

Massachusetts Future of Work Commission

Mohamad Ali, CEO, IDG, Inc.

July 20, 2021

Good morning everyone. And thank you Senator Lesser and Representative Cutler for inviting me to address this commission today.

I'm joining you from my home in Arlington, from which I've worked remotely for the past year and a half.

As Senator Lesser mentioned, my name is Mohamad Ali, and I'm the CEO of IDG - International Data Group, Inc.

IDG was founded 57 years ago in Newton, Massachusetts and today we are headquartered in nearby Needham. We have over 3000 employees and offices in over 50 countries.

Some of you may know IDG from publications such as PC World, Macworld, or Computerworld, but for 57 years our IDC division has published the leading market forecast models for how the technology industry will evolve. Most of the world's technology companies use our forecasts to guide their product development. Our research is aligned around nine "Future of Enterprise" categories, including the "Future of Work." Our researchers ask questions such as: What will work look like over the next few years? How will automation change the way we work? How will our digital workspaces and physical workplaces evolve?

Today, I will speak from three perspectives.

First, as a Massachusetts employer, I'll speak to our own Future of Work plans. When will we return to the office? What will our remote and hybrid work models look like? What issues will we need the state to address in this complex and fast-changing time?

Second, as a provider of data and research on the "Future of Work", I'll highlight what we are telling technology companies to enable them to build products, and transform their own companies, for this future.

Lastly, I will speak not as a CEO, but as a citizen, observing the great and growing divide between the rich and poor in our state, our nation, and the world. I will suggest that if we do not plan carefully for this Future of Work, that divide may grow even wider.

So let me start in my role as an employer here in Massachusetts.

When the pandemic hit in March of 2020, IDG saw a tremendous decline in our business. Our customers paused their spending, our global technology events came to a halt, and we were unsure of our future. We immediately shifted to virtual events, delivering over 1000 such events in 2020. We also developed research forecasting the impact and opportunities of the pandemic on and for the technology industry. Our business not only recovered but accelerated.

We were lucky. Nearly all of our 3000 employees are "knowledge workers". We can work from home. And with travel down, and no commute, many of us were able to get more work done and did so with a

lower carbon-footprint. Of course this productivity boost was also unevenly distributed—parents, especially mothers, left without childcare and newly responsible for online school activities, bore a disproportionate burden. And even for those without caregiving duties, the transition to remote work brought challenges. At IDG, we took extra steps to support our employees, such as extra days off, called “unplug days,” to help our employees recharge as boundaries between work and home blurred.

But we've missed seeing each other – we are people after all. We've missed the innovation and engagement that happens through casual interaction. Earlier this year, the Boston Globe ran an article about IDG and other Massachusetts's companies' plans for returning to the office. In response to my comments, one reader stated that a casual conversation in his company's cafeteria led to multiple patents.

Further, some knowledge work cannot be done fully remotely. I serve on the board of iRobot, the maker of the Roomba robotic vacuum. Certain work needs to be done in a lab – to machine physical models, to run the prototypes through hardware tests, etc.

Whatever the drivers, we will neither stay remote forever, nor return to the office environment of the past. At IDG, our employees will have options to work in the office, remotely, or hybrid. We plan to start these new work models in January 2022. By then, we expect to better understand such things as: What will the traffic and train schedule look like? What tools will retain strong collaboration when some employees are in the office and others are remote? Regardless of the answers, we will not be returning to the work model of the past.

Looking beyond the technology sector, there are also many knowledge workers across the broad stretches of the Massachusetts economy – from the accountant in Worcester to the language translator in Lowell – who could continue to work from home or in a hybrid model, but are unable to do so effectively, due to low-quality broadband, inadequate quiet spaces at home or nearby, or poor computer equipment. Examples like these illustrate opportunities for the state to help.

Then, there are the front-line workers – workers often providing customer-facing services requiring physical presence. I also serve on the board of Henry Schein, the largest distributor to the dental industry. Dentists are one group of front-line workers, but there are also many other such worker, including restaurant servers and hotel cleaners, who not only lack the opportunity to work from home, but might further lack health and other benefits and be dependent on public transportation to define where they can and cannot find employment.

This brings me to my first recommendation: **Ensure we address the needs of all by separately understanding each category of worker.** To strategically define the future of work in Massachusetts, this commission should assess how the Future of Work will affect each category of worker – as the needs of the hybrid-ready knowledge worker may differ meaningfully from the location dependent frontline worker. While there are common areas where the state can help – such as transportation, housing, broadband, worker benefits, etc. – the needs are different by categories of workers. They are also interdependent. Put simply: A state where the knowledge workers thrive and the front-line workers don't—where engineers and researchers adapt and janitors and cafeteria workers fall behind — isn't healthy or sustainable. We need all groups to find Massachusetts to be a place of opportunity – not just because it's the right thing to do, but because it is economically necessary. IDG, as an employer in

Massachusetts, needs the state's help to create a competitive Future of Work environment for both our IDG workers as well as for the other workers in our state whom we depend on.

Let me now move to the second topic. What is IDG telling our customers in the technology industry about the Future of Work?

[Chart 2] Our IDC research suggests that over 50% of IT and business leaders surveyed expect remote and hybrid work will be an embedded part of work practices.

[Chart 3] Our data models predict that technologies that power that Future of Work will reach \$1T by 2024, growing at 17% annually – substantially higher than GDP.

[Chart 4] These Future of Work technologies include now-familiar collaboration products such as Zoom, Google Workspace, and Slack. Others include technologies to safeguard computers like this one that I'm using at home so it's as secure as when I'm on the network at the office. The Future of Work technologies fall in four broad categories: digital trust, digital infrastructure, workplace, and connectivity.

[Chart 5] But for remote and hybrid work to work well, we need parity. That means a parity of experience among workers who are working remotely, in the field, and at work sites. You may have noticed that when we are all in the office or when we are all remote, things seem to work better than when some of us are in the office and others are remote.

As we move to a world that is hybrid by design and not just by circumstance, our research suggest there will be significant investments in Future of Work technologies to enable workers to have secure access to all resources – from any device, from any location.

For knowledge workers in Massachusetts, hybrid ways of working can provide meaningful benefits: greater personal flexibility, improved productivity, more opportunities for disabled workers, lower climate impact, and far fewer hours sitting in traffic on the Mass Pike or Storrow Drive.

Frontline workers will also see more technology investments in virtual-first approaches that benefit us all as consumers: virtual doctor visits, app-based restaurant and grocery delivery and other time saving services. This is also driving new types of worker/company relationship, such as the gig worker, which I will speak about more later.

[Chart 6] Additionally, as our day to day lives – our work, our shopping, our learning, our medical treatments – become more digitally powered, automation will increase dramatically, and will help many jobs, as we up-level human centric work supported by automation. There will be many benefits to the workers, but like other major societal changes, there will be challenges of equity. The state, businesses and civil society will need to traverse the path carefully to ensure that all can participate in these benefits.

This brings me to my second recommendation: **Move fast to retrain our workforce.** Automation is not in the distant future. It is here today, and the current workforce is actively involved in making this happen. 84% of those we surveyed are either already doing so or are planning to do so.

[Chart 7] While this will have benefits, allowing 36% of workers to focus on higher level and potentially more interesting tasks, 16% of the positions may be eliminated. Retraining will be critical. But it is not a simple or clear task.

[Chart 8] While half of employers believe they have a path to transforming their work and workforce through automation, a third have stated that they don't know how to reskill their organizations to meet future business needs.

This brings me to my third and final recommendation: **Be bold and act for the long-term.**

We will need a digital infrastructure that serves the full spectrum of our workers. Policies and investments will be required in a minimum of 3 areas: broadband, cyber-security, and computer equipment for all our citizens to equitably access the people, data and applications they need to work across our rapidly evolving digital economy. Schools will need investments to modernize – in higher broadband capacity, more computer equipment and software, and student privacy. Remote and hybrid workers across the state will need faster and reliable home internet. The infrastructure itself will need to be more secure, from the fiber to the cloud to the software and hardware. This will require both government policies and investments for long-term competitiveness.

Our physical infrastructure will change. Consumer demand for digital first experiences, from virtual doctor visits to remote student learning models, will drive a remix in our transportation infrastructure and housing needs. The hybrid world will require both great digital infrastructure *and* great physical infrastructure with potentially lower consumption of the physical infrastructure. While the economics of the physical infrastructure might get challenging, it may be required to make the hybrid world work well, which in-turn could drive meaningful benefits such as higher productivity and lower climate impact. At IDG, we expect to hire 2000-4000 employees over the next 4 years. We have moved our office from Framingham to Needham to be closer to Route 128, the commuter rail lines and the Green line. We expect that many of those employees will have a hybrid work schedule; but when they do come to the office, they will need to do so in a reliable and timely manner. Further, if we can modernize our transportation system, this might open up opportunities to address our state's housing affordability and equity issues. Imagine a worker who chooses to live in an affordable town in Western Massachusetts but needs to be in Boston on Tuesdays and Thursdays; and is able to get there in 30 minutes with net-zero carbon emissions. Now is the time to dream big and set the stage for the long-term.

Lastly, bold actions are needed to secure our most important resource – our people. There are two areas I would encourage the commission to consider: retraining and worker benefits. We have already discussed the criticality of retraining in the face of remote work, automation and the Future of Work, so I won't spend more time here. Regarding worker benefits, a workforce where everyone has sufficient benefits – starting with a living wage and healthcare – is critical. Gig workers, in particular, is a fast-growing category of workers whose economic security is yet to be determined. Many states and countries are assessing whether they are employees deserving benefits, independent contractors with minimal to no benefits, or yet a third category. Massachusetts has a unique opportunity to lead and create a model that benefits employers but also ensure that this new category of workers are not left behind. How we handle this will have long-term implications for our most important resource – our people.

I will conclude with a few personal words, not as a CEO, but as a citizen of our Commonwealth and country.

[Chart 9] For decades now, we as a nation have been on a path of growing divide. As I said earlier, this a concern to us all – Democrats and Republicans. The Future of Work will provide tremendous benefits to many knowledge workers and bring greater wealth to Massachusetts, but the knowledge worker also needs the frontline worker, and we all need the frontline worker to have a quality of life that will encourage her to stay here in Massachusetts. We are all connected, and I encourage this bi-partisan commission to view our future as an integrated one.

Massachusetts has often led our nation in solving the hardest problems – technically and socially. The Future of Work and its broad implications to our society is among the great challenges that Massachusetts can rise again to solve for our nation. I applaud the commission for this work you are undertaking. And I thank you for having me here today.

Future of Work

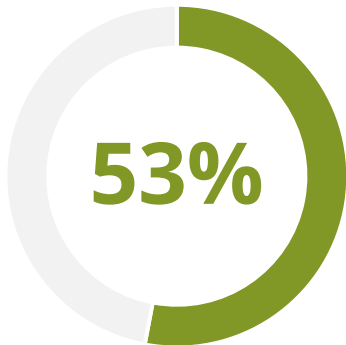
July 20, 2021



Remote work is likely here to stay

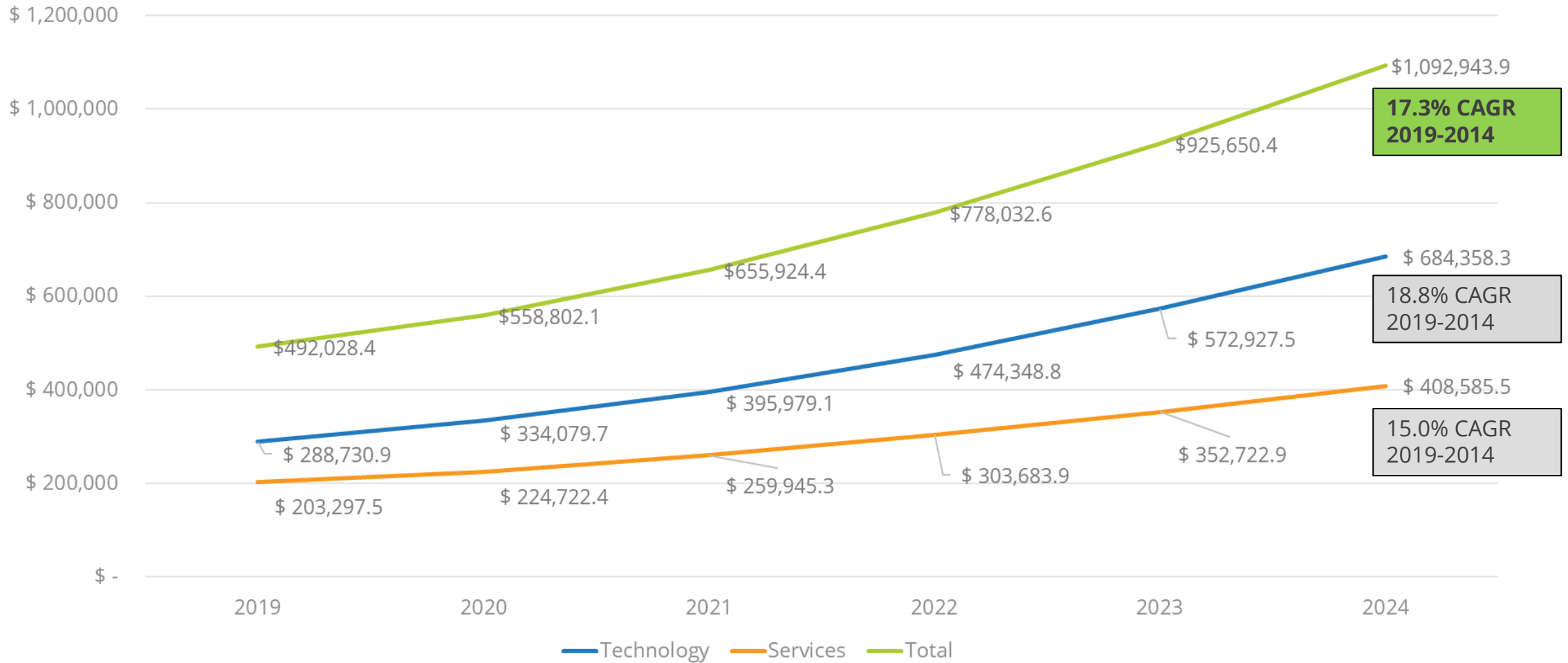


Which work practices and technology advances emerging from the pandemic are **most likely to endure?**



53% of IT and Business leaders report remote and hybrid work models will be *an embedded part of accepted work practices* for many industries.

Spending on technology to enable Future of Work forecasted to grow 17% per year exceeding \$1T by 2024



Source: IDC, 2021

Top technology investment to support Future of Work in U.S.

Priority and top priority technology investments over the next 2 years:



59%

Digital Trust

Security, privacy, and compliance technologies



52%

Digital infrastructure

Cloud, infrastructure, autonomous IT operations



52%

Workplace

Collaborative workspaces, talent dev and management



48%

Connectivity

Enterprise network infrastructure, 5G, WiFi, mobile


United States N=200
Source: Future Enterprise Resiliency & Spending Survey, IDC, February 2021


Hybrid work depends on a **parity** of experiences for all


What technologies will your organization be investing in 2021 to enable technology parity for all members of the workforce, regardless of physical location?



Parity = all workers have:

 **secure** access to resources required to do their jobs ...

 from **any device**

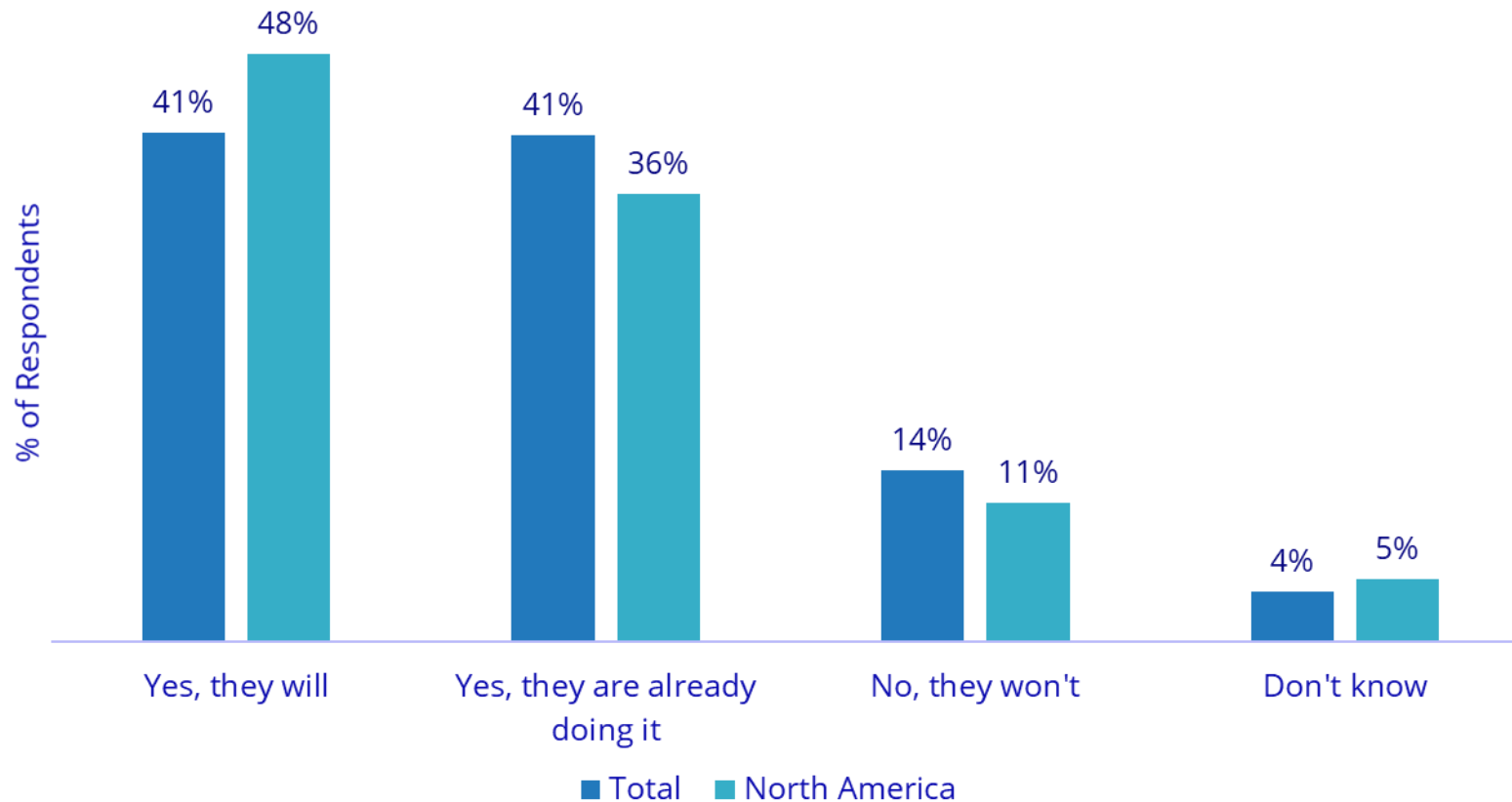
 from **any location**

U.S. Technology Parity Investments

% of respondents
United States n =300
Source: Future of Work Survey, IDC, March, 2021

Automation: In 2021, **84%** of North American respondents indicate they will or are already enabling their workforce to be directly involved in automating aspects of their own work.

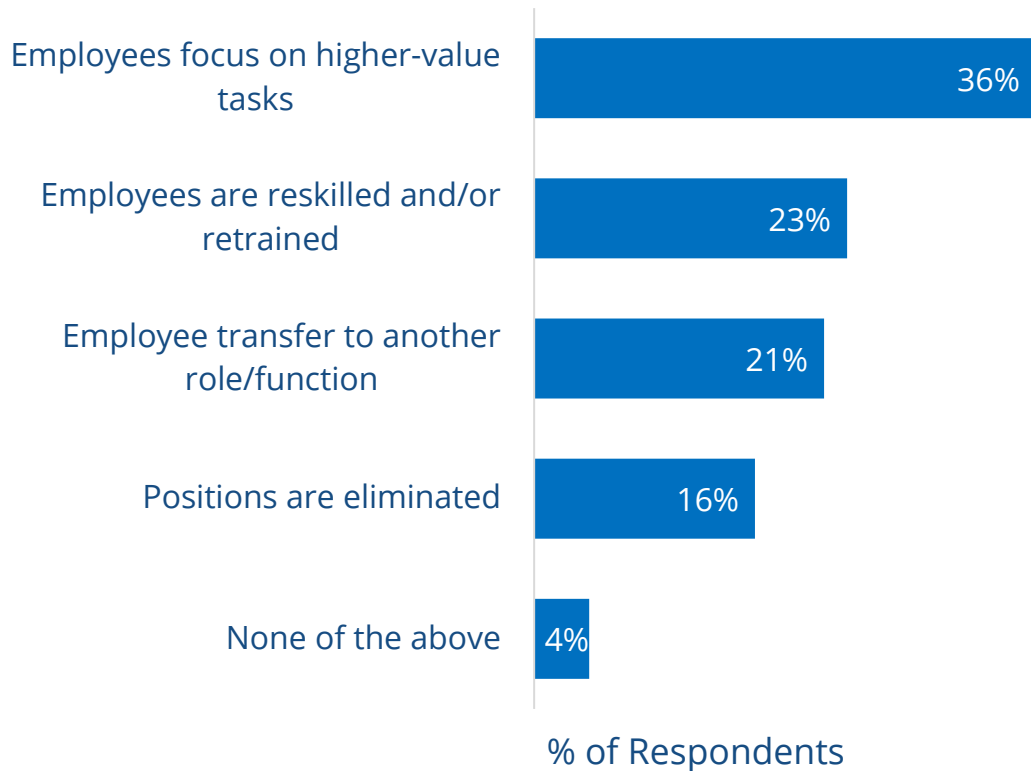
Will your workforce get directly involved in automating aspects of their own work in 2021?



n =1116 (NA 403, Europe 409, Japan 304)
Source: Future of Work Survey, IDC, March 2021

Automation: 36% of US respondents note automation technologies will enable their employees to focus on **higher value tasks** while other employees will be retrained or transferred (albeit slowly). **16%** indicate that positions will be **eliminated**.

Where do you see automation technologies having the most impact on employees in the next 18 months?

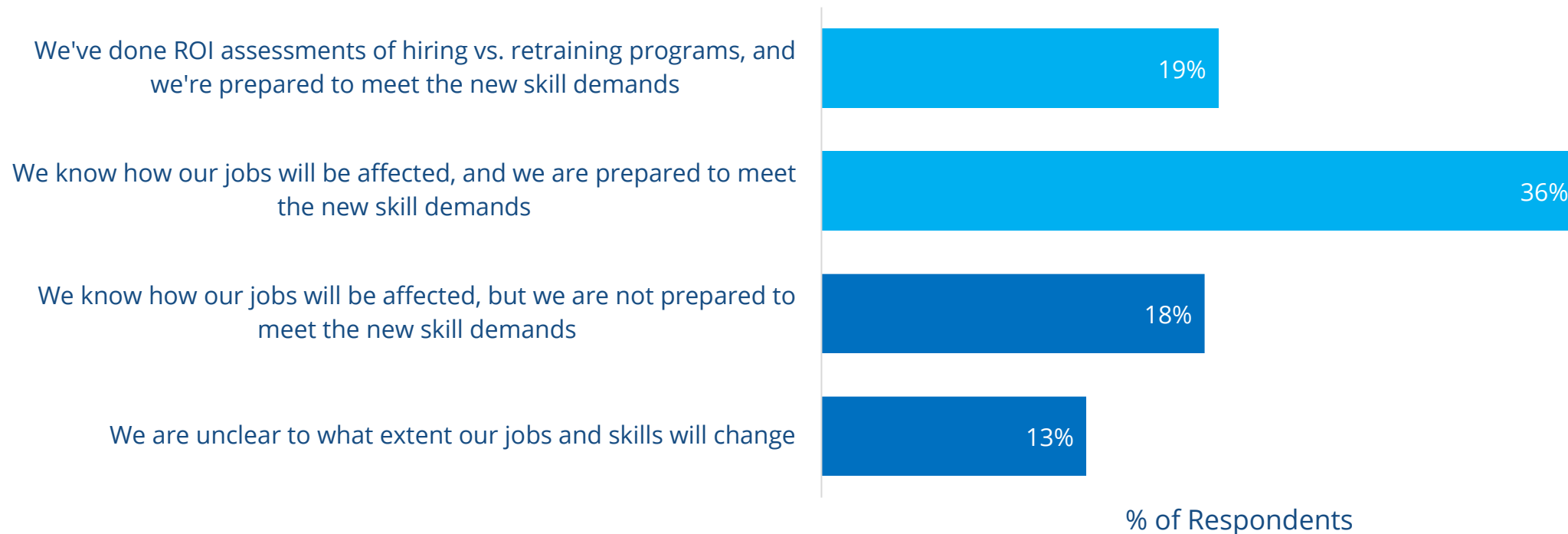


n = 300 (United States)
Source: Future of Work Survey, IDC, March 2021



Automation: While **55%** of U.S. organizations say they are prepared to meet automation skills demand, more will need to assess ROI of hiring v. **retraining** to be truly resilient.

How will your organization address the changes in jobs and skills driven by automation in the next 18 months?

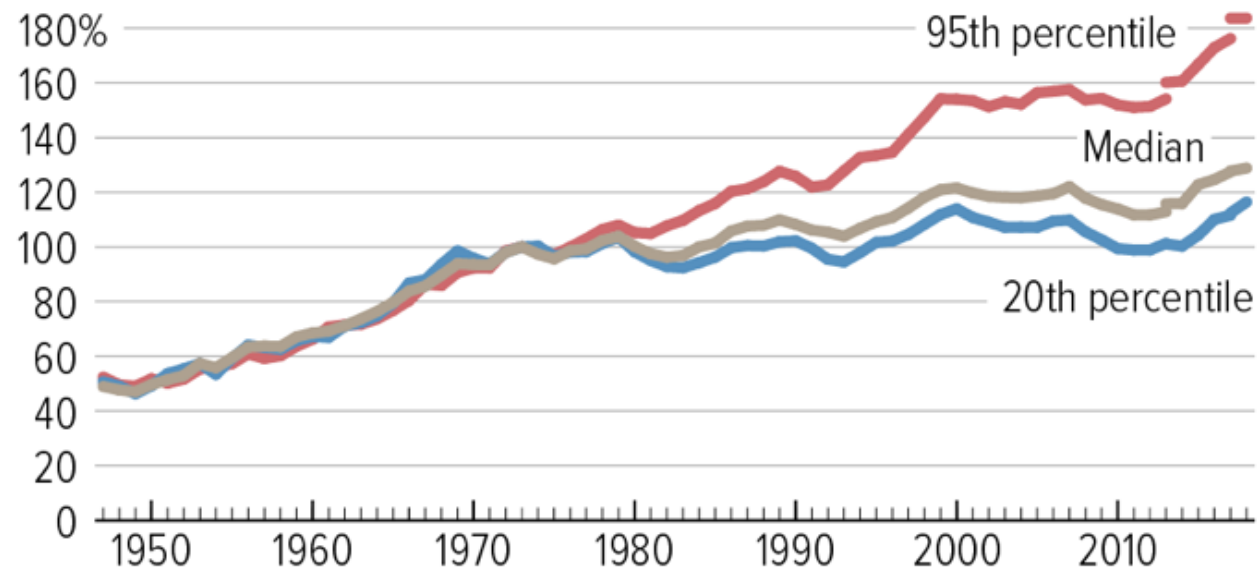


n =300 United States
Source: Future of Work Survey, IDC, March 2021

Economic Inequality. The Future of Work could drive further inequality, but Massachusetts has an opportunity to get ahead of this.

Income Gains Widely Shared in Early Postwar Decades — But Not Since Then

Real family income between 1947 and 2018, as a percentage of 1973 level



Note: Breaks indicate implementation of a redesigned questionnaire (2013) and an updated data processing system (2017).

Source: CBPP calculations based on U.S. Census Bureau Data

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