

# TOYOTA CHAIRMAN TAKESHI UCHIYAMADA CHARTS THE COURSE OF THE WORLD'S LARGEST AUTOMAKER

**Takeshi Uchiyamada**  
**Chairman of the Board**  
**Toyota Motor Corporation**

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## **Excerpts from Chairman Uchiyamada's Remarks**

**Your passion other than work?** I love to sail with my friends. We've been doing it for 40 years as a group. And you have to know so much about the shifting tides and winds and cross-currents. And there are moments of real danger, but knowing that you have the skills to recover and knowing you have to rely on teamwork to survive, that's really the soul of sailing. It's a good thing. I like it because it's a lot like managing a global automobile company through a very turbulent period.

**Status of Toyota Motor Corporation today?** Toyota has gone through a series of tough challenges. The financial crisis of 2007 and 2008 was followed by the recall crisis in 2010, and then the terrible earthquake and tsunami in 2011 with its disruption of our global supply chain. But we managed to sail our way through these challenges and we are now intensifying our efforts to get better, to continuously improve, which was the Japanese concept of "kaizen."

**Outlook for Toyota Motor Corporation?** It's not very modest of me to say this, but I think the facts support my statement: The Prius has become the most important vehicle for our future. We have taken what we learned and applied it to other Toyota and Lexus vehicles. As of March this year we had sold 5 million hybrid vehicles around the world, and the Prius alone hit a cumulative level of 3 million sales globally in June.

**What lies ahead?** Like everyone else, we are pursuing a portfolio of options, but we have made big progress in developing a hydrogen fuel-cell vehicle. Toyota will be able to offer that in a sedan around 2015. A fuel-cell vehicle has zero tailpipe emissions, just like an electric vehicle, but it does not have issues of driving range and charging time that electric vehicles have. I personally expect a lot from this hydrogen fuel-cell technology. And if government and industry work together, this might be part of the long-term solution.

There are two other technological challenges I would like to touch on. And one is automated driving technologies. We are now able to recognize driving conditions surrounding the car and to determine a driver's physical condition. We do that by using millimeter wave radar and an object recognition camera system. We can control vehicle behavior using sensors on the front of the vehicle to apply brakes and control steering. We believe these technologies must be introduced in stages. They must be layered on because we always have to be prepared for the worst-case accident. We must make sure that drivers and society as a whole fully understand the implications of these new technologies. Issues of safety must never be compromised. Our ultimate goal is zero fatalities from accidents.

Secondly, how do we allow cars to be connected to other vehicles, to roads and other infrastructure, and to the Internet as a whole? If we could combine vehicle-to-vehicle and vehicle-to-infrastructure communication, we could create an intelligent transportation system that could detect congestion far in advance. We could see a vehicle even before it enters a highway or we could see a vehicle hidden behind a fence or a building. This also has the potential to prevent accidents and congestion. It also would reduce emissions.

**What is your company's focus?** In 2011 we drafted the Toyota Global Vision. In short sentences, consisting of fewer than 70 words, it defined what kind of company we should be. It said that creating always-better cars is our chief focus.

**Can you tell the difference between a Toyota manufacture in Japan and one manufactured in the U.S.?**

Actually, if I get in with my eyes covered, I won't be able to tell. If I go in with my eyes open, I will see the suppliers' stickers in some areas of the car so I'll be able to tell where it was made.

**Do you recommend particular policies to Prime Minister Abe?** I meet with the Prime Minister at least once or more per month.

**What about China as a market?** Right now our focus is on the U.S. market. That's the market we are most interested in at the moment. The largest sales volume for Toyota is here in the United States. We are selling slightly less than 10 million units throughout the world, and of that over 2 million cars are sold here in the United States. And therefore the United States, in the world, is the center of politics and economy. It's very stable. And also the business environment is very fair, stable, and it is business-friendly.

And at the same time, here in the United States, population is expected to continue to grow, and therefore we attach more importance on the United States. But in terms of the market, as you correctly pointed out, the Chinese market has become the largest market in the world. But unfortunately, in the case of Toyota, in China we still have a very small or low presence. I earlier said that we are selling more than 2 million units of cars here in the United States, but in China it's around 900,000. So by far the U.S. market is bigger and more important.

**What's the best deal for a Toyota?** In the case of passenger cars, Camry of Toyota, among passenger cars, is the best recommendation.

**What's the fastest Toyota?** It's all been sold out, but Lexus LFA, that's a super sports car that can run 200 miles at the maximum speed... It was around \$370,000. [Laughter.]

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DAVID RUBENSTEIN: Welcome, members and guests of The Economic Club of Washington. I'm David Rubenstein, Club President, and I welcome you all to this breakfast event at the Ronald Reagan Building and International Trade Center in Washington, DC.

We're very honored today to have as our special guest the chairman of Toyota Motors. Toyota, as many of you may know, is the largest automobile company in the world now, with a market cap of about \$207 billion and revenues annually of about \$230 billion; has 331,000 employees, about 32,000 employees in the United States; and last year sold about 9.7 million cars worldwide, and this year perhaps is on track to sell 10 million cars.

The chairman of Toyota, Takeshi Uchiyamada, is a person who joined Toyota right out of college. He was an applied physics major at Nagoya University, and then right after – in 1969 – he graduated, he joined Toyota, and has, over a period of 44 years, worked his way up to be chairman. He is best known in the company for, among other things, being the person who helped promote and develop the very well-known hybrid car that Toyota produces called the Prius. And he is often known in Japan and in Toyota Company as the father of the Prius.

He became the chairman of Toyota in June of 2013, previously served as vice chairman, and has held a wide variety of positions. He is a well-known figure in Japanese business circles and global business circles and is vice chairman of the Japanese federation of businesses known as Keidanren. So it's my pleasure to introduce our special guest today, Takeshi Uchiyamada. [Applause.]

TAKESHI UCHIYAMADA: [Mr. Uchiyamada's remarks are through an interpreter.] Thank you very much for that introduction, David. I really appreciate this opportunity. I will bet that you and many other people here this morning think that all Japanese executives do is work, work, work, so I wanted to tell you about the passion I have other than work.

Toyota has gone through a series of tough challenges. The financial crisis of 2007 and 2008 was followed by the recall crisis in 2010, and then the terrible earthquake and tsunami in 2011 with its disruption of our global supply chain. But we managed to sail our way through these challenges and we are now intensifying our efforts to get better, to continuously improve, which was the Japanese concept of "kaizen."

The kind of turbulence I want to talk to you about today is different. First, it's technological, starting with the issue of what propulsion systems cars of the future will have. As David mentioned in his introduction, you know, some people call me the father of our company's Prius hybrid car, or maybe a grandfather by now. I'm not sure. [Laughter.] But I can tell you the Prius was not easy to create.

Back in 1993 my group was supposed to come up with a car for the 21<sup>st</sup> century, and we thought a car for the 21<sup>st</sup> century must be a part of the solution to the challenges relating to resources and environment. And so my team proposed to top management that we design a vehicle that would achieve 1.5 times better fuel consumption. We thought that was extremely ambitious, but top management told us: Double it. You're not being ambitious enough. You should think about the century ahead.

So we had to give up the possible target and try to achieve the ideal target. This was major pressure, the most intense I had ever experienced. Finally we decided to adopt a hybrid system that achieved this very challenging goal of doubling the fuel economy. We studied 80 different types of hybrid systems and finally chose the so-called series-parallel system. This would enable a vehicle to run only on the gasoline engine, only on the electric motor, or on the combination of both depending on driving conditions. Also environmental protection would be optimized.

When we showed the first concept model at the Tokyo Motor Show in the fall of 1995, we failed to make the prototype actually function. This prototype that was completed in the lab did not function at all. Can you imagine the agony we endured? For 49 days in November through December the car didn't move an inch. I couldn't sleep very well during that period.

And finally, either on Christmas Eve or Christmas Day – anyway, near the end of a year – we got the car to run for the first time, but only for 500 meters and then it stopped. But that was a huge Christmas present to us engaged in the development of the Prius. But we didn't give up. We kept working hard developing the vehicle and reached the launch goal in December 1997.

It's not very modest of me to say this, but I think the facts support my statement: The Prius has become the most important vehicle for our future. We have taken what we learned and applied it to other Toyota and Lexus vehicles. As of March this year we had sold 5 million hybrid vehicles around the world, and the Prius alone hit a cumulative level of 3 million sales globally in June.

I'm personally very proud that hybrid vehicles have achieved this kind of popularity, and deeply grateful to our valued customers who supported it. One of our competitors has said customers who drive Prius are "geeks." And after this one Prius owner wrote on the Web: I'm a Prius geek and I'm proud of it. And we then created a Prius geek badge. [Laughter.] Can you see? This is the Prius geek badge. And this badge is made of cheap tin, but for me it's the most valuable award that I can wear.

Now, as I look around the world I see that some people believe diesel engines are the future. Others think that all-electric vehicles are the quick solution. Some people say hybrid vehicles such as the Prius are only a bridge to the future, but we think it could be a long bridge and a very sturdy one because there are many more gains we can achieve with hybrids.

As we disclosed that last month in Michigan, we are working on the fourth generation of the Prius. In each of the previous moves to a new generation, we achieved a 10 percent increase in mileage per gallon. We are committed to beating that record this time. We will continue to offer many types of hybrids, more than any other manufacturer. One variation is the plug-in hybrid. It reduces CO<sub>2</sub> to the same extent than an all-electric vehicle does, but the big difference is that a plug-in can be driven on its gasoline-charged engine even if it runs out of electricity it received from being plugged into the socket.

That gives a driver much more confidence that he or she will not run out of juice somewhere along the highway. The United States has many hybrids on the roads, but today I wish to call on the other industries to sell 5 million of these vehicles in the United States by the end of 2016 on a cumulative basis. I want our industry to work closely together to achieve this goal of 5 million hybrids in America.

Now, if hybrids are the bridge to the future, what is the other end of the bridge? Like everyone else, we are pursuing a portfolio of options, but we have made big progress in developing a hydrogen fuel-cell vehicle. Toyota will be able to offer that in a sedan around 2015. A fuel-cell vehicle has zero tailpipe emissions, just like an electric vehicle, but it does not have issues of driving range and charging time that electric vehicles have. I personally expect a lot from this hydrogen fuel-cell technology. And if government and industry work together, this might be part of the long-term solution. Perhaps 15 years from now we can meet again here in Washington and we will know exactly which system has prevailed. By that time, if I'm still around, I may be the great-grandfather.

Well, there are two other technological challenges I would like to touch on. And one is automated driving technologies. We are now able to recognize driving conditions surrounding the car and to determine a driver's physical condition. We do that by using millimeter wave radar and an object recognition camera system. We can control vehicle behavior using sensors on the front of the vehicle to apply brakes and control steering. We believe these technologies must be introduced in stages. They must be layered on because we always have to be prepared for the worst-case accident. We must make sure that drivers and society as a whole fully understand the implications of these new technologies. Issues of safety must never be compromised. Our ultimate goal is zero fatalities from accidents.

Secondly, how do we allow cars to be connected to other vehicles, to roads and other infrastructure, and to the Internet as a whole? If we could combine vehicle-to-vehicle and vehicle-to-infrastructure communication, we could create an intelligent transportation system that could detect congestion far in advance. We could see a vehicle even before it enters a highway or we could see a vehicle hidden behind a fence or a building. This also has the potential to prevent accidents and congestion. It also would reduce emissions.

The question is how we get it all done and who pays for it. We will need standards that specify how cars made by different manufacturers will communicate with each other. And an overall communications network must be created. Government and industry will have to work together to allow that to happen. New business models and new industries may also have to spring up. We are pursuing the automated driving and connectivity technologies separately, but ultimately they will come together as part of the same system. They

will be like a belt and trousers. They will fit with each other. When you add all this up you can see how different cars will be in just a few years' time. We really are in the process of creating cars of the future.

Finally, we at Toyota recognize there is much economic uncertainty in the world, including here in the United States. As we attempt to navigate our way through the many issues, we believe we have profound responsibilities, like a good captain does. In 2011 we drafted the Toyota Global Vision. In short sentences, consisting of fewer than 70 words, it defined what kind of company we should be. It said that creating always-better cars is our chief focus.

But we also believe we should contribute to communities where we have enjoyed such strong sales. For example, we strive to contribute to communities through our work on advanced infrastructure, such as intelligent transportation systems, smart grids, and other solutions that allow greater mobility. At the national U.S. level, after being in crisis just a few years ago, the auto industry is encountering much better weather. It is now playing a major role in creating new jobs in America and enhancing the country's overall competitiveness in the world.

These jobs are good jobs. They require continuous efforts to improve education and training. We think this lifts a society as a whole. Currently Toyota has invested a little less than \$20 billion U.S. in the United States and has 10 plants. Altogether with sales, marketing, R&D, and other functions, we employ around 32,000 people directly. We obviously wish to develop our business further here with many exciting new vehicles, but we also have a strong commitment to contribute to the entire auto industry, to the U.S. economy, and to American society as a whole. And for myself, I would like to lead Toyota to navigate through the waters to achieve that goal.

Thank you very much for your kind attention. I wish you all well and I look forward to talking with David. Thank you. [Applause.]

MR. RUBENSTEIN: All right, so thank you very much for those remarks.

My first question is, I noticed when you were giving your speech you obviously have a high degree of confidence in technology because you were reading it from an iPad. [Laughter.] And normally people have a text that's written out, but did you ever worry that the iPad battery could go down or something like that? [Laughter.]

MR. UCHIYAMADA: Well, of course I checked before coming here that I have enough battery before coming here, so I was confident that the battery will last, at least for my speech.

MR. RUBENSTEIN: Toyota has become the largest automobile company in the world, but to do that it, in effect, disrupted better-known companies around the world – General Motors or Ford or other large automobile companies. What were the one or two major things that enabled Toyota to come from a very modest-sized company in the 1950s to the biggest automobile company? Would you say there are one or two traits that Toyota had that propelled it forward?

MR. UCHIYAMADA: Well, there are various factors, including luck, that we enjoyed that brought us here. But in my case I would like to refer to two factors, which I believe must have had something to do with who we are today.

Number one, Toyota has constantly been improving products, or when we changed models we designed models. We very carefully listened to customers' voices so that customers' voices are fully reflected in the models that we create or refurbish. That was very important. Of course our competitors must be doing the same thing, but how persistent and how tenacious in our effort in trying to reflect customer voices in the product was one important factor.

Secondly, in the case of Toyota we have Toyota production system, which is a very sophisticated and refined production system. And this Toyota production system has the core base, which is the continuous improvement activities. Constantly – you never get satisfied with what you see today or what you have achieved today, but continue to improve on that further. This relates to cost, relates to policy, quality as well as productivity. So that's the continuation of that and accumulated, continued efforts. So as I said, very carefully listen to the customers first, and also continuous improvement.

MR. RUBENSTEIN: Oh, Toyota, as I said, sort of disrupted some of the better-known companies at the time. Are you worried that there's some smaller company somewhere in the world that could come along and disrupt you? Are you worried about a company like Tesla or others who have a new model? And do you worry that you could ultimately be disrupted in your strength from some smaller company somewhere in the world?

MR. UCHIYAMADA: Well, for that, as you have said, we originally were a small company. Therefore, in the competitive world we believe that there is always an opportunity for any company. And there are many auto companies being established. And there are companies with unique activities, unique technologies, and if they make efforts with those uniqueness that will be of course a threat for us. But more than that, for us a larger threat will be that we ourselves don't have the sensitivity to feel that threat. That would be a much more major threat for Toyota.

In the founding period of Toyota and in the period that Toyota was making a challenge to other companies, we shouldn't forget those times and always work together with those new companies in competition to have a healthy competition. If we are able to work in that way, I think that we'll see the companies will survive that can win that competition.

MR. RUBENSTEIN: Mr. Eiji Toyoda passed away at the age of a hundred. He was, I think, the son of the original founder of Toyota. And I noticed in reading his obituary that his name was spelled T-O-Y-O-D-A, but the company is called – is spelled T-O-Y-O-T-A. So I always wondered, why did they change the spelling of the family's name?

MR. UCHIYAMADA: Well, to me it's part of the history, so to speak. When I joined the company – or this happened far before – a lot before I joined Toyota, but at the initial stage, when Toyota Motor Company was established, as I mentioned earlier, it started with a name Toyoda Motor Corporation. At least it was in their minds, the minds of the founders. And in 1937 the automobile company was newly established.

And when they did that we had to decide on the logo, the company, and we recruited a designer and elicited some ideas. And one of the designers suggested Toyota, ending with T-A. And rather than saying D-A, pronouncing T-A meets the requirement or a need or atmosphere of the times. And based upon that proposal we decided to have the name ending with T-A. And when the company started activities in the 1940s, we started as Toyota Motor Corporation, ending with T-A.

MR. RUBENSTEIN: Myself, as a person who has bought some cars, I had a couple questions. When I go to negotiate the price of a car – [laughter] – I mean, how much flexibility does the – [laughter] – does the dealer

have? And, you know, is there anyone that goes in and actually pays the price that's on the sticker? [Laughter.] Does anybody actually do that, or everybody negotiates everywhere in the world? Is that right? And how much flexibility does the salesman actually have before he goes and talks to his manager? [Laughter.]

MR. UCHIYAMADA: Well, I think everyone has a strong interest in this topic – [laughter] – but it's quite difficult to answer on my side. But actually, the car sales at the dealers not only for Toyota Motor Corporation but usually dealers are independent from the OEMs. So the OEMs will sell the car at a certain price to the dealers, what we wholesale to the dealers, and then the dealerships will sell to the customers. And the price actually is determined by the dealers with their own strategies. So that is the general way that cars sell.

MR. RUBENSTEIN: Negotiating prices, is it men or women? [Laughter.]

MR. UCHIYAMADA: Well, what I hear from the dealers is women, they are more tough. That's what I hear. [Laughter.]

MR. RUBENSTEIN: As chairman of Toyota, presumably you get to test drive some of the new cars and so forth.

MR. UCHIYAMADA: Yeah.

MR. RUBENSTEIN: So do you actually go out and test these cars and you give them your views on whether it will sell or not, or you're not really in a test-driving phase anymore?

MR. UCHIYAMADA: Even today, with the new cars that Toyota introduces in the market, I test drive all of the cars. And I also test drive major competitors' cars, which is the talk of the town.

MR. RUBENSTEIN: And what is your secret fantasy about owning a non-Toyota car? [Laughter.] Which car would you like to – [laughter] – would you like to own?

MR. UCHIYAMADA: Well, today I only drive Toyota cars. Now I have two cars. I own two cars. One is Lexus LS and the other one is, of course, the Prius. So these two cars are made for differentiated use, depending upon where I use those cars. I mean, what do I do if I'm prohibited from riding on Toyota cars? I can say two things about this.

One, as I have been saying, I'm an engineer. So if there's a car that offers very epic-making features technologically, the car that is at the cutting edge of technology, the car that has adopted totally new technology from the viewpoint of supporting engineers who came up with such a technology and the company, I would like to try out those cars. And amongst those vehicles in the existing lineup I'm personally interested in BMW's 5 Series sports-type car. That's really a fun-to-drive car. I like that car. [Laughter.]

MR. RUBENSTEIN: Sales are going to go up now and they're going to put an ad in saying that the chairman of Toyota recommended it, but – [laughter]. Now, you have two children. Suppose one of your children came to you and said that he or she would not really want to buy a Toyota. What would you say to them? [Laughter.]

MR. UCHIYAMADA: Well, actually that happened in my family. My son, when he was buying a car for the first time, he said, I want to buy a car. So I said, OK, that's great, and I think this car is good among the Toyota lineup. That's what I told him. But then he said, well, I don't want to buy a Toyota car. That's what my son

said. And I asked, why? Well, it doesn't look cool. It's not for young people. That's what he said. And I can't say the maker, but he selected a European-manufactured car.

And at the end, well, I thought that he could drive another car and study, but I said, you will regret it. [Laughter.] And after he bought that car there was a lot of failures with that car that he bought. Well, it's a European car, so if you drive it in Japan it's a difficult to get the parts to replace, and so it took time. So now I'm very happy that he has a Toyota car. [Laughter.]

MR. RUBENSTEIN: When you're driving around Tokyo and you drive the car yourself, when you need gasoline do you actually go and pump it in yourself, you know, how do you get gasoline? Do people recognize you when you drive into the gasoline stations? Everybody knows you as the chairman of Toyota? They see it's strange that you're pumping your own gasoline, or you don't do that? [Laughter.]

MR. UCHIYAMADA: Well, I go to the self-service stand. Well, of course, sometimes the maintenance person in my company does it for me, but if I run long distance myself I will be out of gasoline, so I go to a self-service stand by myself and fill it up.

MR. RUBENSTEIN: So today Toyota has come through some very difficult situations. Could you describe a little bit more, when the earthquake and the tsunami happened, it disrupted your supply chain? How difficult was it for you to get back to the situation where you could actually produce cars at the quality that you wanted? How long did it take?

MR. UCHIYAMADA: First of all, in that case, to Japan that was something, the natural disaster, that we have never experienced in recent years. And at that time, friends from the United States or U.S. forces in Japan actually went to the affected area in Northeastern Japan to help people there recover, and we deeply appreciate their support and friendship.

As far as disruption of Toyota supply chain is concerned, true, our supply chain was disrupted and therefore we couldn't but shut down the plant and suspend production there. But in our production group, when there's natural disasters and when plants have to be shut down, we have three principles for recovery.

For five years I was executive vice president in charge of production, so I know those three principles. Those, first of all, placed highest priority on saving people's lives. That comes first. Secondly, to help recover the affected areas. And thirdly, only for the third time you make effort to re-open the production. And you should not make a mistake in terms of sequence of that, and that concept is well understood by all the people.

In the case of earthquake in Tohoku, the supply chain was disrupted, but first and foremost, just like the U.S. forces helping the local region recover, we did the same thing. We wanted to help the recovery of the affected area, because our head office was hardly affected and therefore we sent relief supplies and people who are willing to support them voluntarily – we dispatched them and we first started helping those local people to recover.

And after a while we realized that our supply chain itself was rather substantially disrupted. Even prior to that big one we had several earthquakes. We had floods affecting our facilities. And therefore we had to make sure that, both in Japan and overseas, we tried not to concentrate any parts and any suppliers. We have been sourcing from several numbers of suppliers both in Japan and overseas. So that's what we are doing, preparing ourselves for those disasters.



But what we realized was, especially in the case of semiconductors, below the first-tier suppliers which are distributed, at a lower level there was a single supplier who accounted for a large portion of supplies. The Renesas is the name of the semiconductor manufacturer. Their plant was damaged, and therefore all the car makers got together to go to Renesas to help them recover. And people at Renesas said that it will take at least one year for the damage to be corrected and for the plant to be reopened. But with all this work, people working together, in half that time, within half a year, we were able to reopen the production at Renesas.

MR. RUBENSTEIN: A few years ago Toyota had a problem where the accelerator seemed to get stuck and seemed to be a problem. What actually happened, and what was the cause of it, and how did you solve that problem?

MR. UCHIYAMADA: For this we have caused many concerns to many people. And at that time there were many things occurring simultaneously for us as well. And actually, mainly we had the unintended acceleration issue. That was the main issue. And in there, there was the floor mat and accelerator pedal being stuck and the accelerator pedal becoming difficult to return. There were these issues in that. Of course, each of these issues had their own reasons of the floor mat being stuck – with the accelerator pedal – had their own reasons, but their own causes. So what we did is to analyze the causes and then, as a countermeasure, do recalls.

One other thing that we had continued to discuss until the very end was about the electronic throttle system. With a software bug, there was a concern raised that it may run out of control. So this concern remained until the very end of these series of issues. However, for us the electronic throttle system, the hardware and the software development situation and at the end the electronic throttle, we already had provided to the world 40 million units. And so with that situation we did not receive any claims from the market, the field, about the problem with the electronic throttle. We did do a thorough research and we had no complaints received from the field.

So we had done an analysis of what the reason was, and I have explained at the congressional hearing that I participate in – and however NHTSA and also the National Science Academy had – did a scientific research and had approved our claims, our statements that there was no issue behind the electronic throttle system. And so for this issue we've seen it toned down.

MR. RUBENSTEIN: You could tell the difference in quality of a car from one manufactured, let's say, in the United States and one manufactured in Japan. So today, if you were to have two cars side by side, one manufactured by Toyota in Japan and one manufactured by Toyota in the United States, could you go in and tell which one was manufactured where by the quality of the car, or is it not distinguishable anymore?

MR. UCHIYAMADA: Actually, if I get in with my eyes covered, I won't be able to tell. If I go in with my eyes open, I will see the suppliers' stickers in some areas of the car so I'll be able to tell where it was made. But actually, quality-wise the cars made in Japan and the cars made in the United States, if it's the same model, you won't be able to tell riding in the car, just driving in the car.

The reason is, for Toyota, for each production plant, we have a system to benchmark a Japanese plant, the overseas plant benchmarking a Japanese plant. So for quality and productivity, all of the factors in all processes, we benchmark the plant and analyze, if we have a gap, why is it that we have a gap. And so we do have this analyzing process.

U.S. operations – we have a long history, so already the U.S., with that activity, has achieved the same level with the Japanese plant. And the people working in the plant have been instructing and supporting the suppliers as well. So the product itself is on the same level.

MR. RUBENSTEIN: The most popular color car that you sell?

MR. UCHIYAMADA: Well, this is not limited to the United States, but globally the high-selling color seems to be converging: white, black, and silver. Those are popular colors. Or not exactly those three colors but using those three colors as a base, by some adjustment, most popular. So white, black, and silver are the high-selling colors. But other than that, we sometimes come up with very vivid cars for colors that are preferred in certain regions or countries, or other markets do prefer lower tone or different tone of color. So in line with the preferred colors and tones, we make adjustments to the paints to sell to different markets.

MR. RUBENSTEIN: And people come in and buy – you know, you can always get some additional options on cars that – I guess, are there some options or does everything come in a car now; you don't need to have any additional options? And I often wonder, when I used to go and negotiate cars, not very successfully, they used to try to sell me something called rust-proofing – [laughter] – that rust-proofs the undercoating. And I never knew why I needed that. But do they still do that or – [laughter].

MR. UCHIYAMADA: Well, depending upon what car you are going to buy and in which country you are going to buy a car, so the situation there is from country to country. But in the case of very popular options, including multimedia-related options – navigation systems, audio systems, those are, generally speaking, very popular as options.

Pre-crash safety system, that's the product name that we have. It has radars watching what's going ahead of the car to mitigate or avoid crash. And the higher end of the car also uses an object recognition camera system as well. So using radar system, if that can be obtained through an option to protect yourself, your family, this protection system is the must that you have.

I mean, above a certain grade sometimes it is standardized in the vehicle itself, but because it's rather expensive so, for most cases, it's offered as options. But this radar system is very recommendable for you to have as an option.

MR. RUBENSTEIN: So let me ask you, Japan has suffered in recent years from their very expensive yen. The yen at one point, when I first went to Tokyo many years ago, was 360 yen to the dollar. Obviously now it's much lower. So how have you been able to overcome the yen as a Japanese manufacturer, and what kind of impact does it have on the Japanese economy by having such an expensive yen?

MR. UCHIYAMADA: Well, the foreign exchange rate will be resolved – the economy's mechanisms, various mechanisms. And when it was 360 yen per dollar it was a fixed rate, so it was constantly fixed at that rate. But currently it fluctuates freely, so it is a resolve that we see out from the economic mechanisms.

Before, the yen-to-dollar used to be 77 yen, so an extremely strong yen had arrived. Well, right now I think around 87 – 97, excuse me – 97 to 98 yen per dollar. And the reason why we are seeing this change is because, similarly, as the U.S. government policy is taking, the monetary policy is made to try to get out of the deflation and try to invigorate the economy of Japan. And so we are having a monetary easing policy in Japan. Therefore, there is more money flowing into the market. And as a result, the yen has returned to a 97 to 98 level.

What is most difficult for us is the fluctuation itself? A large fluctuation of the foreign exchange rate is very difficult to do a business operation. Therefore, for us, we don't try to focus on a certain rate, not simply saying that a certain rate will be difficult for us. For us, what we focus on is trying to build a structure so that we are not affected so much by the fluctuation of the foreign exchange.

For example, right now we are in the 90s area compared with the 70s to the dollar. And the yen will be depreciated. But there are manufacturers who are trying to return production operations to Japan. But we don't want to make decisions on where we manufacture our products, just because of the foreign exchange. So for the ES model we have made a decision to do the manufacturing in the U.S. And that is going to be implemented. And that kind of decision – we are not going to make changes just because of the foreign exchange.

And the Lexus model, the reason we made this decision was that the Lexus model was manufactured mainly in Japan. Up to now that was a good thing for the Lexus, because we could utilize the high-quality Japanese plants to do the manufacturing for the Lexus. But as I've said earlier, the U.S. plants have improved their level of quality and they can manufacture that. And also the RX right now – Lexus RX is now manufactured in the Canadian plant. And so in order to avoid the impact from the fluctuation of the foreign exchange, we are going to shift to achieve a good balance.

MR. RUBENSTEIN: Now, the Prime Minister of Japan, Mr. Abe, is very well known now for his economic policies. As the chairman of Toyota, I assume he would call you and say, what do you think of my policies? Do you recommend particular policies to him? And do you see him frequently? And what do you think of the economic policies known as “Abenomics”?

MR. UCHIYAMADA: OK. Actually right now there is an organization called Keidanren, Japan Business Federation, and I'm vice chairman of that organization. And also there are certain meetings chaired by Prime Minister himself, called the Comprehensive Science Council, and I'm involved in both of these organizations. Especially in the case of Keidanren, it covers the entire economic activities. And for the Japanese economy to be competitive on the global scene, what sort of government policies should we introduce or implement? On those points the Keidanren has been presenting proposals to the government.

Within Keidanren I'm in charge of Industrial Technology Committee and also electronics technology industry. So relating to the electronics industry or from the general industry viewpoint, from that perspective, we come up with a proposal or advice, which can help those industries in Japan to become more competitive, so the Prime Minister, he wants to enhance Japanese competitiveness through more focused efforts in science and technology area in Japan, innovation among others.

And this involves another organization set up by Prime Minister, a comprehensive science technology council. And as a private sector representative there, in a rather bold sense the bold approach is going to be taken for science and technology in Japan. And in a more prioritized manner, Japan should make greater investment in those areas, those other proposals that we are presenting and those that we are actually working on those areas more specifically. So I meet with the Prime Minister at least once or more per month.

MR. RUBENSTEIN: And let me ask you, Japan is a country which has probably the least favorable demographics of any developed country. The average age in the United States is roughly 36. Europe is roughly 41. Japan is 45 and has the highest percentage of people of 65 or older in the world. So do you worry, as a

Japanese business leader, about the demographic issues? And how do you try to address those as a businessman, and are people in Japan worried about this in terms of your economic vitality in the future?

MR. UCHIYAMADA: Well, the total nation is concerned with this issue. So the labor population is dropping. And there's an issue of reducing the ratio in the total demographics but also the absolute number, the absolute number of people in the labor population is reducing. So everyone in Japan is very concerned with this issue.

And at the end we need to create a society that people will be comfortable in giving birth to children and raising children. But before that, what we have to do is to have opportunities – more opportunities for women. Now, looking around, I see many women participating here, but in Japan if we open this kind of an event or party we will see much fewer women participating. It will be just mainly men participating in this kind of event.

So for myself, because half of the population in the world is women, female, I think that they should have more opportunities to be able to be vital in the economy. And if there are any hindering factors, we should solve these.

MR. RUBENSTEIN: But there's an effort right now, I understand, to have Japanese businessmen not go out and drink at night but go home and spend more time with their wives and maybe help create more population. [Laughter.] So is that getting anywhere, or do you think that's going to produce very much anytime soon?

MR. UCHIYAMADA: Well, in the case of Japan, birth is not the issue but it's after birth of the child that we have an issue. So the couple has a child, we have to support the couple – the mother and the child. So we need a system that can support the mother and the child, the family. I think we need to create that kind of a system in Japan because the issue is there. So just by not drinking at night and going home early, that won't increase the population in Japan. [Laughter.]

MR. RUBENSTEIN: So the biggest economy in the world now is still the United States, and China is the second-biggest. But as you look at your future as a company, are you more interested in the United States market or the Chinese market, which is presumably much larger. Is that, for your future, a more significant country or is the United States still, the next five or 10 or 15 years, going to be the most significant foreign country for you?

MR. UCHIYAMADA: Right now our focus is on the U.S. market. That's the market we are most interested in at the moment. The largest sales volume for Toyota is here in the United States. We are selling slightly less than 10 million units throughout the world, and of that over 2 million cars are sold here in the United States. And therefore the United States, in the world, is the center of politics and economy. It's very stable. And also the business environment is very fair, stable, and it is business-friendly.

And at the same time, here in the United States, population is expected to continue to grow, and therefore we attach more importance on the United States. But in terms of the market, as you correctly pointed out, the Chinese market has become the largest market in the world. But unfortunately, in the case of Toyota, in China we still have a very small or low presence. I earlier said that we are selling more than 2 million units of cars here in the United States, but in China it's around 900,000. So by far the U.S. market is bigger and more important.

MR. RUBENSTEIN: Do you think in our lifetime, you know, there will be a very big percentage of cars that are only electric, or do you think the market isn't really there for that, or the technology isn't likely to develop such that electric cars only will become an important factor in our lifetime?

MR. UCHIYAMADA: Well, when you say "us," is it about us two? If it's just about our lifetime, maybe that won't happen. [Laughter.]

Well, for an electric vehicle, during driving it has zero emissions, so that's a wonderful characteristic of the electric vehicle. But on the other hand, the driving distance is shorter and it takes time to charge the vehicle. So in order to solve those issues, we are also working on the battery, not the lithium battery but the next-generation battery is being developed. So in the world of batteries, there should be about two breakthroughs in order to see that happen, in order to see the age of electric vehicles. And as I've said in my speech, during driving the zero emission is a characteristic of electric vehicles, and for the charging time and the driving distance issue, thinking of those points, if we want to utilize that strong character of zero emission, the fuel-cell vehicle will be a much more realistic solution. That's what I feel.

MR. RUBENSTEIN: You mentioned cars that don't need drivers, automatic cars. So have you ever been in a test-driven car yet where you were a passenger and there was a robot driving it, or would you be worried about that?

MR. UCHIYAMADA: Well, in Michigan, the state of Michigan, using the public roads we have been doing the test for the automated driving vehicles. And I have driven that also too, and I didn't have any worries driving on that test drive.

But on the other hand, the reason why I think that cars with the automated driving vehicles, we should be careful about having driverless automated driving vehicles. And the reason why I feel this is because the automated driving vehicles will have a lot of sensors to be monitoring the external world, to monitor the environment outside and in the meantime driving. But at one time, if there is a possibility that the sensors are not able to monitor the environment, what will happen to the car?

And also, for example, for the brakes, steering, the engine – and that car might be running on a motor but if, for those functions, there is a problem or a defect occurring and if there is a warning coming out and the car can't drive anymore, then what will happen to that automated driving car?

So I think at the end, the authorization of the sensors monitoring the environment, the sensing system, – will it be possible to monitor everything? Like in those busy cities, the car will be able to detect people running across the roads. Will the robots be able to detect everything? I think it will take more time to be able to do that. If the machine can't detect, then the car must be handed over to the driver, to the human being.

And so the human being, at the end, will need to control the vehicle. I think for a while that needs to be the common understanding of the world, because if it's the people's understanding that, well, we can drink champagne and have fun because the car can drive itself, but if the car can't drive itself then the human being will have to drive the car themselves and it won't be possible.

So what we're thinking of right now is for highways and certain infrastructure, if it is being prepared to allow those automated driving vehicles, maybe that will quicken the time that we can have those driverless cars. But right now, the cars that are being tested right now, the development is not being done to create that kind of driverless car, but it is being done to promote the technologies that are related to automated driving.

But I still strongly believe that, at the end, each and every one of you will have the responsibility to drive that car. So if you are doing careless driving and you're not able to detect the danger around you, then the car should have the feature to support you. So technology will be very effective in that area, I believe.

MR. RUBENSTEIN: That would be better, because I know when I'm driving I always have people honking the horn at me, and I always assume that's because I'm not that good a driver. But let's suppose I wanted to go buy a car today and I wanted to buy a Toyota. And I'm going to leave today, right now, after this and go buy a Toyota. What would be the best value for money that I could get? What would be the best deal that I could get in terms of the price and the overall quality of the car? What would you recommend that I buy?

MR. UCHIYAMADA: Well, probably no matter which car you select, you will never be sorry later on. [Laughter.] You'll never regret it. And that's because it depends on what customers seek in the cars, what they want to see in the cars. But generally speaking, those volume cars, the cars selling well means many customers are satisfied in driving those cars. In the case of passenger cars, Camry of Toyota, among passenger cars, is the best recommendation.

MR. RUBENSTEIN: Suppose I was a lot younger than I am. You pointed out that I wasn't that young earlier, but suppose I – [laughter] – suppose I was younger and I wanted the fastest Toyota car I could get. What's the fastest car you have?

MR. UCHIYAMADA: Well, already since we limited the number of vehicles sold, it's all been sold out, but Lexus LFA, that's a super sports car that can run 200 miles at the maximum speed.

MR. RUBENSTEIN: So does that cost more than \$20,000? I don't want to –

MR. UCHIYAMADA: Well, I think it was around \$370,000. [Laughter.]

MR. RUBENSTEIN: Thank you. [Applause.] We have a gift for you, a copy of the first map of the District of Columbia. [Applause.] You did a very good job. Thank you.

MR. UCHIYAMADA: [In Japanese.] [Applause.]

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## **Takeshi Uchiyamada**



**Takeshi Uchiyamada**

Chairman of the Board  
Toyota Motor Corporation

Takeshi Uchiyamada was born August 17, 1946. He graduated from Nagoya University with a degree in applied physics in March 1969 and joined Toyota Motor Corporation (TMC) in April the same year.

In January 1994, Mr. Uchiyamada became project general manager of Vehicle Development Center 2. In January 1996, he became chief engineer of that center, which developed the Prius—the world's first mass-produced gasoline-electric hybrid car.

After being named to the Board of Directors in June 1998, Mr. Uchiyamada oversaw Vehicle Development Center 3. In June 2000, he became chief officer of Vehicle Development Center 2, and in June 2001, managing director and chief officer of the Overseas Customer Service Operations Center. Mr. Uchiyamada was made a senior managing director and also appointed chief officer of the Vehicle Engineering Group in June 2003. In June 2004, he became a chief officer of the Production Control & Logistics Group, and in June 2005, he became executive vice president and member of the board. Mr. Uchiyamada was appointed vice chairman of the board in June 2012. He became chairman of the board in June 2013.

Mr. Uchiyamada is active in business circles in Japan and worldwide. He is vice chairman of Nippon Keidanren, the association of business organizations in Japan.