

2012 Los Angeles Auto Show Motor Press Guild Keynote Address - Jim Lentz

November 28, 2012

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[Motor Press Guild Event, Los Angeles, CA](#)

Wednesday, Nov. 28, 2012

The Auto Industry: Architects of the Future

Good morning everyone!

And thank you for this opportunity to tell you why I am so proud to be a part of this great industry!

From its humble beginnings over 125 years ago... to becoming the largest manufacturing sector in the nation... the auto industry has done pretty well for itself. And, in the process has continuously helped shape America and its future.

Now, when it comes to our industry... names like Henry Ford... Lee Iacocca... and Carroll Shelby... are widely known. But what about George Cayley?... John Hetrick?... or Mary Anderson?

To be honest ... I hadn't heard of them either until we started researching for this speech. But now... I've nicknamed them the 'Big Three' ... because even though they're not household names... their work affects nearly every person around the globe.

George Cayley invented safety belts...

John Hetrick developed safety cushions or what we now call air bags...

And Mary Anderson created the very first windshield wipers.

The point is... they changed the future of the auto industry and had a positive effect on our everyday lives.

And today... all automakers are doing the same... creating great things that will have a major impact on our industry... our society... and our future.

But before I delve into what we can expect in the next decade and beyond... let's talk about what's happening with our economy and industry today and what forces are in play.

To start, the U.S. economy grew two-percent in the third quarter.

This is attributed largely to consumers feeling better about their finances...

Unemployment dropped to a three-and-a-half year low...

Consumer Confidence jumped to a 5-year high...

And, the housing market seems to be turning the corner.

Fueled by these positive economic trends, the auto industry is gaining momentum.

For the total U.S. market... our annual sales forecast for 2012 is at 14.3 million vehicles... or possibly a little higher ... an increase of about a million and a half over 2011.

And the forecast ahead looks even better. Analysts predict sales will reach 16 million again in just a few years.

Now, there is data to back up their optimism.

First... there's pent up demand. In the U.S., there are more than 245 million cars on the road, and the average age of these vehicles have hit a record high of 11 years old. Over 20-percent of these cars are over 16 years old.

Second... historically... car loans have never been cheaper. Banks are charging the lowest interest rates since the Federal Reserve began its survey of loans... more than four decades ago.

Third...and the best news... the J.D. Power's Information Network says younger buyers have returned to the market at a higher rate than any other age category... which bodes well for market longevity.

So, there are a lot of positives helping drive optimism and sales... and all automakers are showing revitalized momentum.

For proof... just look at all the great new products on display here at the LA Auto Show.

It's good to see such a strong presence from automakers... and the best news is that consumers benefit from the many choices available to suit their needs.

Okay... but what about further out? What's in store for us in the long-term future?

Well, our industry has shown in the past that what we do matters. The Big Three... Cayley, Hetrick and Anderson have proven that.

And seeing the displays here at the auto show proves automakers are stepping up their game and developing advanced technologies to meet future needs of both consumers and society.

In fact, the Alliance of Automobile Manufacturers said... our industry traditionally ranks at the top of research and development investments for all industries, including computers and pharmaceuticals.

And, these investments are already becoming a reality and creating a new world for consumers.

So what will our new world be like?

Well, I'd like to say it will be similar to the Jetsons with flying cars to get us around. But... that's probably a bit ambitious.

We will, however, see new types of mobility... cleaner more efficient vehicles... and safer cars.

Let's take a deeper dive into each one.

First... new types of mobility.

From car sharing to connected cars to autonomous vehicles... consumers will have several choices when it comes to their transportation needs.

You know car sharing actually started back in the 1960's and 70's in Europe. It took a while... but in 1994... the first successful U.S., car share program started in Portland, Oregon.

And... car sharing continues to grow. According to the University of California-Berkley... there are now 25 car sharing programs in the U.S. with nearly 720,000 members, sharing over 9,800 vehicles.

You can now find car sharing in most large and mid-sized cities... and on hundreds of University campuses.

This is a great way to make cars more accessible to low-income households and to those who don't have a regular need for a car. And, as our country's population increases, car sharing will help reduce congestion and pollution.

Okay... what about connected cars? Today... customers have a multitude of choices to stay safely and seamlessly connected to the outside world... from inside their car.

Nearly every manufacturer has its own version. Ford offers SYNC... GM has OnStar... and Toyota has Entune and Lexus Enform.

And as the trend increases to have more access to things your smartphone and tablets can do... the need to help minimize driver distraction also increases.

Every car maker is dealing with this situation. At Toyota... one of our many approaches is using a skateboard.

Now... I'm not saying people should travel by skateboard... but rather, we can learn from one. Let me explain.

Imagine a dashboard where there are no buttons to push... no screens to tap... and your eyes can remain focused on the road. Well... that's exactly what Toyota is working on.

The Board of Awesomeness... yes... that's what it's called... is an electric skateboard that is run by hand gestures.

As a benefit of our partnership with Microsoft... the board is equipped with a Windows 8 tablet and Windows Kinect motion-sensing software.

By raising and lowering your hand... like this... you control the throttle... and the closer your hand gets to the board... the faster the motor goes.

One of the many real world applications could possibly be when you raise your hand... the radio volume goes up... when you drop your hand... the volume goes down.

This could potentially work in conjunction with voice recognition which sometimes can be hindered by accents or mispronunciations. Hand gestures are pretty universal.

I'll wait for a few seconds while you insert your own punch line.

So, from the conceptual to the concrete... a skateboard is leading the way.

Now, at Toyota... we're also going beyond hand gestures. Back in September... our Smart INSECT vehicle made its debut in Japan.

The INSECT is our next-generation communications-linked concept model that supports the driver and keeps them connected to his or her home.

It's an ultra-compact, single-passenger electric vehicle that's equipped with a bevy of technologies like motion sensors, voice recognition and behavior predictions.

Let me tell you a few fun things this car can do.

It uses motion sensors and facial-recognition technology to detect and authenticate the driver registered as they approach the car. Once the car recognizes the driver, it flashes its front lights.

Then, detecting the driver's hand gesture... the doors will open.

The driver is greeted via the instrument panel... with a 'Hello' or any other phrase you chose.

Now... through voice recognition a 'virtual agent' will communicate with the driver, set the destination and operate various functions of the car like the audio system.

This is sort of like our version of Herbie the Love Bug... but highly updated and tricked out.

We've also been hearing the term 'autonomous car' in the news a lot lately... but this type of automated technology has been around for a while with features like anti-lock brakes and vehicle stability control... and the list continues to grow with each new model year.

These days... many manufacturers offer a pre-collision system... lane keeping... and automatic parking.

For example... the new 2013 Lexus LS offers the industry's most advanced pre-collision active safety system. It's designed to assist the driver in avoiding or mitigating collisions with vehicles and pedestrians under a wide range of city and highway speeds, day... or night.

Now... Toyota's view of autonomous technology may differ from others. We believe the driver must ALWAYS be engaged... and this technology must be introduced slowly due to major legal, regulatory and consumer hurdles that need to be made.

I'm sure we'll be hearing a lot more about autonomous cars in the near future.

These are just a few examples of the many types of mobility automakers are creating for a better tomorrow.

Our industry is also developing greener, more sustainable vehicles that will make us less reliant on foreign oil.

Today in the U.S., there are nearly 300 fuel-efficient models to choose from... including 40 hybrids... 33 clean

diesels... and a growing number of plug-ins and pure electric vehicles... that achieve 30 miles per gallon or more. That's up by an incredible 330-percent in just six years.

And you can expect that number of models to increase in the next few years as all automakers launch cleaner, more efficient vehicles.

For Toyota... we're taking a portfolio approach and offering a variety of choices, including plug-ins... electric vehicles... and in 2015... our first fuel cell hybrid.

But, hybrid technology continues to be key for us.

We plan on launching 21 new or redesigned hybrids globally between now and the end of 2015, starting with the all-new Avalon hybrid which will arrive at dealerships next month.

We're also working on developing a next-generation battery that we expect to have one of the world's highest performance levels... and we're working on wireless battery charging technology so there will be no more plugs to plug-in.

Compound our efforts with the technologies other manufacturers are developing... and you start getting a picture of what cars in the future will be like... and how different they will be than what's on the road today.

The third way our industry is improving the lives of people and society overall is making cars safer.

One way we will do that is by overcoming a huge issue...distracted driving.

Last year, one-in-six highway deaths were attributed to distracted driving. One in six!

Consumers are accustomed to connecting any time... anywhere. And ... they want that same ability in their cars.

That's why nearly every State has some type of cell phone and texting laws. We have them in California, but I bet when you drove here today... you probably saw someone talking or texting on their phone.

So, the best thing we can do as an industry is bring more awareness to this issue... and integrate and adapt in-car technology to help minimize distracted driving.

Our industry has done a great job banding together on this issue, but we can... and will do more.

For instance... the Alliance of Automobile Manufacturers partnered with the American Academy of Orthopaedic Surgeons to launch...'Decide To Drive'... an interactive, multi-media campaign highlighting the importance of hands on the wheel... eyes on the road.

This campaign has taught children how to discourage their parents from using handheld devices while driving... and has brought awareness to drivers themselves about the deadly risk of texting while driving.

In addition, companies continue to develop other technologies that will help make cars safer.

For instance... Nissan has a goal of having 'virtually zero' accidents with their vehicles... so, they're working

on a steering wheel that doesn't shake or vibrate even while driving on a bumpy road... and a vehicle that will swerve on its own to avoid a pedestrian stepping out in front of the car.

Volvo announced that in 2014... it will offer a traffic-jam assistance system allowing cars to automatically follow the car ahead of them in traffic... moving as much as 30 miles per hour.

At Toyota... one idea we're exploring is like Harry Potter's invisibility cloak.

Many cars on the road today have a back-up camera with a display showing what's behind you when you're in reverse. But... it's still hard to be absolutely sure you're not going to hit something or someone.

So, researchers from Keio University in Japan have developed an optical-camouflage technology making the back seat seem invisible... which would help eliminate blind spots.

This system was showcased in a 'See-Through-Prius' back in September at the Digital Content Expo in Tokyo.

How it works seems like magic... but the cloak is made of reflective materials that captures footage from cameras behind the car which then projects the image onto the cloak visible to the driver. The illusion of invisibility is amazing.

One of the developers said it will feel like you're driving a glass car.

We're also doing some other non-magical work through our Collaborative Safety Research Center.

The center is working with universities, hospitals, research institutions and federal agencies on a variety of projects. Our goal is to develop new safety technologies to help reduce the number of traffic injuries and fatalities on our roads.

The best thing about this center is that it focuses on research that will benefit the entire industry rather than purely focusing on proprietary technologies. This way... all cars... no matter what brand... can be improved in the future to help consumers all around the world.

Currently, the center has a total of 26 different safety research projects with 16 partners targeting our most vulnerable populations, teens, seniors, and pedestrians.

A few of the newer projects include:

Working with the University of Iowa on how in-vehicle technologies like advanced driving assistance systems can help seniors with declining driving abilities.

With the Children's Hospital of Philadelphia Center for Child Injury Prevention Studies, along with NHTSA and the Chalmers SAFER project... to study mild traumatic brain injury in adolescents... which is the most common injury to children in car crashes.

And... with the University of Michigan Transportation Research Institute to conduct what we believe to be the most comprehensive driver distraction study to date, involving over 5,500 teens and adults. Based on miles driven, teens are now four times more likely than other drivers to be involved in a crash so, we want to develop effective ways to help change dangerous driving behaviors.

In fact... yesterday we announced some of our preliminary findings. They range from:

Teens' distracting behaviors are related to their parents' distracting behaviors...

Teens text while driving 26 times more than their parents think they do...

And, teens regularly drive with young passengers in their car with no adults...which is associated with doubling of the driver's risk of being killed in a crash. And, the more passengers in the car... the higher the risk becomes.

You'll be hearing more over the next few months as we continue to analyze the data and develop recommendations.

As a father, one of the key takeaways I got from the study is... you need to be the kind of driver you want your teen to be.

Again, these results will be shared so that we can all make important steps to improve safety for consumers all around the world... no matter what brand they choose.

With us today are Dr. Ray Bingham from the Michigan research institute and Toyota's principal investigator, Dr. Tina Sayer. I'd encourage you to speak with them about this very important study.

Well, I hope you can see why I'm so proud to be a part of this industry!

Look, there will always be some healthy competition amongst automakers... and that's good. In fact... make sure you check out the all-new Toyota RAV4 in just a few minutes... and our newest Lexus coupe concept, the LF-CC... they're both fantastic vehicles.

But, bigger picture... when it comes down to it... together...we are a great industry.

125 years have come and gone... and the advancements we've made in that time cannot be overstated. And, I know... those of the future will be even better.

So... let's all be proud of the fact that... we are part of an industry that truly makes a difference... and positively impacts peoples' lives and society.

We are architects of the future.

We are creating a prototype community of tomorrow with new advances in mobility and technologies for safer and greener days ahead.

And... we are committed to making the next 125 years better and brighter than ever before.

Thank you.

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