

Work in Progress Episode 336: Chike Aguh, Former U.S. Chief Innovation Officer:

Ramona Schindelheim, WorkingNation Editor-in-Chief:

You are listening to Work in Progress. I'm Ramona Schindelheim. Editor-in-Chief of Working Nation Work in Progress explores the rapidly changing workplace through conversations with innovators, educators, and decision-makers, people with solutions to today's workforce challenges.

Sometimes it feels like technology is moving so fast that many of us are at risk of being left behind. Recently, the Center for Workforce Inclusion and Working Nation collaborated on the third annual day-long Equity Summit in Washington D.C. There we brought together experts to discuss ways to ensure that mid-career and older workers have access to opportunities in today's labor market, in hiring, job retention and reskilling.

As part of the summit, I was joined on stage by Chike Aguh, former Chief Innovation Officer for the Biden administration and current senior advisor to the project on workforce at Harvard University. We talked about the potential impact of AI and other advancements in technology on those older workers, including older workers of color. I started out our conversation by asking Chike, who is also on the Working Nation Advisory Board to share his assessment of the economy and current labor market. Here's that discussion.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

As you heard, I was recently in the Biden administration at the Department of Labor. We will spend a lot of time thinking about the state of the economy, the state of the workforce, and a couple of things I'll say on the front end, but we have a lot of conversations about technology replacing people. That is a real concern. I would also put on, if you look at the US economy, it's desperately in need of people.

Currently, for every 10 jobs open nationally, there are 8 people looking. I am from the state of Maryland. Currently in Maryland for every 10 jobs open in Maryland, there are 3 people looking. We in January had an unemployment rate of 1.8%, the lowest in the history of the measure. And if you look at particular industries, ones that we think are very important, from semiconductors to green technologies to health care to elder care, you are going to see similar gaps in shortages. So keep in mind how technology will disrupt the workforce, change the workforce is a very real conversation, but it also paired with the fact that we desperately need people. And when we get into it, the last thing I'll say before we dive into some questions is, technology doesn't do all things equally well.

For example, we've seen that technology actually is not good at replacing human fine motor function. It's not good at driving yet. It's not good at things that actually human beings do do with their hands. What is it very good at? It's actually very good at reading and writing, which is actually a change in a flip of the paradigm that we've been used to when we think about technology. Generally we've said if you do things repetitively with your labor, with your back, you're probably going to not be in a job. That's actually changing kind of, and the people who are now in a more precarious place are people who read and write for a living.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

I'm leaving.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

Ramona's irreplaceable. But that's a new paradigm. Say those things on the front end. One, technology affecting the workforce is real. Two, the American economy and the world economy is desperately in need of people, meaning we don't have an American to waste. And then thirdly, we have to be precise about how technology is going to affect that latter question, because it doesn't do all things equally well. Some things it does really well, which are going to create some challenges, and then there are some other things that actually are coming back in vogue and are more important now than ever.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

So one of the things that employers are telling us, I read the Beige Book, the Fed's Beige Book every six weeks. I love it. It's not data, it's anecdotal.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

We love to hear that.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

It's the people who are asking the questions of the businesses in their community. Nearly every single bank of the 12 banks, they say they don't have the people with the right skills. So to your point about technology is changing, but employers can't find the people to fill those jobs. So how do we make that connection?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

I think the first thing is it requires some precision. When we say workers don't have the right skills, what do we exactly mean by that? I've spent most of my time when I was in government talking to industry who would tell me a variant of that. And if you were to push them and say, "What is it that you're looking for exactly?" Some of them will name certain jobs and things, but after a while you'll get something like, "You need somebody with the right 'mindset.' I will train them. I'll take care of the rest. Just give me someone who has the right attitude, and we'll take care of the rest."

So really what I always hear there is that there are a bunch of skills that are very technical, what I call the just-in-time skills for certain jobs. "Hey, I need you to learn how to use this machine. I need you to learn how to use this piece of software. I need you to learn how to do this particular process." And that's going to change a lot.

But then there are what I call the timeless skills. And when you think about the population that a CWI is looking to serve because of their experience, they actually have a lot of those. Leading, communicating, conflict resolution. That is a skill that we would hear continually from employers that they don't see enough in the workforce, the ability to resolve conflicts between teams, and customers, and other stakeholders.

So as we think about getting folks those skills, then the next question is, okay, how do people get those skills? On the technical side that is training as we understand it, are you providing those opportunities, particularly in terms of the technologies that we're talking about. Are you telling people how to do, for example, prompt engineering to use a Claude, or a ChatGPT, or a Gemini?

But then on the timeless side, you don't learn those skills in the classroom. If you think about it, think about all of you who have had illustrious careers, likely when you were early on, you went to a meeting and you said something you weren't supposed to. And if you were lucky, someone who was older pulled you aside and said, "Don't say that again." Or, "Next time, say it this way.: And it's like being an athlete. You go out during practice, you take a shot, you didn't do it well the first time, someone coaches you, in hopefully a risk-free environment that's safe. And then during a game you take the shot again, you're not quite so good, and you practice, and practice, and practice, under the guidance of a mentor.

And the question is for so many workers, do they get that? And the answer is no. And when I think about the population that this group is thinking about, that CWI serves, that is a critical function that this group can serve in the economy. It's not simply about, frankly thinking about older workers and how can they be another body. It's how do we take advantage of the unique skills and perspectives that they have to do a thing that we need, which is we need more mentors than ever in the workforce to help people be effective on the job, to have those skills timeless and just-in-time to be effective for themselves and also for the country.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

There's that meme and the falsehood that older adults don't learn new technology. I challenge everyone in this room to think about the jobs that you have done in your life. So it is still part of the complaint that older workers don't know how to do this, they don't know how to figure out, they're not going to be able to figure out AI. They're not going to be able to figure out that new piece of equipment. When you've talked to employers and the different roles that you've been in, are they saying that to you too, or is it just a media meme?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

I think it is a thing that most employers don't say out loud, but I think it's a bias that exists. In some ways it makes it even harder to deal with. I'd say two things. One, you're right, it is a myth. I think we've all seen it. I think about my mom and my dad who are approaching retirement who, the fact that they can use an iPhone is something I never thought was going to be possible back when I was in college, but here it happens.

If you think about health care and you think about people who've had illustrious careers in healthier, it is impossible now to be in health care in a number of ways without learning that technology, and the health care workforce is... Actually no, it's a U-shaped workforce with a huge amount of folks who are toward the latter part of their career. But I go back to, what are you utilizing these older workers for? Again, am I having them do the exact same thing I'm having a 25-year-old do? Maybe, maybe not. But again, if you have someone who has deep experience, has learned how to do the job, but also frankly, deal with people, do all those things that, we call them soft skills, but I always say we call them soft until someone doesn't have them, then it gets really hard. How are we particularly utilizing this piece of our workforce to fill in that gap?

And that is a level of intentionality that if we're candid, we don't always see across the entire employer base. And we actually need to be intentional. For those of you who are sports fans, I'm a Commanders fan. If you are a coach, you are sitting and looking at your roster and you are saying, "How do I use that safety? How do I use that corner? What play package do I put them

in?" And you will literally think about every single player, how are you going to use them in particular instances to further your objective?

That level of intentionality is variable across industry, if we're candid, as someone who's been in industry, working in industry, and we have to get to that level to make sure that we are utilizing everyone that we have, particularly our older workers who bring particular things to the table. So the first question is... The first statement is one, that is a myth that they can't learn new technology. But the second thing is, is that actually the biggest value add for them in your business? And that's something that we basically have to get more intentional, more strategic about.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

We talk with CWI, we put out a magazine a couple of years ago, digital magazine called The Intersection of Race, Gender, and Age. So we know that brown and black workers, especially older workers, are often marginalized, and there's inequity there. So do you think technology is going to make that gap even wider? Because if you are already seeing that happen, are we going to see it as a bigger issue?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

I think that's up to us. About six months ago, I was in New York and I got to see a panel on this question that Van Jones led, and I'll credit him because it was a really great phrase. He basically said, "If you think about 96% of every demographic group, they all know the exact same amount about AI, which is zero." And we are actually at a moment of supreme equity in AI because of our collective ignorance. The question is, what's going to happen next year and the year after that? Are we going to be able to use this technology and ubiquitous knowledge of it to close those gaps, or will we see what's happened in other technologies and other forms of privilege and advantage where you have these gaps that are not based on merit, they're based on simply who your parents are, where you were born, where you went to school, and who you know?

It's not in our interest for that. So I think again, to go back to the numbers I gave you, 8 people looking for every 10 jobs open currently. And again, if you look at this size of the US, workforce is not growing. That is the thing we see in many advanced economies, their workforces are not growing. Depending on how you look at it, it's either staying stagnant or slightly shrinking. Even if we hired every available person, we would still have jobs open. So what it means is I actually don't have the luxury of bias. Because I need everybody that I can to actually work these jobs for the benefit of my business. I got to do a panel about a year ago with David S. Wilder of Siemens, and this was to a group of chief talent officers and CHROs and he basically said, "This is not a political question, it's not a values question, this is purely a business problem to be solved. I have orders I cannot fill because I do not have workers to actually do that. It's not in my interest to be biased."

I think when you frame it that way, and I'm talking to industry, I think getting their heads around that has actually happened, this is my experience. The question is the how. Because now it means I need to go and recruit in places I didn't recruit before. I always say to industry, all the smart kids from MIT, Harvard, Stanford, you hired them already. They already work for you. Doing another college fair is not going to get you more employees, there aren't enough of them. You're going to need to go to communities that you haven't been to before to make that

difference. And for those of you who have done M&A before, we always talk about when you're going to start a new product, are you going to build it, or are you going to buy it?

Effectively, we've always bought. We've always gone out in the market, and I find a person who has the right skills, and I just pay them enough and they come work for me. Now you're going to have to build it. You're going to have to find people who could do the job, invest in them. That's why things like apprenticeship, work-based learning are, from when I was in administration to now we have doubled the amount of apprenticeship slots in America by copious federal investment, but also because there's huge need. And also by the way, you see that generally more diverse pipelines people stay longer, so on and so forth. So as we think about that, again, go back to the population that we're thinking about.

If we're going to have much more work-based learning, much more of someone who doesn't know a job sitting next to someone who actually does know a job, this is where this particular part of our workforce is really valuable. How do we have someone who knows what they're doing, has been around the block, help someone who's just coming up so they can start their career the right way? And if we're candid, those of us who've been lucky in life, lucky in the economy, we got that.

But when you think about young black and brown workers, a lot of them don't. They come into the workforce, swim on their own, and when they drown, we're like, "Oh wow, you just don't swim well." No, it's because we got lifeguards when we were coming to the economy, and a lot of them didn't. And when we think about this population that we're talking about, they can be those lifeguards that are going to make a huge difference for so many workers we need.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

I still worry about though the worker who is the mid-career, the 45+.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce
Absolutely.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

And while I support, I think the apprenticeship program is fantastic. It has expanded and it's fantastic, but you don't see that kind of program really offered to someone who's 45 years old, or recruit people that age that are recruited. Doesn't that mindset need to change as well if we're going to try to do what you're saying?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

I think you do have examples. So if I think about the Department of Labor, one of our tried and true programs, something called the WANTO program, which is basically a program focused on getting women into the skilled trades. Because if you look at the skilled trades, electricians, carpenters, machinists, you don't see many women, and that's a problem. And these women of all walks of life, all ages. But you're right, we need more of them.

And I think the difference has always been, programs like that were seen to be a luxury. I don't need to do this because I have the workers that I need, so I'm not going to do these new things. But now, I mean I remember, this is probably three years ago during the pandemic. I'm from

Work in Progress Episode 336: Chike Aguh, Former U.S. Chief Innovation Officer:

Maryland, my family went to a state park in Western Maryland, and I remember driving by a Wendy's and seeing a posting for, it was \$16.50 an hour plus a \$500 signing bonus to work at a Wendy's near Hagerstown.

And again, different now obviously than where we are now, but the crunch that people are in, I think is opening minds. If you look at the semiconductor industry, which has received billions of dollars from the Chips Act, they are trying to figure out, how are they going to fill all these roles? Because if we're going to build what six, seven semiconductor fabs in America in the next decade. Just to give you a sense of what semiconductor fab, it is the size of a city block, and it costs \$10 billion. The same dimensions as a nuclear power plant, and we're going to build seven of them. And by the way, we haven't built one since the late 80s, since a little after I was born.

And by the way, all the workers who knew how to build them are edging toward retirement. And so now if we put all this together, there's an opportunity if we can seize it. But I think you're right, we need to do, what was a luxury is now a necessity. There are models that we can use. Again, the Department of Labor, that program I mentioned has been around for decades. It should be much bigger. And we always ask for it to be much bigger, except our friends in Congress didn't always agree with us. But I think that there is an opportunity, but you're right. If we don't take that opportunity and combine these things, it's just a big problem.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

A lot of people in the audience, in person here and then watching on livestream, they're in these service programs. Do you see any examples of yes, and this is the way this works, putting those service providers together with the local government, putting them together with the federal government, as you said, all that money that's out there that's coming in through the infrastructure, bipartisan infrastructure bill is creating lots of jobs.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

I would say a couple of examples, and I'll be, I'll speak candid. No one has solved this at scale. No locality, no state, no country has solved this at scale. The closest thing you're going to see is like a Switzerland, who has solved this. Again, very, very, very different economy, very different scale, but no one in America has solved this at scale.

So in some ways we are trying to figure out how do we take islands of innovation, kind of expand them to things that are scaled. So if you look at the semiconductor industry, just to go back there, this is a place where SEMI, which is a trade association for the semiconductor industry, Shari Liss, who runs their workforce development efforts, deeply invested in apprenticeship, deeply thinking about, how do we use the right part of the U in their workforce that's going to retire before 2030? And by the way, that is a third of the semiconductor workforce. A third of the semiconductor workforce, which is the older part, is going to retire by 2030.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

Losing a lot of good knowledge.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

Critical knowledge because again, no one's built one of these in 40 years. They are creating apprenticeship programs, trying to use that knowledge to prepare the workforce for that. And by the way, thinking about those workers who are coming in, how are we supporting them through things like childcare, through things like transportation assistance, things like that. I'd say another one is in the health care space.

For those who have watched, Bloomberg Philanthropies invested a quarter billion dollars in working with 10 regions across the country, where they are creating basically health care high schools on the youth side. Where basically they'll be in class for part of the week, and on site for the other part of the week learning the industry, and hopefully if they choose, graduating into a job. What the hospitals are thinking through is, okay, we have folks who've been doing their job, whatever it is, 10, 20, 30 years. How do we think about this student's time on site by utilizing their knowledge to acclimate them to health care?

Again, small examples in New York City, in Durham, North Carolina, and Boston, and in Alabama. But those are two very different industries, but they're thinking about this same question now. If we're candid and if they were here right now, they'll tell you where they're building the plane as they fly. No one has done this at scale. And one of the things I say particularly to folks who are in this room, who are practitioners, who are leading, who are working with folks who are doing this, is folks are going to want to get it perfect. There is no perfect.

A great phrase I heard once was "Start something simple soon." Start, we don't have time for you to wait. Number one, the businesses that you work with don't have time to wait because they have [inaudible 00:17:35] to fill. But then also more broadly, that country can't wait. We don't have an American to waste, we've got to figure out how we get everybody off the economic sidelines who is there, and into economic productivity, because our economy and our future are going to depend on it.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

Do you think that programs like the federal-funded CSEP program can embrace this innovation that's going on, and then also maybe help do this? How do you think that could happen?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

I think the answer is yes, and I think it would have to, I think, embrace a couple things. One, again, thinking strategically about this workforce, what does this workforce particularly have? Not just again, as a warm body to slide into a billet, but actually, what does this part of the workforce have that it can offer uniquely? I think that's number one.

Two, I think as someone who worked at the federal level, many meetings I had were about increased flexibility. "Hey, can I use the dollars to do this? Can I use the dollars to do that?" And I think to the extent we can work more of that into it, and by the way, having people take advantage of that flexibility. There are lots of times I said, "No, no, you actually can do that thing. I don't know who told you that you couldn't," but the assumption is usually that the answer is no.

I would say lastly, and this is kind of going to be a tripartite answer is, looking at the entire panoply of skills. How do you teach folks technical skills? Hey, things they need to know right

now, the new software, the new process, the new piece of tech, how do I take advantage of those timeless skills? That leadership, that communication, all that. And then now these particular technology skills, the productivity increases that we can see for workers with the use of generative AI is massive.

And you are literally seeing workers become 2 or 3X more productive, particularly in things that involve writing, reading, generating content. And so we should not think that old workers can't do that. We actually should empower them so they can actually focus their minds on what they're best set to do, which is I actually think some of this incredible stewarding curation and teaching function that we desperately need in the workforce, particularly for workers who are in the most disadvantaged groups.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

I want to, yes-and you on what you said earlier. I think most of us don't really know what AI is capable of, or how to implement it in a business. But I see a lot of employers saying, "We're using AI now," and they're just kind of throwing it in, and workers are saying, "We're not getting trained on it." So we are at a loss here. So that is another little bit of a disconnect that is disrupting the way people are working.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

And I'll push further here. When you think about AI, as someone who sold technology previously, generally when you sell a technology as a business, you know what it does. You basically are going out there and trying to convince people that it does what you say it does.

Generative AI is different in the sense of, we actually don't totally know what it can do. Even Microsoft doesn't totally know what it can do. I'll use a quaint example. If you go to Microsoft Copilot, and basically there's ChatGPT worked into Microsoft Word, I remember this example reading in Wired Magazine. The person using it said, "Can you read this 10-page document and create me a 1-page summary?" They asked the question, they got the 1-page summary. Then they changed the question and they said, "Hey, as a friend, could you really do a detailed, clear job of creating a 1-page summary of this 10-page document?"

They got a different product. That doesn't make sense. Why would phrasing it frankly, a more personal way to a machine, make the machine put a different product? No one knows when the thing has 8 billion parameters. So right now what's key is not only are we training workers on this, but how are we actually having workers push the bounds of what it can do? The most clever companies that I've seen are actually having workers kick the tires on this and saying, "Go and just use this for six weeks and come back and tell me what it can do. Tell me where you found it most useful. Tell me where we should apply it first."

One thing I think that we've seen is if you're working at a C-suite level and you have a multi-thousand person organization, "Oh, I know I think where this will be most useful." The answer is that you actually don't. You're far from the front line, you're far from the actual actual day-to-day work being done, and the most clever business leaders that I've seen have said, "Let me put this in the hands of my workers. Let me see what they do and let them come back to me."

They have also said, "I'm going to be strategic about where I apply it. I'm not going to put AI everywhere all at once, because it doesn't do every task effectively." If you have a task that

requires 99.999% accuracy, applying AI at this very moment is not the best thing, because to actually get to that level actually costs a lot of money, a lot of time. You should use it from things like where 95% accuracy is okay. And again, that requires that intentionality, and it's going to be through those workers. And particularly I think, again, the workers that we're talking about, we're going to be able to surface those learnings and send them back up their chain so that they can be most useful to their companies and their organizations.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

That sounds like very good advice just in general, that is to ask the people who are doing the job or the people who need the assistance, how does this work?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

That's generally good advice that people in C-suites, and governments, and at times in the boards of nonprofits don't remember. The people, generally close to the problem are closest to the solution. And you have to accept that you as the leader are actually not as close as you might think you are. And for this technology, it's critical because again, we don't quite know everything it does, and that will expand over time. So again, let's trust the workers that we're talking about right now to help us figure that out.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

There was a Goldman Sachs study that was cited earlier that they believe that 300 million jobs are going to be disrupted in some way by AI, to speak of this technology and other technology. And this has been going on for decades if not centuries, and technology always changes the way we work. But you sound hopeful that we're going to figure this out. Am I right, wrong?

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

No, I am. I think it's up to us. I think there is a version of the world where this turns out badly, where a lot of workers are affected negatively. But then I think there's a world where, I call it doing it. When I was in industry, you always hear about doing more with less. Meaning, how do I get more revenue, more impact with less people, less resources? What we need to switch to is think about this as, how do we do a lot more with a lot more?

And the first a lot more is more money, more impact, exponentially more. And the second a lot more is this powerful combination of AI and people. Again, I was a teacher almost 20 years ago. That was one of my first jobs. I wish I had had generative AI, because when I think about the amount of my time I actually spent teaching, it was not as much as I wanted it to be because there was all this other stuff that I did that had to get done, but it was not that critical relationship between myself and my students.

If I had that, then, and by the way, when I think about not just people in business, but people like teachers, social workers, case workers, the amount that they do, the people who are doing the toughest jobs in our society, what they could do with those tools, how many more people could they help? That's why I'm hopeful. It's going to require intentionality. It's going to require strategy. It's going to require doing a bunch of things that we've not done at scale before. It's

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going to require humility and actually listening to the people who are going to be on the business end of this, versus thinking that we have it all figured out ourselves.

This is up to us. This is truly up to us. And when we think about the impact of this, it is bigger than your company, it's bigger than your community. This is about will my 7-year-old and my 3-year-old live in a country as prosperous, as respected as the one that I grew up in? That is how important this is. And I believe that the workers that we're talking about and the technology that we're talking about put together are actually a huge part of the solution of making that still be true.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

Chike, thank you.

Chike Aguh, Senior Advisor, Harvard's Project on Workforce

Thank you.

Ramona Schindelheim, WorkingNation Editor-in-Chief:

That was my conversation with Chike Aguh at the Equity Summit in Washington, D.C. in September. I'm Ramona Schindelheim, Editor-in-Chief of Working Nation. Thanks for listening.