

Ramona Schindelheim, WorkingNation editor-in-chief:

You're listening to Work In Progress. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Work in Progress explores the rapidly changing workplace through conversations with innovators, educators and decision makers, people with solutions to today's workforce challenges. Technology is a part of all of our lives, constantly reshaping the way we work, play and live. This week, more than 100,000 people are expected that the world's biggest tech event, the Consumer Electronics Show in Las Vegas, to get a look at what's ahead of us in 2023 and beyond. Joining me to discuss CES and the future of technology is Gary Shapiro, CEO of the Consumer Technology Association. Gary, thank you so much for joining me on Work in Progress.

Gary Shapiro, Consumer Technology Assn. CEO:

Ramona, thank you for having me. I'm honored.

Ramona Schindelheim, WorkingNation editor-in-chief:

So let's get right to it. What are some of the major themes at CES this year?

Gary Shapiro, Consumer Technology Assn. CEO:

Well, as you said, CES is the world's largest tech event and it's all focused on innovation. That always defines who we are. But for this year, for the first time, we actually do have themes, but we have partnered with the United Nations, and a partner of theirs, the World Academy of Science and Technology to focus on fundamental human securities or rights as we know them. These are rights that every human being should have and technology makes them come alive.

The right to healthcare, the right to clean air and clean water, the right to food, the right to community and involvement, the right to political choice and involvement. These are things which are fundamental to who we are as humans as you go down the Maslow hierarchy. We don't often talk about them, but in a world where we need highly skilled and expert doctors and everything else, technology is stepping in in a way to fill in the human gaps and make a difference. So what we'll see at CES, to give some examples, what does technology have to do with food?

Well, there's all sorts of ways of locally produced food that people are showing even in your own home from the little micro what you can do to what the macro, the big companies like Caterpillar and John Deere are doing with technology to produce more agriculture, to use artificial intelligence, self-driving vehicles, things like that. So you could basically get the best produce from a field and work at 24 hours a day, even if you have a shortage of human labor.

In the healthcare, it's the same story. You have a shortage of doctors. In the United States, there's actually a statutory limit on the number of people that can go to medical school. That hasn't changed in over two decades. It's a law. Yet our population has grown. We've gotten older and we're living longer and we need more healthcare. So technology is stepping in a very big way, and there's a tremendous amount of solutions being shown at CES in that.

Ramona Schindelheim, WorkingNation editor-in-chief:

To that point, very clearly, healthcare, there's already a shortage of people to fill the jobs, nurses, doctors, medical technicians. The technology that you're providing or the industry is providing is changing that. But are there ideas on how we can upskill the population to learn that technology? Is it hard?

Gary Shapiro, Consumer Technology Assn. CEO:

Well, certainly it takes a long time to be trained in certain specialties, but technology is enhancing the educational process in different ways. So one of the areas we have focused on in as an organization is white collar apprenticeships. If you take, for example, someone who served in the military or a person returned to the workforce after raising a family or someone else, it doesn't necessarily require a fancy degree. Based on experience, you could base on putting yourself with a company, and IBM has pioneered this, but other companies like Bosch and so many others have stepped up and said, "We want to do this as well."

So there's a whole range of apprenticeship programs where you actually get paid for perhaps a year and you get a guaranteed job when you're done and you're skilled and trained in so many different areas. I think that's one of the models for the future. It's gone through almost three administrations now with Obama, Trump and Biden, that they're all very supportive of it going forward on this and it's a win-win situation for everyone.

There's also other things we're doing to try to encourage people to learn. That is there's been a vision and technology that as artificial intelligence develops, it'll allow people to have personalized education. Because some people are oral learner, some people are visual, some people like rewards, some people like games, some people like recognition, we all learn differently and we have to figure out how it does. Now, while the debate may go on in public about school choice and private versus charter, I think technology can step in as it did so, I wouldn't say beautifully, but it wasn't really totally beautiful during the pandemic where kids learn remotely.

But we all know that wasn't a total success. It there's the human relationship part, which is so important. That's why actually events like ours occur, even though I'm the paid cheerleader for the technology industry and I believe in how tech has saved us during the pandemic, we also produce an event where people show up in person. When you're in-person, you get so much more information. You have the human touch, the hugs, the handshakes, the kisses, and you also have the ability to establish a relationship, develop trust, a bond. Then there's the element of serendipity, which is so important, of discovery, which you get. That's part of the educational system as well.

Ramona Schindelheim, WorkingNation editor-in-chief:

You mentioned that education is a key part of this. During the pandemic, we've done a lot of work at WorkingNation, looking at VR as one of the pieces of technology that can not only help K through 12, but even in college, anything new and exciting that you see coming in that area?

Gary Shapiro, Consumer Technology Assn. CEO:

Absolutely. We all know where we're going, getting there maybe bumpy and different and not totally as we expected, but the result will be there with VR, and that is that you have the ability to create an environment which doesn't have to be as expensive. The best example that we've been doing for a while already is the airplane cockpit. It obviously costs a lot of money to fly someone on an airplane. It's expensive, it's dangerous, especially with a beginner.

So now the training has shifted over, so much of it is VR. But it doesn't have to be that. It could be for surgery, it could be for driving, it could be for many different areas of human endeavor where you are basically learning in a very sophisticated way through machines, if you will, that are very smart and they give you the education and experience, figure out what you're doing wrong, give you the immediate feedback, correct you as opposed to how we've done things for thousands of years, where my wife

who's a surgeon would say, "You basically watch one surgery, one supervised, and then you're on your own, see one, do one and then you're out there."

But the research shows that surgeons who do a hundred surgeries are much more successful than those who do the first 10 or even the first hundred. So those kind of things, this is a life-saving technologies in so many different areas, but they also go to more mundane work. Learning is individualized. You can do it with an environment that is increasingly being created. There's so many entrepreneurs out there, there's so many people trying to do something. We even at CES have OVR, a company which is advancing virtual technology with using smell at the show, using different senses. So there's things that you would expect and things you wouldn't expect and you'll see a lot of those at CES.

Ramona Schindelheim, WorkingNation editor-in-chief:

You know mentioned your partnership with United Nations on the sustainability, ESG. I recall seeing a study from the Consumer Technology Association that many of the U.S. tech companies are actually embracing this within their own systems to try to become more... Make this part of their more long-term strategy. Am I seeing that correctly?

Gary Shapiro, Consumer Technology Assn. CEO:

Companies are embracing sustainability for multiple reasons. Number one, we're all humans and we want to leave the world better than we found it. Many of us have kids. Not only do we want to do right by our kids, but also, they're judging us. There's also a generation of, I wouldn't call them kids, people joining companies, and this is their number one priority. So there's multiple reasons and we have the capacity to do it. There's so many different ways that's done, how that's interpreted, how it affects the stock market, how things are a whole different subjects.

But certainly it's a discussion even in our own headquarters about what we do and what we focus on. Our environmental efforts are very important. One of the things we have done and will continue to do is to support Las Vegas because we know when people fly to a meeting, they're burning fuel to get there. On the other hand, we know that the average person has 29 meetings and would take them several months of flying around the world to have a lot of those meetings. So we feel pretty good about it.

But what we also do is we donate heavily to the city of Las Vegas for their environmental and sustainability efforts. The companies themselves, boy are they doing different things in different ways. We have almost all the major technology companies joining with us in an effort to talk about how to do it, how to measure it, how to get better at it. It's sustainable. But 65% of the United States technology companies have integrated ESG according to a future of work study that we did in terms of what they're doing.

Ramona Schindelheim, WorkingNation editor-in-chief:

On a different subject, we talk at WorkingNation that technology is a great place to find a good paying, family sustaining work, a good job. But we've heard a lot about tech companies laying off workers. What do you think is ahead for the industry the next year?

Gary Shapiro, Consumer Technology Assn. CEO:

I'm a little bit older. I've lived through four recessions and that's part of the natural business cycle. There's individually painful results, but they're so necessary in terms of moving our society and innovation and the free market forward. If it wasn't for that, we'd still be having a smaller country, less

prosperous, and we'd have a lot of people with horse and buggies that we were protecting their jobs. You have to be able to move forward and it's painful individually, but the reality is it's there.

In fact, even during COVID, as governments around the world were keeping businesses alive that maybe they shouldn't have been. I was at a European country recently talking with the top government official who say, "We've given all these money to these businesses that should have gone under." That is the part of capitalism that's just real. It's one that's painful, but it's so important and it's part of the American system is that people are always changing jobs and there are other opportunities.

One of the great things about our country is we are the global leader in innovation in so many areas and there's so many reasons for that. It's our culture. It's the fact that we are an immigrant culture. Most of us came from people who wanted a better life. We're the largest diverse culture in the world of any country. Diversity promotes innovation. But we also have a culture that's unique to us and maybe Canada or Israel where failure is a step towards learning, so you could start something new.

You could be laid off for your job or you could start a small business, and potential employers view that as something that's very positive. So we learn new skills. We're willing to change. We're willing to change what we're doing and we're willing even to do it later in life. I think that's an important thing. There's so many other reasons we're innovative I'd be happy to talk about. Among them, it's the cultural tradition we have. But there are jobs out there that are in great demand right now. If you're into data analytics, if you're into cybersecurity, you could get a job immediately.

There's definitely tech layoffs going on. But even in the tech industry now, there's more jobs open by the two to one ratio than there are jobs being lost. So it's just a matter of some companies rebalancing. Some companies will do well, some companies will go under, and that's part of the creative destruction. That's an important part of our innovation system.

I mean, the most important thing we could do as a nation is to have public policies which in a sense encourage that, but ease the burden of being laid off or failure, if you will, at a company, and that is to make sure you can be hired again, make sure that's out there, make sure you can get the training you need, make sure the training is relevant, make sure the community colleges and other educational institutions are partnering with the local business and industry.

I was on the board of the largest university in Virginia, George Mason University, and that was such a big part of what we focus on is getting that tech community totally integrated with the university. So we had the right courses, the right offerings. That's one of the reasons I think Amazon chose to move to Northern Virginia with its headquarters is because they understand the training and educational system in that area is just phenomenal to get the kind of skills where there's jobs that are needed for the 21st century workforce.

Ramona Schindelheim, WorkingNation editor-in-chief:

I think your point about Amazon is very well taken as well, as companies, you mentioned IBM, Google, other companies out there that are working with providers, education providers to train the workforce they need, not waiting for people to just suddenly learn how to do something. They're helping them get those skills because they know there are jobs out there that still need to be filled.

Gary Shapiro, Consumer Technology Assn. CEO:

Absolutely. I mean, the tech industry is wonderful because it's been growing for many years now. The growth forever is impossible for any industry. So there's cycles and maturity gives you the opportunity to view that historically and realize we'll get out of this cycle, we'll move forward. We have a very strong country, it's still very innovative. We're doing great things. I mean, we always see our own blemishes,

but the reality is our people are really bright. Americans, they're talented, they're innovative, they solve problems and they come from everywhere.

One of the life-changing experiences for me was to go onto an aircraft carrier overnight on an embark in the middle of the Pacific and land in an arrested landing. But see, 5,000 young Americans are working on this boat, this carrier, and they're getting along with each other, they're getting disciplined, they're doing all these, but they're problem solvers. In talking with the head of NATO a couple of weeks ago about what's going on in Russia and Ukraine and why the Russians are losing, he said, "That's a top down environment. They can't do anything unless they're told what to do. But in NATO, we kind of knew, we didn't realize how bad it was for Russia, but we try to train our people to empower them in the military to make decisions, to use their judgment."

It's the same thing I try to do with my employees and I know that tech companies do and other companies do. If you want to survive, you can't just tell everyone what to do. You have to let people do things, let people learn, even let them make mistakes as long as they're not fatal. That's what I think the CEOs that are succeeding are doing.

Ramona Schindelheim, WorkingNation editor-in-chief:

Yeah. I also believe we do have a very entrepreneurial environment and system here in the country where we encourage the small business growth. We have so many small businesses so that innovation carries through to creating new companies, new jobs. To that point too, I feel like everything is a technology company now in some way, shape or form. Even if you work in retail, you got to use technology. You have to understand it. So I think we're all exposed to it.

Gary Shapiro, Consumer Technology Assn. CEO:

Absolutely. There's no question about that. I mean, in terms of the culture, you mentioned kids with their lemonade stands. We love that here. That's what we do. We start them out very young and we encourage them to understand how you have hard work and opportunity give you the ability to succeed or to fail. We talk about business skills. We do things very well for most of our kids, not all, and we could always do better. But that's something that we will keep doing and that's important.

Certainly, the culture of companies is very important. But what we do in, and we're a nonprofit trade association, I'll never forget attending my first board meeting in the early 1980s and the discussion by all these CEOs was, "Should we make it more expensive to be at CES?" The chairman said something which was very profound and stuck to me this day is he said, "We're the biggest exhibitor and frankly cost of exhibiting is just a rounding error for us. But we always have to make the show so that anyone with an idea can basically expose it to thousands of investors, retailers, buyers, journalists like yourself and others so they have that opportunity."

That's why Shark Tank has been there for multiple years and that's why we have something called Eureka Park where we'll have over a thousand startups from around the world and they'll be showing... It'll drinking from a fire hose. Mark Cuban walks the floors of the show, as does the leaders from Best Buy and Walmart and other companies, and they discover things.

One of the things that we have to maintain I think to succeed going forward is really the way we should measure how companies are doing and what they're doing is what's best for consumers, how consumers are choosing with their time and their dollars to spend. Sadly, I think we've gotten away from that in the last couple of years in Washington where there's a focus on saying big companies should not be allowed to buy small companies. They say we've changed the standards so we're protecting existing competitors rather than doing what's best for consumers and that is now the law according to the Federal Trade

Commission, which I find just horrific frankly and totally antithetical to the free market system, which has made us so great and it's very, very dangerous.

It's something that we're speaking out on as loudly as we can because big companies are not bad. They actually do create a lot of jobs. They provide a lot of neighborhood benefit, they pay well, they do all sorts of things, but one of the things they do that's very important is they buy or they invest in or they're first customers for small companies. Big companies flood Eureka Park with their employees. Some of the major companies require all their employees to visit those small companies.

We have to make sure that people in the ivory tower of Washington understand that people only invest in companies, investors put up hard earned money to the startup because they think they're going to have an exit. Obviously, sometimes they love a relative or they're helping someone out or they believe in the cause of their the product, but it really comes down they want to return for their money. You can only get the return for money if the company goes public or if they grow organically. Both those things do happen, but the most common thing is that someone else buys them and that's the exit that the investors are looking for.

So let's not screw it up is my main message and you'll be hearing about that more and more as the year goes on, especially with the new Congress because this past Congress almost did some dangerous things, and fortunately they left without it. But we'll be going forward in 2023 focused on the fact that competition does have some hard messages. People do fail, companies do fail, but we can't throw the baby out with the bathwater. We got to make sure that big companies have their place, which they certainly do, and small companies.

The problem with Washington, if I just could add, because I'm on a roll here, is that we don't really want to make it so that only big companies can comply with all these rules and regulations. We have to make it easy for any startup. You don't have to go to the government for permission. Certainly, governments should regulate. We're not against regulation. Just say what the rules of the road are and tech companies and startups will follow them, but don't create huge barriers to entry. So a new company just requires a lot of money with a great idea to get started, making it as easy as possible to create new competitors.

Ramona Schindelheim, WorkingNation editor-in-chief:

On that note, Gary, thank you so much for sharing your thoughts on that and what you think should be ahead in this, the new year 2023.

Gary Shapiro, Consumer Technology Assn. CEO:

Thank you Ramona, and I look forward to seeing you this week at CES.

Ramona Schindelheim, WorkingNation editor-in-chief:

Exactly. I can't wait to see it. I'm going to go through Eureka Park myself, because I want to see what's going on. I hear there may be a flying car, at least the prototype.

Gary Shapiro, Consumer Technology Assn. CEO:

Oh, they'll be really cool. You will be inspired and you will come back with 50 story ideas. Even in a economic downturn, what we're going to see is we're going to see the growth of so many categories such as digital health and EV and all the different transportation alternatives. It's one of the largest car shows in the world as well with the whole ecosystem and all the new technologies that are coming, which the car companies are relying on. So many things are going on there in such a positive way.

It starts the new year with a great degree of optimism and hope and business leaders just love it because it's inspiring to other staff. Now in this age of COVID, it's even their opportunity to get to see their own employees and to have that bonding that's so important for keeping that corporate culture going. So I look forward to seeing you out there. Safe travels, have a great trip and see you in Vegas.

Ramona Schindelheim, WorkingNation editor-in-chief:

Thanks Gary. See you there. I've been speaking to Gary Shapiro, CEO of the Consumer Technology Association. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Thank you for listening and look for our reports from CES.