeple represented piety and the juniper branch was a sign of virtue in Italian culture.¹² A Latin scholar might notice not just symbolism but also playful humor, the Latin word for juniper (*ginepra*) being a play on the subject's name.¹³ And a forensic investigator may be intrigued to find Leonardo's fingerprint embedded behind Ginevra's right shoulder.

Stepping into someone else's experience opens our own eyes as leaders to a richer depth of insights. Each year on Founder's Day, the McDonald's corporate office empties and its senior leaders work at the grills, front counters, fry stations, and drive-through windows of hundreds of their restaurants around the world—giving them a chance to see the experience from customers' and store associates' vantage points.¹⁴



Similarly, experiencing diverse strengths, skill sets, and viewpoints can help illuminate new ideas. The Santa Fe Institute, a research center focused on the study of complex systems, brings together business, scientific, educational, and other leaders, connecting multiple lived experiences and mindsets to “understand and unify the underlying, shared patterns in complex physical, biological, social, cultural, technological”¹⁵ systems in pursuit of a common goal.

Notice—and make use of—the patterns

Patterns and rhythms are replete in mathematics, nature, and design. One such pattern—the golden rectangle¹⁶—is considered to be one of the most aesthetically pleasing and calming figures to the eye, and therefore, architects and designers have embraced it for centuries. Structures such as the Parthenon¹⁷ and the Taj Mahal exhibit this underlying pattern, and even today’s 16:9 TV screen approximates it.

Leonardo composed Ginevra’s portrait so that her face and bodice form a golden rectangle, and a bisection of the rectangle goes through her dominant eye. Further, we see a similar pattern in Leonardo’s two other well-known female portraits, the *Lady with the Ermine* and the *Mona Lisa*.¹⁸ Leonardo recognized that by embracing these natural patterns and reproducing them in his paintings, he could amplify the impact and aesthetics of his art. He was such an expert on the use of geometry in art that he illustrated Luca Paciolo’s classic book *The Divine Proportion* (the title being a synonym for the golden ratio).¹⁹

Notice and be conscious of the patterns that enable you, and those that impede you. We’re surrounded by patterns and rhythms: Company culture is a pattern; team structures are patterns; operating models are patterns. They’re all designed to bring structure, order, and consistency to an organization. Patterns can also be unhealthy, such as organizational silos (which tended to fall during the pandemic but are rapidly being rebuilt in many organizations). As leaders, we need to embrace the constructive patterns and ask what else they enable us to do, while naming the destructive patterns so that they can be dismantled.

For our own personal leadership journeys, rhythms are critical. How much of the fatigue and imbalance we often sense as leaders is a function of our fighting against natural rhythms such as sleep cycles, healthy eating patterns, and regularly disconnecting? In *The Power of Full Engagement*, the authors argue that the key to productivity is not time management but energy management. Their studies of multiple high-performing executives reveal that the “richest, happiest, and most productive lives are characterized by the ability to fully engage in the challenge at hand, but also to disengage periodically and seek renewal.”²⁰

Look around the corner

The *Ginevra* is Leonardo’s only artwork painted on both sides. The back of the poplar panel is adorned with the words, “Beauty adorns virtue,” written in Latin against a backdrop of juniper and palm fronds. Although Ginevra’s visage greets visitors upon entering the gallery, the painting is mounted on a floating wall so that patrons can walk around it to view the reverse. Regrettably, many visitors to the gallery don’t “look around the corner” and, therefore, miss half of Leonardo’s paintings exhibited in the Americas.

Get up, walk around, and both literally and metaphorically look around the corners of your own organization and industry to evade orthodoxy, pinpoint risks, and enhance performance. As my colleagues Steve Goldbach and Geoff Tuff describe, “Innovation lore is littered with stories of brilliant minds coming to disrupt industry norms by seeing past [orthodoxy],”²¹ citing as an example the “corners” that traditional watchmakers failed to look around while smartwatches became the bestselling timepiece in the industry in just two years.²² In strategy workshops for our clients, we often have one breakout group assume the role of the C-suite of the biggest competitor—or a company in a totally different industry—to strategize how to disrupt the company from that new perspective. It’s an excellent exercise to become aware of preconceived barriers and corners.

To the best of our knowledge, Leonardo da Vinci never built or tested any of the designs he penned in his journals. In fact, the multiple war machines and weapons he described in his letter to Sforza were all conceptual, and Leonardo was considered a pacifist. Yet almost 500 years after his death, MRI technology proved that Leonardo’s journal drawing of a tripartite heart valve accurately depicted the workings of the circulatory system.²³ Wings that he designed after thousands of hours of observing birds in flight were proven airworthy on a test flight captured by a National Geographic Society photographer in 2000.²⁴ And an Italian loom that was posthumously built to Leonardo’s specifications in the 17th century is still weaving fine fabrics in Tuscany,²⁵ the only known design of Leonardo’s in regular operation.

Leonardo offers us, as leaders, simple but profound wisdom for seeking the convergence of art and science: “It is useful to constantly observe, note, and consider.”²⁶ His advice is as understated as his resume. ●

As leaders, we need to embrace the constructive patterns and ask what else they enable us to do, while naming the destructive patterns so that they can be dismantled.

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Your big agenda just got bigger

Long-standing challenges are being prioritized in new ways on leaders' agendas, creating opportunities for those who can effectively weave them into a seamless strategic vision

By **Jolyon Barker**

As the pace of change continues to accelerate and the level of volatility grows, functional priorities and systematic drivers of change are competing for position on leaders' strategic agendas.

On one side of the ledger, leaders are contending with increased competition, more vocal investors, more empowered consumers, and growing talent challenges. On the other side sit huge, transformative initiatives. Seventy-four percent of CEOs say their organizations are pursuing large-scale digital transformation initiatives, 71% are investing in workforce transformations, and 46% are prioritizing sustainability-focused transformations, according to the June 2021 edition of the *Fortune/Deloitte CEO survey*¹ of 110 chief executives across more than 15 industries. These are the top three priorities ranked by our survey respondents. Add to these the need to address the growing trust deficit among stakeholders of all stripes and, after a tumultuous year and a half, the need to increase organizational resilience and you have a delicate balancing act, one that requires

a vision for the future that often must be funded by operating models in transition.

Against this backdrop, we see five overarching priorities—call them the “new essentials”—that hold the power to transform and future-proof organizations: digital transformation, the future of work, climate change, trust, and resilience. We believe that the path to competitive advantage lies in drawing the connections between them, breaking down organizational silos, developing new skill sets, and encouraging operating models that value collaboration both inside and outside the organization. Too often, these challenges are being treated as discrete activities and organizations miss the considerable strategic advantages that can come from a more holistic approach.

Digital transformation can create and power new ways of working, bring coherence and transparency to far-flung supply chains, and enable organizations to adapt to and mitigate climate change, for example. Building and leveraging trust equity



with internal and external stakeholders affords organizations the ability to evolve, push through change, and take necessary risks while building credibility with an evolving workforce. And learning organizational resilience creates a climate of readiness, one that acknowledges both the uncertainty ahead and the opportunities that can come with it.

These are the issues leading our own research agenda as we navigate an increasingly unpredictable environment with you. Consider this just the start of the conversation and stick with us as we explore these issues in depth in the months to come.

Drive strategic and holistic digital transformation

Once viewed as a technical requirement to remain relevant, digital transformation is becoming a strategic imperative that can overhaul how organizations operate and how they drive value in the marketplace. It can be both the enabler of, and catalyst for, other strategic imperatives and a critical precursor to a more robust and disruption-proof operating model. But to fulfill this promise, the conversation needs to change.

Digital transformation quickly became more about chasing the latest disruptive technology rather than focusing on strategic goals. You can't win by simply adding AI to your toolbox. Strategic transformation demands a reorientation of technology, one that focuses as much on the "why" as on the "how." Put the bits and bytes aside long enough to ask the big questions: What's the mission? Who do we serve?

To get there, leaders need a common language² to discuss and plan for how digitally driven capabilities can pair with evolutions in operations and the workforce to transform their organizations. CEOs, CTOs, and their peers across the C-suite need to speak this language together to have higher-level conversations that ultimately include technology as both an enabler and a catalyst.

At its core, a digitally progressive organization is a future-ready organization that's able to pivot, scale up or down, and maintain stability in the face of volatility. This work is never-ending. Digital transformation is about continual adaptation to match the pace of innovation because going digital isn't the ultimate goal; it's the context within which a 21st-century organization operates.

Evolve work, workforces, and workplaces

With digital tools, services, and processes as enablers, the evolution of work, workforces, and workplaces is accelerating. Jobs are changing. Workforces are being rebalanced and redistributed

as organizations develop new models for hiring in-house versus outsourced talent. Workplace strategies are more in flux than ever, with investments in office foosball/football tables giving way to reimbursements that equip employees working at their own kitchen tables.

Amidst all the change, organizations are being challenged to build stronger relationships with their workers so that employees have a real voice and are empowered to act. In a July 2021 special report from our global human capital trends team,³ we explored how the worker-employer relationship needs to evolve to meet the challenges and opportunities posed by a post-pandemic world. Eighty-six percent of the executives we interviewed think that workers will have more independence from and influence over their employers going forward. With an increasingly tenuous talent supply, how can you set your organization apart to attract and retain the workers and capabilities you need?

Those organizations that can rearchitect work, unleash the workforce, and adapt their workplace strategies around the inherently human aspects of work—giving purpose and meaning to the tasks at hand, maximizing workers' potential, and adopting a more inclusive perspective of success that takes into account employees' work as well as their lives and communities—will gain a competitive advantage.

Mitigate and adapt to climate change

Of course, climate change's threats to the global economy have elevated the issue from a peripheral organizational concern to a featured item on leaders' strategic agendas, but Deloitte research also has found that decarbonization represents a significant market opportunity. For example, if Asia Pacific begins investing in decarbonization technology now, it could yield US\$47 trillion in net economic gain for the region by 2070, according to an analysis by the Deloitte Economics Institute.⁴

As global scientific research⁵ has concluded, decarbonization is a critical path to limit climate change. The world is warming, and the challenges that climate change poses to organizations will grow more dire. Organizations need to act now, both individually and collectively, to ward off more substantial costs to the system—diminishing resources, weakened supply chains, displaced talent pools.

To get to net-zero emissions, complex and interconnected systems across the global economy must be transformed. It's no small task, as every sector begins to adopt new business models, processes, and technologies to reduce, measure, and report on their carbon impact, and to mitigate and adapt to climate change.

Prioritizing any one of these challenges will take focus, creativity, and some risk-taking. Tackling them together will increase your organization's resilience and relevance.

Shifting away from still-profitable revenue streams into new and uncertain areas can be daunting. Incumbents across a range of industries have sought to manage the transition to a low-carbon future⁶ by taking small steps, creating optionality, and extending the timeline over which the shift will play out. Simultaneously, leaders can prepare for a dramatically different future by setting aside existing frameworks about the current landscape and considering how markets, the industry, and the global economy are likely to be reconfigured as they move toward a low-carbon footing. This transformation toward a net-zero carbon future can create new market opportunities and new paths to sustainable success.

Build and leverage trust equity

The level of trust that an organization has built among board members, investors, employees, customers, suppliers, and other stakeholders is integral to the success of climate change initiatives, digital, and work-related transformations. However, the global pandemic, the proliferation of data privacy and protection issues, a fraying of the social contract between people and governments, an abundance of misinformation, and a concomitant level of social and political upheaval in many countries have created a deep trust deficit.

This deficit can present organizations with PR crises, decreasing customer loyalty, a lack of shareholder confidence, defecting employees, and unstable supplier relationships—but making a concerted effort to build and maintain trust with all stakeholders also can yield significant opportunity.⁷

Deloitte research has found that three-quarters of customers who highly trust a brand are likely to try the brand's new products and services. Another study found that companies that have garnered high levels of trust are more than twice as likely to be "high-performing revenue organizations" than companies with low trust levels.⁸ Yet another found that public companies that are rated the most trustworthy have outperformed the S&P 500.⁹

Something so important, so omnipresent, yet so difficult to earn and maintain needs to be considered from the perspective of all stakeholders and corners of the organization. Topics ranging from cyber posture to the organization's stance and actions relative to ESG; compliance; commitments to diversity, equity, and inclusion; product and service quality; and many others all drive stakeholders' trust in an organization. Therefore, trust needs to be addressed proactively, and trust levels need to be consistently and repeatedly diagnosed, measured, quantified, and

objectively assessed across this multidimensional matrix of stakeholders and actions as part of an organization's DNA.

Develop organizational resilience

Resilience, the ability to thrive amidst continual disruption, is fast becoming an "always-on" competitive advantage. Organizations that made early investments in resilient strategies during the COVID-19 crisis—or that had already made strategic, workforce, and technology investments in capabilities that enhance resilience—reported that they outperformed their competition, according to our fourth-annual *Global Resilience Report*,¹⁰ a survey of 2,260 private- and public-sector C-suite executives in 21 countries and across multiple industries in December 2020.

Those organizations that hadn't already invested in resilience are learning some hard lessons: 70% of the executives we surveyed reported that they don't have complete confidence in their organizations' ability to pivot and adapt to disruptive events. However, many respondents also reported that they made investments in 2020 to improve their organizations' preparedness and resilience for future disruptions: 35% put processes in place to stress-test their cash reserves; 33% worked on increasing their supply chain's transparency, security, and diversification; and 32% worked to boost cross-functional collaboration.

Cross-functional collaboration is at the heart of a resilient organization¹¹ because resilience requires "whole-system" cooperation and strategic vision to increase collective agility, improve responsive decision-making, and ensure an ecosystem-wide view that benefits all stakeholders. And this resilience isn't just a characteristic or a mindset; it's a capability unto itself that can be leveraged to ensure the success of digital and workforce transformations, to mitigate and adapt to climate change, and to shore up stakeholders' trust in your organization's ability to weather any disruption.

Prioritizing any one of these challenges will take focus, creativity, and some risk-taking. Tackling them together will increase your organization's resilience and relevance. There will be many dependencies along the way—a fluency in digital systems, a resilient organizational culture, a surfeit of trust among internal and external stakeholders, to name just a few—but one thing is clear: Yesterday's business doctrines are insufficient.

Take on the "new essentials." Find the connections between them. Push your teams to break down established structures as they balance short-term priorities with your response to the existential drivers of change. Future-ready organizations are already mining them for opportunities. Don't be left behind. ●



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3





Beyond the job

To increase agility and address changing worker demands, organizations will largely do away with the traditional concept of the job—necessitating a fundamental rethink of the operating model for talent and work

By **Susan Cantrell** Illustrations by **SHOUT**

Ever since Adam Smith wrote about the division of labor over a century ago, jobs have been the dominating structure for organizing work. Managers give feedback, hire, promote, and organize their teams around people in “jobs”—discrete sets of fixed responsibilities. We write job descriptions, set compensation levels, create organizational charts, assign training, and manage performance—all around these predefined jobs.

But the very notion of the job is increasingly becoming a relic of the industrial era. This approach worked well when organizations were stable and predictable, and when they competed more on scalable efficiency than on speed, innovation, and agility.

If there’s a single thread running through the narratives on the future of work, it’s that we’re moving away from the mechanistic, industrial models of the past to a more fluid, human, and digital future in which our organizations, people, and work organically adapt in real time—and one with an ever-expanding portfolio of stakeholders, workforces, work options, workplaces, and strategic futures that can no longer be categorized into simple boxes. To adapt to a changing world, we need to build something far more fit for a world in which speed, agility, and innovation rule the day, and in which people expect more meaning, choice, growth, and autonomy at work.

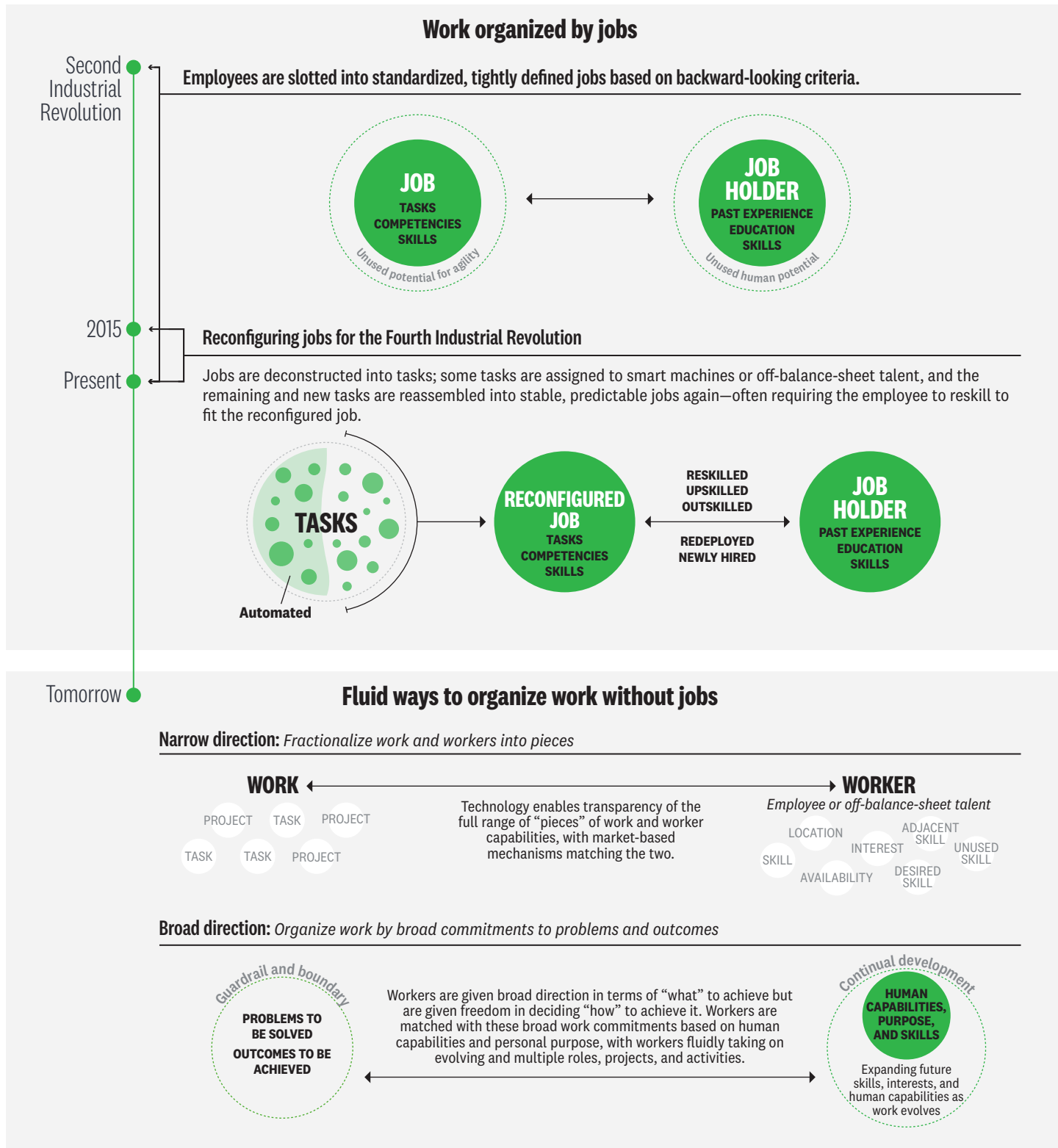
In recent years, the thinking on the future of work has focused on the need to reconfigure jobs—not to

reimagine or replace them entirely. The reasoning goes like this: As alternative approaches to work have emerged such as artificial intelligence, automation, and off-balance-sheet talent, we need to disaggregate the job into component tasks, determine which tasks can be performed more optimally by smart machines or alternative talent outside of the organization’s walls, and then reassemble the remaining tasks with new ones to create a newly reconfigured job. Employees are then reskilled, upskilled, or outskilled to once again meet the needs of the newly reconfigured job, with automation substituting for, augmenting, or transforming the human worker’s role (figure 1).

But this approach is a top-down, engineering-like approach still rooted in a mechanistic mindset that doesn’t give workers much choice or agency. Too often, the focus is on chasing efficiency and cost reduction instead of opening up new opportunities to unlock growth and value. And the world is simply changing too fast to go through this process again and again each time a new technology emerges, markets shift, or new opportunities emerge.

If anything has shown the need for greater agility, it has been the pandemic. Forced to become more agile, organizations fluidly moved people to where the work was; created agile, cross-functional SWAT teams to tackle complex problems; and experimented with new work models. For many of us, the pandemic enabled work to become more emergent than engineered.

FIG 1: Work beyond jobs



Source: Deloitte analysis.

How do we go about organizing work beyond the constraints of the traditional job in a way that ... unleashes the potential of both organizations and people at scale and speed?

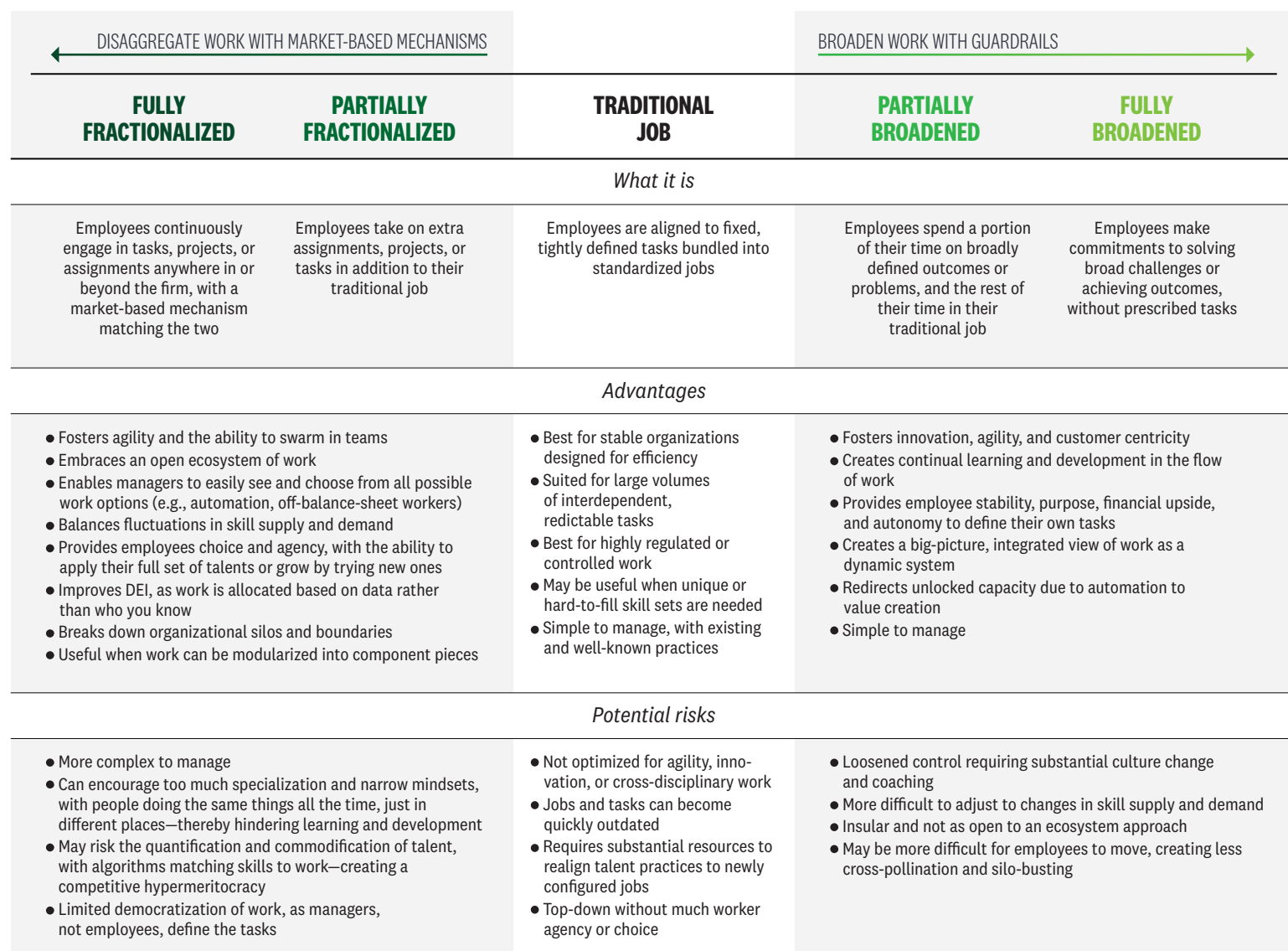
How do we go about organizing work beyond the constraints of the traditional job in a way that creates a kind of dynamic stability that unleashes the potential of both organizations and people at scale and speed?

To move beyond the industrialization of work and jobs, organizations are generally moving in two directions. In one, organizations seek to atomize the work and the worker, deconstructing both into their component parts (tasks or projects, skills and capabilities), and then using new advances in technology to rapidly match the “pieces” of work and worker based on evolving needs and interests. The other direction seeks to organize work by creating very broad commitments to problems to be solved, outcomes to be achieved, or new sources of value to be created, essentially providing guardrails for workers in terms of the broad “what” of work but giving them the freedom and autonomy to choose the “how” (figure 1).

Fractionalizing work into component tasks can lend itself to farming out work to gig or other off-balance-sheet workers, thereby undermining the stability, purpose, opportunities for growth, and stable income achieved through employment that most workers desire. For this reason, we aren’t going to discuss gig economy options here, preferring to look at how organizations can create stable homes for workers as employees, and as part of their commitment to stakeholder capitalism, while still empowering them with the autonomy, agency, and choice that many enjoy as gig workers.

In reality, these are two ends of a fluid spectrum of options, with many alternatives in between. Organizations will want to use different options for different workforces or businesses. Indeed, there’s still a place for traditional jobs in most organizations, but that should be perceived as one of many options for organizations (figure 2).

FIG 2: The multitude of options beyond the job



Source: Deloitte analysis.

Fractionalize work and the workforce

Unbundling work from the job and dividing it into component pieces unleashes people’s ability to swarm: to dynamically flow to the work by taking on short-term challenges, opportunities, tasks, projects, or assignments that span job titles and departments. Unboxing people from jobs and deconstructing them into their full range of skills, experience, and interests enables them to be seen as unique individuals beyond their job descriptions, with significant diversity, equity, and inclusion implications.

New technology developed by companies such as Eightfold AI, Gloat, and Hitch enable employees to have visibility into projects and assignments anywhere in an organization, and suggest and match potential opportunities based on interests, availability, and AI-inferred skills. This is partial fractionalization where employees maintain their standard job but can also take on additional work elsewhere as needed or desired.

Using such a project marketplace, employees at Tata Communications contribute to a project in addition to their core job responsibilities. HERE Technologies allows employees to carve out time from their core job responsibilities (for example, 5% or 20%, or sometimes 100% of their time) for the duration of the project or task, negotiated between managers. Kelley Steven-Waiss, former chief human resources officer of HERE and founder of Hitch.works, calls this the principle of “you get what you give”: You give the time of your employees to others, but you also get the ability to leverage talent from elsewhere in the organization.¹

In large part, consulting firms work like this today, as do internal, project-based consulting groups or data science teams that are “rented” out to other functions in the firm. At Haier, the entire organization of more than 75,000 employees works

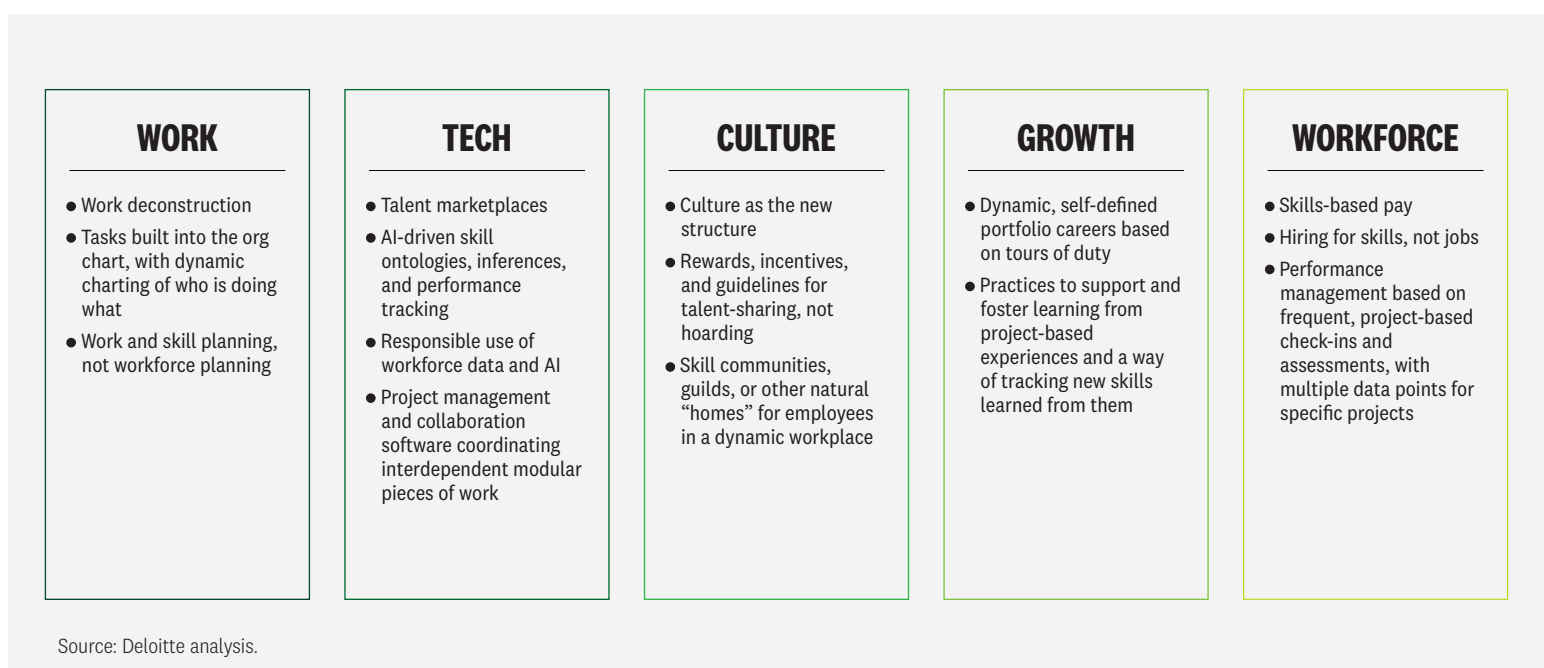
in a fully fractionalized model, with an internal talent market that governs the deployment of talent focused on specific projects. The core organizational units are self-organizing, fluid microenterprises, each with 10 to 15 employees. All talent can join, start, or move to a microenterprise at will. Microenterprises are grouped into platforms, responsible for getting teams together and helping identify opportunities for collaboration. There are only three categories of employees—the platform owner, the microenterprise owner, and the entrepreneur—with no higher or lower rank.²

Haier also enables internal and external entrepreneurs (employees and independent contractors) to join microenterprises and platforms.³ We’re seeing signs of the convergence of types of talent marketplaces: internal talent marketplaces, external gig marketplaces, the cross-company talent exchanges that emerged in the pandemic, and even internal talent marketplaces that connect with one another.

Fractionalizing work is very useful in a fast-changing work environment, but it can risk over-indexing on skills, and the quantification of people and specialization—ultimately risking its goal of humanizing work entirely. Managers may only want to engage with employees who already have the proven skills they need, for example, sacrificing employee development.

It may also lead to what Tom Malone predicted back in 2011 as the dawning age of “hyperspecialization” in which work previously done by one person is divided into more specialized pieces done by multiple people, achieving improvements in quality, speed, and cost.⁴ The danger? People can become too specialized in specific skill areas, lack the incentive to grow and develop in new ways, or have little scope to improvise or add more value. Slicing work too thin can turn “that’s not my job” into “that’s not my task” and prevent people from having the

FIG 3: New practices for fractionalizing work



Instead of atomizing jobs into pieces, an alternative is to broaden them so that the focus is on the broad outcomes to be achieved or problems to be solved.

big-picture view that enables them to spot opportunities that will reinvent the future.

With the right decision frameworks, culture, and guidelines, organizations can avoid such risks and accelerate workforce resilience, agility, and capability, and impact the future of work.⁵ Indeed, fractionalization is more of a wholesale operating model reinvention than it is a technology play, demanding an entirely new set of work, talent, and management practices to support it (figure 3).

Broaden work and the workforce

Instead of atomizing jobs into pieces, an alternative is to broaden them so that the focus is on the broad outcomes to be achieved or problems to be solved. With latitude in defining the “how” of work in pursuit of broad objectives, employees get the opportunity to take on bigger, more integrated roles and responsibilities that often cross functional boundaries and enable them to develop new skills and gain experience.

For decades, businesses have gradually embraced worker empowerment, with the move to DevOps, agile, intrapreneurship, teams of teams with distributed control and centralized coordination, self-management, edge-centric decision-making, and “teal organizations” all signaling a direction away from rigid jobs. Many organizations have broadened roles for limited periods of time—for example, through Hackathons, IdeaJams, and Google’s famous “20 percent time” for engineers to spend time on any project they feel will most benefit the company. So too is LinkedIn’s “InDays,” for which employees are given one day per month to focus on something they’re passionate about or that inspires them.⁶ But too often, organizations simply bolt these approaches onto legacy jobs and expectations.

A few organizations are fully embracing broadened roles, either at the individual or team level. Consider tomato processor Morning Star, where no one has a job title. Instead, each employee drafts their own outcomes and problems to be solved. For example, one worker’s personal mission is to turn tomatoes into juice in a way that’s highly efficient and environmentally responsible.

The statement then describes how they’ll work to achieve the objectives—including whom they collaborate with and what decision rights they have—and that description is then approved by coworkers. Only two management layers exist: the president, who makes strategic decisions, and everyone else. But the organization isn’t flat; authority (and pay) is based on expertise and value created rather than positional power.

“We believe you should do what you’re good at, so we don’t try to fit people into a job,” says Paul Green Jr., who led the company’s training and development efforts. “As a result, our people have broader and more complicated roles than elsewhere.”⁷ Employees are also held accountable by their peers. Several compensation committees, each composed of peers and elected by peers, work to validate self-assessments.

To help employees spot new opportunities and think like owners, Morning Star makes all financial data transparent to employees and invests in education that ensures that employees understand not only their costs, but also the value they’re creating. Results are impressive: Morning Star has grown its

volume, revenue, and profit by double-digit percentages annually for the past two decades.⁸

ING Netherlands, in contrast, defines work around team outcomes rather than individual ones. Its organizational building block is multidisciplinary teams or squads—comprising a mix of marketing specialists, product and commercial specialists, user experience designers, data analysts, and IT engineers—all focused on a shared outcome.

Similar to Morning Star, each squad has to write down the purpose of what it’s working on, agree on a way of measuring the impact, and decide on how to manage its daily activities.

Squads are part of 13 tribes that address specific domains, such as mortgage services, securities, and private banking. Tribes meet quarterly to celebrate and learn from successes and failures, and align with the overall strategy and other tribes and squads. Chapters coordinate members of the same discipline—data analytics, say, or systems processes—who are scattered among squads.

To support the new model, ING introduced a new performance management program emphasizing ongoing feedback, the alignment of individual and organizational purpose, self-defined targets based on contributions to the team, and personal “stretch ambitions” to encourage innovation over incremental improvements. Broadened jobs meant that ING reduced the number of job types from approximately 85 to 15, including retiring the traditional full-time manager role. HR Director Maarten van Beek explains: “I strongly believe that, in future organizations, we need to match people’s skills with the jobs that need to be done. We have to move away from functions, fixed jobs, and function houses.”⁹

The opportunity to shed the notion of the job as a relic of the industrial era in favor of broadly defined roles has never been greater. Due to new advances in technology, we can arm every employee with the data and insights to make smarter decisions. The advent of human-machine collaboration means that work processes can become far more iterative in a test-and-learn cycle of work. As technology increasingly automates routine tasks, it frees people to apply their capabilities to creative problem-solving.

Even though advances in tech are making it easier to successfully broaden roles, there’s a countertrend on the rise: using automation and AI to more tightly control how people do their jobs and tasks that takes Tayloresque tracking and control to radical, new heights. Companies are now using AI to do everything from tracking and guiding a warehouse worker’s hand movements, to directing truck drivers’ routes and schedules, to providing differing call center scripts based on AI-categorized customer issues. Instead, companies should consider using AI to empower workers to make better decisions on their own and spot new opportunities.

Although broadening work grants more autonomy to employees, the trade-off is the abandonment of the idea that there’s one best way to do things. Instead, control is achieved through the clear articulation of broad outcomes, mutual accountability, transparent information-sharing, and strong cultural principles, values, and norms fostered through longer employee tenures. Rewards based on shared outcomes incent employees to creatively generate more value, but intrinsic motivation achieved through aligning

work with purpose and passion is the real driver of performance (figure 4).

It can also take quite a bit of coaching, cultural change, and hard work to engage employees in solving unanticipated problems and freely working toward outcomes. Many people prefer to think in terms of tangible, narrow rules and predefined tasks, and may be less comfortable with work that continually evolves based on specific contexts and challenges.

To transition, organizations can gradually expand the scope of the broadened role, start employees with predefined problems, and start providing the data, tools, and AI support to help employees make more of their own decisions. AI can even be used to help: Klick Health’s Genome machine learning technology, for example, analyzes every project at every stage in the firm, rewarding more responsibility to people who have demonstrated consistent competency and success.¹⁰

Compared to fractionalization, broadening work focuses more on nonroutine tasks and emergent work rather than on tasks and projects predefined by managers, boosting an organization’s “surface area” to innovate and adapt. Workers never fall into the trap of “that’s not my task or project.” But it may also be more difficult for employees to fluidly move around the organization, thereby making it harder to cross-pollinate ideas or smooth out differences in skill supply and demand.

Unlike fractionalization, the focus is less on specific hard skills and more on broad human capabilities such as the problem-solving, curiosity, and creativity necessary to identify problems and opportunities, and then develop, test, and iterate on solutions. Specific skills tend to be learned on the job and grow over time in the flow of work itself. Although people may not have the opportunity to use their full range of skills as they might with a fractionalized approach, neither do they risk being treated as fungible skills in

a competitive marketplace. Instead of seeing the world as fractured but interchangeable parts to be configured and reconfigured at will, work and people are viewed more as dynamic systems.

Tiptoeing into the future of work

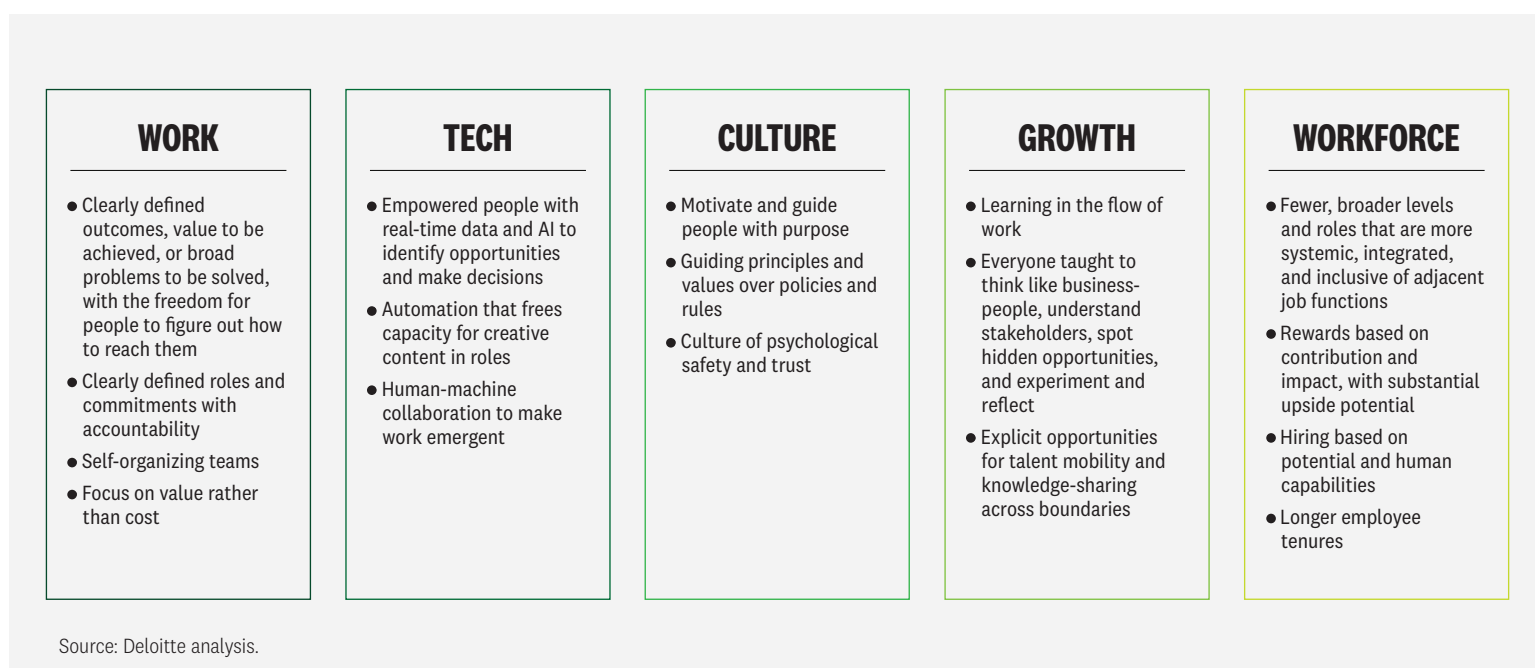
Moving beyond the job as the primary organizing construct for work is an audacious undertaking requiring a wholesale change in what it means to work, how we support it, and how we fundamentally view workers—and one that will upend the very structures and mindsets we’ve become habituated to since the dawn of the Second Industrial Revolution.

But jobs as we know them are a product of their time, a rigid solution that no longer serves today’s dynamic, more complex problems. We need entirely new approaches to mobilizing and coordinating human effort—moving from people boxed into jobs to roles built around the individual; from mechanistic to organic structures; and from workers viewed as “resources” or “capital” to workers as whole, complex contributors filled with potential.

Although it might be a daunting proposition to think about doing away with jobs entirely, you can tiptoe your way into the future of work. Start inching forward by experimenting with a hybrid option close to the traditional job. Pick your spot to experiment, focusing on where the organization might have challenges or pain points, where automation is freeing up extra capacity, or where change is happening so fast that talent practices can’t keep pace. Over time, gradually seek to further fractionalize or broaden work and try out different approaches for different types of work or workforces. Ultimately, you can use a variety of ways to organize work, pushing beyond “the job” to unleash agility and unprecedented value for your organization and employees. ●

This article was originally published in the summer 2021 issue of SHRM’s People + Strategy journal.

FIG 4: New practices for broadening work



Moving beyond the job as the primary organizing construct for work is an audacious undertaking requiring a wholesale change in what it means to work, how we support it, and how we fundamentally view workers.





Unshackling the creative business

Breaking the trade-off between creativity and efficiency can allow an organization to innovate, transform, and overcome disruption. Here's how to start.

By **Peter Evans-Greenwood, Robert Hillard, Robbie Robertson, and Peter Williams** Illustrations by **Nazario Graziano**

Construction is arguably one of the industries that's most resistant to technology-driven disruption. From the pyramids in Egypt to Dubai's Burj Khalifa, the same essential process has endured through the millennia, absorbing myriad technological innovations without undergoing much in the way of fundamental change, which makes the work of firms such as Australia's Hickory Group all the more remarkable. Hickory has used techniques and technologies from outside the industry to transform the construction process—and

the industry along with it.¹ The firm's approach to high-rise construction, known as Design for Manufacture and Assembly (DFMA),² is a modern, modular, and digital approach inspired by repeatable parts in the automotive industry.³ Using DFMA, Hickory can build skyscrapers more economically, much more quickly, and with much less disturbance to local residents and businesses than traditional construction techniques.⁴ In fact, DFMA has been so successful that the city of Melbourne, where Hickory Group is headquartered,

has considered regulation that would implicitly require all new high-rise construction to be done via DFMA.⁵

Firms like Hickory are rightly credited with being creative, and for having the spark of new and useful thinking that drives innovation. But, innovative as it is, the DFMA process itself wasn't the most important factor behind Hickory's success. Even more important was the way Hickory developed its version of DFMA and brought it to market—by engaging in many small acts of

creativity across and outside the organization that added up, in the end, to a transformative result. Most important of all, almost none of these creative acts involved inventing new things. Rather, Hickory's success was largely the result of new and different ways of behaving. Groups within Hickory engaged with each other in new ways to put existing processes and technologies together to create DFMA; simultaneously, Hickory worked with external organizations, such as contractors and regulators, in new ways to smooth DFMA's path to market.

Hickory's story showcases creativity in how a firm and groups within the firm collaborate and engage with each other and with the market, rather than creativity as a skill or capability fostered to develop creative products and services. It's this marriage of creative engagement, of new and useful ways of acting, with the invention of new and useful things, that is the essence of a creative business. In a world full of interdependencies where accomplishing anything involves a multitude of stakeholders, getting things done depends crucially on the ability to work effectively with others. And when the thing to be done is new, working effectively with others, more often than not, means working in ways that haven't been tried before. It's what allows an organization to respond to unforeseen and previously unknown problems, transform a problem into an opportunity, and find opportunity where others didn't think to look. It's the kind of creativity, born of interactions across many teams, places, times, and problems, that can—given enough time—transform a business, an industry, or the entire market.

A firm is only as creative as its least creative team

The need for creative engagement becomes clear when one considers that, in organizations composed of teams of teams (as many modern organizations are),⁷ any particular team's creativity is contingent on the creativity of others. Unlike in the heyday of the industrial revolution, when simpler production processes and tight vertical integration made it easier for a business to be creative as a whole, the past few decades have seen the unbundling of the firm, with increasingly complex internal functions broken up into neat packages, with suppliers, partners, clients, or even customers taking on responsibility for packages.⁸ This unbundling means that organizations have transformed

themselves into complex webs of relationships that span across internal groups and external ecosystems. It also means that the average organizational team is small and unable to accomplish much on its own, and hence must rely on the actions of others to turn a creative idea into reality.

Consider a chain of fast-food restaurants whose marketers have determined that adding a constantly changing item to the menu, a burger of the week, will attract repeat customers. Novel (to the chain) techniques and ingredients—such as a black bun, a sweet and savory filling, or a burger using ingredients from other cultures, or possibly even ingredients recently developed in the lab—will result in something that stands out from the usual menu items, something with colors and textures perfect for social media. A burger of the week might be just the creative idea, the potential innovation, the restaurants need to catch the public's eye.

For the burger-of-the-week campaign to succeed, the restaurants will have to coordinate many small changes across the organization and its ecosystem. Signage and menus need to be changed to include that week's burger, and the burger must be added to cash register systems so that it can be sold. Any novel cooking techniques need to be integrated into kitchen processes, requiring training, at a minimum, and possibly additional tooling. Different ingredients must be sourced from (likely new) suppliers and integrated into the supply chain. And all this needs to be pulled apart at the end of every week and redone in new configurations for each successive burger of the week. To accomplish this, marketing, supply chain, procurement, IT, finance, and front-line restaurant workers and operational teams must all work with each other in ways they are not accustomed to, at least until the burger-of-the-week program becomes established.

The story is the same for Hickory and DFMA. Developments affecting one part of the process, such as the integration of 3D modeling tools with custom engineering plugins to calculate part weights, structural loads, and centers of gravity, informed beneficial changes in other parts of the process, such as performing engineering before design instead of the other way around as in a conventional build. Factory production of modular components made a wider range of materials and techniques possible, such as using low-carbon geopolymers instead of concrete. Because it departs so radically from conventional construction, the DFMA process could not be assessed with

Defining creativity

Decades of research into creativity has arrived at the consensus that creativity is not an ineffable thing. It can in fact be defined: It's the creation of something novel and useful,⁶ a creative work, where "work" can be taken quite broadly to include physical objects, theorems or strategies, systems for understanding the world, stories and narratives, or music that can be performed again and again. Novelty on its own is not enough. A creative work must also be seen as useful, helping the community move toward its goals. Defining creativity in terms of novelty and usefulness implies that creativity is contextual. Novel and useful to whom? Where? When? This relativity also implies that, while the individual or team is important to creativity, other factors are also, and sometimes even more, important.

When a creative outcome depends on the sum of many creative acts across the organization and its ecosystem, the effort can stall if any of the participants cannot flex in the needed way. And flexibility, unfortunately, is often hard to come by. The culprit? Institutionalized scalable efficiency.

established institutional risk models. This made it difficult to obtain debt financing, causing Hickory to seek alternative ways to fund its early DFMA construction projects. And so on.

These examples highlight the value of distributed creativity⁹ as well as of creative ways of engaging both within and without the organization. But they also highlight the difficulty. When a creative outcome depends on the sum of many creative acts across the organization and its ecosystem, the effort can stall if any of the participants cannot flex in the needed way. And flexibility, unfortunately, is often hard to come by. The culprit? Institutionalized scalable efficiency.

Efficiency trumps creativity

Almost by definition, scalable efficiency designs creativity out of organizational activities. It prioritizes simplification and standardization as the means to efficiency, prescribing a correct way of doing things for everyone across the organization. Events and behaviors that fall outside these constraints are “exceptions,” undesirable and wasteful disruptions to the process. Tightly specified responsibilities and deliverables provide little room for trial and experimentation. Performance metrics for departments, teams, and individuals drive them to reduce waste and increase productivity rather than to experiment with new ideas and approaches.

Formal contracts with outside parties and performance agreements among internal groups constrain creative behavior, as teams have little incentive to depart (or might be actively prevented from departing) from stipulated norms. These restrictions are the result of strategies that promote a small set of anchor products or services that lock in standardized production and supply chain processes to drive scale efficiencies and control quality, with few variations permitted.

We can see how this would work against creativity in the burger-of-the-week example. The supply chain team may balk at sourcing ingredients from unfamiliar, and therefore unproven, vendors or allow it only after a lengthy vetting and approval process. Procurement policies may prohibit ordering signs and menus in smaller quantities than would qualify for a volume discount. Learning and development may not be authorized to contract with instructors to teach line cooks new techniques. Under these circumstances, our fictitious marketing department has the

choice of either convincing other teams to step around contracts, service-level agreements, and organizational policies that inhibit realization of the creative idea, or going rogue and establishing new, possibly unsanctioned relationships to bring the idea to life.

That’s not to say that firms built around scalable efficiency don’t try to be more creative. Typically, improving creativity at such firms is approached in two ways. The first is to establish a dedicated creative group, such as “innovation,” “R&D,” or “design,” whose job it is to be creative for the firm, developing new products and processes. The second is to teach creativity methodologies to operating teams, who are then expected to apply them to their daily work. But both of these approaches commonly fail. The first fails because a creative department has no operational role or responsibilities, and so finds itself disconnected from and unable to influence what the operational teams are doing. It may generate a wealth of creative ideas, but few of them will find their way to execution as the creative department’s mandate to be creative is no match for the operational pressure to be efficient. The second approach fails because operational teams often struggle to make use of the creativity techniques they’ve been taught. They too may generate their fair share of creative ideas but find themselves unable to put them into practice as they run into roadblocks thrown up by the processes, metrics, and time constraints they must work within.

One of the commonly used “Four Ps” frameworks—this one for the factors influencing creativity¹⁰—is helpful in understanding why these approaches fall short. According to this concept, creativity is a function of product, person, process, and place.¹¹ “Product” is the dependent variable, the output of the formula: the creative work. The other three Ps are the independent variables, the things that we can control, that determine if our product will be new and useful, and creative. “Person” is the individual (or team) doing the creating, their ambitions, attitudes, skills, background, and experience. “Process” is the creative process, encompassing the entire creative journey through multiple phases of generating ideas and then winnowing them down to arrive at a novel and useful solution (as opposed to techniques such as brainstorming or design thinking). Finally, “place” is the setting in which the work is done, not just the physical surroundings (as is often noted), but also the larger social and organizational environment that shapes creativity by determining what’s easy and what’s hard to do, and includes the metrics, assumptions, and principals that are the foundation of a firm’s operating model.

The two methods described earlier focus on “person.” The first treats creativity as the responsibility of particular creative individuals rather than being distributed across the firm. The second focuses on the techniques used within the team, the workers’ creative skills, without empowering the team to establish new ways of working with stakeholders across the organization and its ecosystem. Absent a place and process conducive to creativity—flexible, iterative, adaptable—a singular focus on “person” will get an organization nowhere. While “person” is undeniably important, process, place, and even products are equally important, as creativity emerges from the interactions between the four Ps.

Invest in creative engagement

Consider projects—the change initiatives that we’re all spending an increasing proportion of our time on—as an example of how product, person, process, and place need to work in concert for creativity to emerge. We can staff projects with a diverse team that pulls together a range of perspectives, backgrounds, and skills.¹⁵ We can even train the team in techniques such as design thinking and provide them with a creative mentor. Projects, however, are justified and prioritized according to a cost-benefit analysis, a measure of efficiency. Strict limitations are placed on the project’s deliverables, its timeline and resources, and the reporting and operating procedures that the project is required to follow. Nor can the project team work creatively with other project and operational teams across the organization, as the other teams are working under the same limitations.

If we want more creative project outcomes, then we need to give project teams the space to be creative. In practical terms, this can mean empowering the team to change the project’s scope or reframe the problem they’re addressing. This implies that the project team may want to change the scope, timing, or nature of its deliverable, its product, as well as the process by which they produce it. The team also needs to be empowered to experiment with alternative approaches before settling on what seems to be the best. This requires investing time and effort in developing and evaluating these alternatives, as well as exploring new ways of working with existing collaborators or establishing relationships with new ones.

Any changes to a project’s product or process will involve negotiating with other stakeholders—projects and operations teams—whose own work will be affected by these changes. This requires an operational environment, a place, that both empowers teams to find new ways of working with their stakeholders and provides them with governance processes that can be used to negotiate deviations from standard operating procedures. The burger-of-the-month team, for example, may ask the firm’s supply chain team to collaborate on creating a lightweight vendor approval process. This would likely create new value for the firm, but the collaboration will also have knock-on effects across the organization as the supply chain team reprioritizes other work—work that other teams depend on and that is unlikely to be accommodated by existing budgets. To account for these knock-on effects, marketing and supply chain will need sanctioned procedures to help other teams accommodate their efforts.

All this experimentation, collaboration, and accommodation can deliver creative solutions that are more valuable and useful than would have been considered otherwise. But this additional effort needs to be planned for and funded. It must also be balanced with the desire to be efficient, to standardize, and to drive efficiency: Fostering creativity does not and should not imply giving teams a blank check.

To fund the effort needed for creativity without unnecessarily compromising desirable efficiency, both creativity and efficiency need to be explicitly accounted for in a firm’s operating model. This means combining the traditional measure of efficiency—cost-benefit—with some measure of creative potential—investment opportunity, perhaps—that enables the firm to compare and balance the two. If a firm fails to do this, then efficiency will always trump creativity because creativity comes with a cost—a cost that, in the eyes of scalable efficiency, is unnecessary.

A creative business needs creative leadership

Creative business—enabling firms to productively engage with change across the entire value chain—presents both an opportunity and challenge. The opportunity is the ability to flexibly respond to unknown (and unforeseen) problems and opportunities, making operating models more flexible and firms more

Creativity as a generative process

Research in the past few decades has shown us that creativity emerges from human interaction and collaboration.¹² It’s a generative process: Interactions in, and influenced by, the workplace build on domain knowledge, past experience, and differing perspectives on the problem at hand to synthesize a novel and useful response.¹³ Recent research contrasts with historical views of creativity that saw it as an attribute of a creative individual,¹⁴ a cognitive approach that assumes that novel ideas originate in the head. On the contrary, creativity is something we do (a verb) rather than something we have (a noun).

Appointing a chief creative officer with operational responsibility signals to teams and workers not only that the firm values creativity, but that it's willing to put its money where its mouth is by making someone responsible for getting it done.

innovative. These attributes may well be what enables an organization to stay at the head of its industry at a time when, for many, the transition to digital is upending several traditional sources of competitive advantage.

On the flip side, the challenge is that capitalizing on this opportunity requires deep changes in a firm's habits and norms. Investing in training, or giving teams a license to be creative, is important but insufficient. Creativity needs to be integrated into the very fabric of the firm.

At the senior leadership level, instilling habits and norms that foster creativity requires the development of governance frameworks that consider creativity as a key factor when deciding what to invest in. Program portfolio management, for example, needs to consider the possibility of a project creatively generating new value—its investment-opportunity ratio—and not just its ability to deliver effectively, its cost-benefit calculus. To support this, new processes will be required, backed by executive sponsorship that teams can access if they think that their project has the creative potential to deliver new value. These processes will need to institutionalize ways to change the scope of a team's project, invest in exploring alternatives, and find new ways to collaborate or new groups to collaborate with. Some instances might need direct executive involvement, such as when a new approach departs significantly from commonly accepted organizational or industry norms. This was the case when Hickory's DFMA construction process outgrew conventional industry partnering practices, requiring creative approaches to collaboration.

These new governance and operating processes are only possible if a firm quantifies the opportunities that creativity presents. In other words, we need to measure creativity. This might sound like a strange, if not impossible, task, not least because creativity's value is contextual. It's possible, though, to develop subjective measures of creativity¹⁶ that can be used to determine, for example, which of two similar projects is the more creative, or if an investment in a project yielded a more creative outcome than would have resulted otherwise. These qualitative measures can be used to develop aggregate quantitative metrics that provide insight into the overall impact of a firm's investment in creativity.

The glue that binds governance and operations together with metrics is an established methodology or methodologies, such as design thinking, that help translate creativity into action. These methods have two uses. The first is to provide teams with a language that they can use to both describe and advocate for

a creative opportunity that they see in their work. The second is to give teams a formal way to describe how they will explore the creative opportunity and thereby provide an estimate of the investment required.

Nor should we ignore the cultural aspect of creativity. While training and a general license to be creative are not enough on their own, they are still essential. Some staff might be spontaneously creative, but others will benefit from training in tools and techniques that enable them to tap into their inner muse. Even those who are spontaneously creative likely will benefit from training on when and when not to express their creativity to smooth their interactions with less spontaneous colleagues. And from a cultural standpoint, as well as from an accountability one, appointing a chief creative officer or the equivalent could hugely boost a firm's efforts to become more creative if that executive is tasked with accomplishing the things described above—developing creativity metrics and working with other executives to integrate the metrics into the governance and operating processes that they're responsible for. Appointing a chief creative officer with operational responsibility signals to teams and workers not only that the firm values creativity, but that it's willing to put its money where its mouth is by making someone responsible for getting it done.

Building a creative business

The ability to act as a creative business relies on a complex set of norms, processes, and governance mechanisms that must all work together to promote exploration throughout the firm and its ecosystem. It requires some degree of comfort with ambiguity, as creativity's outcomes are sometimes difficult to precisely define until the creative process is well underway. At the same time, it also requires enough structure to channel creativity toward the good of the firm and to obtain an acceptable return on investment. Although putting structure around ambiguity may seem like a contradiction in terms, it can be done, and it can be done in a disciplined and systematic way. Putting in the work to do so is what can start an organization on the path to becoming a creative business—a path that can lead to sustainable competitive advantage in a world where creativity has become a deciding factor, if not *the* deciding factor, in setting an organization apart. ●





From livable to lovable: Making cities more human

Cities can take concrete steps to embody elements of a lovable city, helping their residents feel more connected. The payoff: happier, more resilient citizens poised to drive economic growth.

By **Duleesha Kulasooriya** and **Mark Wee** Illustrations by **Greg Mably**

“I ♥ NY.” Perhaps nowhere is that iconic sentiment more evident than in New York City, where millions of New Yorkers take pride in its colorful neighborhoods, its diners and jazz clubs, its museums and theaters, and, of course, its inhabitants’ unique character. And New York’s not alone. Millions of others feel just as passionate about the cities they call home, be it Paris’ boulevards and cafés, Lima’s eclectic blend of cultures, or Hong Kong’s throb of commerce. They recognize their city’s limitations, but they also revel in its rewards. They’re part of the city, and they feel that the city is part of them. Many wouldn’t dream of living anywhere else.

What drives such pride, passion, and joy—in a word, love—for a city? Too often, the qualities that inspire love may be viewed as intangible and unquantifiable. But there *are* identifiable attributes that make a city lovable, and city planners and governments can shape those attributes to help the city and its citizens form an emotional bond. That emotional bond, in turn, can deliver benefits to individuals and institutions alike, chief among them happiness. After all, more and more of us are living in cities every year,¹ and the more we can relate to our cities, the more vibrant our lives will be.

There's more to being lovable than being livable and smart

The impulse to rehumanize cities amid rapid change is not new. Jane Jacobs' battle with Robert Moses, where Jacobs mobilized grassroots opposition to Moses' plans to build interstates through New York neighborhoods, is one of the more prominent examples where the desire to humanize cities—or keep them human—has clashed with efforts to modernize them.² These days, technology and an obsession with convenience dominate conversations on city revitalization. It's important to bring the relational aspects of dense urban environments back into prominence.

Most urban planners, as well as the general public, evaluate cities on two main dimensions. One is livability, a city's ability to satisfy its citizens' pragmatic physical, social, and professional needs. Livability is measured on factors such as safety, mobility options, employment and educational opportunities, public space, and political stability. More recently, much of the discourse on cities has revolved around making cities smart. The focus here is on deploying broadband and other technologies, such as artificial intelligence, machine learning, and the internet of things, to do everything from manage traffic to improve security surveillance to allow citizens to report accumulated trash or snow using their smartphones.

Both livability and smartness are foundational to lovability. Basic infrastructure and services should be in place, and going about one's daily life should be reasonably easy and pleasant. And we should unquestionably use advanced technology to help improve quality of life and alleviate issues such as congestion and crime.

However, lovability also relies on a third attribute that's often overlooked. That attribute is human connection: a city's ability to foster community and evoke a sense of belonging. Though it may be less concrete than livability or smartness, human connection is no less important because that's where the social and emotional components of lovability, those feelings of pride, passion, and joy, spring from.

A city can be human in many ways

Teasing out being human from being livable and smart is somewhat artificial, since the three domains overlap and, ideally, positively reinforce each other. That said, research led by the DesignSingapore Council has identified six key attributes that contribute to being a human city: inclusion, connection, attachment, stimulation, freedom, and agency.³ While individuals may experience these attributes differently depending on factors such as their socioeconomic status, gender identity, ethnicity, (dis)ability, immigration status, and sexual orientation,

all of the attributes are related and interact with one another to create different levels and types of humanness.

Inclusion

A city's residents need to feel included for the city to feel human. This is true on both a social level, meaning acceptance by other residents, and a legal level, meaning the universal extension of social rights and the provision of basic services.

Many cities may find that promoting inclusion is a challenge. For instance, Western European cities have historically performed well on inclusion metrics due to their comprehensive social security nets and abundant employment opportunities. But recent widespread social unrest between those who consider themselves natives and newly arrived migrants is an indicator that overarching narratives around social inclusion might need to be revisited. Furthermore, hate crimes have been on the rise in countries as far-flung as New Zealand, the United States, China, and Israel. The United States, for example, has seen a resurgence of hostility toward ethnic minorities, sparking movements such as Black Lives Matter and Stop Asian Hate in protest. These grassroots campaigns constitute efforts of reconciliation—attempts to raise awareness and increase the inclusion of minority voices in civic society.

Inclusion also extends beyond new migrants and race to all edges of society, from the LGBTQ community to the elderly. All of these individuals must feel welcomed and safe for them to experience their city as lovable.

Connection

Connection embodies how well a city facilitates the creation of social bonds, which can lead to a feeling of closeness to and affection for others in the city.

Urban planners can do a great deal to facilitate community through infrastructural design. Designing open spaces with porous perimeters, for instance, encourages social interaction by inviting passers-by to join. But it's also important not to be overly prescriptive. Restraint from overplanning allows for citizens to take ownership of their neighborhoods and develop connections in their own authentic manner.

Superkilen park in Copenhagen, Denmark, incorporates an eclectic mix of furnishings from all over the world, including a picnic table from Armenia, a swing set from Baghdad, and three tons of soil from the Palestinian territories. These elements were chosen by the community to cultivate points of discussion and learning among visitors. In this way, the park was designed to bridge the gaps between diverse neighborhoods. On the other hand, the favelas of Rio de Janeiro achieve the same thing without

Research led by the DesignSingapore Council has identified six key attributes that contribute to being a human city: inclusion, connection, attachment, stimulation, freedom, and agency.



having been deliberately planned. The improvised design of favela streets, with their long and winding staircases that meander between and around homes, facilitates interaction between the favelas' inhabitants. These examples demonstrate that city design, whether planned or fortuitous, can increase connection between citizens anywhere.

Attachment

Attachment differs from connection in that it refers to the affinity that people feel for the city rather than for each other. It's a city's ability to cultivate a sense of familiarity and rootedness with the city. Typically, residents who have lived in a city for longer feel a greater sense of such attachment.

Attachment is strongly related to the unique aspects of a city's identity, meaning that it arises out of what a city does differently, rather than the aspects that it has in common with its neighbors. In Southeast Asia, for instance, food is often a badge of identity. It's not uncommon to hear Malaysians and Singaporeans arguing about whether Penang or Singapore has the best char kway teow.

Policymakers worldwide have struggled with navigating the varied attachment levels of newcomers to a city. There are, however, some bright spots. For the past 40 years, Australia has pursued a policy of multiculturalism that's encouraging new migrants to embrace both Australian and other cultural identities on an equal basis. Importantly, newly arrived migrants are supported by comprehensive national policies that provide significant financial investment into their integration into the broader community, assisting with translation, providing English classes, and funding community initiatives, thus cultivating a sense of connection. Sydney is an example of a city that embodies this ethos: It evidences high levels of attachment despite many of its residents being foreign-born.

Paradoxically, part of the reason is the emergence of ethnic enclaves in which different ethnic groups concentrate their cultural activities. Sydney's Fairfield district is home predominantly to Iraqi and Syrian Christians, whereas part of southwest Sydney is now known as "Little Athens" for its Greek community. Allowing such enclaves to form allows newly arrived migrant communities to remain connected to their roots, increasing their attachment to the city by providing a welcoming context in which they can express their uniquely diasporic identities.

Stimulation

Stimulation is the excitement a city cultivates among its population. A stimulating city keeps its residents excited about what

each new day brings, providing widely accessible opportunities for exploration, leisure, socializing, and learning. To ensure that cities are stimulating, local governments need to take creativity seriously. Without the support of the creative industries, night life and entertainment, which are vital cultural assets, could be lost forever.

London is an example of an already stimulating city that has explicitly committed to maintaining its position as one of the most exciting cities in the world. In addition to maintaining a strong commitment to diversity, the metropolis highly values creativity: It's home to more than 250 museums and art galleries, many of which are free to the public. Further, in 2016, London appointed its first Night Czar,⁴ whose sole responsibility is to ensure that the city is just as vibrant during the night as it is during the day. The role has pioneered initiatives such as the Night Tube, which initiated 24-hour public transportation on Fridays and Saturdays, measures to support queer venues such as nightclubs, and reviews of licensing approval processes to attract diversity within London's nightlife venues.

Freedom

For a city to be lovable, residents should feel free to be and express themselves. This can be one of the more difficult characteristics to achieve, as the factors that affect the feeling of freedom differ from person to person.

Throughout the years, large cities have attracted those who do not conform to social norms. During World War II, gay sailors were routinely expelled from the navy at the ports of San Francisco, leading many to settle in the area. Further migration of gay individuals to the city resulted in San Francisco establishing itself as the United States' queer capital through the mid-20th century. Its progressive attitudes have since evolved into a culture of acceptance that goes beyond gender identity and sexual orientation.

One reason people may feel a sense of freedom in a city is the anonymity that their large populations provide. Nowadays, though, the concept of freedom has progressed beyond anonymity towards acceptance. For this reason, freedom overlaps largely with inclusion. Authorities should consider focusing on cultivating acceptance across the community through education to allow residents, including minorities, to feel free to be themselves.

Agency

Agency is a measure of empowerment, the extent to which people believe that they're able to influence change within their cities. This perception is often greatly influenced by how inclusive a city is in its decision-making around policies. Achieving this

HUMAN-CENTERED CITIES TEND TO HAVE HAPPIER PEOPLE

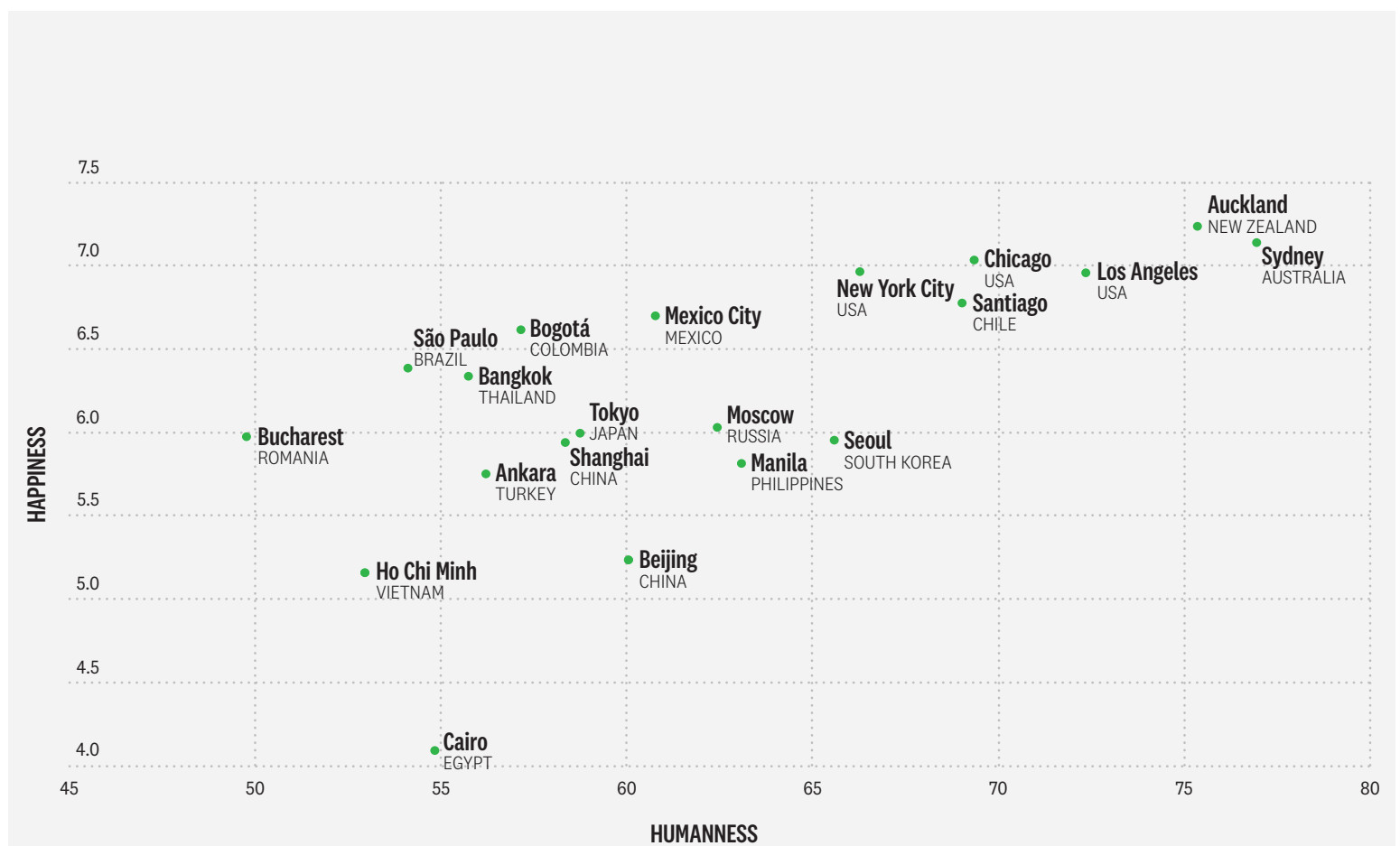
Happiness as an outcome for cities is imperative, as it's a significant predictor of peoples' resilience in adversity. From the plot in figure 1, it's evident that there's a positive relationship between a city's "humanness," as measured using proxies from the 2017–2020 World Values Survey, and its residents'

happiness, as measured by the World Happiness Report 2020, which ranks nations and cities on their citizens' happiness based on respondents' ratings of their lives.⁶

The World Happiness Report finds that people in a high-trust environment that promotes happiness

experience "extra well-being resilience" that makes them better able to weather hardships such as illness, divorce, a family member's death, and unemployment. It may not be too far a stretch to infer that this resilience, in turn, could help people more effectively work toward consistent economic growth.

FIG 1: Happiness correlates with humanness across 20 cities



Note: A fuller examination of the relationship between happiness and humanness would need to incorporate livable and smart city variables as well other variables known to be associated with happiness. This investigation is beyond the scope of this paper.

Source: Deloitte analysis based on data from the 2017–2020 World Values Survey and the World Happiness Report 2020.

inclusion, however, may be difficult in cities whose leaders and citizens have more pressing concerns. The tendency to deprioritize agency is a particular challenge in poorer cities, where escaping poverty is the primary concern.

Though civic agency often manifests in a democratic, participatory model, some city populations can achieve a sense of agency even without directly democratic mechanisms. This is more often the case in monolithic societies where people feel represented by those in power simply because their interests may align. Data from the World Values Survey,⁵ a global study of people's beliefs, values, and motivations, exemplifies this tendency in Beijing and Shanghai. When respondents were asked to rank four priorities from a list that also included strong defense, economic growth, and maintaining a beautiful environment, only 18% of Beijing respondents and about 14% of Shanghai respondents mentioned communal decision-making as one of their top two priorities. This is considerably lower than the average of all 22 cities surveyed, across which 47% of respondents identified public decision-making as a top priority.

Policymakers should be careful to account for varying conceptions of agency. The type of decision-making that's typically thought of as being conducive to agency in the West is not universally valued. While some people find agency in representation in political decision-making, others may find it in the freedom of economic choice.

Lovability has many shapes

Zooming out now to lovability as a whole, it's possible to find proxies for each of its three central qualities—livable, smart, and human—to measure and visualize a city's lovability. The sidebar “Shapes of love” shows these shapes of love, according to several chosen proxies, for the three cities of Shanghai, Sydney, and Berlin.

The important point here is that cities can be lovable in many ways, with some of the most desirable shapes depending on its residents' needs at a particular time. Parsing out

lovability's three aspects can allow leaders to help address a city's needs in a more nuanced manner than a single index figure. Investments can be planned to shift the shape of the triangle as needed with the city's changing demographics and needs.

Lovability also has many shades

When considering lovability, city leaders will run up against the question: Lovable for whom? A city that's lovable for one might not necessarily be lovable for another. The honest truth is that city planners and managers are unlikely to be able to design cities that are equally lovable for all. This is why it's important for leaders to consider not just the shapes but the shades of love—the desires, needs, and sentiments of specific population segments—and make conscious choices around which segments they want to prioritize.

To do this, leaders can craft a set of personas that represent the key groups that the city serves. One approach could be to start with traditional city demographics and develop personas that cover most of the city's residents (see figure 3, “Shades of love”). Another approach could be to create personas representing the types of people city leaders most want to attract and engage—for example, young professionals, artists, or new immigrants—to define a city that's lovable to them as well.

With the personas defined, city leaders can use methods such as ethnographic research, interviews, and surveys to help determine the dominant desires of each. Each persona would therefore also have a triangle that designates its preferences. The goal is to unearth both the commonalities and the tensions among desires of city residents.

For the purposes of illustration, a city's shape of love was depicted as a single triangle earlier in this article. In reality, however, cities have many neighborhoods, all of which can have different shapes of love, and whose particular populations may have different needs. New York, for example, has Brooklyn, Harlem, SoHo, Lower Manhattan, Jamaica, Chelsea, Hell's Kitchen, Greenwich Village, the Upper West Side, and the Lower East

When considering lovability, city leaders will run up against the question: Lovable for whom? A city that's lovable for one might not necessarily be lovable for another.

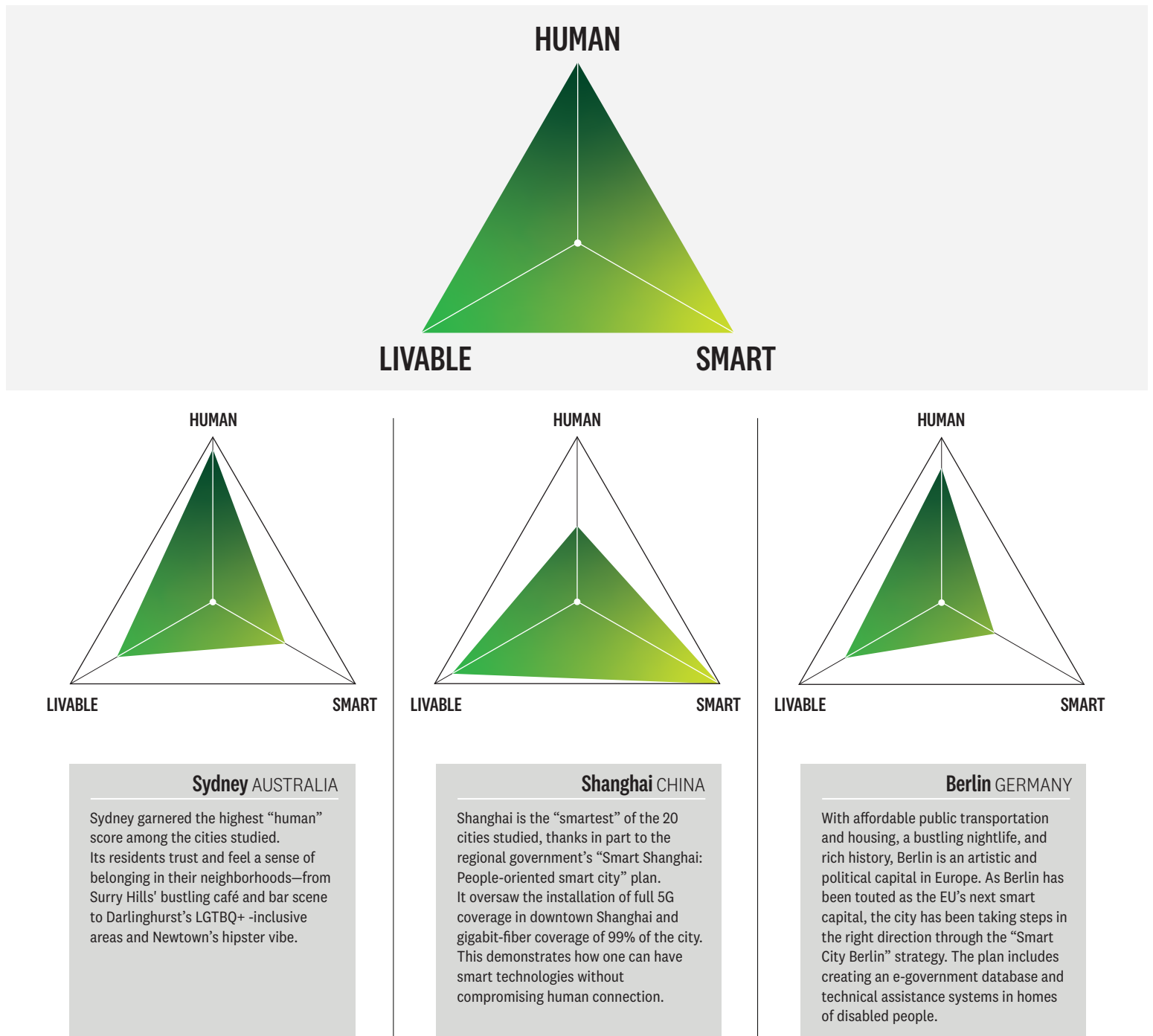
MEASURING THE SHAPES OF LOVE

The metrics used to illustrate the three principles of lovable cities are weak proxies, but they are drawn from the most credible publicly accessible data sets that can be found for a broad spectrum of cities. The livability dimension was assessed using the “Structures” section of the Institute for Management Development's (IMD) Smart City Index 2020.⁷ The 19 metrics within this index cover the five areas of health and safety, mobility,

activities, opportunities, and governance. The smart dimension was assessed from metrics from the “Technologies” section of the same IMD Smart City Index. These measures evaluate factors such as the availability of ridesharing apps, the extent of online reporting of city maintenance issues, and the quality of IT lessons in schools. Finally, while there are no data sets that capture the human dimension in as nuanced a way as would have

been preferred, the current research uses data from the 2017–2020 World Values Survey the proxy. The humanness metric draws upon questions that dealt with respondents' perceptions of free choice (freedom), life satisfaction (stimulation), closeness with their neighborhood (attachment), trust within the neighborhood (connection), neighbor preferences (inclusion), and political actions that they have thought of or might engage in (agency).

FIG 2: Shapes of love: Different cities, different lovability profiles



Source: Deloitte analysis.

Side, each with a distinct character and citizen priorities. City planners can therefore match the scale of analysis with their goals and the purpose of the study.

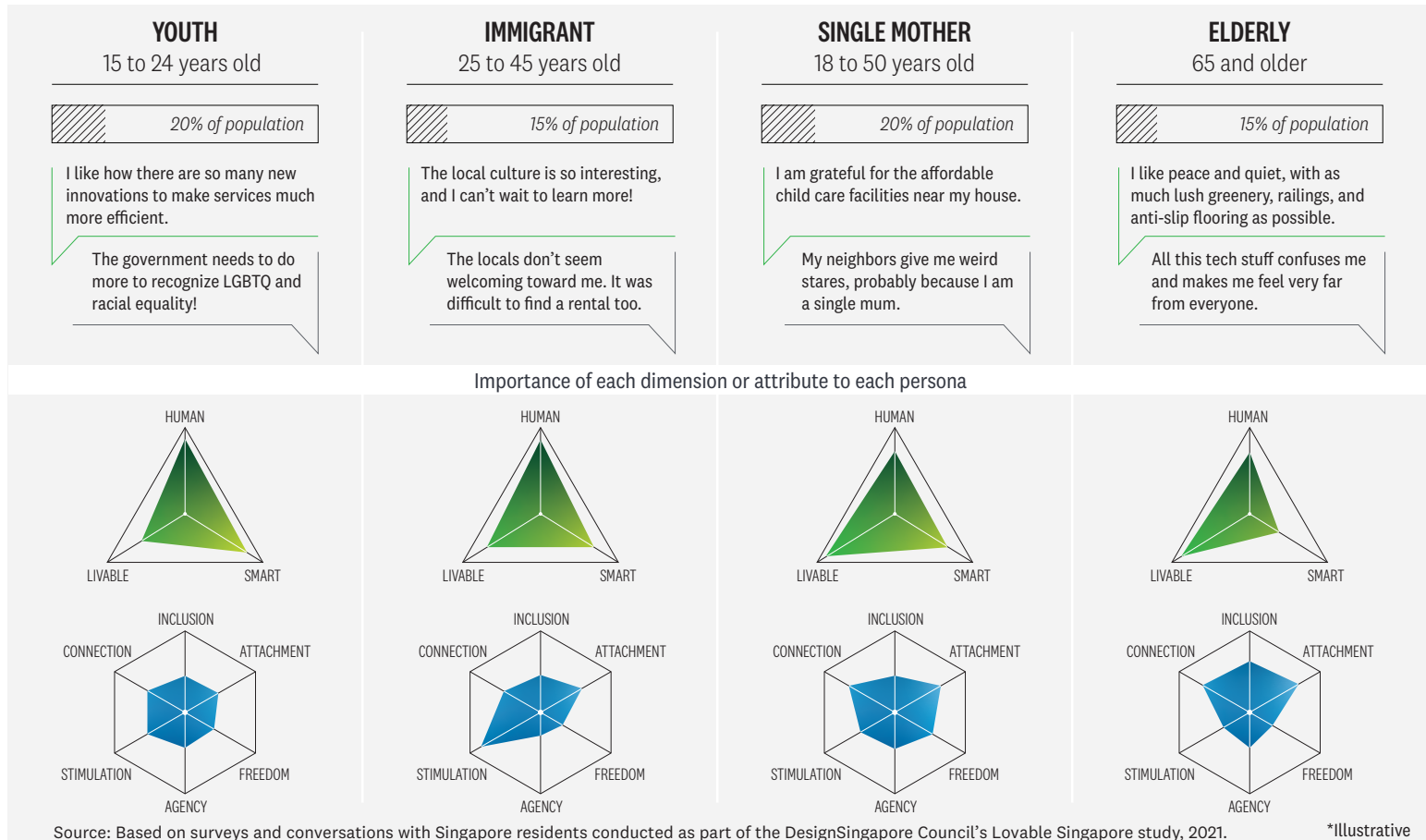
It's worth reiterating that how a city chooses to reshape its triangle will likely depend greatly on factors such as its existing infrastructure, its leaders' priorities, its current capabilities, and even its prevailing cultural ethos. In Singapore, pursuing lovability might take the form of establishing local museums to recount the young city's social history rather than its colonial history; in busy Athens, it may be expressed in the pedestrianization of the city center. But starting by mapping the shapes and shades of love is a powerful way for city planners and managers to understand where they may need to focus in designing and operating their cities to be more lovable—and more human.

Being human is what makes a city truly lovable

Many of the experiences that go into a city's lovability can be planned and intentional. Many are also inherently emergent as the scaffolding of the city's design is filled in by its occupants. It's up to city planners and governments to plan what can be planned, and influence what can't be planned, to move their cities toward being lovable. If we skimp on acknowledging and addressing the human underpinnings of what makes a city worth living in, we risk solving for the wrong factors. We shouldn't stop at making our cities livable. We should strive to make them lovable. ●

This article is supported by the Deloitte Center for Government Insights, the Deloitte US firm's government and public sector research organization.

FIG 3: Shades of love: Different populations have different needs and desires*



Source: Based on surveys and conversations with Singapore residents conducted as part of the DesignSingapore Council's Lovable Singapore study, 2021.

*Illustrative

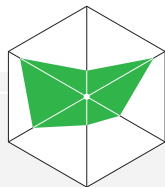
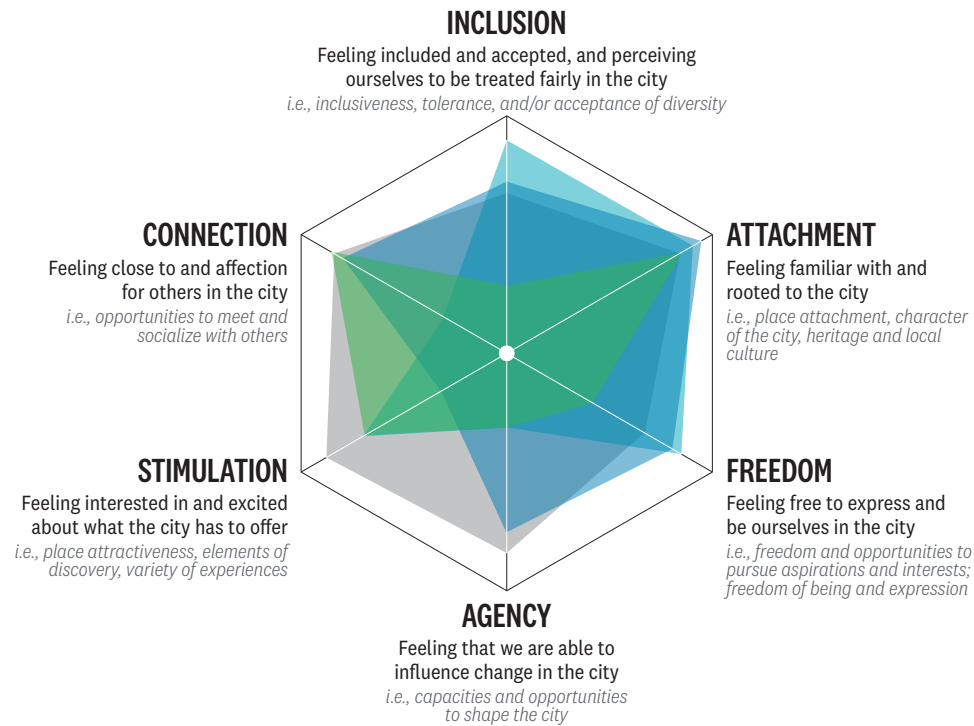
SINGAPORE'S QUEST FOR LOVABILITY

The Lovable Singapore Study is the city-state's inaugural concerted effort to uncover what it means to live lovably in Singapore and how the city could design for it. Led by the DesignSingapore Council (Dsg), Singapore's national agency for design, and with participation from both public agencies and private organizations,⁸ the study aims to increase lovability by balancing economic and cultural pursuits across an increasingly diverse and sophisticated population.

To establish the current landscape of Singapore's strengths and gaps, Dsg engaged almost 2,500 citizens to explore two questions: "What makes Singapore lovable?" and, "What would make Singapore more lovable?"

From this research, Dsg mapped four personas—unloved but attached, loving but disengaged, loved and engaged, and loved but disengaged—to the six emotional connections of the "human" dimension

of lovability, using the same visualization approach as used to map a city's livable, smart, and human attributes more broadly. The mappings were then stacked to identify where more targeted approaches may be needed for the city to be lovable to these personas. For instance, issues around a lack of attraction—the study's synonym for stimulation—were found to be associated with a lack of vibrancy in public spaces due to over-curation and regulation.



PERSONA A

Unloved but attached

Persona A often feels excluded or marginalized in some way.

- This affects their ability to move about freely in Singapore, metaphorically but also sometimes literally. This persona would feel stuck, and thus low on agency.
- They may also be anchored by nostalgia, personal history, and a sense of heritage. They therefore score higher on the attachment and stimulation fronts.

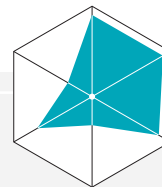


PERSONA B

Loving but unengaged

Persona B may personally feel included in Singapore but is disturbed by injustice in society. This group is likely to see others being excluded, impacting their perception of Singapore's lovability.

- Their sense of connection is high, as this group is driven by social justice and connection.
- They want to take action, but it might not be clear to them how to do so. Their sense of agency is therefore lower.

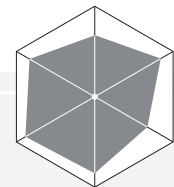


PERSONA C

Loved but unengaged

Persona C has been treated fairly well and lives a good life. This is what's most important to them.

- They have a high sense of freedom and inclusion, but their sense of agency is on the lower side, though they often do not feel this is important. This group may be uncomfortable with societal change.
- The group's stimulation is negatively affected by stress.



PERSONA D

Loved and engaged

Persona D represents those who believe that Singapore is home no matter what.

- They feel a sense of attachment and agency. Those who fall in this group also tend to be involved in grassroots and volunteer work.
- They are doing well in their own lives, so they feel free to be themselves in wider society.

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Unshackling the creative business

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2. Design for Manufacture and Assembly (DFMA) is a design approach that focuses on the efficiency of manufacturing and assembling the final product. The foundation of applying the approach to construction is a digital model of the building—a building information model (BIM). Rather than treating BIM as a tool to streamline existing operations, which is common, the DFMA approach centers the model and uses it to drive all building activities.
3. Hickory’s approach is built on a set of parametric digital models that enable a bespoke building to be broken down into a set of custom parts—precast stairs and pretensioned concrete flooring system with preattached façades—that are manufactured offsite and then assembled onsite. A key difference between Hickory’s and early modular systems is the focus on creating an approach that could be used to construct any bespoke building, rather than restricting the building to a set of predefined manufactured components.
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Humanizing performance management

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, and evaluate whether they've stood the test of time.

By **Timothy Murphy**

Director of research and insights for Deloitte's CMO Program



What we said then

“Nonverbal information often trumps verbal content. In one experiment, subjects were asked to rate video recordings of participants reading various passages. ... Subjects who were asked to assess the feelings of the participants assigned up to 13 times more importance to the nonverbal over the verbal content.”¹

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What we say now

Put simply, we often communicate more meaning to our team members in how we deliver the message rather than just what we say. Words matter, but the tone and other nonverbal cues speak volumes.

Consider that fact within the context of our heavily remote—or hybrid—work environment today, in which emails, IMs, and conference calls are our primary modes of communication. The research we shared four years ago was conducted over video, but even video calls now are fraught with complexity when it comes to nonverbal communication. (The fatigue is *real*.)²

So how do team leaders host meaningful performance management conversations in a world in which face-to-face interactions can be few and far between, and video calls often involve staring at a shy, fatigued, or tuned-out team member's headshot?

Make videoconferencing the exception rather than the rule. Using video less frequently can help your team members avoid videoconferencing fatigue, and can help you increase the impact and meaning of those video-based touch points when you use them, tapping into your entire arsenal of communication—that is, both verbal and nonverbal cues. And if you're in a hybrid work model, reserve those relatively rare in-person moments for one-on-one feedback sessions and check-ins with your team, rather than just spending that time in the office for business as usual. ●

Deloitte Insights Magazine is printed by the Prolific Group in Winnipeg, Manitoba, Canada, which has been a long-term leader in environmental responsibility.

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Computer-to-plate technology replaces film and photographic chemicals in prepress operations, with all metal plates collected and recycled.

The company was among the first printers in western Canada to recycle its water-miscible waste solvent, resulting in a reduced environmental impact. A chemical distiller allows the facility to distill, recycle, and reuse the chemicals from its presses, eliminating the need to send out hundreds of barrels of contaminated chemicals per year to be disposed of or recycled.

Its paper-baling equipment recycles up to 40 tons per month of trimmings, vastly reducing waste while capturing paper dust that affects air quality as well as product quality.

This issue of *Deloitte Insights Magazine* is printed on Rolland Enviro Satin, which contains 100% postconsumer recycled content and resulted in these savings:*

Wood consumption:
Reduced by 15.08 tons
Net energy use:
Reduced by 12.22 million BTUs
Solid waste production:
Reduced by 1,833 pounds
Greenhouse gases:
Reduced CO2 by 53,560 pounds

*Source: Environmental Paper Network, papercalculator.org.

