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BOB SAFIAN: That's Peggy Johnson, CEO of Magic Leap. She made the unusual decision to make a leap herself this year, in the midst of the pandemic, from a safe perch at Microsoft, to a one-time startup darling that’s been struggling.

I’m Bob Safian, former editor of Fast Company, founder of The Flux Group, and host of Masters of Scale: Rapid Response.

I wanted to talk to Peggy because, even in difficult times, new opportunities can emerge. But we don’t always know which ones are worth pursuing.

Peggy is betting that the accelerated tech adoption that’s occurred in 2020 will soon extend to emerging technologies like Magic Leap’s AR, citing a parallel to the mobile phone revolution she was part of as a leader at Qualcomm.

She’s also betting that the risk she’s taken is worth it. As a woman, she says, getting a CEO job is still harder than it is for men.

With Magic Leap, she hopes, she can turn that challenge – along with a tarnished brand – into something special.

[THEME MUSIC]
SAFIAN: I'm Bob Safian, and I'm here with Peggy Johnson, the CEO of Magic Leap. Peggy is coming to us from snowy Colorado, as I ask my questions from my home in New York. Peggy, thanks for joining us.

JOHNSON: Thank you, Bob. It's great to be here with you today, virtually.

SAFIAN: So when the year started, you were comfortably established as a top executive at one of the most successful tech businesses in the world, at Microsoft. At Magic Leap, meanwhile, as the pandemic came down, there was talk about bankruptcy filing. And yet you decide to leave Microsoft to move over there. What was the motivation for making this transition?

JOHNSON: Let me tell you, Bob, you're not the first one to ask me that, as you might imagine. I had an ambition to be a CEO, and I had long held it. I was 25 years at Qualcomm and then six years at Microsoft, which were amazing years. I had arguably one of the best jobs out there in the tech industry. But I really wanted to make that jump and be a CEO.

And I knew a bit about Magic Leap. I was familiar with the technology. I'd visited the factory actually a few years ago. Rony and I knew each other from conferences. And so I'd had a chance–

SAFIAN: Rony is Magic Leap’s founder.

JOHNSON: Correct. Yeah, Rony Abovitz. So I knew the technology was solid. And I had been watching the progress of the company, and they had just made the pivot to enterprise, and I felt that was the exact right move. So I decided to raise my hand very intentionally.

But it was in the middle of a pandemic, as we all know. And that, I have to say, was an odd experience to step into a CEO role having never met any of the team that I was going to be leading, having never met any of the board members that interviewed me. It was different, but we got through it.

SAFIAN: And now you’re working out of Colorado, while Magic Leap is based in Florida. So everything has been happening remote, yes?

JOHNSON: Most of it has. I've gone now three times to Florida. Mostly we are just like every other company in Florida, operating on a limited basis. And we have obviously all the right protocol in place, but to a large extent, our employees are working from home. So it didn't make sense to be there 100% of the time. Each time I go, I get to meet a few more folks and that's been wonderful.
SAFIAN: I want to dig in on Magic Leap's business and its technology. But I want to ask you first, CEO jobs for women sometimes are harder to come by. Was that a challenge or a factor for you in finding this next move, whether it was Magic Leap or anywhere else? Did you feel that there was a different hurdle that you faced?

JOHNSON: Frankly, yes. I did. I've seen it happen over my years in the technology industry – and you've probably heard other women leaders say this – women tend to be evaluated on their performance and men on their potential. And basically what that means is oftentimes there may be a male candidate and folks will say, "I think he can do it," where the female candidate they'll say, "Has she ever done this before?" And I think that's why we don't see enough women on public boards, because a lot of times the criteria is, well, we want people who've been CEOs. Well, there haven't been that many women who've been CEOs. So if that's a criteria, we're going to continue to not have very many women on public boards.

SAFIAN: I think for some people it's hard to understand exactly what Magic Leap does. Your website describes the technology as "a wearable computer that brings the physical and digital worlds together." But it's not VR and it's not AR, like on my smartphone. Can you try to encapsulate for folks in audio what that means?

JOHNSON: We make a headset and when you put it on, you still see the world around you, your physical world is still there, but we augment it with digital content – and that content can be pictures, texts, video. It can be a 3D volumetric image of somebody live who's not co-located with you, which I think is some of the real exciting use cases that we'll see with the technology going forward. But it doesn't just sit there as perhaps AR does when you view it through your smartphone. It's not just a viewer. You actually can interact with the digital content. And to do so, essentially, that headset needs to be a computer. So think of it as a computer on your eyes.

So for instance, one that Ericsson worked on recently with our headset. They do these things called Gemba walks, which is a Japanese term. It's when the manager walks the floor of a factory and looks to make improvements along the way. And the factory manager can put the headset on. And as they walk up to a piece of machinery, above the machinery in digital can be a set of characteristics: How that machine is doing, what the uptime has been, any red flags, does any sensors need to be changed? Do you need to call an expert? You can do so right from inside of the headset. So that's the sort of interaction that we think really sort of augments human potential.

SAFIAN: When I first heard about Magic Leap, this was several years ago, it raised just a ton of money. Three, three and a half billion dollars, something like that, right? And then offered relatively little, at least publicly, to show for it. And there was this kind of backlash that it's hype versus reality. As you come in knowing there's that legacy that has both positive and negative parts of it, how do you manage through the skepticism?
JOHNSON: I mean, to be honest, I haven't loved some of the headlines. And so as I came in, I wanted to help do a reset publicly of who Magic Leap is. Because I think a lot of what they have done over the last 9, 10 years or so has been missed. Before Magic Leap was in the game, I don't think people had seen anything like that: digital content, super imposed in our physical world. It's amazing the first time you see it. Because my background is in wireless, and I got to see the wireless industry evolve really from nothing to one, one and a half billion handsets shipped every year.

It's very similar to augmented reality. In the early days of wireless, we didn't know where this technology was going. Yeah, you can make a phone call maybe from your car, wouldn't that be great? Who would have expected it would have taken the place of so many devices that we once owned all wrapped up in a mobile phone of today. And I think this technology has a similar ability to really sort of reinvent the next generation of computing.

SAFIAN: And when you see where the technology that Magic Leap has today and this vision that you see for what it can be in the future, how much of that transition is about that the technology itself needs to evolve and how much of it is, like the technology is there, but we just have to adopt it and use it in a different kind of way? I mean, we've certainly seen a lot of technologies being adopted over the past year at apace that they never had been before. Where does this technology fit in that continuum between the creation and the adoption?

JOHNSON: So, I think that's a very good point, that COVID accelerated so many technologies, and it accelerated AR as well. I think AR was not on many CEO's radar even a year ago. And now we're getting incoming calls from folks saying, "Can you help us? We need to get our teams together. What can you do?" So, the technology is solid, and it's really about aligning real world business needs to the technology. You can't just build a piece of hardware and put it up for sale and say, "Come get it." You have to sit down with traditional industries and say, "Okay, what are you trying to solve here?" And then we work together. We've had an engagement with a company called Brainlab for the last couple of years, and they make 3D visualization software for the brain.

Just recently at UC Davis, where they separated some conjoined twins, they trained the surgical teams using the Brainlab software and the Magic Leap devices. So people could get a good picture of what the twins' brains look like, how they were going to go about the separation of it, which was just a powerful way to train a team.

[AD BREAK]

SAFIAN: It sounds a little bit like the earlier years of Magic Leap, maybe they got a little distracted by the consumer market, maybe because that's where the funding was. Many of the listeners here are entrepreneurs and so there is that roadmap that you go through with an organization.
JOHNSON: Yeah. I think what happened, and it's not unlike what we've seen in many startups, where you say, "Wow, I've got a great technology. Where is it best used earliest?" And you're looking for a place to point it. And I think, in the early days of Magic Leap, they were looking everywhere across consumer and enterprise, even back in the beginning. And that was challenging for the company. But it's not unlike the mobile industry. People tried all sorts of early use cases and many of them just weren't right or they weren't developed enough for them to really resonate.

And so, it's part of the process. The more challenging thing is that Magic Leap was making hardware and software. There's so many things that have to be solved all at once. They'll have a calibration machine and I'll say, "Well, who made this device for you?" "Oh, we just built it ourselves," because nobody made those devices.

And so, it's just an impressive team that unfortunately some of the headlines of the past several years, I think, overshadowed the good, innovative work that that team has done.

SAFIAN: What are the challenges of taking over from a founder?

JOHNSON: I think there can be challenges, because they have a vision that they'd like to see continued to be pursued. I have to say, my partnership with Rony has been amazing. He's still on our board and he is a creative genius, hands down. And I'm more of the enterprise-focused, commercial-focus. And so it's actually a good mix and we've worked well together. I don't know that every founder has been like that when someone else has taken over, I think we've heard some stories. It hasn't been the case here with Rony.

SAFIAN: I know a lot of your expertise and much of your higher profile, at least, successes have come through partnerships that you've helped put together for both Qualcomm and Microsoft. At a startup-like place like Magic Leap as you're describing, it sounds like there's a tendency to want to do everything yourself, as opposed to look at partnerships. Is that a kind of cultural transition that you're working through with them?

JOHNSON: It absolutely is. Yeah. I do think the company was very focused, again, because they were making hardware and software. So they were making the full stack. When you're first trying to bring a new piece of technology to light, that is a good way to go about things, because you have control of everything up and down the stack. But going forward, really, the only way we're going to scale is to partner. And again, that's a muscle I bring, as you said, from Qualcomm and from my six years at Microsoft. But you're right, I had to do a bit of cultural transformation within the company. I had a front row seat at the cultural transformation of Microsoft over the last six years and learned a lot about how to do that. It starts with listening, learning, understanding the background, and then introducing an open-mindedness to change. It's not always easy, it hasn't been without its challenges, but we're on a good path going forward.
SAFIAN: Any specific episodes that help illuminate that?

JOHNSON: Yeah, I am all about transparency. And I think in the early days of the company, because they had harnessed sort of magic in a bottle, they were very secretive about the abilities of the technology while they were developing it. But now, in where we're at on the spectrum of the growth of the company, I want to be very open both with the external community, but also with the internal community. So, I've really upped communications across the team. We have, every other week, all hands meetings, we call them the loop, every other week, ask me – AMAs associated with the all hands meetings. So any question can be teed up. And I share good news and bad news. And I've done that from day one, and I'll continue to do that. And I think the teams have appreciated that. It's helpful for them to understand the state of the company, where we're headed, the focus that we have. I repeat it every other week in front of them, our goals and our vision and our cultural values. And we want everybody to know when they come in, virtually or physically, what they should be working on that day. And we try to keep things very crisp and clear.

SAFIAN: I know you've only been there still a few months, so I know it's still early, but I'm curious, do you see any lessons from working at bigger places like Microsoft and Qualcomm that apply particularly well to an earlier stage business like Magic Leap?

JOHNSON: Well, one thing that we used to talk about as one of our leadership values at Microsoft was to create clarity. And I do think that is a discipline that I'm going to continue to hone across the company, across our leaders, that there's never any question. I think with any startup, there's a little bit of chaos at any given point, particularly when you're pivoting. Is this the right direction? No, we're going off in that direction.

And I'm trying to keep the flexibility high and the clarity high and the chaos low.

SAFIAN: You've become CEO also at a moment when there's increasing pressure on businesses to engage on social issues. Is that something you have a philosophy about?

JOHNSON: I am deeply involved in issues around diversity in tech, having been a woman in tech for over 35 years now and just seeing the challenges along the way and the good people we lost along the way, because there wasn't an environment that was inclusive. I'm a bit of an introvert, and to come into a room and to be in a meeting room, the only woman there, not super talkative, was hard for me, and likely would have washed me out early on if not for a manager I had that recognized that my form of communication was different than others.

And that's just one form of being inclusive. But we really, as a company, as an industry across the broader industries across the U.S. and the world, we all just have to be a bit
more inclusive. Otherwise, you'll lose out on some talent that could be part of the solution.

I've built a pretty diverse management team because I want that diversity of perspective, diversity of thought. I think we build a better product if we have that. So four of nine members of my management team are diverse, and it means a lot to me. And actually just being in South Florida, we've got a wonderful LatinX population at the company, almost 20%. And in COVID, I think companies have an opportunity to increase their diversity because we've realized you can work remotely. So, why not hire from everywhere? And I think people can increase their numbers just by continuing with some of the lessons we've learned from the pandemic about our ability to be productive remotely.

SAFIAN: The NASDAQ recently proposed new rules to have more diversity on boards. Do you feel like that's something that's overdue or like, “Oh, why did we even have to do this? We shouldn't need to.”?

JOHNSON: I feel both those things. NASDAQ's move, I applaud it. And I think Edina Friedman, CEO of NASDAQ, was amazing to put that proposal up and to speak about it. Companies need to realize the value of diversity. You just make better products, you offer better services, if you reflect the people that you're trying to sell to. I don't know why that is such a challenging concept for people to get their heads around. You're going to make a better product, do it for bottom line reasons.

SAFIAN: And when you're inside a big company, do people mostly recognize that, but they just can't figure out exactly how to do it? What gets in the way?

JOHNSON: You know, you have to make it a priority. So it's about having diverse slates. It's about having people who are doing the interviewing being diverse, so a diverse candidate knows they can feel comfortable at the company. It's about tracking the numbers and shining a big light on them. They're uncomfortable, and it can be maddening at times because you think you have a way to increase the numbers, and it doesn't work. And you've got to try other things. So it's hard work.

And that is something that companies need to recognize and to embrace but with the understanding it's going to make them a better company. It will affect their bottom line. They'll make better products, better services. It's hard work, but the payoff is enormous.

SAFIAN: You mentioned the changes that have happened with COVID-19 and the pandemic. How much do you worry about the external environment, COVID-19 numbers rising, job losses, political uncertainty, relative to your strategy?

JOHNSON: Well, it's interesting. Given the product that we make, my company's vision and priorities can very much be entwined with helping the world find better solutions,
both within the pandemic and then post-pandemic. I think we'll be slower to travel again. I don't know about you, but I used to fly to New York and back, cross country for a two-hour meeting. I don't think I'll be doing that anymore. There's the impact on the environment of doing that, on my time, time away from family, there's so many things that we put up with because that's the way it was done, that I think we won't do so much post pandemic. But that means that the tools that we're using to engage need to continue to improve.

I think all of the video conferencing has been wonderful. Can you imagine us getting by without it? We've been able to actually continue to run our businesses, but I think everyone would agree that that experience could be improved. I do feel that the technology that we're building can play a role in helping both with the issues during the pandemic of communicating, as well as post-pandemic.

SAFIAN: I had a guest on last week who argued that while these digital tools are convenient, they may be making us more isolated, which could undercut long-term productivity and creativity. It sounds like you see AR maybe as an antidote to that?

JOHNSON: Yeah, I think there's something about being inside of a 3D meeting that feels like a meeting again. We were in it the other day laughing at one of the guys, what they were doing. When people talk, the feeling that they're right there is very present. And that is something that is, unfortunately, really missing in all of the video conferencing we're doing today.

SAFIAN: What do you think is at stake in this moment?

JOHNSON: One of the rallying cries so often from the tech industry is, "Tech can solve it." But we have to remember there's people involved too. I think in any of the solutions, in COVID or post-COVID, we need to think about the human side of things. And when you see it in headlines – kids can't be with their friends, and family can't be together – we don't talk enough about that side of it, the emotional aspect of it, and the isolation that this pandemic has caused. And tech needs to augment what we as humans are trying to achieve – it cannot replace it.

And I think all of us need to think about that when we look for solutions going forward. It pains me to see the pain that so many people are in. It's not just jobs, which is one whole level of pain clearly, but the separation that we're all feeling has to be addressed.

SAFIAN: I've played a little bit with the Microsoft's Hololens, which sounds like it's a competitor, similar kind of technology to what you're doing at Magic Leap. Is Microsoft now one of your competition?

JOHNSON: In some way, yes. I would say in other ways, we both want the AR industry to continue to evolve, to develop, and to accelerate, and from that standpoint, we are
very symbiotic. We want the same thing, which is for this technology to be accelerated to the point where it becomes more of a day-to-day experience. So while we may compete from a hardware perspective, from a broader industry perspective we have a lot in common.

SAFIAN: And does it mean you have the same in common with people who are pursuing virtual reality?

JOHNSON: Virtual reality is a technology where you're fully occluded, so you put the device on and you enter another world. You don't see your world, and you're part of another world. That's one aspect, and super interesting for media, and for many consumer plays, I believe.

Augmented reality, there's sort of two ends of that spectrum. You have devices, for instance, your mobile phone, the Pokemon Go sort of thing, where you have digital content, you can see it as you're viewing through the phone. And then you have the higher end of that spectrum, which is all about interacting with the digital content.

And this is why the enterprise is a good starting point because they have a need to interact with data – whether you're in a factory, whether you're in an operating room, whether you're in some area of public sector – you need and want to be able to interact with your data. And this technology can allow you to do that.

I'm doing the best I can to bring that all to light.

SAFIAN: Well, Peggy, thank you so much for sharing all of your time and your thoughts and your experience with us. I really appreciate it.

JOHNSON: Thanks, Bob. Very much appreciate you having me.