

Frank Beckmann: Frank Beckmann here, continuing to explore the future of mobility and we do it know with a member of the staff at Ford Motor Company, the executive staff. And this is John Casesa, the Chief Strategy Officer for Ford who less than a year ago, was tapped by Mark Fields- coming out of the banking industry and to offer a global strategy for what Ford is doing and I don't know if you realize the time or not John, the way the auto industry was so quickly changing because it is now it so rapid. And I came up with theme for CES here that we are witnessing, we are really going through what Henry Ford and Americans went through a century ago, aren't we?

John Casesa: Absolutely, Frank. I will tell you the reason, I came to Ford for two reasons. One, I really believe that the change was as big as the going from the horse to the car. I really believe that and I thought it would be fun to be a part of it; than to be an advisor. The second reason I came to Ford, is I worked for a lot of the auto companies but Ford was the company that didn't take the bailout. Ford was the company that changed its stripes, it became a really different company in a last era and Mark and the team, of course, with Allen's leadership did it. So I said well, it is a huge change and these guys is ready to do it again.

Frank Beckmann: But this is really really Sea-change; that what we are witnessing right now, but what you are talking about is autonomous cars and not even considering Uber and Lyft right now. But just the choices that customers are going to have down the road with autonomous vehicles versus self-riding vehicles. If everybody is going to make the same sort of cars, what going to differentiate what draws the customer to the Ford brand or the Blue Oval.

John Casesa: It's a great question and I think the short answer is we can't all make the same kind of cars because if we do that, Ford and the other auto companies will surely commoditized themselves. Will be one of those handset makers that doesn't exist anymore. So what we are trying to do at Ford is really think back from how we can make people lives better. How they will want to move in the future in? And where can we at Ford play? Where do we have the right to win? And where do we have unique capabilities. So for example, we have an enormous share of the police car market; of the ambulance market; of the van market; we are the leader of pickup trucks, so we understand these customers and their needs are different from the other customers. So we think the future world of mobility will be a very complicated messy place with a lot of people with different kind of needs with different jobs to be done. So as a company are trying to focus on those jobs to be done. We instead talked about creating the customer centric organization not as a slogan but as the way to run the company. So, I think Frank, if we don't have the view then the future will be commoditized as everybody just wants, just basically have an Uber without the driver. We think the world will be a very complicated place whether you live in the city or in the country, whether in the US or Europe; and whether you are an ambulance rider or driving your kids to school, and we can find we have to create solutions for those specific customers where we really have the ability to be better.

Frank Beckmann: Well you are right. Whether you are talking about ambulances; police cars; what they need in rural America is different than what people are to need driving their kids to school.

John Casesa: Right.

Frank Beckmann: All different adaptations that the auto companies will have to make, but as we move on down the line; the other part of this that strikes me is how government is going to have to change what it does too. They have begun to lay out some ground rules to how they want to see this field developed. But when we start talking about a government that has an EPA requiring fifty six miles per gallon for instance. What we have is a President-elect who is focusing so much on cars that are made outside the country and bought back here in the United States, there has to be some understanding there as well but don't they don't want to stand in the way of this progress.

John Casesa: Look I think where we are in a time collectively and collectively I mean the industry. I mean the regulators; NGOs; consumers; the media, it is collective discovery about how the world could be different. You know when cars replaced horses I don't think the government really knew what the world was going to look like in 1920 right, but we did create a road system and traffic lights and rules, I think we'll do it again. But I think it's going to be a long and winding road with a lot of mistakes. I think a lot of debate; discussion; mutual discovery and conflict. But I think one thing is that the technology revolution that we found the revolutionary now about connectivity autonomous is ingenuity speaking regulators are leaning forward. People are saying WOW there is so much societal benefit to helping people more safely with less ignitions, lowering the cost of access to transportation that we feel like there is genuinely enormous support for the technology revolution.

Frank Beckmann: Are they going to get out of the way?

John Casesa: I don't think you can expect them to get out of the way because when you take the automobile; this four thousand pound appliance, and you make it connected and autonomous as a robot, it has a lot of societal implementation so I doubt if they can get out of the way. But I think they can be a partner, and I do think will be a partner. I really think...we will not have access to technology without that.

Frank Beckmann: What do you want to drive? I have been driving the same thing that I am right now in KMX Hybrid Black Label.

John Casesa: Yeah. So in my company we are very partial to Fords and Lincolns so I have spent the last couple of years driving Mustangs even through the winter, and now that I have that out of my system I have a new Lincoln Continental which I think, for people, will be another discovery because that is not an old brand. People you know don't realize what we have done and I think when that car is on the street, it has a huge impact.

Frank Beckmann: John Casesa from Ford, thanks so much.

John Casesa: Thank you ,Frank.

Frank Beckmann: As we continue exploring the future of mobility. They have been doing at CES as well, and one of the fascinating sessions that was held, the attendees included the Managing Director at Deloitte, Scott Corwin, who made a point that I had not thought of in this exciting realm we are seeing in today's changes in the auto industry and in mobility overall. Scott, the point you made that was so fascinating to me is that we keep thinking of consumers thinking about whether they want a buy the autonomous vehicles or have a self-driving car and you went through this with your group at Deloitte too, and you came to a conclusion that you were maybe not thinking this through correctly.

Scott Corwin: That's correct, Frank. Early on, we got up a little bit in the view of everything we were reading and thinking about was we will have personally owned vehicles or shared mobility. We have driver driven vehicles or autonomous. And we came to the conclusion that that was a false choice. We had thought about different scenarios of adoption and what not and there is a lot written about the idea that potentially you need to create safe places for all autonomous drive vehicles. But what actually happened with the technology in companies like Google, and what they have done, is they demonstrated that these vehicles can operate safely in a by motor way with driver driven vehicles. And so we came up with a very simple two-by-two and on the X axis is personally owed or shared and then on the Y axis it is driver driven or fully autonomous. What is really interesting is that we see this rise to shared mobility with the ride hailing services. We have always had, by the way, you know, vehicles sharing in the form of taxis and limos and rental cars, but you know Uber and Lyft and what is interesting is the number of miles driven. Ninety-eight percent are driven by personally owed driver driven vehicles and now they are 2% in sort of the ride sharing. That has doubled in the last few years and it's on an exponential growth rate. But when you get to autonomous, you will have four different quadrants so people will have and we think all four of these future states will coexist. So you will have driver driven personally owed; you will have driver driven shared, which will shrink over time; you will personally owned autonomous drive vehicles; and then you will have shared autonomous vehicles, kind of like you know Google pod in urban areas. So that create a whole different set of possibilities and it also create an enormous complexity for both the legacy and the combatant to auto players and even the disruptors about the where this future is heading.

Frank Beckmann: Who are the disruptors?

Scott Corwin: So our view is the disruptors have been companies like Google and Uber and Apple and Tesla. And the reason we call them disruptors is because they looked at sort of this vertically integrated structure that existed in the automotive industry going back to the time of Henry Ford and it's have been relatively unchanged in hundred years. There are always auto suppliers; there are OEMs; there are dealers, even in the beginning of time there are patrol stations; there insurance companies; you had the public sector giving driver licenses and traffic tickets and parking tickets. That structure even with all the technology hasn't fundamentally changed. But where we are heading now is to a new form of mobility that will be intermodal and particularly in urban areas where you travel across different modes of transportation in a more seamless and integrated matter - with lots of different choices. And I think that is really important that all these different segments that are going to exist; creates a lot of opportunity. As we shift from the idea that all the values embedded into the vehicle itself, to actually what the experience is with the data and the services that come from it. This idea of mobility management, those of sources of future value creation adds lots of different players, have an opportunity to go make happen.

Frank Beckmann: So it is fun for me ponder this, you get paid to ponder it. How is the consumer going to make this choice about what he or she wants to do in terms of vehicle ownership down the road?

Scott Corwin: Well I'm not only have the fun to ponder it, I have the spent the last couple of years making the rounds with, you know, my friends in Detroit where I've spend a lot of time in the technology firms and insurance companies and the department of transportation and places like Columbus and innovative places, even here in Las Vegas in Nevada. There is some much furtle innovation and experimentation and there is so many different views about where this is going. So it has been you know a remarkable period and we are at the

culp of and it's very early to a dramatically different. And it is not going to be a straight line of how we get there.

Frank Beckmann: I described it as we are reliving what Henry Ford did a century ago when he took the horse and buggy and turned it into the mobile vehicle.

Scott Corwin: I think that is a fantastic analogy. I agree with that.

Frank Beckmann: And finally again, how will the consumer make that choice that he or she wants to own. What will be the driving effect of that?

Scott Corwin: So our view is that it will vary depending upon where people live and sort of their nature of their family structure and their work life style balance. So there is not a single answer to that. I think what it is that you can see and sort of middle class families today that might have two or three vehicles, they might in fact have an autonomous drive personally owed vehicle that pretty much customized. It can be cleaner; it could be safer; it could be faster; it could be more efficient. I mean the one thing about autonomous drive vehicles is that they nearly never crash and so the through put and tightly congested areas and urban areas. So I think in urban areas you are going to see shared AVs get adopted pretty quickly because it enables the movement to more people at lower cost and in rural suburban areas probably it will be a much slower adoption rate.

Frank Beckmann: Scott Corwin Deloitte, thanks so much. Great stuff.

Scott Corwin: My pleasure. Thank you very much Frank.