Bank of America Global Automotive Summit

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Ford Participants

Jim Baumbick - Vice President, Product Development Operations and Quality

Bank of America Participants

John Murphy – Managing Director, BofA Global Research

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Presentation

JOHN MURPHY: --for joining us. Everybody could get settled down. Next up, we're very happy to have Ford. Today, we have Jim Baumbick, the company's vice president of product development operations and quality, who is always a wealth of knowledge when we talk about product. He's super helpful when we go through Car Wars, although he doesn't give us all the answers. I wish he would give us more. Just by way of background, Ford really began a new product offensive in 2018 with a simplification of its segments, getting rid of passenger cars and leveraging a platform strategy to drive best-in-class product refresh rate, which we calculate in our Car Wars analysis, so we can attest to that. It's not just coming from Ford, and we actually wholeheartedly agree with that.

The evolution is hitting its next phase here, though, as Blue emerges as sort of the core product or profit generator for the company that will fund sort of the investment in future on gen two and three EVs as they grow to scale, and Ford Pro is more and more unleashed and really going to be a great profit generator over time. Since 2018, there's been a major advancement, both in technology on the ADAS side and the connected tech side, which I think also will probably be unleashed over time. So there's a lot going on here from the product standpoint, and we're very happy to have Jim with us today. And with that, I'll turn it over to Jim to give a couple of opening remarks, and we'll get into the grill session in a few minutes.

JIM BAUMBICK: Sounds good. Thanks for having me here. I did want to share a couple of slides because I thought-- I was reflecting on my arrival here, and I've had a chance to participate in the

conference a couple of times over the last five or six years, and so I thought, hey, might just kind of look back, and then look forward to where we're going.

So you all know safe harbor applies. [Safe Harbor Statement shown on slide]

A lot of things have changed, but some things have stayed the same. When I was here in 2019, we talked about an ambition to build a winning portfolio. And the goal was really to kind of tighten up and make sure we were preparing for the transformation that was kind ahead of us. And I'm happy to report that we made quite a bit of progress in that regard.

Some of the things we've actually decided recently, in terms of how we structure the company, is around really segmenting the business in a different way. So we think a Ford Pro is really a superpower for Ford. We're commercial leaders in the US and Europe, and Ted and his team are actually focused on building on an ecosystem of integrated software and service solutions for our customers to help their businesses thrive. If they win, we win.

We have Model e, an internal startup. This is essentially a group that's unencumbered by our legacy approach, and they're focused on agility and speed to really compete in a market that is fast evolving. And then we really have Ford Blue that is-- it's a springboard for us, right? We have a really powerful portfolio of passion products, enthusiast products, things like Mustang, Bronco, F-series that we think are really a big opportunity for us leaning forward.

Now, it's hard in the room to see this slide, but when I did the reflection, I looked back to 2018, and what we said is we would narrow the portfolio. So John, you had mentioned a couple of times in the past about sedans and the migration. Well, we made some serious choices. We said, where we're going to compete, we're in it to win it. Our goal was to have podium finishers in each of the segments that we compete on. And since we actually initiated that, we've added three more to the stable. Ford Maverick is doing exceptionally well. There's an example of the choice on sedans freed us up to do something different and to show up in a way that's uniquely Ford. That's a product there that's resonating with customers. The last model year sold out in less than three days. We have a Ford Puma in Europe, and then also the Ford Bronco, which has done extremely well.

Now, the tightness of that portfolio, the focus of that portfolio, where we could win was critical because we knew this EV transformation was unfolding. And we wanted to head straight into it full force with our gen one EVs. And this is where we electrified our most iconic vehicles, starting with Mustang Mach-E, F-150 Lightning, and E-Transit. And those last two products, the Lightning and the E-Transit were also underpinning a critical transformation in the commercial space that support our Ford Pro portfolio, to really accelerate that. So that's kind of the backdrop, but when you look forward, we now have this really incredible portfolio to leverage.

So we're going to have very focused investments on the ICE side. And we're going to talk to you a little bit about derivatives, because there's a big opportunity to expand from each of these winning nameplates into different territories. And at the same time, we're well underway, well underway on developing our next gen Gen2 EVs.

So these are dedicated platforms. These platforms are software first, fully networked vehicles. And that electrical architecture will be leveraged across the entire portfolio.

Now, these aren't just words. This is a picture, like in-process, construction underway in Blue Oval City. We're building the plant. It's coming along quite well. And we've already announced that we're going to be in production with one of our platforms, our Gen 2 platform. So it was referred to as Project T3, underpinning EV trucks in the second generation in 2025. So this is very, very real to us.

Now, on Ford Blue, let's talk a little bit about derivatives. Derivatives are an opportunity when you have something like a winning party like Bronco to actually extend into new and different spaces, right? Going after different customers.

So there's three examples on the screen here, with Everglades, the Raptor, and Heritage, all distinctly going after different customers. This is just the start. We have a ton more coming. And on Bronco, we're never going to let the foot off the throttle pedal. We have a ton of opportunity in different spaces to speak to different customers.

And I can tell you with perfect certainty, you look at something like a Bronco Raptor customer versus a Heritage customer, they're very different. And for some customers it's a bit of a wrestle. They want both. So this a really incredible opportunity for us to leverage.

Now, the exciting part about this is the capital efficiency of derivatives. So a lot of the derivatives we have in market and that we're working on are 80% plus commonality to the base vehicle that they spawn off of. What that means is it's speed to market. It's lower cost. And what's really exciting, the contribution margin, the average contribution margin of these derivatives is 30plus percent higher.

So think of like a Tremor, an F-150, and Maverick, or something like a Timberline, on Expedition, and Explorer. And we have other derivatives that are way higher than that 30% increase. What that results in, if you just think pound for pound, every dollar we invest in engineering, we get 2 times or more the EBIT margin return on that investment. And that's where we really think there's a huge opportunity to kind of extend into different customer groups off of that core winning product.

Now, winning's not just about the vehicle product side. We are uber focused on winning in digital. And BlueCruise is a great example of this. We've deployed it across F-150, Expedition, a number of our Lincoln products, Mach-E, F-150 Lightning. The customers have already accumulated over 55 million miles of active driving with BlueCruise. And it grows every day.

Recently, Consumer Reports ranked BlueCruise number one against the likes of Tesla Autopilot and the GM Super Cruise. Now, we're not stopping there. And we're leveraging a number of the engineers that we've brought in from Argo to focus solely on L3 automation.

So how do we actually get hands off, eyes off the road to give customers back more of what they value the most, and it's their time, enabling them to kind of do what they love most during their journey. So an enormous opportunity here. And then, again, you see other examples of deploying in digital with pro trailer hitch assist.

This is a system using AI and algorithms that we've trained with a wide range of environments, whether it's terrain, or weather conditions, and certainly hitch balls and couplers to automate the process of actually aligning your hitch ball to your receiver, your coupler, making it very simple for customers to do what they love faster, easier, and quicker going forward.

So I'll just wrap up with the comments. You know, when we think about Ford Pro, E, and Blue, we think it's more of what we've talked about in the past of really leaning into this winning portfolio. Where we

choose to compete, we're in it to win it. And the new structure is a bit more of a winning segmentation for our business.

We think it's going to enable our teams in Pro, E, and Blue to solely focus on the customers that they serve, go deeper in terms of those insights, and unlock even more growth and profitability. So with that, we can get right into the questions.

JOHN MURPHY: Great, so thank you very much. That's incredibly helpful. And you answered a few questions that we had in that presentation.

If we think about Ford Blue, to start, you mentioned the derivatives as being much more profitable, by a 30% plus improvement in contribution margin, which is great. I mean, how much of the product portfolio do you think that they will represent over time in Blue? And what kind of impact do you think that will have on sort of product cadence and replacement rates? Meaning, do those become sort of the new refreshes? And we're kind of looking at a Bronco that will kind of last for another seven or eight years? And we'll have specials, or some of these enhancements that come off of it? Or will we still see a couple of generations of big replacement rates, plus these incremental trim levels?

JIM BAUMBICK: I think we're going to be very surgical where we do significant actions. And there are a couple of those areas that we think we can then catapult ourselves to a different space. But the biggest opportunity here is like continue to win in the core space of where we position the product. So for Bronco and the off road area of capability, but then when you look around the landscape of the demand spaces and the consumer spaces, and you look at who's buying a Bronco, and what else they have in their stable, it opens up a ton of opportunity of where you can actually tailor a Bronco that is unique to that set of customers.

And so that's kind of the whole power of it is step one was getting a winning product. Step two is now how can you expand and invite yourself, or in some cases, customers are asking us, inviting us into different spaces, where wouldn't it be cool if you did X, Y, or Z.

So we have no shortage of ideas. It's all around picking the biggest impact ideas that are going to resonate with the largest population of customers. And what we find with derivatives is they almost amp up the passion level of the customer for the product, because it's uniquely tailored to them. It's exactly what they're looking for. Bronco Raptor is a perfect example.

JOHN MURPHY: I certainly agree. The idea of driving down complexity, though, in Ford Blue is key to driving profitability up over time. You could argue some of this may actually drive-up complexity. But I think you said you were using 80% reuse, at least, I think, on these.

So how do you kind of juxtapose reducing complexity, but increasing sort of these specials, or these different trim levels?

JIM BAUMBICK: Yeah, this is a great question. There is no doubt, and we are on a mission. You're going to see it starting with the '24 model year some dramatic reductions in the complexity, the offering to the customer. The reality is, it's gotten too complex.

And what I love about derivatives is even at the team level, when we find something that we know is going to resonate, like they got to fight to get it in. And so it's what would you trade to get it in? Because the net reduction has to continue over time.

And what I think you'll start to see is we're going to find the very discrete spaces, almost the vehicle configuration that you want to order, versus the, I'll say the historic way of people ordering vehicles, where you pick your option feature and whatnot. We're going to learn as we simplify, but then we offer these really bespoke derivatives that customers can choose from to make reductions over time.

JOHN MURPHY: In your mandate in product development-- you know, this might be a little bit outside of, but I'm just curious. With these derivatives and the focus on Blue, is there a view that you necessarily want to constrain volume and drive mix significantly higher? Or is it you're pushing mix with all of these derivatives and a great product, that if volume grows, volume grows, and that's great, but you're balancing that versus mix? I mean, how do you think about that in the product development side?

JIM BAUMBICK: I think you're going to see it'll vary by vehicle line. In some cases, we don't have the capacity. I'll use Maverick as an example. We're rushing to add capacity. And in that case, it will probably end up being a shift in the mix of what we offer, because we could sell every one we make. Same thing with Bronco.

In other cases what we're finding is as we strike something into the market that resonates with customers, it's naturally pulling on the mix. And it might actually result in higher volume.

So I'll use an example. ST on Explorer is a wonderful example of something that started as a derivative. It was a very efficient derivative. And it's grown to almost 20% of the mix. It has very, very healthy contribution margins. And it's one of those ones that's well above 30% higher.

JOHN MURPHY: That's also a very good example. If we think about what this means for pro, obviously Blue is going to be supplying into pro. How do you think about sort of the tailoring of the product to the consumer through pro? Obviously, there's more unique derivatives or specs that people are going to be looking for at pro. How do you manage that in this product development process?

JIM BAUMBICK: Well, look, we're serving the pro team. We're serving those commercial customers. What I love about the way we're structured with Ford Pro is if you think about development of something like an F-150, where you have this mix of retail and commercial, there's a little bit of a tug of war. And there's always going to be a tug of war how you make choices.

But what's served us well as a part of developing that winning portfolio was this uber focus on customers. What matters most to them? What's going to help them, whether it's in the commercial space to their business? Or how does it enable them to do what they love to do?

And with the Ford Pro team, they're going to be able to spend even more time with commercial customers. So we're going to get further insights. We'll be able to look at some of those that are systemic across different vocations, and amplify that.

On a traditional product program team, you have the same team trying to get those insights out of retail and commercial. And if I'm honest, there was a limit of time. What's wonderful about Ford Pro is they are going to wake up every day looking to serve those customers. And so they're going to get insights every

day then I can now consume within the product development system to make that product even better for them.

So to me, it's a win-win proposition. It's all about understanding customers much more deeply, and then, leaning into that, as a way to win.

JOHN MURPHY: So the F-150 is kind of a crossover between obviously retail and fleet. The F-150 Lightning has been launched to huge success, probably more than you even-- or better than you even expected.

JIM BAUMBICK: Yep.

JOHN MURPHY: How do you think the pickup truck market is going to evolve as it is electrified over time? Do you think the F-150 Lightning is going to cannibalize the ICE product over time? Do you think it could be additive?

There are some segments-- you know, there's some shifting here where I think the traditional incumbents are kind of going at it as a traditional forum. You have some wacky designs, like the Cybertruck that are theoretically pickups that probably won't have too big an influence. But how do you think about, as everybody's going after EV pickups, the market changing, or maybe not changing that much on the core side, and this just becoming additive?

JIM BAUMBICK: I think the best way to think about this is when we were developing our gen 1 EVs, our focus was what can you do in a BEV that you can't-- or what can you do in a BEV enabled by a BEV that you can't do in an ICE?

And I think, in some respects, you got to think about the reverse. There are all kinds of use cases where either it becomes an inherent constraint for a customer. They have to either tailor what they love to do. So think of something like in the off-road space. Charging is a challenge in everyday life. Charging when you're out in the wild is a challenge.

So you think about the strength of the product in that space, that's a unique superpower. That's something that we need to lean into, and maybe improve fuel economy. We can leverage hybrids, all kinds of things that win with that use case.

Most of that.- I think it's something like 70% of customers that own an EV, own an ICE or hybrid in their garage. And so when you think about the application specific, most people's lives during the week, you can live with an EV. In fact, I'm running my own experiment at home where I have a Mach-E. I don't even have a charger installed. And on a 110 normal garage hookup, so my family members can run their whole life off of that, and have to go only charge when they do a long distance.

But I like to do off-roading. So if I'm going to go out in the sand dunes, I don't want to stop what I love doing. I want to be able to go do what I want to do. And so I think you're going to see this opportunity expose itself, where we offer trucks for everybody. We have a full lineup, tip to tail, with the Maverick, all the way up to class two. And then we're going to focus the evolution of those products in areas that are things that ICE can do, that may be a limitation or a challenge for EVs.

JOHN MURPHY: And maybe just harkening back to when the ecoboost was launched on the F-150, I think there was a big surprise that the fuel economy wasn't necessarily the real sort of attractive trait

there. I mean, it is, of course. But it was really the low end torque that a lot of your truck buyers really enjoyed.

So I mean, are you finding potentially with the F-150 Lightning that there is actually use cases and strength of that product that are something similar to that that are a bit surprising, where you might have a traditional Joe six-pack that really loves his F-150, and all of a sudden finds out, hey, listen, the F-150 Lightning has actually got a lot of better stuff for what I really need than the internal combustion engine.

JIM BAUMBICK: No question about it. I mean, you can't have a frunk on an ICE F-150. So for as long as I can remember-- I've been with the company 30 years-- closed, lockable storage was like what you wanted. Well, you can now have that on an EV.

There's other use cases. So you look at the resonance of power to the box with our power boost that we offer on the F-150 Hybrid. Well, now the amount of onboard energy you have with an EV is like it's an upgrade. It's a big upgrade.

So depending on how you use the vehicle, it's trying to identify the right tool for the job. And how does it actually enable customers to do what they need to do, whether it's for fun, or for their businesses to thrive? And I think as long as we're clear eyed around how we want to position those products, I think there's a much longer duration where these can be complementary.

JOHN MURPHY: OK, and then just last question on crossing over between Blue and Model E here, there's a lot coming on sort of the connected side on the products that may fit a little bit more elegantly with an EV architecture. However, there might be a lot of people on the ICE side that would like those connected capabilities.

Is there a reason that you can't ramp up connected contents, an opportunity for folks on the Blue side, as they're kind of demanding this, or maybe wanting this? Or are you not finding that? And is that something you're working into product development?

JIM BAUMBICK: No, our intention is to actually leverage these electrical architectures across the fleet. BlueCruise is a great example. It was deployed initially on ICE products. And so to me, that's independent of, I'll call it propulsion, or propulsion agnostic.

There will be unique experiences that you can do on a BEV that don't apply to an ICE. There may be some unique experiences on an ICE that don't apply to a BEV. And I think that's exactly it is how do we actually leverage the superpowers of each to then enable the best experience for our customers in each domain.

But the intent is, this is a cross portfolio opportunity. And certainly, that future architecture that we're working on for these dedicated BEVs is backwards compatible into the ICE.

JOHN MURPHY: OK, switching directly to Model E, I mean, as you think about product development and sizing the market, how do you think about that size of the market for EVs? How is that changing? And maybe if you could just remind us of where Ford's current market share is in the EV market.

JIM BAUMBICK: Yeah, look, we're clearly the number two. What I think is wonderful about our EV portfolio, we're the number two in revenue.

There's been a lot talk about some of our recent results. We're building capacity. Like we're in the process of actually ramping up extended capacity on Mach-E, and well on our mission to get to that 600K run rate at the end of the year. And what's great is, relative to some of our competitors, we're seeing much higher revenue, much higher revenue.

JOHN MURPHY: What do you sort of define as your competitive advantage as you're looking at these products? And I think there's a target of getting the 2 million units, sort of an exit run rate in 2026. I think an optimist might say, hey, listen, these 2 million units are incremental to your current base. A pessimist might say, hey, listen, you're going to cannibalize your existing sales. I mean, the truth may lie somewhere in the middle. But how do you define your competitive advantage? And do you think this is opening up new customers, new markets, new regions for you in a way that you might not have before? And might be hard to define exactly what's incremental and what's not, but how do you think about that?

JIM BAUMBICK: It's actually exactly what you said. We see the opportunity is leveraging the EV portfolio to go after new and different customers. The reality is, for our gen one products, well over 60% of the customers are new to Ford. And they're actually, in the case of F-150 Lightning, they're new to trucks. So they are a new customer in this early adoption period. In the long run, there'll be some crossover, for sure. In the medium term, and the short term, there's an opportunity to go get new customers, and actually speak to them uniquely, and be complementary to the portfolio.

So when you think of these three businesses, we can be purpose built and oriented in our EV portfolio to go after a completely different space, and maximize the incrementality. And that enables us in the medium term to leverage some of the investments and the assets that we have in the Blue portfolio. And that's exactly the way we're thinking about it.

JOHN MURPHY: And are you running into any sort of impediments? I mean, it seems like you're sold out of Mach-E. You're sold out of F-150 Lightning. I mean, you're not running into a lot of impediments. But as you're going to market, and you're selling these vehicles, and you're hearing from your dealers, are there any things that you think you need to work on, or any real hurdles as far as getting these vehicles to the market and to customers? Or are we just in such a supply constrained market right now, that's not the kind of stuff that you're even kind of running into at the moment?

JIM BAUMBICK: I think the area we're focusing on is trying to evolve the customer experience. The expectations of our EV customers is very different. And there's a whole team focused on trying to elevate and extend that experience to be a bit more digital oriented. And that's going to actually be something that we can back cast to the broader ICE portfolio is just making the experience better for everybody.

DOUG KARSON: Jim, if I could ask one question, the Lightning is awesome. And I think it hit the market. The adoption by customers was amazing. If you give us some of maybe the lessons that you've learned from the consumer standpoint, and kind of how it hit the market perfectly, but then also some of the challenges in the production and execution of it.

JIM BAUMBICK: Yeah, I think what hit the mark is this focus on really two aspects. We wanted to do it in a high volume segment, right? We didn't want to just do it off on a niche that this is some side hobby. Like we're in it to win it.

And just by electrifying the F-150, it became very real, given the scale of the F-150.

DOUG KARSON: Because F-150 you could do a million units in a hot environment.

JIM BAUMBICK: Absolutely. So it was kind of a signal that this is the real deal. We also very much focused on what can you do uniquely in a BEV that you can't do in an ICE, so effectively opening up new experiences, things that people can consider in their choice making. Do I want this experience or that experience? And I think by doing that, it actually carves out its own little niche, or its space where it's going to compete.

Now, in gen 1 we leveraged our existing architecture. So there was some constraint. And that's why we're so keen to kind of leap to our gen 2 products, where we're going to do clean sheet. This is an unconstrained architecture. And it's purpose built for EV.

So we'll be able to even amp it up even further. There really are no limitations. So we can lean into what it is. The EVness of that portfolio, the EVness of that platform is going to open up many more possibilities for our customers.

DOUG KARSON: Because the architecture would allow more forward thinking flexibility into the EV. But I guess what you learned was that the customer is there for that product.

JIM BAUMBICK: Absolutely. And it also will drive us to think about different trade offs in the development process. The largest component in the vehicle for cost is the battery. So energy efficiency of that vehicle becomes uber important to maximize range, and actually position from a cost perspective.

DOUG KARSON: Weight, all sorts of things.

JIM BAUMBICK: Absolutely, absolutely.

DOUG KARSON: Thank you

JIM BAUMBICK: So we've learned a lot from Gen 1, and all that learning, plus we've brought in some incredible talent from outside the company. So this combination of gen 1 learnings and that outside expertise, looking at these new architectures clean sheet is really going to change the game for us.

JOHN MURPHY: When you think about the design and engineering as we get to gen 2 and gen 3, you know, there have been a little bit of hiccups on the F-150 Lightning. Haven't really disrupted the product in any way or sort of perception of it, so it's fine. But as far as driving sort of scale and efficiency, and ease of production, so that these issues don't repeat, and as you have this almost unfettered demand for it, that you're actually just able to kind of plow it out and get as many of these out there that people want, what kind of is changing in sort of design and engineering? I know you're talking about simplifying, clean

sheeting it. But I mean, are there any kind of examples that you can give as to how this is really going to change and become much easier to produce over time than maybe the current F-150?

JIM BAUMBICK: Well, I think what you're going to see-- and we've been focused on just our general improvement, and focus on quality, is making sure we're getting it right. So something like the connected vehicle, and leveraging that in the assembly environment, and during launches enables us to find things much faster than we had in the traditional sense, right?

So this recent challenge that we had with Lightning, we found that immediately. There were only 18 vehicles that got out. We knew exactly the 18 vehicles we had to go deal with. And so our quality system did what it was expected to do.

I wouldn't say that's unique at all to EV. It's around us making sure that we have a very fine tuned and high acuity around our QOS, and making sure as we go through scaling, in any manufacturing environment you want stability. You want to find your rhythm. You want to hit your jobs per hour. And you want to be able to produce at rate.

During a launch phase is a naturally unstable environment. The actual product side, the assembly site is actually trying to scale and get the rate. The whole supply base is doing the same thing. And so it's probably the most unstable environment as you're trying to get it up to full line right. And once you find that momentum, that's the power of mass production.

So to me, it's not unique to EV. It's all around trying to improve our ability and the quality operating system around industrialization. And we've applied all those learnings into our most recent launches with Super Duty, Escape, and Corsair, and in some cases, slowing it down to find the right pace throughout the entire supply base is really important.

DOUG KARSON: What is the pace between gen 1 and gen 2 in a number of months or years?

JIM BAUMBICK: It's pretty quick, I mean, if you think about it, right? It felt like we were going full bore on gen 1. And here we are. You know, we're starting production in 2025 of gen 2.

DOUG KARSON: Right.

JIM BAUMBICK: So to me, for that level of change, that is a very significant, very short cycle that will definitely register on your--

DOUG KARSON: Car Wars—

JIM BAUMBICK: Car Wars metrics. But that was our intent, right? We knew the transformation was underway. And we wanted to get there, and get there quickly in a way that really signaled to the market, but more importantly to our customers that this transformation is real, and we intend to be in it to win it. So I think we did exactly the right thing. It's underpinning these three businesses. And now we have the next wave coming behind it. And they are going to be a significant advancement.

DOUG KARSON: These old platform migrations would take 8 to 10 years.

JIM BAUMBICK: Yep, well, I mean, you could look back and always say, well, you could spend more time developing the platform. But we would have lost the time of getting speed to market.

DOUG KARSON: Yeah. You compromised.

JIM BAUMBICK: Yeah, it was the right balance. And quite frankly, inviting customers into something that is familiar, like an F-150, almost makes the invite much more broader. Because you can't walk outside without seeing an F-150 on the road.

DOUG KARSON: Yep.

JIM BAUMBICK: So it's just another mechanism of propulsion. And you're going to see in gen 2, we're going to really lean into the unique superpowers of dedicated EV architectures, and the software first capability that is going to really transform the portfolio.

JOHN MURPHY: If we think about the EV products right now, they're generally higher price points, very strong mix. Part of that is what the market is demanding. Part of that is to cover some high fixed costs on bill of materials, but also as you're scaling up and need to cover fixed costs.

As you think of the product development process right now, is there a focus on introducing or staying sort of at the higher end of mix in price points in the products that you're putting out right now? And when over time do you think you see things drop more into the mass market, in the 35-- I mean, 35 was the average price, but I mean, maybe even below that over time?

You know, is this the kind of thing where those 2 million units will be a very rich mix, on a price point standpoint to really kind of help get the flywheel going here and cover some of these costs?

JIM BAUMBICK: I think you're seeing the benefit of the offering. So yes, we are seeing a higher mix naturally. But our intent is to lead the electric revolution. And to do that it means it needs to be for everybody.

So we have an enormous amount of attention on how do we make this available to everyone at all price points? And I think one of the benefits of our portfolio is they're all qualifying for the IRA. Those are a mechanism to make them more attainable and reachable for the average customer. But we have to do more. And that's what we're focused on.

JOHN MURPHY: Got it. I mean, as you're scaling, you kind of mentioned finding your rhythm on production, right? And that matters on the ICE side and the EV side. In supply chain on EV, because things are ramping up, it's potentially a little bit greater of a challenge for Ford and the whole industry, because new supply chains and sources are being found for batteries, raws, you know, inverters, electric motors, everything. You know, what are kind of the biggest challenges of ramping to your target volumes, and getting to scale eventually in Model E, where the margins are also at target?

JIM BAUMBICK: Yeah, I think some of the bigger challenges at the scale we're trying to ramp to-- and you know, every manufacturer is rushing in the same direction, is securing the supply of the materials we need to actually produce the volume that is our ambition.

And so we're focused on ensuring that we can secure the supply of the right materials, but also making choices around things that we think are going to be differentiating. And that's really growing and owning some of the software. And even our microchip design and development is part of the next generation of EVs and platform development.

So it's this balance of what do you want to own? And actually, how do we use that as a point of differentiation? And then the other side of the coin, it's making sure we can secure what we need to be able to execute the plan that we've set out.

JOHN MURPHY: Gotcha. Maybe flipping to Ford Pro, I mean, the E-Transit's had a lot of success. How do you kind of look at that and try to understand the lessons learned? I mean, it's early days. It's relatively low volumes. But it is having a lot of success.

How do you understand what's happening there with the Pro consumer? Are they more receptive to EVs than you ever would have hoped? I mean, what's going on there with the E-Transit?

JIM BAUMBICK: Yeah, I think there's a lot of insights. And there is a natural draw of EVs to the commercial space.

There are some spaces that actually EVs won't meet their needs. It doesn't do the job in the way they need to do. And it's largely on the much heavier, higher payload, higher energy use applications. But for a vast majority of them, it's actually the right tool for the job.

And when you think of the commercial application, right, there's the three biggest factors to a business is going to be your depreciation. It's going to be fuel costs. And then behind that, if you take an EV, and take the fuel costs out, then it's all around uptime.

And that's precisely what Ford Pro is focused on, a set of capabilities, and a way to respond to customers to make sure that truck, that van is on the road, doing what it needs to do to help their business thrive. And if we can increase the uptime, reduce the downtime, that's a lower cost for those customers. Then you're just back to depreciation.

So we're trying to focus on helping our customers win. And if they win, we're going to win.

DOUG KARSON: How does uptime get improved? I could see the fuel easily. I'm just curious about that.

JIM BAUMBICK: Well, I mean, certainly in an EV there are a lot less things that could go wrong, right, the complexity of an ICE powertrain. But actually, this is where software is going to be a huge leverage for us. So prognostics, being able to look at wearables in the vehicle, or when things start to go wrong, the signals are resident in those vehicles that are all visible relative to OTA and pulling data off the vehicle. So our team like Ford Pro can actually look at the fleet using telematics and identify, hey, in order to avoid uptime, proactively you need to bring this vehicle in. Let's plan for service.

Or here's even a better situation. Think of a large fleet with 100 or 1,000 trucks. Let's have mobile service go and service those vehicles proactively when they're off shift so that they're ready to go the next day, and those things are up and running.

So uptime is going to be a major focus of Ford Pro. And it's going to help reduce the costs for our customers. And it'll improve their business. And it'll be just another reason why Ford's leading in the commercial space.

JOHN MURPHY: Jim, why can't you leverage-- or you may answer we're going to-- that kind of capability in your connected EVs and ICE vehicles to consumers? Meaning, giving you sort of an advance notice of, hey, listen, this is an issue we found. You might want to check this out, or you might want to go back to a dealer, or might flash it on an OTA. So that, I mean, the fleet customer has sort of a dollar and cents thought process. But the retail customer has, hey, you just saved me a few hours. Thank you very much. And they become much more loyal, and are maybe willing to pay more for the vehicle over time. You know, that's not in a fleet-- this would be your general fleet managing it in totality. There's got to be an opportunity to leverage it in that direction as well.

JIM BAUMBICK: I completely agree. This is where-- and again, you think of the unique customers of something like Pro, E, and Blue using those edge cases. But those edge cases can make the experience better for everybody.

And so you're exactly right. Our intention, and we are actively leaning in prognostics in a way that we can start to help those vehicles stay on the road, or be preventative in trying to avoid any failures that might exist in the field, that when you didn't have a connected vehicle, or you didn't have that information off the car, you couldn't do that.

JOHN MURPHY: Yeah, no, it seems like a huge, huge opportunity—

JIM BAUMBICK: Big time.

JOHN MURPHY: --across the product portfolio. I've got a few more questions, but I just want to open up to the audience and see if we have any questions in the audience. One over there.

AUDIENCE: Thanks for taking the time. I'm sort of curious if you could maybe talk about the differences in the design and development process between the United States and China, and how, in response to the rapid cycle iteration that we've seen in China, and potentially changing preferences, potentially just more competition that is attuned to those preferences, you might be thinking about strategic shifts for how you're bringing vehicles to market there? Thank you.

JIM BAUMBICK: I think we try to learn from all of our product development activities across the globe. We've had vehicle programs that we've been able to shorten the time to market cycle in China that we've fed those learnings back to the US, and vise versa.

So really it's around constant learning. And in the environment like in China, it's so fast paced, and so fast moving that in order to actually stay out on the edge, you have to actually shorten that time to market. Otherwise you're too far down the track, and you can't respond to be relevant.

So we're very focused on trying to improve that speed to market. And one way to do that is by being thoughtful around the architecture development. So at the end of the day, platforms become really, really important to this. At the beginning of the discussion we were talking a little bit about Maverick. So Maverick was enabled based on the way we had designed the architecture three, four, five years before we even thought of doing a Maverick. You know, we talked about what the bookend of the platform might be. And it was something in the space of light commercial.

Because we did that, when we identified the space and the opportunity on Maverick, we were actually able to do that at the speed that would be more ubiquitous or consistent with some of the fastest in the industry. Because we had a core platform to leverage, a high degree of platform reuse, and all of our time and attention was on the unique aspects what makes a Maverick different than a Bronco Sport, different than an Escape.

And so when we look at the landscape competitively, that's what the best companies do. And that's what we're focused on in terms of these new EV platforms is enabling the ability to do that shorter cycle off of a common platform and reuse critical components, you know, inverters, motors, batteries, and even setting up the flexibility of how and what you can change. That will enable speed.

JOHN MURPHY: Any questions. OK.

DOUG KARSON: There is a question there.

JOHN MURPHY: OK, shoot.

AUDIENCE: Thanks, just to the extent that you can disclose, your tire with CATL, could you maybe add more color to what exactly you think CATL could bring to the table? As well as in terms of battery chemistry, is LFP something in your roadmap for use down the road for your vehicles?

JIM BAUMBICK: Yeah, I would just say we think LFP is a technology that's really critical to the portfolio. It's lower cost, higher durability for many different applications. And I think it's going to help us make battery electric vehicle offerings more accessible for not just businesses, but also many different customers. So it's a critical part of our plan.

DOUG KARSON: Jim.

AUDIENCE: Thanks for the presentation. Just following up on the Ford teach in that laid out a lot of really interesting dynamics behind the breakout, I did have a very basic question, which I don't know if you've shared yet. If John's bullish scenario is true, a lot of incremental volume growth as you move into the coast and get market share, what kind of production capacity do you have, you know, in 2025, 2026, when you get some of the new EV production coming online, versus where you are today? Or what kind of flexibility you could have by going to three shifts versus two? I don't actually have a good volume number in my head.

And then second, the average transaction prices have been phenomenal in terms of how you've managed your product portfolio during these two years. Is that something that you expect to be flattish

over the next several years, a little bit lower, materially lower? Just anything on that front would be helpful for me to kind of think about how you're approaching it. Thank you.

JIM BAUMBICK: Yeah, I would stick with the-- I'll start with the second question first on average transaction price. To me, that's a signal that we have something that's resonating with customers. It's unique. It's differentiated. And it's something that they want.

So it kind of gets back to the whole premise of a winning portfolio, right? If you're only investing in things that you know are going to really, really speak to customers, that's where I think we've had great success in actually pulling higher transaction prices. And in some cases, it becomes almost a challenge. Like something like Maverick, one of the powers of Maverick is it's actually got a low entry price. But there's so much demand for it, and it's actually pulling in the other direction. We don't want it to fight what its actually core intent was. It was a targeted entry level vehicle that's starting to conquest, you

So I think it's all around making sure we have resonance in the product. And it will come with, it will result in higher transaction prices. I don't think we just can ask for higher ATPs for what we got. On the volume side, we're thinking about it as a lot of incremental capability and capacity.

know, Honda, Toyota.

So I mean, Blue Oval City, as an example, is a incremental investment. It is bringing on additional capacity, at a time where we're also adding capacity on some of these products that are sold out. I mean, I'll go back to the example of Maverick and Bronco Sport, or even the full-size Bronco with Ranger. Both of those assembly sites have two winning products in each of them.

So I'm dying to squeeze out every incremental one I can make. And we're working to actually add that capacity. So there's not really a food fight for capacity. In the long run, we'll have some choices to be made. But in the medium term, we see this as an incredible opportunity to grow in Blue, in E, and in Pro.

JOHN MURPHY: All right, I got three more I want to sneak in here. First, and kind of the follow up on product development speed, things are changing here, where the vehicle is going to be updated over time, operating systems to some degree, functionality on ADAS potentially over time.

So as we think about product development life cycles, or schedules, or refresh rates, as we kind of define them, they're going to change to some degree. Meaning sort of a 4-to-5-year life cycle, 2 and 1/2 to 3 years of average age suddenly is going to be interrupted by not mid cycle majors or stuff like that, but maybe 6 or 12 month software updates, and it's going to make my life doing "Car Wars" a little bit more complicated, to put it politely. So that's selfishly asking this question.

But more seriously, I mean, how do you think about that in product development, and the opportunity to really kind of bring new, fresh product to the market, and maybe even deliver to the people that own the vehicle already.

JIM BAUMBICK: Yeah, so I think, John, this is something we're also thinking a lot about. I do believe the premise of freshness is going to evolve and change. It needs to think more broadly.

So when you have a vehicle, which we've never had until we got to these connected architectures, that gets better over time, the vehicle is getting better over time. The traditional view is, it's a new product. It's out there. You buy it. And it goes through this decay curve. Well, these vehicles are going to get better.

So I do think we need to account for how do experiences evolve on products? So, what's the freshness, or the turn rate, or something related to the number of software drops, or the evolution of the software in the vehicle?

But I also think it's not going to swing the other way, where all of a sudden, life cycles are going to grow to 10, 12 years because of the amount of competition. So there's going to be this balance of physical freshness, and this ongoing like improvement of the vehicle over time that's going to evolve.

And that's where I think derivatives play an interesting role in this, because derivatives are something that actual almost create buzz, attention, interest in a vehicle line, and invite customers to kind of check it out. Now, maybe they don't buy exactly that configuration. But sometimes you'll see it'll be a lift that they'll just buy one of the base vehicles, like the core offering. Those derivatives may be restricted in terms of the available volume that we can sell.

And we may go through a situation where we have a two or a three-year run on a derivative. And then it goes away. And we bring in something different. So, like how do you capture all those things?

So, I think the complexity of your "Car Wars" is certainly going to get a lot harder. But I think we have to kind of cast it through the lens of, does a customer not just see but feel that the vehicle is new, or evolving, or improving? And it's going to be this more complex equation that we have to all sort out.

DOUG KARSONOn the derivatives side, because I've been doing this for a long time also, there is a cost to having so many different derivatives. If you look at Tesla, they don't really have that many derivatives. And how are you going to balance the derivatives with making sure that you're very profitable on a line?

JIM BAUMBICK: Yeah, this gets back to the reuse. So we're not changing that much. We're being very surgical in the change. And what that does is it taps into emotion. And I think that's where it invites people that may not otherwise have decided to jump in the pool and by vehicle X, Y, or Z--

DOUG KARSON: So major architecture the same, but just smaller applications?

JIM BAUMBICK: That's right. That's right, a high degree of reuse. I also think in the case of Tesla, you know, there hasn't been anywhere near the level of competition. The number of EVs in the market is going to proliferate.

So this is where I don't think everybody's going to jump to a 12 year cycle and just do software drops. I think that's also not going to happen. It's going to be this eclectic mix in the middle where what is new? What is evolving? And then how are people making choices? Because their car is getting better they're going to have to weigh off buying something that is new, maybe has new capability, maybe has new visual like attraction to it, and how do they make that choice in total?

JOHN MURPHY: Yeah, it's going to get very interesting and complicated. Maybe I'm going to ask one last question here. You know, there's a lot of concern that product spending is increasing dramatically, as Model E is ramping up over time. But if we think about sort of the potential for reuse on an EV, on an EV platform, it actually may be higher, and sort of incremental over time, as battery, or battery management systems, or electric motors, I mean, things that are big components in a vehicle can be plugged back into a platform in a similar way.

So as Model E ramps up, and it potentially matures over time, is there a potential, theoretically, for this sort of step up in product spends to kind of pull back to something more normal, or potentially even become more efficient over time as there's more reuse and commonality in a platform, and then allow for faster product refresh rates as well?

So I mean, not without dollars and cents. But I mean, could it become more efficient, and then create a more rapid turn, and bring consumers into the showrooms, or the virtual showrooms even more often?

JIM BAUMBICK: There is no question good platform development will shorten time to market for the top hat, because you're reusing some of those parts. Setting up a platform typically I would say the amount of engineering required to do the platform part of a vehicle is maybe twice as high as doing the top hat. So the more you change that, it has an effect on the industrial system, which drives expense and whatnot. So if you think about the bandwidth, and you design it well up front, then the proliferation of top hats, either an efficiency, less overall cost, or the ability to actually design vehicles, top hats that actually go into completely different spaces is a way to kind of reinvest that. So there is absolutely opportunity.

JOHN MURPHY: Great. Oh, we got one last one over here.

AUDIENCE: Yeah, just a quick one on affordability. So I didn't hear affordability and the product development roadmap as much. But I did hear like the Maverick is selling great. And can't help but notice the Maverick has a high \$20,000 MSRP, so almost half the ATP these days. So is there an opportunity for Ford to maybe make some kind of lower contented products that are much more affordable to maybe take advantage of an opportunity here?

JIM BAUMBICK: Yeah, I do think there's an opportunity to have additional affordable offerings. We're constantly looking at it. We're very focused on it.

In our current situation, we're trying to add capacity of what we actually have at the moment, because we have such strong demand. So that's kind of the short term focus. But as we think about the future plan, that is a very clear focus of ours.

AUDIENCE: Great.

JOHN MURPHY: And with that, we're going to wrap up. Jim, thank you very much for the time.

JIM BAUMBICK: Oh, thanks for everything.

JOHN MURPHY: We love talking to you about products. So thank you so much for coming.

JIM BAUMBICK: I appreciate it.

DOUG KARSON: That was awesome.

JIM BAUMBICK: Thank you.