



# The State of Automotive in 2023

Webinar hosted by Reuters with Accenture and SAP

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**Paul Bergamini** [00:00:04] Hey. Good morning, everyone. Quickly allow everyone of the attendees to go into the session today. Firstly, welcome to our automotive campfire conversation brought to you by SAP and Accenture. I'm Paul Bettany from Reuters event. I'll be the moderator for today's session, which is entitled, "The Future of Automotive in 2023". Before we kind of kick off, there are a few housekeeping items before I hand over to Accenture. We encourage questions. Just enter through the Q&A box, which should be at the bottom of the screen. I'll make sure to put through as many as we have time for the panelists. Secondly, the recording of today's session will be made available on the link to join the webinar today. That should be ready on there within the next day or two. If you have any issues with that, please email me directly. With that, I want to introduce you to two presenters today... Bill Newman who is the industry executive advisor for SAP in North America, along with Jim Surge is the Managing Director for SAP Automotive and Industrial at Accenture. Bill and Jim will be sharing a perspective on how the unprecedented disruptions in 2022 from supply

chain perspective and the changes we're likely to see in 2023. With that in mind, over to you Bill.

**Bill Newman** [00:01:21] Hey, thanks very much, Paul. And hello, Jim. Thanks for joining me today for our campfire conversation. It seems appropriate, given our recent work with the Reuters automotive event and other industry events with our client conversations over the past month or so. And so, it's really great to have you here to help me unpack all of that because there is sure a lot going on.

**Jim Sourges** [00:01:46] Hey, Bill. I'm glad to be here with you, Paul. Today, as we sit around this virtual campfire, you know, making some s'mores and maybe some hard cider later. But in all seriousness, there is a lot going on in the industry that we love to serve. I think as we head into 2023, we're going to continue to see accelerated change really are around what's going on around e-mobility sustainability and customer experience. Let's not forget that which is going to put even more pressure on supply chains. I think that's what we picked up at the event that we co-hosted a couple of weeks back.

**Bill Newman** [00:02:22] Yeah, for sure. I agree with all of that. So Jim, let's dive in. When we were in Detroit, we heard from a number of executives that I think both the brand and the supplier level, and it seemed to me, at least based on those conversations and others, that 2023 may be another challenging year for supply demand, balance, component shortages, even that pesky "I" word, inflationary pressures. Right. Particularly around the energy sector with the ongoing conflict in Ukraine impacting Europe as we head into winter. What I see here in North America, I think it's safe to say that supply chain issues will be with us until we decouple some of those broad offshoring networks, build capacity in region and rebuild many of those networks and, you know, really shovels in the ground building new infrastructure. So, Jim, what should OEMs and suppliers do first to prepare for proper execution of those new networks that are in transition and to optimize vehicle supply and demand in such a fragile supply chain to protect their margins?

**Jim Sourses** [00:03:34] Yeah, I think, Bill, I think you hit on it. You know, I think I think at Accenture, one of the things we see is we think we're in the early phases of what we're kind of coining, you know, the supply chain and manufacturing reinvention in automotive. And really, if you think about next year, demand's forecasted to remain quite strong. Thus, more focus again is going to be on the supply side, which, as you indicated, you know, people smarter than us kind of predict they're going to go on until 2024, which not only is going to be on the semiconductor and chip side, but it's also going to impact batteries in rare earth metals, steel and some even just say tires given energy impacts on the chem industry. And so when you start thinking about this re-embraced, embracing the reinvention, so to speak. I think it's around the topic of agility, which really is how are we going to drive better ability to sense and respond to these changes in our supply chain? And it's going to have to happen on both the vehicles supply and the demand side, but I think we'll see more focus on supply in the coming years. So if I think about what we heard at the Reuters event, right, it kind of netted out. It was probably like three capabilities, if I distilled it, Bill, that need to continue to be matured and bolstered. If we're going to try to protect margins going down one, it's going to be around how do I go back to the old thing of how do I integrate my order to delivery processes specifically on the planning

and execution side? So I see a lot of clients where they're doing work around different forecasting methods, whether it's on demand or supply. But we need to link it up to the order management logistics piece. There's another set of dimensions which is all around data, right? And the data led transformation, which is the granularity of how we plan product in this industry. Right. Some folks are still do it at a series level. What we're seeing a lot of headway around model option trend and detailed market analysis, which then says at the end of the day, how do we put in the capability really to do? What we used to talk about is what if an exception-based planning by linking up the network? You know, to me, one of the interesting side conversations from some of the executives that believe that, you know, the supply shortage is going to continue was if we start fixing supply, what we see these days supply increase. Right. And, you know, a lot of folks said we're operating too low today. We need to get it back to maybe plus 2 million mark or something. But their concern was, we hope some don't go chase the demand that gets us back into the incentive era that we once lived in. So we'll kind of give a little wait and see and see how that goes.

**Bill Newman** [00:06:27] Yeah, for sure. I mean, I think it's easy to see that it is a balance and there are healthy margins right now in the space. So, you know what? What do you do to try to keep the best of keep the best of what we have now by still rebalancing and getting something to that's more manageable? Jim, I think one of the areas if we kind of dove a little deeper into categories is, is around chips. And I guess we we'd be remiss not to bring that up in this conversation. Right. So, you know, it does seem like the new normal, you know, while the semiconductor industry is certainly investing heavily in ramping up manufacturing capacity, a lot of challenges we see are also due to kind of that point to point connections and transactional nature of supply chains within high tech and tech related automotive spaces. But this extends to other components and commodities. I mean, you mentioned even rare earth metals a moment ago. I spoke earlier this year with the Center of Automotive Research, and we discussed the importance of leveraging those digital signals and data, kind of what you were alluding to a moment ago, and even bringing those logistics networks in-house to reduce errors and complexities impacting third party logistics companies. Jim, with all of that, how can brands and

suppliers leverage data more overtly, let's say, in the creation of a new and resilient supply network?

**Jim Sorges** [00:07:58] Yeah, we're no longer just going to be able to absorb every interruption. So we're going to have to be able to figure out how to manage it, Bill. And I think it ties into the whole resiliency and business continuity kind of topic. We heard from the executives in Detroit. You know, you use that word resiliency. And traditionally we would have all sat here and says, wow, that means we're going to stockpile, we're going to put more buffer stock in. Maybe we'll take back in some of the work that we've kind of put out in the tier half or we've outsourced, so to speak, on those value out of processes, you know, revert back to dual suppliers and every one of those actions increases cost, right. If not managed. So you have that on the one side and then we have the customer expectation on the other where we've seen the content and the product and we see folks now realizing maybe I have to do a little better job on next best match on that vehicle to kind of give the consumer a little more choice in that. Right. And, you know, I think I think at the end, you know, the new norm we're going to go into if we're really going to try to protect margins, is we have to reimagine what resiliency means for this industry. And you hit on it. It's a data led issue that really we have to focus on. How do we absorb, adapt and recover from these impacts. Right. And be mindful of the financial impact. And so a couple examples come to mind. One of the things we've done in the past year or so with MIT is thinking about everything from a digital network and network. But one of the things there was around looking at stress testing and how do you look at and come up with what your time to survive, your time to recover and your performance impact. That just gives you a sense of where your issues are. But more importantly, that same digital twin, let's call it right, can use it for a couple of things. Now becomes this intelligent visibility a.k.a. your control tower to start seeing where things are and be able to react to it. And the other one is gives us the ability to do some what if planning that historically with our legacy systems in that so hard to do and it's why everybody's up in Excel, right?

**Bill Newman** [00:10:18] Yeah.

**Jim Sorges** [00:10:20] So I think that's kind of a thing. And I think that's the power now with technology. Now we're at that age where 20 years

ago we couldn't do it. We can now. And I think on the agility, there still will be a couple of things that we'll be looking at right on flexibility. We'll go back and look at some of the procurement stuff. It's basic blocking and tackling that will need to look at the logistic networks. Let's just not talk about material, but let's think about how we've got impact that on logistics. Right. And then lastly, it's just. The order to deliver a piece of how we're going to diversify the production, which means the demand sensing balance in my mind.

**Bill Newman** [00:10:58] You know, Jim, before we leave this topic, I just want to share anecdotally a not so funny story, but something that we're seeing. I'd love to hear your comments and thoughts on it. So we were speaking with one of our customers and the heavy truck space and they just basically flat out told me that they they can't trust the three people anymore. And let's just say we love all of our customers in the transportation sector, don't get me wrong. But it's so challenging right now that you get a signal from your three people and, you know, the data signal that they have that your container's on the dock in Shanghai and then three days later, it shows up in the Port of Los Angeles. And now you've constrained and you've compressed your inbound supply due to your logistics network. So I think your point of threading all of that together is spot on. I'll also share with you I love the idea of next best match. We have a nephew who's buying a new truck. One of our great customers is not going to name them here, but had to go with the 20 inch wheels versus the 18 inch wheels. Now, he wasn't originally going to pay the extra 400 bucks for the nicer wheels, but he wants this truck. So he's taking that now and he's going to pay the extra margin because it's everything that he wanted. So props to the dealer because he was able to find the actual truck that he wanted and maybe they'll come to terms on splitting the difference on the wheel cost. But that's just kind of the world we live in. And oh, by the way, he did put a cash deposit down on the truck. Right. So yeah, I think you hit on some really great topics just before we leave that. Have you seen any other examples of that or comments anecdotally on anything to that nature?

**Jim Sorges** [00:12:45] Well, I can just pile on to what you were saying. You're living here in South Florida. You know, we're still doing the cleanup from Hurricane Ian. And I think we lost like 50, 70,000 vehicles down here. Right. So if you think about

a surge in sales the last month down here is the compromise and being able to look for next best match and thinking about that from that lens, you know, rings loud in our household given we lost two cars. So like I was living the experience as we talk.

**Bill Newman** [00:13:13] Yeah. And I do. I had some good news for listeners. Jim did find at least one car before the Reuters automotive event, and I believe you found a second finally. Is that correct?

**Jim Sorges** [00:13:24] We're working on it. So if any right out there, please bring me afterwards. I can use it.

**Bill Newman** [00:13:29] All right? Right, good. Very good. All right. Well, let's move on to our next topic and sustainability. So when we talk about business networks, particularly around that supply and demand, we do hear sustainability across the sourcing landscape as a growing topic of importance. Next year, we have phased in volumes across the EU and California, right around the sale of electrified vehicles. As we move to 2030 and 2035 targets are more daunting. However, though, could be the reporting requirements from the U.S. Securities and Exchange Commission around scope one and two requirements and even scope three if that element. So how I make how I how I my supply chain and then how do my customers impact in terms of footprint carbon footprint in the use of my vehicle being that pesky scope three. So even if that scope three element is not withdrawn during the oncoming comment period, there's still going to be some lift in terms of compliance reporting as well out of Europe. The ISG, the German Supply Chain Act, is another. All of these regulatory measures contain the potential for fairly severe revenue-based penalties. And by the way, for you and for your listeners, Jim, I am not going to try to pronounce the full statement of our case in Germany. My German is not that good. So we're not we're not going to try that. But we did come back to it, we did speak at the Reuters automotive event on this topic of sustainability recently in Detroit, and I wonder if you could share some of those findings and feedback from your side to our guests and other customers who have shared with us on the topic.

**Jim Sorges** [00:15:18] And I'm not going to touch the German speaking. You work for SAP, so that's in your camp. I, I have a tough time speaking English some days, but when I think about the

sustainability thing, I think the thing that strikes me is I love the quote from your CEO, Christine Klein. I think you said something I'm paraphrasing, you know, to make sustainability profitable and profitability sustainable without sacrificing one for the other. And I think that's kind of an interesting take on where we are with sustainability. One of the takeaways from the Reuters event, and I'm not trying to be confrontational but was there seemed to be a little conflict or contention, specifically, or I'm going to look around the timing to obtain stated objectives and goals for sustainability versus what we're trying to do for penetration on Bev product and scalability of Bev and at the center of this thing and it was interesting talking to folks seems to be at the battery production, whether we're talking about capacity availability, what type of battery we're going to do, you know, lithium ion phosphate or we, you know, nickel and cobalt in the, you know, the whole premise that the front end mining and transforming those metals goes against our sustainability targets, whereas the life cycle studies of, you know, in use we're going to reap them, you know, post and in use, right? And so where that potential conflict is around as Bev ramps up on production. Are we going to use more energy to produce more emissions, so to speak? That means those objectives might have to maybe get realigned. From a timing perspective, I don't think that's going to mean sustainability takes a backseat by any means. But as inflationary pressures continue to ramp up, companies are going to have to be forced. Where do I make investment dollars? Is it going to be around my product or is it around compliance? And you and I have been with the industry a long time. So as a product, lead industry will do compliance when we have to move in, sometimes do them and pay the penalty. But we're going to have to look at that. So what does that mean to supply chains? I think is really where it goes. You know, so beyond the power train itself, we're going to start looking at more people taking advantage of how do I use sustainability to also double click on my cost goals, right? Whether it's around energy consumption, rationalization, the type of materials I'm going to look at, lifecycle management, you know, we're going to go back to recycle kind of kind of concept man, pick up a different thing. And I think that's kind of where we're all going to go, which means we'll still need to make investments, data and managing that is at the core of this. Go back to your data comment earlier, Bill, and I think that's kind of, you know, what we're trying to grasp

with, you know, short of just reporting. I mean, you've talked to some other folks on this bill. I mean, what else did you glean from that conversation?

**Bill Newman** [00:18:21] Well, I heard a really great quote just last week when I was with some executives in the heavy equipment space. And they brought up one of the presenters, brought up really great point. And that's you can have you can have ESG without being sustainable, but you can't be sustainable without having ESG, right? Because there's a certain element of structure around compliance and ESG products that allow you to track and monitor where you're going with your sustainability efforts. Yeah, I would also I would also submit that there's and again, I'm for viewers outside of the United States, apologies, but we have a lot of things that are hitting all at once. And so not necessarily will knits EPA and FCC requirements necessarily line up to drive the outcome-based results. In my opinion that I think we're looking for when you have tailpipe emissions that don't give pause or concern, Jim, to the topic you brought up about how we mineral these mine, these heavy metals that are used. And also if there is no element on the back side to move to a more carbon neutral or even carbon free portfolio in terms of electricity for consumption. And we're at a point where we just can't throw the baby out with the bath water. We have growing energy needs. We're going to have to keep producing energy from a lot of different factors. I mean, and even geopolitical risks with the situation in Ukraine really having people second guessing, particularly in France and Germany, why those nuclear power plants were getting decommissioned, you know, that that might have been too soon to actually account for some of these unforeseen risk events of geopolitical and weather nature. So I think there's a lot in the soup. I think that there's a lot coming at us. Fortunately, it'll be more incremental. But for companies, car companies and we you and Jim, you and I spoke to a number of brands at Reuters. They're there. They're opting into the portfolio shift because frankly, they just want to stay in market in places like California and EU. So they will comply right. From that perspective, they will shift their portfolio to product. But again, at the end of the day, are those outcome-based results. What we need from not only a business commitment, but also from a societal goal, I guess. That would be my one of the questions I would have as we go into next year.

**Jim Sources** [00:21:02] Yeah, for sure. I think. I think the thing is, we also see us everybody's kind of maybe coming out a little different point in the value chain of where they're putting the impetus, realizing reporting broadly needs to be there. But it reminds us of the industry we're in. I mean, this is a true value chain from upfront, a product design through end of life and beyond. Right. That it's going to take us more time to get there. But that's what I kind of said, the conflict of the timing for sure.

**Bill Newman** [00:21:31] Well, these are some great insights and definitely require new capabilities. And I think on behalf of SJP and Accenture, we're both very eager, interested to partner with all of our customers and throughout the ecosystem to understand where we go next. So Jim, as the campfire begins to dwindle, that a little bit and I do want to get to some of the Q&A that we have that's starting to build out there. Let's just spend a few minutes thinking about next year, 2023 already. I mean, here we are. It's the U.S. Thanksgiving holiday week. It's at the time of this recording. Pretty, pretty amazing that the year has gone by so quickly. Let's make a few bold predictions. Let's go out on that campfire log and see what we based on what we talked about. I'll go ahead and go first. As I think we mentioned before, I think supply demand challenges will persist through next year. I believe the industry will work to restore capabilities across many categories. Right. On the upside, I think you alluded to earlier, Jim, is that this will, in effect, rebalance available inventories to demand to a level including the new phenomenon of purchasing those vehicles with the 8 to 12 months lead time with cash deposits. So thank goodness for consumers everywhere who still are able to do that. I think also to somebody, you know, somebody no one would have predicted that for sure as a part of the pre-pandemic time frame but now it's commonplace also concierge and creating demand with new make and deliver processes. Again, these are these are things we never would have imagined before the pandemic. But as we start to bring our service levels up and decouple these regional constraints, I think that's really going to be some of the things to to watch and keys to excellence as we move into 2023, at least from my side. Jim What do you see?

**Jim Sources** [00:23:32] Me I can't make bold predictions, Bill. I won't even do it for the game on Saturday. But you know, I think from a macro picture, the one that, you know, I just can't play

back, the conversation at the event was around days supply. And if in fact supply starts to continue to trend down as it's been so supply constraints. Right. I think we'll end somewhere you know, back end and next year we'll see plus 2 million vehicles and day supply, which is, if you think about it, it's almost a doubling of where we were last year. Right. I think we'll get there, which then says, aha, what would be the double click data points we might see. And so if I put four underneath that one is in the spirit of sustainability, we're likely to see, you know, SUV inventory likely to be the highest out of the out of the, you know, the fit out there in the market. And, you know, I always say so much for green, but as consumers, we still like to buy them. Inventories on upper end trim packages might peak out and hit a plateau where we've been putting our constrained commodities. Where do we put them? Is it on lower end? Things are all upper end trim towards the back end. We might see that particularly around chip issues, consumer compromise hopefully decreases as availability increases or less likely, whether it's on trim option colors, wheels containing items, which means there's going to be more pressure on order to delivery. I think, you know, at some point if we get back the thing we used to talk about 20 years ago, Moore's wrong. Well, we get the troop build to order in the North America market. Right. And we're seeing basic beginning blocks, whether people say they're going there, but the capabilities need to be there. And I think lastly, the brand loyalty may take a hit if supply goes back up. But I'm talking about the dealer experience and compromise those consumers went through, let alone any market adjustments they paid on top of MSRP. Consumers have a short mindset, and so at the end of the day, what does that really mean for capabilities? That gets back in my mind, doubling down on agility and resiliency topics. We're going to have to make sure we keep linking up the man in the supply. And it's really the integrated planning and execution, in my mind, is where we need to keep putting a focus for next year.

**Bill Newman** [00:26:07] Yeah. These are these are great insights. Paul, before we jump into Q&A, I just want to call out one of the questions in the chat I'm writing. He's asking about interest rates and car sales. Really, they're going to increase next year. And I'll just say what I'm typing in. I'm like, believe it or not, forecast show moderate light passenger vehicle sales increases. Here's to the consumer. So, on that note, Paul, over to you to help us moderate the the rest of the Q&A for today.

And thanks, everybody, for your time and listening to some really great questions in the in the Q&A.

**Paul Bergamini** [00:26:44] Yes, some great insights there, guys. And we're. Yeah. What I'm going to do with a question, I'm going to kind of start from the questions that came first through and then kind of work our way through those and time order. If we got to get to your question, I'll be more than happy to kind of forward on any questions we don't get to do over here. I'm sure I'll be happy to kind of get back to you on that. So, I think the first question is a question for Jim. What actions are you or have you seen companies take to better sense and respond to balance of supply and demand?

**Jim Sources** [00:27:18] That's an interesting one. I always say it's a little bit of my Back to the Future experience. At the heart of it, it's getting back to looking at some enablement to do a better job of doing, you know, sales and out planning and looking at sales and execution. And so at the heart of it really set up the technology. We're seeing companies start to realize the, you know, the integrated nature of the processes and truly either put the transformation program around it to drive it from a cross-functional nature at the heart. As Bill alluded to earlier, it's around the data and also realizing we need to sit there and make sure we're using the same planning data, whether it's vehicle taxonomy, description volumes, mix rates, etc., to kind of do that. So we understand the plan. I see folks really putting a lot of energy on the process, technology and data, and some have also taken the organization aspect and started to realign around vehicle planning concepts once again. So a lot of action in the industry. Back on this topic.

**Bill Newman** [00:28:28] If I can just add, one of the things that we're also seeing is this concept of threading business networks. So from source from to your suppliers. So Jim, the supply demand process for the parts 2 to 2, the vehicle delivery and the portfolio planning that you mentioned. And then also on the logistics side, I mean, here in the U.S., we may be facing a rail strike in the next two weeks before the Christmas holiday and that that could really seriously impact the movement of finished vehicles and even parts. So we're all kind of hoping here that that gets handled. But, you know, again, another one of these odd risk events coming out of the pandemic and into

kind of this new normal that companies who don't have the ability to thread those networks together using data really stand a disadvantage.

**Jim Sorges** [00:29:21] Yeah, a Paul maybe was one pile-on. You know I think this is public domain. So it happened on it we presented out at Sapphire but between, you know SAP, Accenture and our client, Toyota is a great example. What they're doing in this space around leveraging the SAP integrated business planning toolset to help start doing demand and supply balance. So just a case study that was done at Sapphire this year, so could share that.

**Paul Bergamini** [00:29:48] It's definitely I think I think the audience would love that. We'd love to see more of that. So next question is for you, Bill and our attendees asked, what are some of the key capabilities that are needed for supply chain become more agile? What actions and capabilities should be kind of companies to address?

**Bill Newman** [00:30:07] Yeah. Well, I think we kind of this is a double click on what Jim, you and I have been talking about throughout our conversation. So first of all, really props to all of those, you know, supply and demand planning professionals that have had to reshape their forecast daily, hourly, every 15 minutes using clipboards, you know, using spreadsheets. So really having a live enterprise view of that not only is much more effective in a company planning, but also, frankly, has created a much healthier quality of life for all those supply demand planning professionals. So, again, much, much credit and respect to everybody in that in that field of discipline. So I think just having that view and having an enterprise view, not a plant based or a line based view. Lots of good tools out there to do plant-based planning. But again, they have a tendency to crumple when there are a number of impacts to demand shape, signals, re forecasting. And you know, we're not in that age anymore where you can run ERP once a day even coming into normal times. Right. Because now you're able to do things like make a profit right in, you're in and try to build some of the margin that Jim you were talking about needing to protect. So I think those are all really critical. And again, getting more to an intelligent, data driven platform both for planning and execution, I think is key to operational excellence moving forward.

**Paul Bergamini** [00:31:55] Jim, did you want to rethink that point?

**Jim Sorges** [00:31:56] No. As I was listening to Bill and I just think about clients I get the pleasure of working with. Right. It seems to be you consulting. We like to do these buzzwords, right? The digital twin. I just love this man doing this so long and everything. See, back in the day now we put digital in front of it. But what Bill said something that really struck me, it's how do we make sure from a supply chain planning it's the network, it's the node-based stuff that links up what Bill said. It's the consumer, it's the plant, it's the logistics network, it's our suppliers, right? And having a representation. So when something goes awry, we have the ability to react with that. And at the end of the day, that's linking that with the data. And to me that's like the core capability for any of these things we talk about, whether it's, you know, control tower sensing and responding versus going after point solutions and optimizing the heck out of how can I suggest orders to the dealers or the customer, right, if I can't execute on it? So what? I think that's like an underlying foundational capability that we got to continue to mature.

**Paul Bergamini** [00:33:05] Okay. And the next question is something that actually came up a lot at the Voices conference in Detroit last month. It's poised to Bill, but I'm sure Jim will also have an opinion on this. So in this new normal, how does the OEM supply relationship need to change? How much visibility or forecast is needed but suppliers get commitment back from supplier. So do you incorporate incorporates it back into your plan? Yeah. We'll start with you on that one.

**Bill Newman** [00:33:39] Yeah, well, I'll so couple of anecdotal stories. So even before the you know, Jim, you touched on batteries. So even before the pandemic and the lockdowns, we had some major issues in terms of supply of supply of batteries. And so there were, you know, OEMs, you know, setting up, expedite, desk set, you know, giga-factories for their suppliers. And then when we figured out how to fix that and get that back on a steady state, right then we then then of course, we had other issues that we had to face and reconcile with those. One of our OEM mutual customers went so far as to go to a supplier and say, I want you to show me exactly the part that's coming off your system, because there are components that go to some of my competitors and even started the commerce the very unpleasant

conversation of having to revise product numbering scheme to basically illustrate which in fact where there were their product components. You know, that's really not so that level of granularity, as long as you can tag all of that digitally as a part of your manufacturing and output flow and production scheduling, you don't need to hardwire that into, you know, product number schemas. They're already complex enough as it is, right? So being able to tag in a sequence time-based map what's going where have it appropriately routed, those kind of things, that should be sufficient. Now, having said that, as Jim and I have alluded to many times during this conversation, if you don't have that data and you don't have those signals and you can't organize them across your networks between source, make and deliver, you'll have problems, and you will have some very uncomfortable conversations with your customers. I'll finally just say that the customers that we have and those that we hear working in industry, they understand, they get it. You know, their big ask is, if you see something that could be a problem, tell us before it is and get earlier in the process and get a little bit more creative and innovative with us as we start to kind of shape the portfolio for tomorrow. So really bringing suppliers more deeply into the front end, which I think is a very net positive thing. Jim, anything from your side?

**Jim Sources** [00:36:14] No, I, I think the word relationship is taking on a different connotation now for a couple of reasons. One, we got this inflection of I call it two supply chains and we'll say three, if I consider aftermarket. But ICE Product versus Bev, I kind of like to look at those two separate supply chains as one and two coming out of the pandemic. With all the shortages, I think we've learned we have to do things differently than we did before. And you know that to kind of paraphrase, we were with one of the purchasing executives from one of the European luxury brands a couple weeks back. And the notion of he was going through the kind of key criteria from a procurement perspective, they look but kind of said, you know, price isn't everything. Certainly, it's important we're talking cost, but there are other dimensions in that relationship really is the visibility, the visibility, the data, the product, etc., needs to heighten. And I think it's even more complicated now with the different supply chains. And then let's throw aftermarket on it for service parts, right? How do we know what's out there? And getting commitments and conversations back and forth needs to continue to improve.

**Paul Bergamini** [00:37:29] Okay. And Jim, to throw it back to you, our next attendee has a question for you. So what are some of the key risks that you see as we go into 2023? They list a couple here, such as the risks include increased supplier inventory, not aligned to consumer preferences and inability to optimize production based on constraints and lost sales due to a lot more fulfillment and increased supply chain costs. If you could offer some of your thoughts on that.

**Jim Sources** [00:38:00] Yeah, I, I kind of use my one ship already on the day supply as my you know, I think we'll get up to 2 million. Right. As a risk. I think, you know, here's what I think the risk is going to be. There's going to be another issue that we don't know. Right. Just think of last year. Right. We had, you know, whether it was bills talks about an impending rail issue. We had the port issue last year, etc. There will be some other glitch. And the question is. How are we going to respond to it? And I think the risk is sitting here and just thinking that everything will be okay and the trends will go down. I think we have an opportunity we've had an opportunity to continue to to reinvent and reimagine. And I think the risk is if we don't stay on that course and back off of it, that will leave us in a worse place than we are now. I think that's the bigger risk of sitting back and being complacent.

**Paul Bergamini** [00:38:53] Okay. I think I've got quite an interesting question here. I think I lost the question on this particular topic. So the question from Nick Golden, who's based in London. He says, you mentioned the semiconductor issue and the delays to delivery. How do you see automotive retailers getting into position as a win, the need to think creatively, creatively, in all situations? Right. Can they fit this anxious waiting time into the engaged marketplace? Yeah, Nick, they're asking how can they kind of turn it into something of an opportunity for themselves?

**Bill Newman** [00:39:26] Well, I'll go first. And Jim, you can pile on. So I'll stoke the fire with my stick first.

**Jim Sources** [00:39:33] I'm going to get some. You're doing.

**Bill Newman** [00:39:34] That. And it's a great question from Nick, so thanks for asking it. So for sure, you're seeing a lot of partnerships with



all of the large chip manufacturers. And I'll just throw in a shameless plug here. You know, SJP is very privileged and honored and humbled, frankly, to work with 80 plus percent of the global industry chip and battery manufacturers. So we are grateful for that. And what we see is, is that those partnerships from the OEMs and those semiconductor manufacturers are not mutually exclusive. So, for example, LG has announced partnerships, I believe, with both with I believe Honda now and with GM. You've got Panasonic now that's going to work with Toyota as well as with Tesla in terms of battery, Gigafactory batteries are being battery giga-factories are being built sidecar next to large campuses where these vehicles are being built. There's a big one for Rivian that's going up down in normal Illinois. Obviously, Volkswagen and Ford have both committed to large infrastructure in Tennessee and as well as the chip manufacturers bringing more capacity domestically online with Intel's announcements of new factories, just as one example, that's going to take some time. So while we're waiting for that infrastructure to come on board, the other dynamic domestically, the other dynamic is, is that those semiconductor OEMs are allocating a higher percentage of portfolio production to automotive based applications. And we were just on a call with we call it a mobility tech provider here in our industry. For those listeners who may not be familiar, you just can't take a chip that you build for a Samsung or an Apple or Google phone and put it into a car. They're completely different architecture, different capabilities, different capacity levels. So you actually have to allocate those. And those contracts are often designed for production purposes and 1 to 3 years cycles. So again, we have another lag that's getting tightened up now as we work to that. But coming back to the competitive advantage, you know, people are buying chip and battery companies, but partnering with them for specific capacity and purpose into their vehicles, that takes a whole lot of risk, everything from allocation to transportation off the table. And those companies who can do it well will win. Right. Jim, anything on that?

**Jim Sorges** [00:42:28] Yeah. So, Nick, first, good luck on the match on Friday. Maybe I should be saying that it was.

**Bill Newman** [00:42:35] It only took, what, 43 minutes to get into the World Cup snack. Here we go.

**Jim Sorges** [00:42:40] They're going to work around the campfire. It's all friends.

**Bill Newman** [00:42:43] Well, it's all friends. We're all friends around the campfire. We're all mates.

**Jim Sorges** [00:42:47] I think I think you bring up a great point. I think it's not just on the retail side of the next question. It's I think it's the retailer and the OEM together. And I think it's around things around how do you manage that experience? So is it around next best match? So if you came in there and there is a shortage being able to understand from consumer at a time or you know, what's the really looking for, absolutely must have the product or is willing to adjust some compromises. But then giving him the option of saying, hey, I could get you the exact car you want and it's, you know, it's 30 days from now. But if you take off this one feature, it's the, you know, the phone charger in the car. We can have that to you in 15 days. And if you let go of that, plus, it's at least giving the consumer the choice of what decision they want to make is one two. I've also heard things around extremely long lead times for products, and we're talking months to a time. Is there something in the interim we could do for that consumer to kind of, you know, keep them happy? Is it, you know, is there something around? A short-term loan creativity, we'll call it, of some sense. Right. But I think.

**Paul Bergamini** [00:44:05] We may have lost Jim.

**Bill Newman** [00:44:08] And I was really waiting for that point.

**Paul Bergamini** [00:44:11] Really building up to something, something groundbreaking now. So we'll see if it was even going back to the reveal that it had actually built. And that question is so. What is the small section of the resiliency side of things? What are the barriers and constraints that are currently preventing companies from implementing capability to perform and run? What if the volatility scenario in supply chain performance to assess business impact.

**Bill Newman** [00:44:45] Well, I think just everybody's so darn busy right now. And, you know, we've had to deal with workers being sent home, workers coming back to the office, shifts in production, rebalancing supplies. So just kind of

getting through the chaos that was the pandemic and the lockdowns and the reopening, I think has been a huge impediment. So, Jim, welcome back. We're talking about what are some of the barriers to kind of getting to that resilience. I think moving forward now, it's assuming that you can do your hygiene and get your shop in order. And, oh, by the way, that you may be also cash margin fluid, liquid and positive. Now you can start to figure out how you want to go win in the marketplace, just kind of like back to 18 and 2019. And I'm really excited that companies are able to begin to look at that. I think we keyed on a number of topics here while we were poking the fire, you know, flexibility, data driven, being able to make and protect to margin. Those are the kind of things and just, frankly, accuracy and timeliness of information. I think those are the things that allow us to be able to respond quickly to unforeseen events, but also build in a more predictable and deliberate fashion. Because, you know, companies have business goals and objectives and strategies they want to execute on. They're finally getting back to those. So being able to execute against those. Right. But you need to have your house in order, right? You can't be burned. You can't be fighting the kitchen fire every day. And in figuring out how you build on that new third car garage. Right. It's just impossible to do both things well at once. So I do think that it's going to be about, again, getting your house in order, being able to have a forward vision and then beginning to execute on it with the use of data and accuracy. Jim, welcome back. Anything more to add on that topic?

**Jim Sorges** [00:46:53] Bill, I can't follow up with that one. I'm going to let you just take that one on your own here.

**Bill Newman** [00:46:59] No worries. Good to have you back.

**Paul Bergamini** [00:47:02] Okay, cool. But we've got we've got a few more questions which focus more on the sustainability side of the presentation. The first one is from an anonymous attendee. He mentioned that the question is, hi, Bill. I heard Accenture and SAP collaborated on SAP, right? Yes, I heard that Accenture recipe collaborated on SAP, RTP, responsible design and production. Can you explain the solution and how it helps drive secure and sustainable design principles? EPR Regulation? I think that question was actually for Jim.

**Bill Newman** [00:47:40] I'm going to let me I'll let Jim take that and I'll tag on if I have any other color. Jim, you want to have a go at that?

**Jim Sorges** [00:47:46] Yeah. So SAP and Accenture did collaborate around what I think SAP is calling RTP responsible design and production. And at the end of the day, what it's meant to do, it's thinking about. How do we make sure early on in the thick of it, up in the design side, old PLM kind of stuff where we can start capturing a lot of we'll call sustainability type targets, whether it's around the material, the sourcing of that set material, what type of green in the production or manufacturing of those things. So we can start building the building material, if I could say that around the sustainability stuff early on. So by the time we get through production assembly, we've brought that information and data with us is kind of at the backdrop of what that solution is.

**Paul Bergamini** [00:48:42] Okay. Great. And the other question is, and again, I think it's maybe more directed toward how do we prioritize sustainability, invest in protecting margins and investing in new products and services. Yeah.

**Jim Sorges** [00:49:00] You know. Yeah, it's a loaded one. You know, I think there's two sides and, you know, I'll put you know, I'm a manufacturing guy as a purist. Right. And so compliance. We all have to do it. So I think some money will be put towards compliance, particularly where there are penalty penalties at stake. And as we've been dealing with things like CASE, etc., for years, we'll continue to do the tradeoff of that penalty or not. But I really think, as I said earlier. More money will be invested as we go through the downturn around sustainability things but also have an ROI on costs. And that cost could be, you know, opportunity or pure, whether it's coming back and asking kind of play from an opportunity from a worker self, whether it's back from a packaging kind of. Look at how we package and transport product to and from how we look at monitoring what we're doing within a plant of, you know, let's talk about renewable energies and so forth of how we could get a benefit. Right. And looking at cyclic nature of plants when it's summer and I got HVCA on and winter called... how can I manage my energy cost and consumption differently? I think those types of sustainability topics, to me, they're basic hygiene, right? We've done them

over, will continue to double down on particularly as we get inflationary times and cost becomes where do I put the dollar product or compliance.

**Paul Bergamini** [00:50:33] And then there was you want to think about that final question.

**Bill Newman** [00:50:36] I would just say that keep a close eye on, at least in the U.S. Securities and Exchange Commission regulations regarding scope. One, two, three. I think that that's going to put a lot of emphasis on, as Jim, you said, energy management, but also as well as pretty massive supply chain and supplier management reporting. Right. Because if I have to report up my carbon footprint based on components and component families for roll ups, you know, that's just another layer. And most people expect at least that level to be done. And I do believe that as you start to look at what each footprint, carbon footprint for your product and your components are. I think the good news is that if you're running an enterprise wide, digital data driven environment like we've been talking about all, all, all campfire conversation that we've had, that it's going to be a lot easier for you to find and leverage that information if you're if you're not. Not so much. So, again, I do think that, you know, having the pervasiveness and availability of that information should we need it next year, which I do believe we'll need to a certain degree, that that will be a lot that'll be a lot easier for those companies who make that investment upfront.

**Jim Sorges** [00:52:03] Hey Paul one pile on that comes to mind from the event in Detroit. Right. There were a couple of. Attendees. They're right there at the heart and center of this ad, particularly as it comes to Bev, where they're looking at the battery. They're going to be doing reman recycling revert. And so I think there's another kind of sub industry, right, where you're going to see more of those types of things, particularly around the Bev product. And short of battery, what let's look at electronic modules, whether they're infotainment systems, etc., what will we see happen around those types of things going forward as well? So I think that will kind of be another thing to keep an eye out for.

**Paul Bergamini** [00:52:42] Yeah, definitely. And like you mentioned, judging by the weight loss, you can really keep the conversation kind of bumping around this topic. I think we've got time for one more question from the audience. This

last one. They haven't left the name, but they've asked what digital trends and strategies do you guys see for the automotive industry going into 2023? More specifically, the consumer experience and how to strengthen how to strengthen brand loyalty. Jim, I'll start with you on that one.

**Jim Sorges** [00:53:14] Yeah. So it's the consumer experience on the brand loyalty, right? You know what comes to my mind and again, I'm maybe talking more about my personal experience, which is, you know, I've always realized you have a brand, a brand, a brand loyalty or an experience, its influence quite heavily by the dealer experience you have. Right. So you may stick with the brand. If I have a bad dealer, I'll stick to. If I really want the product, I'll go. But it's how they handle you three times, right? And I think the notion of listening to the consumer's wants from a product set and back to the tradeoffs. Me personally of what do I need to compromise what I could have and giving me that visibility to what my options are and not make me do all the work of going to find all those products works. That's one thing that comes to my mind around that. And the other one is the service experience off of that. Right. You know how when you come back in for that servicing, that experience you have is likely to say, you know, will I come back and be a repeat buy? We all know that, you know, retentions better than conquest. Right. And so how do those two link up from that experience? There are two things that come to my mind.

**Bill Newman** [00:54:27] I'll just add is that is we even if even if Jim's optimistic forecast materializes and we have more vehicles available on stock per day, that's still going to mean fewer vehicles at dealerships on average than before the pandemic. And those vehicles are being really well made. You know, they're being built to last ten, 15 years now. So with fewer vehicles in in in the showroom and more and more vehicle, miles traveled per vehicle. Jim's point your point, Jim, on customer service in in in the customer care in the service center is going to be huge. And that's going to drive more and more of the net promoter score as I go back, get my serve, my customer, my vehicle serviced over time because I will be buying fewer vehicles by a person over time. So you're going to see that shift in Net Promoter score from the front office to the back office and dealers. And that's a whole topic for another day.

**Jim Sorges** [00:55:37] But just to pile on, Bill and again. Don't want to paint a broad brush here, but you can look at some of the survey stuff coming out from some of the pure EV products, right. The service the service cycle's longer than a traditional ice. Part of that is twofold. One, it's availability of parts sometimes, and then it's the diagnostic equipment, etc. Right. And the part issues. Now it's just the tradeoff supply chain. Do I put it in production, or I go to service? We'll leave that one there. But that experience will probably get shorter, right closer to ice. But the thing is, in the meantime, what would that experience feel like when you say, boy, I really love my product, but I'm going to go to another brand because I think they have better service or there's something else, so it's never too early to think about. The customer experience is really the takeaway there.

**Bill Newman** [00:56:29] Good point.

**Paul Bergamini** [00:56:30] Okay. Great. Well, I think that's a that's about time. That's about all the time we have today. I purposely want to thank both Dale and Jim for joining me this conversation. Looking ahead to looking ahead to next in automotive, particularly around supply demand topics. Again, thanks so much, guys.

**Bill Newman** [00:56:49] Yeah. And from my side, thanks to you, Paul and Jim and everyone for joining today. We really hope you enjoyed it. Feel free to reach out to Jim or I and or to click the QR code that you see on your screen to learn more and request a meeting.

**Jim Sorges** [00:57:05] Paul. Bill, thanks. It was good making some s'mores with you, but maybe we can take it offline and find some hard cider to wash that stuff down with. It might be appropriate.

**Bill Newman** [00:57:14] Very good.

**Paul Bergamini** [00:57:16] I will be sending the recordings out as well. That will be made available on the on the link for everyone who's doing the session and for everyone who can't. I hope you guys have a fantastic Thanksgiving. I hope the rest of your week is incredibly restful, apart from maybe an hour and a half on Friday for an overcast audience. So yeah, of all the best guys. And look forward to the next one.

**Jim Sorges** [00:57:38] All right.

**Bill Newman** [00:57:40] Everyone, thank you.