

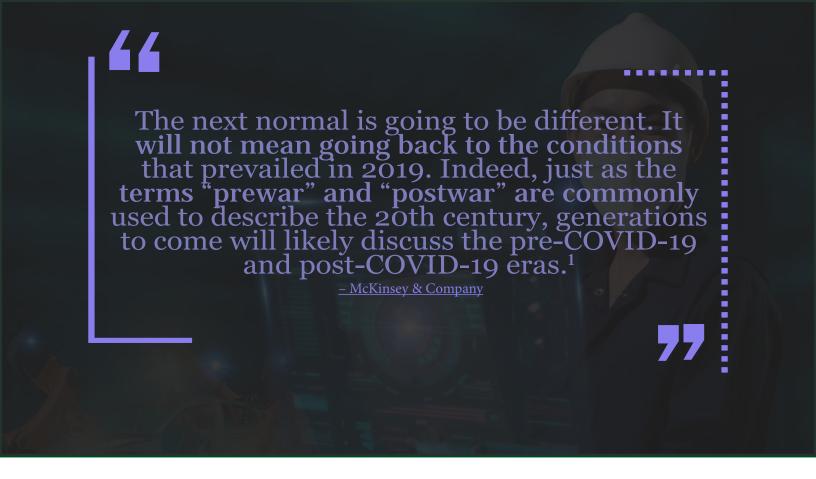


Accelerating Digital Transformation in the Next Normal

Strategic insights for operational leadership



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FROM STEADYING THE SHIP TO DIGITAL TRANSFORMATION

In 2021, the COVID pandemic persisted much longer than anticipated, as the Delta and Omicron variants rattled an already unpredictable operational environment. Mask mandates and other restrictions were reimposed in many states, and companies had to confront another round of serious disruptions to business as usual.

Organizations had to prioritize stability in this situation, but the big question arising today is:

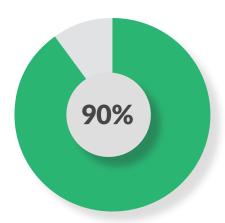
How can organizations harness the power of transformative digital technologies to succeed in the era of rapid change and uncertainty?

Last year's CGS report, Supporting the Enterprise in a Post-COVID World (2021), demonstrated that operational leaders across a range of functions—from the C-Suite to engineering and more—were primarily concerned in 2020 about enabling remote collaboration and ensuring the health and safety of the workforce. During this sustained crisis, leaders focused on "steadying the ship."

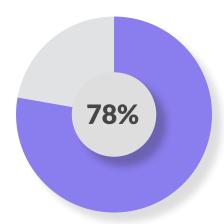
This 2022 report updates that analysis with new survey data gathered from 184 operational leaders representing the C-Suite, Operations, Technology, Engineering, Field Services, Innovation, Strategy and Customer Experience. The results show that steady-state initiatives and pandemic responses remain essential, but that a space may be opening for forward-looking investments in digital technologies. Responsive and nimble leadership will be essential to navigating the next normal as COVID-19 subsides.



One exciting development supported by this survey data and other industry-leading reports is that interest in extended reality (XR) technologies is rising across a range of organizations. Qualcomm defines extended reality (XR) as "an umbrella term encapsulating augmented reality (AR), virtual reality (VR), mixed reality (MR), and everything in between."



of survey respondents agree or strongly agree that the implementation of experiential and immersive technology like AR will help organizations gain a strategic or competitive advantage.



have already adopted AR technologies in their organizations or plan to within the next 12 months.



While new COVID-19 variants or new outbreaks are possible (as of the publish date of this report, the BA.2 variant was becoming the dominant strain worldwide⁴), the detailed picture that emerges from this data suggest organizations may need to balance ongoing crisis management with an awareness that the age of XR is upon us. As we move into the "next normal," augmented reality (AR), among other options, will be essential to transforming the customer experience and the post-COVID-19 workforce.

OUR 2022 SURVEY REVEALS TWO KEY THEMES:



Remote Work and The Great Resignation

Organizations expect to continue investing in technologies that facilitate remote work and remote interaction with customers. Top priorities include training and development, remote diagnostics and self-service customer support. The issue of worker availability will pose significant new challenges for operational leaders as the Great Resignation radically disrupts the workforce and the employeremployee relationship.



Strategic Advantage Through Extended Reality Technology

Organizations anticipate investments in XR and increasingly understand its importance to 21st century businesses. Augmented reality, artificial intelligence, robotics, and virtual reality are set to move into the operational mainstream.



And one wild card:

Will leaders successfully harness the power of extended reality technologies, such as AR, in the next normal?

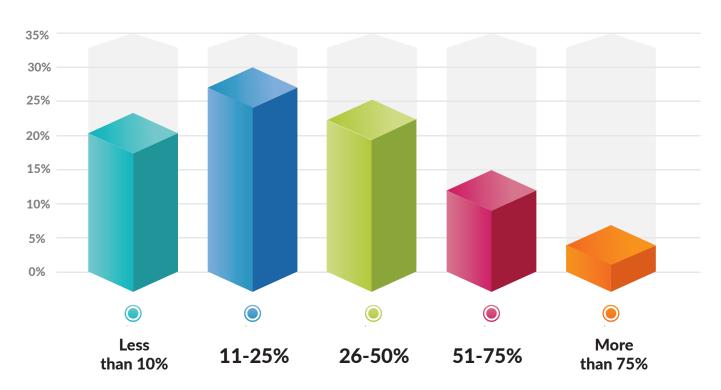
01. REMOTE WORK AND THE GREAT RESIGNATION

As recently as 2018, the issue of working from home was not even a consideration for most organizations or employees. Census data shows that in 2019, fewer than 6 percent of Americans worked primarily from home⁵. The sharp initial shock of the pandemic disrupted the workforce to a degree not seen since the Great Depression⁶. At the height of the pandemic, more than 25 percent of the leaders in our previous survey reported that three-fourths (or more) of their staff were remote/deskless employees.

This year's data show that remote work continues to reshape operations and suggests that workplace changes made because of the pandemic will persist.

Almost half (46 percent) of the respondents indicate that remote/deskless workers currently comprise 26–75 percent of the organization. Gallup estimates that as the pandemic wanes, there will be a 37 percent reduction of in-person days worked per week for those 60 million employees [in America] who can work from home." ⁷

What percentage of your organization is comprised of remote and/or deskless workers?



Though the percentage of remote/deskless employees may fluctuate over time, remote work is here to stay, and it will radically reshape organizations. To succeed in this new environment, organizational leaders will need to ask questions such as:



1. How does remote work affect worker and customer collaboration?



2. How can corporate culture flourish when many employees are not available for face-to-face training exercises and social events?



3. How will feedback, coaching and performance reviews be given to remote employees?



4. How can the organization ensure an effective remote onboarding experience for new employees?



5. How can the productivity of remote employees and teams be measured and incentivized?

Substantive change at this level cannot be dictated from the top. Leaders will need to collaborate with employees to navigate this changed landscape.

The good news is that **70** percent of leaders responsible for learning and development state that they plan to tap into employee feedback for insights at least quarterly. Remote work changes not only where work is done, but how it is done and how it is rewarded and assessed. Fundamentally, it shifts the organization from a consensus model to a collaborative model, necessitating responsive and flexible management.

LEADING REMOTELY

Amazon features more than 10,000 books in the English language on virtuality and how to lead remotely. Why is that? Because it is very difficult to do, and managers have to actively work on it. Number one, make sure that team members constantly feel like they know what's going on. You need to communicate what's happening at the organizational level because, when they're at home, they feel like they've been extracted from the mothership. They wonder what's happening at the company, with clients and with common objectives. The communication around those areas is extremely important. It means emailing and, ideally, sharing more via collaborative tools like Slack or AR-powered solutions.

We also asked leaders to take stock of how operations in field service have evolved—two years into the pandemic—based on the impact of crisis-driven change. More than half of the respondents identified the use of remote or guided repair, service and maintenance technology (54 percent) and enabling customers via remote diagnoses and/or self-service tools (56 percent) as a new normal.

Last year, C-level executives had the highest expectations for self-service and remote diagnostics, while customer service leaders were least convinced that remote repair and service would be a trend in 2021. We attributed the customer service leaders' optimism to the belief that, as worker availability stabilized, inperson operations would increase. However, customers are getting accustomed to self-service options. Research undertaken for the book *The Effortless Experience* states that 58 percent of all customers try to find an answer on a company's website before contacting customer support.

THE GREAT RESIGNATION

This year, our data strongly suggests that **the workforce** is being reshaped by the **Great Resignation**. Thirty-three percent of these respondents think that decreased worker availability is the new normal, while another 34 percent expect decreased worker availability to have a short to medium term effect on field service.



A study reported in the Harvard Business Review analyzed more than 9 million employee records from 4,000+ companies to understand the causes and effects of the Great Resignation. It found that resignation rates are highest among mid-career employees and in the tech and healthcare industries. Organizations will need to adopt a data-driven strategy to identify the root causes of resignations and develop tailored retention programs for staff.⁹

According to The Bureau of Labor Statistics, 4.3 million people voluntarily resigned in August 2021. And that was just the beginning. Some 50 percent of the field service workforce is expected to retire in the next five to 10 years, which will further contribute to labor shortages and skills gaps.

Skills gaps create unnecessary expenses for companies. When there is a problem, one out of three calls result in a truck roll, which means about 40 percent of service employees are dispatched to fix issues. ¹⁰ The cost of an onsite field visit costs between \$200 and \$1,400. Since two to three people are frequently dispatched together to handle issues in the telecom industry, these visits can really add up.

The skills gap is also making it difficult for field technicians to do their jobs. When they can't find the right information on their own, they use phone or video calls in the hopes that team members can help resolve the problem. Sometimes it's hard to connect to the right people and do an amazing job in solving the customer's issues.

The natural result of this lack of manpower and knowledge is a drop in customer satisfaction. As people leave, the service experience is negatively impacted. Fifty-one percent of consumers today cancel their contracts because they're not happy with the level of service that they're getting. Proactive companies are reinventing the service management experience by leaning into technology.

02. STRATEGIC ADVANTAGE VIA EXTENDED REALITY TECHNOLOGY

In our latest report, leaders were asked what new technologies are you using or considering to optimize your operations. Communication software and multi-user collaboration tools took the top two spots in our 2020 survey, with more than half of the respondents indicating interest in each of them.

The picture for 2022 reflects increased used or planned use across several different technologies. Communications software and remote diagnostics remain key, but both decreased in importance relative to 2021. Virtual reality, robotics, augmented reality and the Internet of Things (IoT), however, are now technology priorities for more than one-third of these leaders, where last year none of these technologies achieved a 25 percent response rate.



THE SIX POWER COMBINATIONS OF DIGITAL TRANSFORMATION TECHNOLOGIES¹¹



1. Automating Trust



2. Extended Reality



3. Immersive Interfaces



4. Working Autonomy



5. Digital Reflection

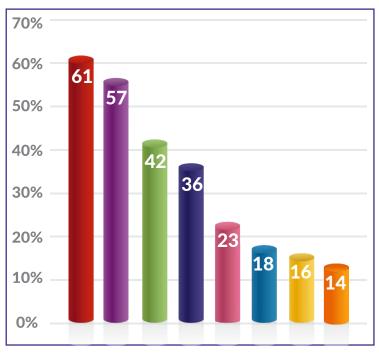


6. Hyperconnected Networks

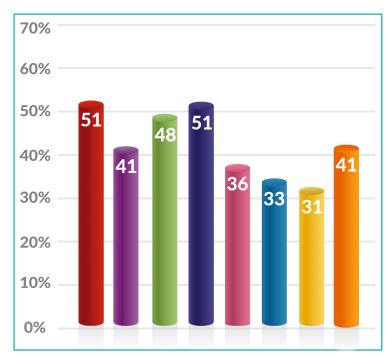
TECHNOLOGIES TO OPTIMIZE OPERATIONS -

(PERCENTAGE OF RESPONDENTS USING OR CONSIDERING)

2021



2022



CGS Data Survey 2021 (response percentages)













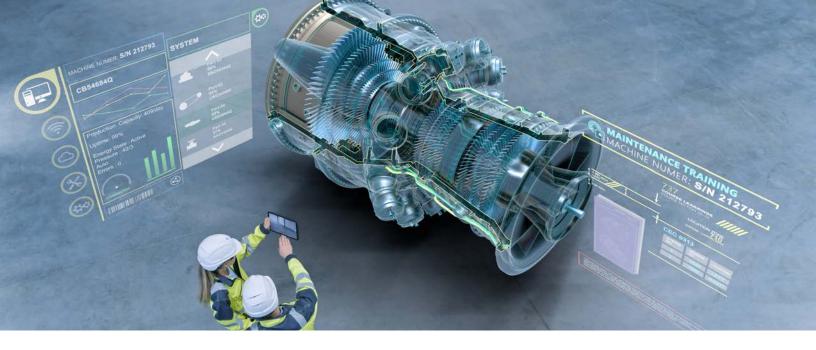




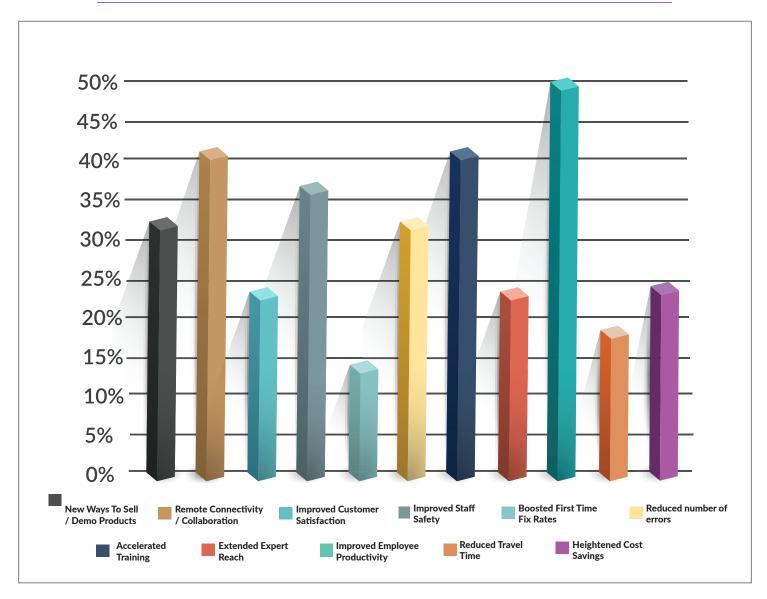
CGS noted last year that "augmented reality and other immersive technologies are exceptionally well-positioned to help organizations tackle the major challenges of 2021." This year's data suggest that this message is being heard by operational leaders.

The top three benefits of augmented reality/mixed reality identified by our respondents are:

- 1) reduced travel time
- 2) boosted first-time fix rates (and corresponding lower repeat visits)
- 3) increased employee productivity



TOP BENEFITS OF AUGMENTED/MIXED REALITY



CGS Survey Data, (response percentages)

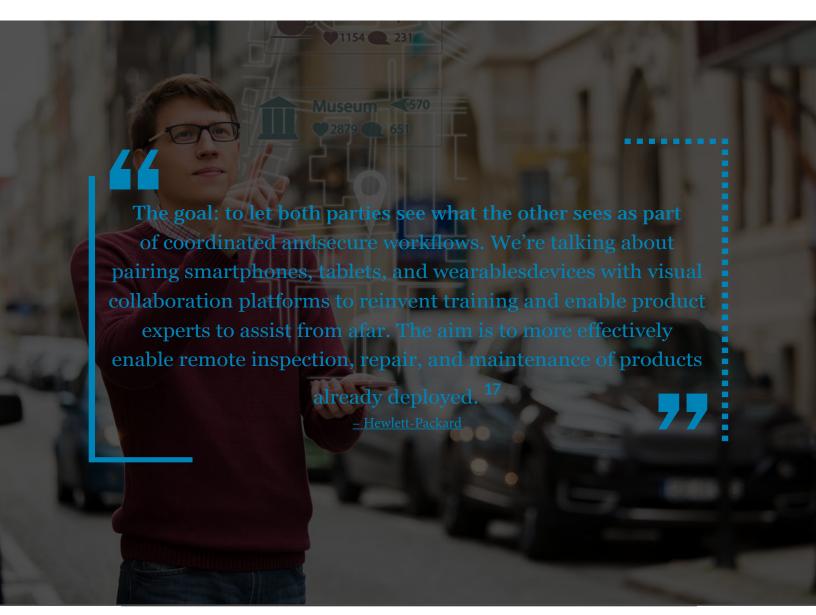


Each of these objectives is important. As Hewlett Packard notes, "the complexity of AR technology and the limits of some early applications can belie the simplicity of what most businesses want today: a way to quickly get remote colleagues and customers connected to geographically dispersed experts." ¹³

Yet, the potential of augmented reality goes far beyond enhancing normal operations. AR/XR is fueling the next disruptive wave in digital transformation.

As Elizabeth Hyman, CEO of XRA at Perkins Coie, argues, "industry leaders are noticing tangible and significant advances in the adoption of AR, VR and MR across sectors, such as healthcare, education, workforce training, manufacturing—including advanced manufacturing—and retail. We are at the precipice of an integration of XR [extended reality] technology that will transform businesses and society for the better." ¹⁴

Grand View Research finds that the global augmented reality market is likely to reach \$340 billion by 2028, reflecting an estimated CAGR of 43.8 percent from 2021 to 2028.¹⁵





THE WILD CARD

In 2020, we asked 100 respondents to rank several key drivers of operational performance. We grouped these responses into three broad themes:

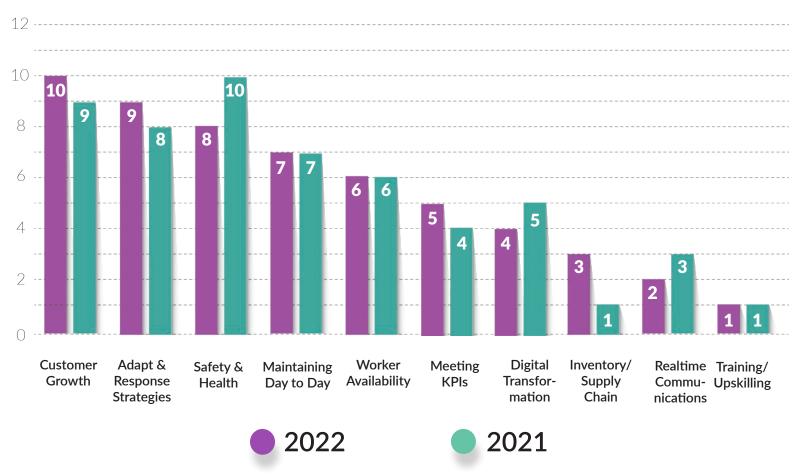
- 1. Steady State Initiatives
 - a. Safety and health of your teams and customers
 - b. Customer Demands/expectations/loyalty
 - c. Maintaining day-to-day operations
 - d. Meeting KPIs
- 2. Pandemic Recovery
 - a. Adapt and response strategies
 - b. Worker availability
 - c. Shoring up inventory/supply chain
- 3. Forward-looking Initiatives
 - a. Digital transformation
 - b. Real-time communication
 - c. Training: Upskilling or reskilling technicians

This year, we repeated the exercise. The data suggest that 2021 continued to present significant pandemic challenges to organizations and that steady state and pandemic response drivers remained relatively more important than future-focused initiatives.

As the table below demonstrates, in both 2020 and 2021, three drivers took top place:

- 1) Customer growth
- 2) The safety and health of employees
- 3) Adapt and response strategies

OPERATIONAL PRIORITIES: 2021 AND 2022



CGS Survey Data, 2020 and 2021 10=Most Important, 1=Least Important

Digital transformation and real-time communications—both classified as forward-looking initiatives—fell slightly in the rankings, while training and upskilling lagged relative to the other options.

As COVID-19 persisted across the globe, this ongoing focus on a steady ship is prudent. And as noted in the previous section, the leaders in our survey are aware of the strategic advantages of augmented reality and other immersive tech.

While there is no quick-fix for navigating a pandemic on the scale of COVID-19, the issue of when and how organizations will find time to prioritize digital transformation and training remains a wild card that merits ongoing attention. The responses to our question regarding the biggest hurdles to getting started with immersive tech provide some insight into the variables to track as augmented reality (and other XR tools) become mainstream reality.

BIGGEST HURDLES TO GETTING STARTED WITH IMMERSIVE TECH



Budget



Knowledge of tech operations



Identifying the right use case



Executive buy-In



Finding the right vendor



Competing priorities



End user adoption



Content development



Finding the right talent

CGS Survey Data, % of respondents per option

TYING IT ALL TOGETHER

- 1) Remote work is here to stay. Studies show that employees' preference usually tends toward at least a hybrid schedule (e.g., 2 days in-office and 3 days workfrom-home) and a healthy work-life balance. The Great Resignation illustrates how people are re-evaluating their careers and paths to prepare for the next normal. Is your organization prepared to attract and retain talent?
- 2) Immersive, "see what I see" technology like Extended Reality (XR) can offer a strategic advantage in many operational areas of a company. From employee collaboration to remote support for customers to offering expertise for technicians in the field, XR empowers and enables a hybrid workforce and increasingly tech-savvy consumers for success in the next normal.

And the Wild Card

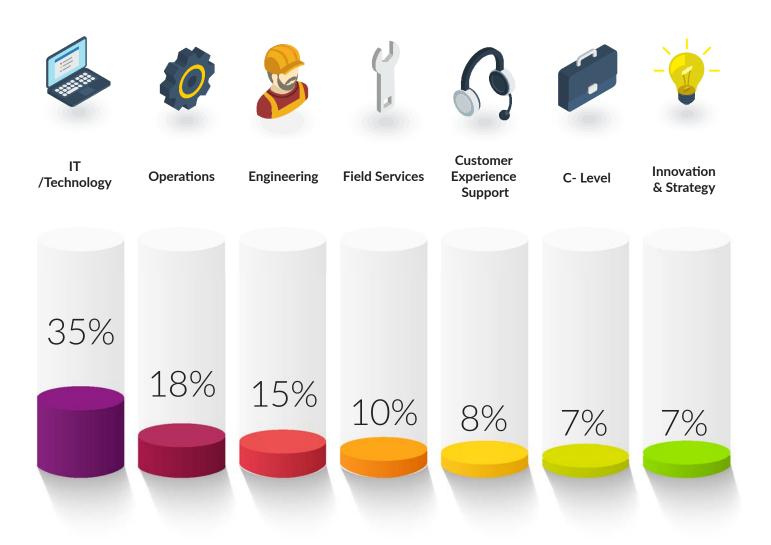
3) As operations leaders, will you successfully harness the power of XR technologies, such as augmented reality, to take this strategic advantage?

Our data shows that uncertainties persist. Organizations continue to focus on steadying the ship and pandemic recovery. However, the leaders we surveyed are also thinking hard about how emerging tech can generate strategic advantage and how investments in digital technology should proceed.

We believe that the next normal is upon us, and XR/AR is poised to disrupt business-as-usual, generating exciting new possibilities for the organization, the customer and the workforce. **CGS looks forward to working with our clients to maximize their strategic advantage and digital transformation in this rapidly changing operational environment.**

A NOTE ON METHODOLOGY

Conducted in December 2021, this survey gathered insights from 184 operational leaders representing the C-Suite, Operations, Technology, Engineering, Field Services, Innovation, Strategy and Customer Experience. The focus was to gauge expectations for investment, operational priorities and challenges in an unprecedented year of change that would include remote work, pandemic recovery and accelerated digital transformation.





Make Everyone a Genius.



What is TeamworkAR?

Born out of **35+ years of expertise delivering tech-forward training** that drives operational excellence at scale, TeamworkAR pairs best practice enterprise learning with the experiential power of mixed reality. Our mission is to provide a platform that brings real-time digital transformation to on-the-job training, learning and support for any company, anywhere.







From knowledge capture and transfer to collaborating with and assisting workers across skill levels, our goal is to make everyone a genius™



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