GERALD JOHNSON: We have to move big, fast. Everyone can do small, fast. We have a lot of assets that we have to swing to EV. It's big, but it can still be done fast.

Our workforce is not a legacy. Our workforce is an advantage. People who do this work, I call them industrial problem-solvers and industrial athletes.

Our plans to become the most inclusive company in the world are solid. Invite the conversations that are uncomfortable, and then do the work that's also uncomfortable.

BOB SAFIAN: That's Gerald Johnson, EVP of manufacturing and sustainability at General Motors.

He was integral to GM's COVID-19 response, but that difficult task may prove simpler than the transitions that he is leading now.

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 Gerald because he is in the crosshairs of two of Corporate America’s most daunting goals: to transform GM to an all-electric vehicle future, and to stake a claim as the world’s most inclusive company.

Gerald has unique insights on what it will take to implement an EV future at scale.

He's a champion for manufacturing, and talks about moving at what he calls Hummer speed.

He's also a pastor, who brings a humanist’s touch to leading a team of thousands.

Making progress, Gerald says, requires us to embrace being uncomfortable, and learn from it.

He offers lessons that bridge ambition, optimism, and nuts-and-bolts reality.

[THEME MUSIC]

SAFIAN: I'm Bob Safian, and I'm here with Gerald Johnson, General Motors Executive Vice President of Global Manufacturing and Sustainability. Gerald, thanks for joining us.

JOHNSON: It's good to be here, Bob. Thanks for having me.
SAFIAN: So, we had Mary Barra, GM CEO, on this show in June of 2020 when the pandemic was still relatively young, and GM had been sprinting to produce ventilators, converting a plant to that purpose. And one of Mary's memorable lessons from the episode was about the speed of change and her desire to maintain and extend what she called going ventilator fast. Now, you were a part of the ventilator process. And my understanding is that since then, you've been working to move GM from ventilator speed to what you call Hummer speed. Can you explain that for us? What does Hummer speed mean?

JOHNSON: Ventilator speed was a phenomenal execution for a very worthy cause to get ventilators out into hospitals that, quite frankly, at the beginning of the pandemic, just weren't in volume and in numbers. And we were proud to play a part in that. And so we did coin the phrase, ventilator speed. Now Hummer speed, to really appreciate it, you have to be in a Hummer EV, and put it into Watts to Freedom mode, and then step on the gas and you'll understand what Hummer speed is like.

It's pushing you back in the seat. It's almost like going down the first hill of a roller coaster ride in terms of how much acceleration is in the Hummer. And the whole point is that our push towards an all EV future, we need to move from ventilator speed to Hummer speed and allow ourselves to be pushed back in the seat a little bit while we get this massive footprint that we have converted to do EV production.

SAFIAN: Many business watchers default to the assumption that bigger organizations are slower, particularly manufacturing ones with embedded facilities and processes. Is it harder to move something that's bigger and has a legacy? I mean, it is, isn't it?

JOHNSON: Of course it is. That's physics, but you can still move big, fast. That's what we mean by Hummer speed. We have to move big, fast. Everyone can do small, fast. It just doesn't take that much. But we do have to do big, fast, because we have a large car park, a large customer base, a great dealer network. We have a lot of assets that we have to swing to EV. It's big, but it can still be done fast.

SAFIAN: When you talk to people at big companies, sometimes they say, "Well, we're so big that a 2% change has a lot of impact." That's not really what you're talking about here, though.

JOHNSON: No.

SAFIAN: You're talking about moving the whole thing.

JOHNSON: We're talking about moving the entire thing. We're talking about moving something as big as General Motors, but doing it quickly. Much like the Hummer, a 9,000 pound vehicle that can accelerate from zero to 60 in three seconds. That's why Hummer
speed matters. Because that's what we're not only engineering into our products, but we're engineering into our business and our organization.

SAFIAN: Now, recently GM announced a $7 billion investment in new facilities in Michigan targeting electric vehicles, EV and batteries. Is GM playing catch up when it comes to EV?

JOHNSON: I'd say no. And let me give you this visual if I could. If you imagine this thing, we believe in an all EV future. If you imagine this thing to be a 400 meter race, right now, EVs are about 20 meters of that 400 meter. We're just getting out of the chute as an industry. That said, for us to get there, we need to design a platform that would be flexible enough to allow us to put together an entire spectrum of vehicles that match customer needs, functionality, beauty, and price points. The Ultium platform allows us to do that across our portfolio. And now we're just putting bodies and vehicles onto that platform.

SAFIAN: And so, if someone looks at something like Tesla's market valuation compared to GM, you'd say, well, they're assuming that Tesla's going to have a better end to this race. And you feel like GM has a lot of assets to be able to get ahead in this race, because we're still early on.

JOHNSON: Bob, I wouldn't dare make any guess about market dynamics around any stock: ours, Teslas, or anybody's. But, to your point, yes, I am obviously in the middle of it. And so I get to see down the road and what's coming and what's in our pipeline and what we're getting at and what we're putting out there. We are talking about bringing an entire lineup of vehicles from small SUVs to mid-size SUVs, to luxury, to large trucks and pickups. That's the spectrum that our customer base expects. And that's what we're going to deliver on over the next two to three years.

SAFIAN: There was an article in the New York Times a few weeks back, citing Amazon's commitment to electric delivery vehicles. And it noted that Amazon's needs not only exceed global capacity today, but are nowhere close to what Amazon's going to need down the road. And I guess it just makes me ask you, what does it take to bring EVs to scale so that it cannot just reach across lots of different groups, but can penetrate them really deeply?

JOHNSON: So it's an entire ecosystem that has to move and shift. Again, we believe in an all EV future. That requires of course for us to design beautiful products, put a great battery in them, give the customers the range, functionality, and beauty that they deserve. Prepare our dealer network to be able to service and support to prepare a supply base to come along with us and shift to the new component sets, to develop new software because these vehicles will have heightened software capability that allows them to be upgraded as they age.

And so we're pulling an entire ecosystem together. We are also investing in infrastructure. We invested $750 million into making charging available. So we have to
bring the whole ecosystem along to do scale and to take what we currently have in the industry of around 3.6, 3.9 million units and convert all that volume into EV.

SAFIAN: I live in New York City, and I have to say I'd love to have an electric car, but there is no place to plug that thing in. Only a handful of places, really where you can charge your vehicle today.

JOHNSON: And we're going to change that, we're going to leverage our dealer networks, which, quite frankly, cover large populations in radii because that's their footprint, and we've already supported them with EV charging investments as well. And then of course, we have an urban strategy as well, that will bring EVs to parking structures, et cetera. So we realize that not everyone will have a charger in their garage, a lot will, but you have to lay out an EV structure to make it as simple as it is to pump gas today.

SAFIAN: So I'm not going to go to a gas station to pump gas. I'm going to go to my dealer to charge up my vehicle?

JOHNSON: You'll go to a dealer-sponsored location. Now the dealers will determine where in their footprint to place these charge units, you'll have those options. You'll have parking options. Yes. But you'll have options to go and have your vehicle charged in an urban environment where, again, you can't utilize your own garage.

SAFIAN: There's a workforce element to these transitions too. We've seen some legacy organizations sort of exposed when their workforces aren't appropriately equipped or trained for a more automated tech-focused future. How do you think about reskilling and upskilling GM's workforce?

JOHNSON: So first of all, I believe that our workforce is not a legacy. Our workforce is an advantage. We have over a million years of automotive building manufacturing capability. We have to bring over 30,000 parts together in one facility. We have to make sure that we download software properly and that we automate and process these vehicles with safety and quality in mind. And we've got 45,000 people skilled at doing that in the U.S. So, bringing them along is the same as we have been in the sense that we always have a retraining when we bring a new vehicle into a plant. The EV will be likewise.

Now mind you, 80% of an EV vehicle is the same. It has doors, deck lids, seats, dash, all that componentry. We just have to introduce that 20%, which is the EV battery and battery chassis, the Ultium platform into that process. Training our people, as we've already proven, we can do with our Bolt EV and our Bolt EUV in our Orient facility today. We know how to bring that training along for the rest of our facilities when that program shows up.
SAFIAN: And if people say, "Oh, yeah, you've got a million years of experience doing things, but it's experience of doing things in old ways and not new, more automated ways." What's your response to that?

JOHNSON: It's not about doing it the old ways. It's about knowing how to do it the right ways. We have a history of standardized work that allows us to have confidence in the quality of the vehicles that we produce. We have quality performance that reinforces that point.

SAFIAN: And so GM's success in the future, isn't necessarily about recruiting new talent and different talent. It's about how you use and equip your traditional talent pool?

JOHNSON: So it's a mixture of both. For manufacturing, it's a lot of bringing our workforce along and upskilling them as we do with every program. It's always about introducing new people because we're hiring thousands of people every year to backfill or to fund our growth strategy. But also we have a heightened level of software capability and technology that we're introducing in these vehicles.

So from an engineering standpoint, we need more software engineers than we have had in the past. And then back in manufacturing, because we are automating, we're always introducing technology in our processing, we also need electromechanical engineering and technical skills added to our workforce as we go down this path. So it's a little bit of both. It's upskilling, it's some new skilling, in engineering it's bringing a whole nother wing of engineering technology into what they've done for many years.

SAFIAN: At Masters of Scale, we sometimes talk about the contrast between the world of bits and the world of atoms, the digital world and the tangible physical world, and where the two intersect can be among the trickiest areas. You work in both areas and your operations have to. What do people misunderstand about managing a manufacturing operation and the differences between manual talent and virtual talent? I'm not even sure I'm using the right words — how you would describe, sort of, the different pieces of what you're moving together.

JOHNSON: Well, for sure you can't manufacture anything virtually. It takes someone to take a piece and put it with another piece and attach it via welds or screws.

And I'll go back to ventilator speed. If we don't have people who have those skills, we don't have 30,000 ventilators going to hospitals all over the United States to save lives. Manufacturing capability in this country is ever more important. I think it became evident through this pandemic, and I'm really appreciative of the thousands of people who do this work and understand how to do this work. I call them industrial problem solvers and industrial athletes, because the work does take a certain amount of manual coordination,
but also they have to solve problems as they arise every 60 seconds, in some cases through our shops.

SAFIAN: I know you have a video series about manufacturing as a competitive advantage. Why?

JOHNSON: Manufacturing is a base skill and capability that's important to every economy, including this U.S. economy. And it's important not only when you need ventilators, but it's important when you need anything in the sense of hardware that can carry software. Software is important, don't get me wrong. But every piece of software is somewhere embedded in some piece of hardware, and someone had to manufacture that.

I think we should be proud of our ability to do that in the U.S., and we certainly are proud of our ability to do it in General Motors. That's worth talking about to me. That's exciting.

It's my hope that others will gain a better appreciation of the need and the value. But it's also my desire to be a voice for the hundred thousand global manufacturing people in my organization about the value of the work that they do.

[AD BREAK]

SAFIAN: Before the break, we heard GM's Gerald Johnson talk about planning for an all-EV future, moving at Hummer speed, and the central role of manufacturing. Now he turns to GM's goal to become the most inclusive company in the world, and what defines equitable climate action.

He also talks about openly addressing what makes us uncomfortable, how being a pastor helps him as an executive, and how being an executive helps him as a pastor.

And he shares some personal lessons about juggling multiple tasks and roles, and why he believes work-life integration is more realistic than work-life balance.

You were named an inaugural member of GM's Inclusion Advisory Board. This was in June 2020 with the goal of becoming the most inclusive company in the world. No small goals there. There have been a flurry of commitments by businesses to address systemic racism. It can be hard to pinpoint what all the talk has actually achieved so far. What's been the tangible impact of that board that you're on?

JOHNSON: One of the reasons we created the IAB, the Inclusion Advisory Board, is to make sure the actions we took in the wake of the George Floyd murder were sustainable. Sometimes some organizations will write a check, and God bless them. The check can go to do wonderful things I hope, but that's not enough because that has a
peak and a wane to it. Our IAB is designed to make sure that we continuously stay in the forefront and if you will, in the fight for diversity, equity, and inclusion. Not only inside of General Motors, which is our first responsibility, but also where we do business.

We want to affect not only our own organization, but the communities where we do business. So the IAB has directed monies that General Motors has put into the control of the IAB to fund various diversity efforts very conscientiously and intentional. It's our commitment to the long term journey of diversity, equity, and inclusion, and not the momentary emotion of one event, one moment, one check.

SAFIAN: I talked with Ken Frazier recently about the organization that he and Ken Chenault set up, OneTen. And Ken talked about how it wasn't able to reach its first year goals, though he was happy with what they did achieve. I'm curious whether you've had any disappointments or positive surprises about how the investments that the board has made have played out so far.

JOHNSON: It's still early to be honest with you, for me to judge it, but I've been surprised, happily surprised by the types of organizations that we've been able to find and support, including the OneTen effort. We are part of that as well, because we want again, be a part of something that's continuing and not just something that's momentary.

My concern, which I think is also inside your question, is: will we lose energy? Will the momentum somehow wane as a society? We also, as the IAB, talk about where we're at inside of General Motors. And we use the IAB as outside eyes and input to make sure that our plans to become the most inclusive company in the world are sound, solid, and reflect all the best ideas.

What is our strategy? How do we grow diversity inside our organization? How do we grow equity? How do we define and grow inclusion? Not to mention, we stand very proud of the fact that we have a female CEO leading our organization who's, of course, I think an icon of both diversity and great leadership.

SAFIAN: Yeah, no, having Mary there, having you there, I mean, it is a more diverse leadership than many organizations have. Internally are there things that are different than two years ago if we were having this discussion.

JOHNSON: Absolutely. The feedback from our employees about the differences, the openness with which we can discuss sometimes awkward and difficult topics, the openness in which we discuss diversity in the broadest sense.

Whether we're talking about ethnicity, race, religion, gender, all these ideas and perspectives of diversity are now bubbling up, and we can have conversations, which means we can have understanding, which means we can make intelligent change. One of the first things we did, as we began to reinitiate our focus around diversity, is we just
had listening sessions. We pulled groups of diverse people together and said, "Let's talk about it." Help us understand what it feels like to be a Black man in this environment, in this situation, given what's going on. Tell me how it feels to be part of the LGBTQ community in this environment. And so, those conversations are happening much more easily today than they did in the past. And that's one of the key differences.

But I think it also shows up in understanding. And quite frankly, it shows up in our engagement surveys where we ask our employees about their engagement, how comfortable they feel about being themselves at work. Those survey numbers are continuing to go up over the last couple years, because I think of these open conversations and the work that we're doing to make diversity a part of our priority. It's now a part of one of our behaviors in General Motors: be inclusive.

SAFIAN: Are there mistakes or misunderstandings that businesses or business leaders make when they're addressing diversity, equity, and inclusion? I mean, there are a lot of business people who are listening here. So, is there advice or lessons that you would point them towards or away from?

JOHNSON: Sure. First thing is, of course there's mistakes, and you should be comfortable with the fact that there are. If you're not making mistakes, you're not making progress. This is supposed to be awkward and uncomfortable. Neurologists tell us that when we're doing something awkward and uncomfortable is when we're learning the most. We have a lot to learn in this space. So, we have to be uncomfortable, and we have to be awkward, and we have to challenge and question things that we maybe once walked by and ignored, or didn't even take note of because we didn't realize that that statement had microaggressions attached to it, or that that statement was offensive or exclusive in some form or fashion. These are the things that I would encourage business leaders to invite the conversations that are uncomfortable, and then do the work that's also uncomfortable, because that's how we make progress.

SAFIAN: None of us like being uncomfortable, but business leaders tend to shy away from it, sometimes because it makes them feel vulnerable.

JOHNSON: I don't think it's just business leaders. I think it's people. Whether we're talking at whatever level of the organization in whatever role, it's a topic that's uncomfortable sometimes, if you haven't had the conversation before. Imagine, I don't know if you have children, but the first time you want to talk to your children about sex, it's uncomfortable. You haven't had those conversations, you avoided them until you couldn't, and then you had to have them. And so, this is one of those times where we have to have conversations around diversity. We have to have conversations around equity and inclusion. And what does that mean to those who felt excluded, and how do we bring everyone in so that we can get the benefit of an inclusive, collaborative, engaged workforce doing great things for our customers?
SAFIAN: GM created a $50 million climate equity fund.

JOHNSON: Yeah.

SAFIAN: Is that connecting inclusiveness and sustainability, or is that a separate area?

JOHNSON: You nailed it on the head, Bob. That is connecting inclusivity with sustainability. The fund was set up so that we could start having conversations about how we don't move to an EV future and leave certain communities behind. Your early question about living in an urban environment: how do you charge a vehicle? It's very different from living in a suburb where you have a garage to do it in. We didn't want to leave segments of our communities behind. Our statement is, everyone in. EV, everyone in. Because we want everyone to go on this journey, and we don't want to leave urban communities behind, or communities of color, which tend to also coincide with urban communities, behind in this whole EV future that we're creating.

SAFIAN: And so, this is when you say equitable climate action, that's what you're referring to.

JOHNSON: That's what we're talking about, making sure everyone can go on this journey with us, and everyone can take advantage of the EV future, which is a great future from a sustainability standpoint and from a cost of ownership standpoint. Everyone should be able to benefit from the product portfolio that General Motors is putting together. And we want to make sure the infrastructure's there, again, for everyone to participate.

SAFIAN: I know that in early 2021 GM announced plans to be carbon neutral in global productions and emissions by 2040, 100% zero tailpipe emissions for new light-duty vehicles by 2035. I hope I have those numbers right.

JOHNSON: In the U.S.

SAFIAN: In the U.S., okay. At many organizations, leaders making ambitious carbon pledges like this will be long gone by the goal dates. For GM, you're talking about 15 to 20 years from now. How do you institutionalize these priorities in a way that don't lose steam or get sidetracked, particularly when tough financial moments come down the road, because they always do come?

JOHNSON: So business leaders of the future will make business decisions of the future. Our horizon is always 10 years out and beyond when we're talking as a leadership team at General Motors. And so, many of the actions we put in place now are the actions that are going to actually set the stage for the next 10 to 15 years.
We have a four-year horizon on the vehicle pipeline from design ideas to actually being out in the public. So, we're already in the pipeline for vehicles that are going to show up in 2025 and 2026. And the architecture and converting my footprint, the manufacturing footprint, to be EV capable are all things that will be an advantage to those that follow us over the next two decades as we go to 2035 and 2040, when we change the entire footprint and make the entire footprint EV capable, and we're doing that in this decade, quite frankly, I don't think that's a reversible trend at all.

SAFIAN: The emphasis on EV versus hydrogen vehicles or some other kind of combustion engine at some point, that will come if and when those technologies become mature enough?

JOHNSON: We're always still working on the next technology. That's being responsible. And so, hydrogen fuel has its place somewhere in the future as well. I don't believe the last battery chemistry technology is with us yet. So, there's still more to come. You have to stay at that edge so that you can see it and adapt it. It's not EV and done. It's EV now. It's EV and AV. It's hydrogen fuel cells. It's other things that are yet to come.

SAFIAN: I'm reflecting, as we've covered all this ground already, manufacturing processes, and EV, and sustainability, and inclusion, you got a big portfolio. You've also got, if I have this right, seven kids, and you're pastor to a congregation, leading a church, how do you balance your time across all of these needs and interests?

JOHNSON: I don't balance, I integrate. I only have one calendar. I only have one life. There's only one me. I have to integrate family, work, church, and other responsibilities. Most importantly, I have a great team. I have a great team in General Motors, and I have a great team at home with my wife, Lynn, and my kids. It's always something going on. But it's really fantastic, because I hope it keeps me young, but it also just keeps me energized. I used to kid people, I drank more coffee coming home to face my seven kids than going to work in the morning.

They're all out of the house now, but that energy still is here. And now, I just put that energy into the congregation that I serve, or other initiatives that I'm a part of. One of the most satisfying things that I get to do is I get to participate in a program that General Motors support called Tutor Mate. And that's where I get to sit down once a week with a second grader and help them learn to read. So, my greatest fun right now is teaching young Sage, who's my student right now, how to read.

SAFIAN: I'm curious, how does being a pastor help you be a better executive, and how does being an executive help you be a better pastor?

JOHNSON: Bob, great question because they do help each other, by the way. It's really simple. One of the things that we talk about at our church, a motto if you will, is: love God, love others, and love yourself. If you do that, whether it's in a church environment
or just in a community setting, or at work, it's still the same thing. We don't use words like that at work. You know, I don't run up and say, "Hey, Bob, I love you," at work. I have said it at work, but that's not the norm. But in my decision making, I have to reflect my care and concern for you.

So my team, we serve about a hundred thousand manufacturing people around the globe. I often remind my leadership team to remember that any day we wake up, if we make a dumb decision, it could affect the livelihood and wellbeing of a thousand people somewhere. And some lady is working on loading steering columns into a vehicle today, who doesn't realize that I made a decision that three years from now is going to cost her. You have to carry that responsibility, and if you carry it well, that's an expression of love. So that helps me both ways.

Now from an executive standpoint, yeah, there's some things quite frankly, in a church environment, you need to have better organization. You need to have better coordination and execution, and all those things come to bear the other way as well. So again, it's an integration that I'm glad to participate in and allow both to flow and support each other.

SAFIAN: So what's at stake for GM right now?

JOHNSON: We have a huge assignment, as we've discussed. We have a vision of the future. We know that and believe in, first of all, the science of climate change. We've set the course for an all electric future for our organization. We are designing and engineering and already starting to produce the vehicles that represent the first evidence of that course that we put in place.

We have more facilities that have to make that turn and more people have to make that turn as well. Right now, we're in for some what looks like a moment of uncertainty, but it's really just a moment of inflection. I think as we start to see the Hummer, the LYRIQ, the Chevy Equinox come out, the Chevy EV Silverado, the GMC Sierra. As we see this product line, I think everything will start to just, by its own momentum, begin to take shape and be clear for everyone to see. Right now our work is to help people see what they can't see yet.

SAFIAN: Does it matter if GM isn't the biggest automaker? How important is that position, that badge of being the largest?

JOHNSON: The biggest is not a goal. The biggest is an outcome. Our size is just a recognition from our customers that they appreciate and value what we do and what we provide. It's not the overarching beacon. It's not a part of our mission statement or our vision statement. Our vision says zero-zero-zero. It doesn't say anything about being the biggest. It says about creating an environment or a community or society that doesn't have crashes, doesn't have emissions, and doesn't have congestion. Doesn't say about
the biggest. Biggest is something that customers determine, and we allow them to vote with their feet and with their dollars and when they show up in our dealers to pick up our products.

SAFIAN: If they're not voting that way, is that disconcerting?

JOHNSON: It would be, but we would then have to adapt and find out why people aren't voting, coming to our dealers, and picking up our products. I'm not concerned about it. I see the future, and I get to look behind the curtain a little more and all the information and everything that we're looking at tells us customers are going to appreciate what we do, and they're going to vote, and we'll be there to provide them with the vehicles that they need.

SAFIAN: This has been great, Gerald. Is there anything that we haven't talked about that we should have?

JOHNSON: We know that we have a responsibility, as General Motors, to be a contributor and advocate for climate change, for EV as a part of that solution, for diversity, equity, inclusion, for everything that people look at that big General Motors emblem.

We carry that responsibility and the responsibility of all those that are connected to it, all the stakeholders. Customers for sure. Our employees and our workforces, absolutely. Our stockholders as well. Everyone has a stake in that, and I just want everyone to realize, we understand it. We carry that proudly but also humbly, and we're going to carry that into an all EV future.

SAFIAN: Well, Gerald, thank you so much for doing this. I really appreciate it.

JOHNSON: Enjoyed the conversation with you, Bob. Thank you.