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EXECUTIVE SUMMARY

As organizations adapt to a new and unfamiliar landscape, which strategies will position them for safety, resilience, and growth?

This three-part series addresses the key shifts we are seeing as a result of the COVID-19 pandemic and other macroeconomic, industry, and technology trends; identifies the key strategies leaders need to consider; and shares emerging best practices from experts in the areas of technology, workplace safety, design, and leadership. The first report in this series, "Strategies for Growth in the Reimagined Workplace," focused on how the idea of a workplace has shifted from a default and static location to a dynamic and distributed ecosystem.

This report looks at the effects of the pandemic and the resulting acceleration of distributed work on employees, customers, and organizations. It includes insights from business leaders and scholars on the human and structural impacts of these shifts and shares strategies they are using to navigate digital business, empower people, unlock creativity, build organizational resilience, and, finally, act as a force-multiplier for customers and broader ecosystems.

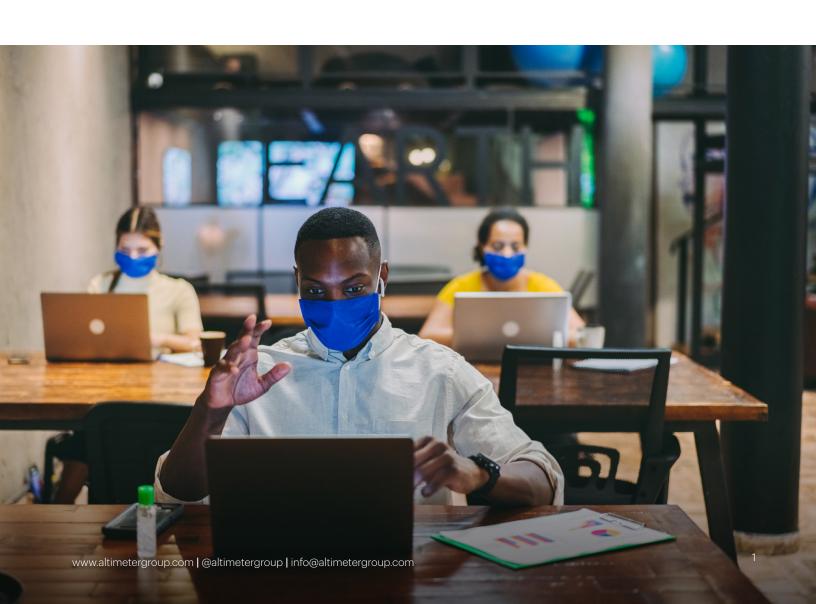


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INTRODUCTION

The pandemic has exposed areas of organizational and societal fragility, forced people to work in entirely new ways, and expanded the meaning of business resilience. But adapting to disruptive change is just a first step. Designing organizations to thrive during both acute and systemic disruption requires us not only to adapt ways of working, but to question assumptions about how, where, and when we work and even the kind of work we do.

There is a saying, variants of which are often attributed to Albert Einstein: "The world we have created is a product of our thinking; it cannot be changed without changing our thinking." Today, our world is a result of thinking that no longer supports the times we live in.

"Look at the framing right now," says Mary L. Gray, Senior Principal Researcher at Microsoft and 2020 MacArthur Fellow. "Most of the conversation about remote work is about working from home, and that's not helping us see that we're really talking about distributed teams." Granted, the notion of performing work from different locations isn't new; humans have done this since the hunter-gatherers, late 19th-century garment workers, or, more recently, the 1980s, when IBM installed remote terminals in some workers' homes¹. What's different, says Gray, is that in the past, "We had a story; we told ourselves that the work we outsourced or offshored was the work that was unimportant. That kind of work tended to be siloed and performed at a remote location."

What leaders called out repeatedly is how digital ways of working have changed customer and employee relationships, affected business indicators, and reshaped the fundamental structure of work, often in surprising ways. While the COVID-19 pandemic is widely agreed to have accelerated these trends, we are only just beginning to learn what distributed work truly means and how to view its relationship to growth.

The following pages contain insights from a range of leaders and scholars on what they've learned about the human, customer, and organizational impacts of distributed work and what questions they have yet to answer.

PEOPLE IMPACTS

When we look back at 2020, one of the hallmarks of the year will be the fact that, in the space of a few days, millions of people's lives changed in response to a threat that had previously been largely theoretical. They radically changed the way they work and live. They began to use new technologies, both in their personal and professional lives. They found inventive ways to connect with each other and serve customers.

There's no question that this period has been stressful, even traumatic, for many. In September, the U.S. National Council for Behavioral Health reported that demand for behavioral health services was increasing, with 52% of behavioral health organizations seeing a rise in the demand for services². In response,

leaders reported spending more time with employees, increasing management training, offering communication and programs to offer flexible scheduling, increasing time off, and even, where possible, changing deadlines.

Overwork on the Rise

On an aggregate level, indicators of overwork are concerning. Humanyze, a workplace analytics company based in Boston, MA, reports that since the beginning of the pandemic it has seen chat traffic increase 16 times, email use increase 63%, and meetings increase 70% across a range of global organizations. Says President Ben Waber, "People can generally sustain this level of work for a couple of weeks, but the data is quite clear that, over any period of time that spans more than a month, your productivity level is going to start taking a hit."





It's not just the amount of work, however; the type of work also contributes to fatigue. "I think for a lot of people, working in a home environment is a lot more exhausting than coming into an office or other type of workplace," says Randy Howder, Principal and Managing Director at Gensler. "Someone told me that half of human communication is body language, so your brain has to work harder when you're just seeing an image on a screen than if you were in person. So we feel more exhausted and more drained, and I think that there's a real impact. Some work needs to be done to figure that out — maybe when we have a hybrid environment, it will balance itself out. But people are reporting that they're just totally fried."

Younger and Newer Employees Feel the Impact in Different Ways

Impacts also vary based on role and tenure within companies. Managers tend to have more resources at their discretion than junior employees. They also tend to have a longer and richer relationship history than their newer counterparts. Says Gensler's Howder, "One of my colleagues put it this way: We left the office on March 13th, with our relationship bank

accounts totally full, and we're burning through that relationship cash. But the younger people were living relationship paycheck-to-paycheck, and they don't have that well of resources. They're missing out on building their personal networks. They're missing out on mentorship. They're missing out on understanding how to navigate office politics and the kinds of things that help them advance their careers."

Schedule Flexibility May Support Diversity and Inclusion

The fact that some people can now design their work schedules and locations to better suit their personal situation will ultimately be more supportive of diversity and inclusion than previous ways of working, says Hao Ko, Principal and Managing Director at Gensler. "Our industry has been notoriously difficult for women and historically has not had a very strong contingent of minorities," he says. "The architecture industry is known for long hours and not great compensation. So for someone to step away for a few years to have a family or to deprioritize a client deadline because one has other responsibilities has not been easy for people."



At the same time, says Autodesk CMO Lisa Campbell, "Being all remote has been a great leveler; more people are feeling connected and able to share. But they miss the human and personal connections. In the future, we're going to have a hybrid environment. Some companies have announced that they're going all virtual or virtual-first, meaning that if you want to work remotely, the opportunity is open to you. In some cases, companies are saying that their office is going to be repurposed to become collaboration spaces rather than a place you would come every day to sit at a desk. So we're building a set of future-of-work skills right now, and we're going to refine them because the next normal is going to be more of this hybrid experience."

The COVID-19 pandemic has been especially hard on working women. A recent report by The Center for American Progress reported that "four times as many women as men dropped out of the labor force in September [2020], roughly 865,000 women compared with 216,000 men." McKinsey Global Institute additionally reports that "women — especially women of color — are more likely to have been laid off or furloughed during the COVID-19 crisis, stalling their careers and jeopardizing their financial security.⁴

At the same time, remote work and close quarters have altered some workplace norms relating to the separation of work and home life. In March 2017, a BBC interview with Professor Robert E. Kelly on the political climate in South Korea became an Internet sensation when Kelly's children unexpectedly burst into his office, prompting both hilarity and discussion of the vastly different expectations placed on working parents.

Today, Kelly's experience happens every day all over the world. Children, pets, spouses, roommates, and family members regularly appear — accidentally or otherwise — in videoconferences, a fact that creates stress for parents but that for some has had positive consequences. "I feel like I know people on my team better than ever before," says Autodesk's Campbell. "I've met their children, their spouses, their pets, and we are very welcoming of that. Before COVID, it used to be considered a terrible interruption, and people would be frustrated by it. And now we all laugh and say, 'Hey, I know their kids' names. I've seen their Halloween costumes."



At the same time, not everyone feels comfortable sharing the same degree of personal information with colleagues, whatever the circumstances. Zoom and other videoconferencing solutions have background options that provide a level of privacy for some, while others feel uncomfortable turning their cameras on at all. This is just one example of the complexities that organizations must consider as they establish new digital norms and manage the tradeoffs of uniform versus personalized approaches to digital interaction.

The allocation of space and resources — from corner offices to cubicles — sends signals about power that the flat screen cannot. "But," says Gensler's Howder, "there's something good about this virtual connection in the sense that we've seen a flattened hierarchy because everybody's on the same dimension on the screen. On our teams, I've seen that some of that missing body language is good because those signals of power and control are muted a little bit. So I have noticed younger people having more of a voice or feeling more comfortable with the medium."

Adaptability Does Not Equal Resilience

While people have demonstrated their ability to navigate a crisis — even a sustained one — there is a difference between adaptability and the organizational capacity to support and scale to meet the demands of unpredictable, significant change. One of the most striking discoveries of the past year is the degree of adaptability that people around the world have shown. They've risen to a challenge unlike any other in at least a century.

At the same time, adaptability is not the same thing as resilience. A recent article by science journalist Tara Haelle describes a different dynamic — a "surge capacity" that has now been depleted. "In those early months" she writes, "I, along with most of the rest of the country, was using 'surge capacity' to operate, as Ann Masten, Ph.D., a psychologist and professor of child development at the University of Minnesota, calls it.



"Surge capacity is a collection of adaptive systems — mental and physical — that humans draw on for short-term survival in acutely stressful situations, such as natural disasters. But natural disasters occur over a short period, even if recovery is long. Pandemics are different — the disaster itself stretches out indefinitely." 5

To support human adaptability with organizational resilience requires systems, processes, technologies, and new norms of behavior that will better prepare us — individually and collectively — to weather whatever may come.

The reason that the concept of "surge capacity" is important not only from a human but an organizational standpoint is that it highlights the secondary risks of extended periods of disruption and uncertainty — burnout, errors, and weakened team and customer relationships. The solution — from both an organizational and human standpoint — is threefold:

- Identify the areas of greatest risk to team and customer relationships;
- Institute mechanisms to renew and strengthen those risk areas; and
- Establish the people, process, and technology infrastructure to enable the organization to thrive and grow during periods of extended uncertainty.



CUSTOMER AND CLIENT IMPACTS

Impacts to customer relationships mirror some of the dynamics of employee relationships. Leaders reported more frequent communication, accelerated digitalization of formerly analog processes, and shifting budgets and priorities.

Digital Is Preferable for B2B Customers

Unlike company-employee relationships, increased digitalization of B2B customer relationships is generally viewed in a positive light. According to McKinsey Global Institute, both B2B buyers and sellers prefer digital ways of working. "More than three-quarters of buyers and sellers say they now prefer digital selfserve and remote human engagement over face-to-face interactions — a sentiment that has steadily intensified even after lockdowns have ended." McKinsey cites safety, speed, and convenience as primary drivers of customers' preference for digital channels: "Only about 20% of B2B buyers say they hope to return to in-person sales, even in sectors where fieldsales models have traditionally dominated, such as pharma and medical products."6

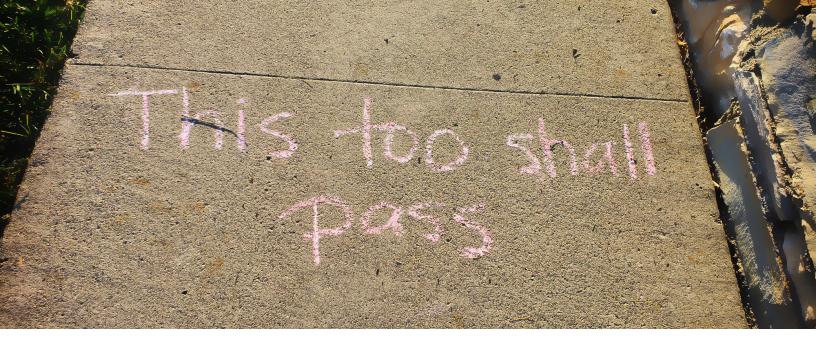
Deeper Communication

In response to COVID-19, says McKinsey, "the majority of B2B companies have shifted their go-to-market model from traditional to digital, with heavy reliance on video and

online chat. Traditional, in-person interactions have dropped 52% since the beginning of the pandemic, while digital interactions via videoconference and online chat are up 41% and 23%, respectively.⁷

Consistent with these trends, leaders are seeing a move to deeper and more frequent discussions on topics such as workplace safety, supply-chain issues, and industry and market trends. Says Ari Almqvist, Group Vice President, Growth and Innovation at Moog, "The big change for us is that relationships with customers and partners have gone virtual. I have more contact with our customers than I did before."

At the same time, the absence of in-person interactions and conferences has been a challenge for companies that rely on or wish to cultivate some degree of in-person engagement. In response, some have shifted budgets and energy not only to virtual events (recognizing that videoconference fatigue extends to those as well), but to at-home experiences. Companies such as Ad Age, LinkedIn, and others have created hybrid experiences involving a package sent to the prospect or customer's home to be used in conjunction with a virtual event; a cooking class, a wine-and-cheese tasting, or other experience meant to bridge the gap between the digital and physical worlds.



Rapid Digitalization

The way companies and customers work together has shifted to digital platforms, such as Zoom, Microsoft Teams, Mural, and other tools. While this is to be expected for digital natives, it was surprising to see the speed at which some senior executives who have been accustomed to more in-person, hierarchical approaches adapted to these tools.

"The shift to digital collaboration has been an eye-opener for management, section managers, and department managers," says Baste Amble, CIO and IT Director at Multiconsult. "They're seeing that they can actually do business in different ways. We had a case where a customer was very skeptical to have a joint meeting to develop their solution and design together online. But the team prepared well, they ran the meeting, and the customer was so impressed and happy. They had tried this before themselves and it hadn't worked, and this time it worked."

The next step, says Amble, is to bring together more competencies across the value chain, using digital tools to connect project phases so that they may serve clients throughout the life of the project. And, he adds, "we will see a huge change going forward in the flow of data and how it's treated; this will enable us to see the value chain as more complete — not this fragmented thing."

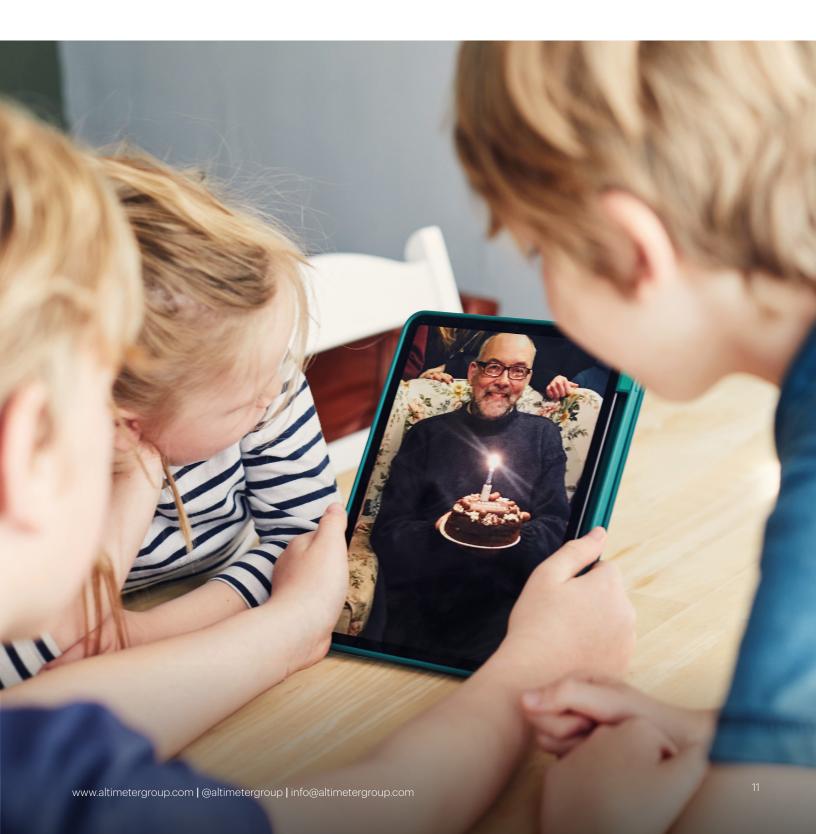
More Helping, Less Selling

Another strategy has been to marshal resources to help customers in novel ways. Says Autodesk's Campbell, "Doing active marketing and demand generation under these circumstances would have been tone deaf. So we had to step back and say, 'Let's be attuned to what our customers are struggling with; what are they going through?"

As a result, she says, "we started to shift some marketing programs to become more about helping our customers. We started working with architecture, engineering, and construction customers to move their models to the cloud. We took the trial software for our collaboration products and told everybody that for a 60-to-90-day period, they could use it for commercial use. We typically don't do that — trials are not meant for commercial use. It's usually 30 days, and then you buy the product or you don't. But these were extenuating circumstances."

Granting free access to tools during the pandemic is a first step, but it doesn't guarantee that customers know how to — or will — use them. Usage metrics can reveal quite a bit about where customers fall along that spectrum and what they may need as a result. "For example," adds Campbell,

"if a customer hasn't used certain kinds of capabilities within our product after a certain amount of time, we know that they're not onboarding well and we need to reach out to help them."





ORGANIZATIONAL IMPACTS

The global nature of the pandemic — as well as its duration and its unpredictability — have had varying impacts and prompted varying organizational responses. Everything from workplace norms to communication methods to customer relationships has been affected in some way. The question is to what extent these effects are permanent and what changes are required to foster business resilience.

Bridging Physical and Digital Environments

While it may be beneficial that digital environments mute some signals, others are more critical. For example, the visual and tactile nature of physical spaces promotes a sense of situational awareness — of knowing where one's colleagues are and, generally speaking, what's happening in the workplace.

These indicators are missing or different in digital environments. Rather than a persistent sense of the environment, helped along by a hallway conversation or a casual chat by the coffee maker, distributed workers

gather information by push notifications or by intentionally checking in with colleagues. These types of relationships, or "weak ties," as defined by Stanford sociologist Mark S. Granovetter in 1973, refer to acquaintances or work colleagues with whom we don't regularly communicate.⁹ Conversely, "strong ties" refer to family members, friends, and close team members at work.

This isn't just a feel-good issue; brief, often accidental interactions support companies' ability to collaborate and innovate, according to a recent study in the *Harvard Business Review*. As a result, organizations must consciously cultivate the types of office interactions that used to happen serendipitously, whether by virtual coffees and lunches, using team-building apps, such as Melting Pot, or other means.

Humanyze's Waber, who co-authored the Harvard Business Review study, has seen weak ties decrease approximately 5% since the middle of March 2020, which equates to two or three fewer colleagues with whom people interact in any given week. "This is meaningful because these indicators had been extremely



stable during the previous year," says Waber.
"But what's interesting is the type of those interactions. Before March 15th, 2020, they tended to be short one-on-one conversations on Slack or other messaging apps. Typically what that means is that these are people you might chat with a couple of times per week for 5–15 minutes."

After March 15, however, these trends shifted, and interactions become more heavily weighted toward people who are in regular, very large meetings — for example, an hourlong zoom call with 20 to 40 other people. "Maybe you have a chat with one of those people later in the week," says Waber, "but it's much more planned." Waber believes that this phenomenon is a result of companies' efforts to bring people together online, and the data confirm that they do have an effect. At the same time, he cautions, "these types of more planned interactions represent a disproportionate percentage of weak ties, and it doesn't appear that they're leading to more one-on-one conversations or stronger ties upstream."

Organizational resilience in virtual environments therefore requires that we find ways to replicate the types of tiny conversations that foster a sense of organizational cohesion and trust and that reveal valuable information that can affect

deadlines, client relationships, quality, and other performance indicators.

This will become critical as organizations ponder how, where, and when to bring employees back to a central workplace. While some companies, such as Automattic, have never had an office at all, this model may not make sense for every organization, especially if it was not built to be virtual from day one. IBM, one of the pioneers of remote work, ended its decades-old policy in 2017, citing the agility that comes from team members in proximity.¹¹

The critical element is data; with less than a year of experience in distributed work, in the context of a global pandemic that affects virtually everyone on the planet in some way, there is as yet no baseline from which to forecast the impact of such a momentous decision.

From a change management perspective, the pandemic has upended some long-held theories and validated others. One surprise for many was the speed at which virtually everyone — irrespective of age, role, or location — was able to adapt to a new and unfamiliar environment. "We found that people can change easily; not just the high-tech people, but the people who are older and more resistant can do it too," says Menno de Jonge, Director, Digital Construction at Royal BAM Group. "We've seen that people are easily



adopting Building Information Management (BIM) and other types of products easily. So we need to find out why."

De Jonge and others have also seen a rise in internal mentoring, where people who have been successful at a particular task or skill can help others. "It works much better than having an executive do it," he says. Further, he expects to see an increase in internal evangelists in digital construction. This is very much in line with the types of reverse mentoring and learning-by-doing that have arisen in response to concerns about a skills gap in the manufacturing industry.¹²

Factoring Context Into Performance Reviews

One of the most sensitive aspects of the current environment is how to navigate performance reviews. Says Carmel Galvin, Chief Human Resources Officer at Autodesk, "We've been talking a lot more with our managers about how we think about performance during this period. Context matters more than ever because people are juggling all sorts of different things.

"So we've really tried to reinforce the importance of checking in with employees, understanding their particular situations, and making sure to take that into account when we're assessing performance. It's also really important to support employees — for example, by covering them with other team members — because the biggest gift we can give to people is that they don't need to feel guilty about dealing with personal responsibilities or that they're letting themselves, the team, or the organization down."

Fostering Business Resilience, Anticipating New Business Models

In addition to changing the "how," "where," and "when" of the way we work, the pandemic has catalyzed more fundamental change to the "what." Restaurants have pivoted to pick-up and delivery. Light manufacturing companies have begun to produce PPE and related products, often necessitating significant changes in supply chains, equipment, and manufacturing methods. Digital transformation has accelerated. "We've changed more in the past five months than we have in the past five years" is a common refrain.

In fact, International Data Corporation (IDC) reports that efforts to move from legacy, on-premises to cloud applications "received a seismic jolt when COVID-19 and the sudden shift to remote work put a spotlight on the inadequacies of legacy software." According to a recent survey conducted by IDC, "75% of organizations are currently adjusting their IT road maps to reduce the costs of current systems,



enable easy execution, and create operational efficiencies in financial reporting, project management, and employee experience."¹³

Granted, business resilience is not only a function of human adaptability; it requires technology and process infrastructure as well. Wong Heang Fine, Group CEO of Surbana Jurong Group, a global urban, infrastructure, and managed services consultancy, believes that the introduction of 5G will unlock tremendous potential for digital-first innovation. This is partly because connectivity continues to be an issue, particularly in the developing world, and partly because emerging technologies will enable companies to explore different business models.

"5G can support millions of devices at ultrafast speeds and has the potential to transform the lives of people around the world. The way we look at it, 5G and other new technologies enable us to utilize our profession in a way that is in line with the gig economy," he says.

In addition, he adds, "Young architects and engineers today don't want to work for big corporates; they like to work on their own.

For companies like us that operate globally, it will give us the opportunity to engage a new generation of architects and engineers throughout the world through a digital platform that we build. This will fundamentally change the business model in the next 15–20 years. If we can use the Uber concept and open ourselves up to the global talent pool, we're not limited to the creativity of the 16,000 people that we employ today — we become more open to the world for new ideas. That's where the new world is going to be."

RECOMMENDATIONS FOR LEADERS

The impacts of the past year, the extreme variability of circumstances — combined with uncertain industry, economic, political, and public health conditions — require leaders to examine their thinking along three axes:

- Bridging analog and digital work;
- Balancing short-term performance and the ability to scale; and
- Combining leadership and an ecosystem view of the organization and its stakeholders.

These are not binaries; people still need in-person interaction. Long-term resilience is moot without short-term performance. Leadership will always be critical in any organization or ecosystem. But tuning these factors will be critical to building organizational resilience. Following is a list of key findings and recommendations for leaders to consider as they plan for both the immediate and longer-term future.

1. Digital workplaces, distributed teams, and distributed customer relationships require a different leadership approach.

Whatever the trajectory of the pandemic, digital teams and digital work will become a much greater driver of how organizations conduct business. They require different collaboration methods, interpersonal communication, indicators, and tools, as well as a more distributed and facilitative workspace rather than a centralized command-and-control method of leadership.

2. Distributed work can seem to flatten hierarchies, but speed and scale require distributed decision-making. This is both a logistical and cultural challenge for many organizations — one that requires technology, process, and leadership support to enable decision-making at scale. In addition, it's critical to focus both on the tangibles (tools, connectivity, education, and training) and intangibles (flexible work schedules, empathy, accessibility, and mentorship) as essential prerequisites to digital business.

3. Maintaining "weak ties" is critically important to organizational performance.

There are clear indications that the number and type of organizational interactions is different in digital versus physical workplaces and that it is much harder to replicate them digitally. Encouraging brief interactions, whether they consist of 15-minute calls, use of collaboration apps, or other methods, is one way to bolster organizational health.

- 4. The decision on when, where, how, and what work to distribute requires data. Many companies understandably have a financial imperative to reduce facilities costs, but it's also important to monitor the impact of these decisions on the KPIs that support growth.
- **5. Business model change is coming.** The past year has provided rare insight into areas of greatest fragility in organizations, as well as opportunities for real innovation. The key is to think of this year as an investment in confronting areas of vulnerability, acclimating to distributed teams.

THE FUTURE IS DISTRIBUTED

One of the trickiest challenges of the past year has been to isolate the effects of the pandemic from market forces already in play. Another has been to imagine what life beyond COVID-19 might look like. Whether one believes that the pandemic was a "black swan" — an unpredictable and severe event — or the beginning of a "new normal," it's clear that COVID-19 accelerated some trends, slowed others, and revealed areas of societal, organizational, and business fragility that require our attention.

Not everything is in our hands; the rate of technology evolution, the macroeconomic environment, and, of course, the course of the pandemic are forces beyond our control. The opportunity for growth lies in our ability to broaden our thinking so that we can design digital spaces that value work, empower people, unlock creativity, build organizational resilience, and enable us to act as a force-multiplier for customers and for society.



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METHODOLOGY

This research report was developed based upon online and in-person conversations with experts, practitioners, technology vendors, investors, and others involved in architecture, manufacturing, engineering, construction, real estate, media and entertainment, and design, as well as secondary research, including relevant and timely books, articles, and news stories. Our deepest gratitude to the following:

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- Royal BAM Group, Menno de Jonge, Director, Digital Construction
- Surbana Jurong Private Limited, Wong Heang Fine, Chief Executive Officer

All findings and analysis are independent and represent Altimeter's body of research.

ABOUT US



About Susan Etlinger, Senior Analyst

Susan Etlinger is a globally recognized expert in digital strategy, with a focus on artificial intelligence, technology ethics, and data. In addition to her work at Altimeter, Susan is a senior fellow at the Centre for International Governance Innovation, an independent, non-partisan think tank based in Canada, and a member of the United States Department of State Speaker Program. She works with clients to assess the impact of AI and other advanced technologies on business and to identify use cases, opportunities, risks, and organizational and cultural considerations. She also works with technology vendors to refine product roadmaps and strategies based on her independent research.

In 2019, Susan was named one of 100 Brilliant Women in Al Ethics by Lighthouse3, a strategic research consultancy focused on Al. Her TED talk, "What Do We Do With All This Big Data?" has been translated into 25 languages and has been viewed more than 1.3 million times. Her research is used in university curricula around the world, and she has been quoted in numerous media outlets, including The Wall Street Journal, The Atlantic, The New York Times, and BBC. Susan holds a bachelor's degree in rhetoric from the University of California at Berkeley.

About Altimeter, a Prophet Company

Altimeter is a research and consulting firm owned by Prophet Brand Strategy that helps companies understand and act on technology disruption. We give business leaders the insight and confidence to help their companies thrive in the face of disruption. In addition to publishing research, Altimeter analysts speak and provide strategy consulting on trends in leadership, digital transformation, social business, data disruption, and content marketing strategy.

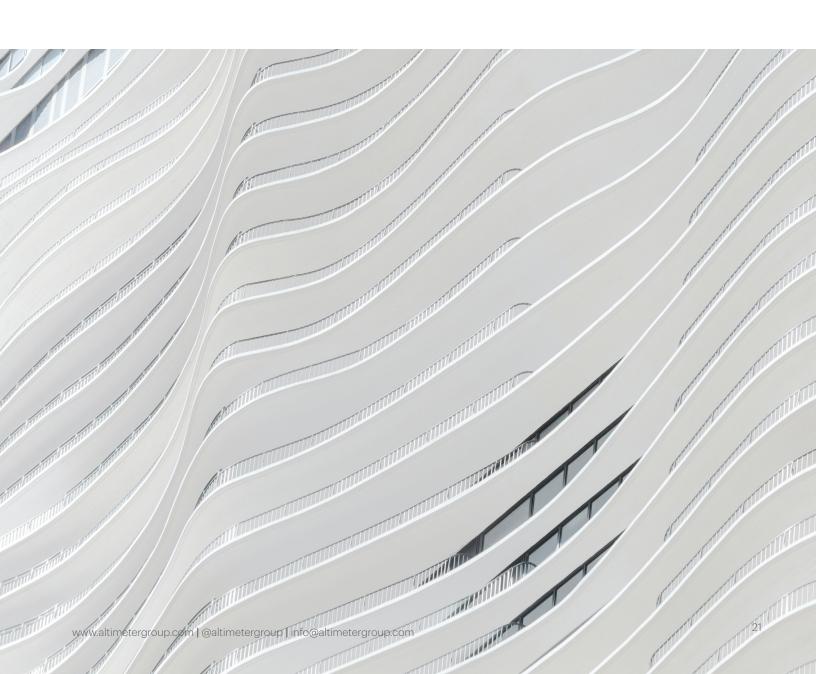
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About the Growth Series

As organizations adapt to a new and unfamiliar landscape, what are the strategies that will position them for safety, resilience, and growth? This three-part series addresses the key shifts we are seeing as a result of the COVID-19 pandemic and other macroeconomic, industry, and technology trends; identifies the key strategies leaders need to consider; and shares emerging best practices from experts in the areas of technology, workplace safety, design, and leadership.

The first report in the series, "Strategies for Growth in the Reimagined Workplace," focuses on the opportunity to rethink the role of the workplace as an engine for growth. The second will focus on people: customers, employees, partners, and other stakeholders; while the third will focus on innovation strategies and emerging business models.



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