

HPC User Forum Update

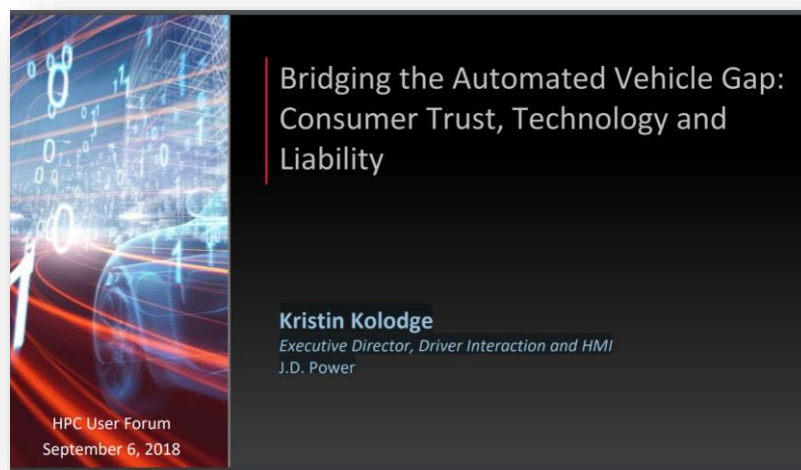
Bridging the Automated Vehicle Gap: Consumer Trust, Technology, and Liability, Dearborn, Michigan, September 2018

Alex Norton, Earl Joseph, Steve Conway, and Bob Sorensen
January 2019

IN THIS UPDATE

The HPC User Forum was established in 1999 to promote the health of the global HPC industry and address issues of common concern to users. In September 2018, the 70th HPC User Forum took place in Dearborn, Michigan. This update summarizes a presentation from the session, Automated Driving Systems, Automotive Engineering, Sensor Networks. The presentation, entitled *Bridging the Automated Vehicle Gap: Consumer Trust, Technology and Liability*, was given by Kristin Kolodge, executive director, Driver Interaction and HMI, J.D. Power.

Kolodge's talk highlighted concerns with automated vehicles, including the fear of possible technology failures or errors, legal liabilities, and fear of the vehicle being hacked. She also discussed the greatest potential benefits, including allowing consumers to do other things while driving, reducing the number of accidents and causing less traffic congestion. However, the element of trust in automated driving systems is central to successful future adoption, and Kolodge anticipates that trust issues will be central for quite some time.



PRESENTATION: BRIDGING THE AUTOMATED VEHICLE GAP: CONSUMER TRUST, TECHNOLOGY AND LIABILITY, KRISTIN KOLODGE, EXECUTIVE DIRECTOR, DRIVER INTERACTION AND HMI, J.D. POWER

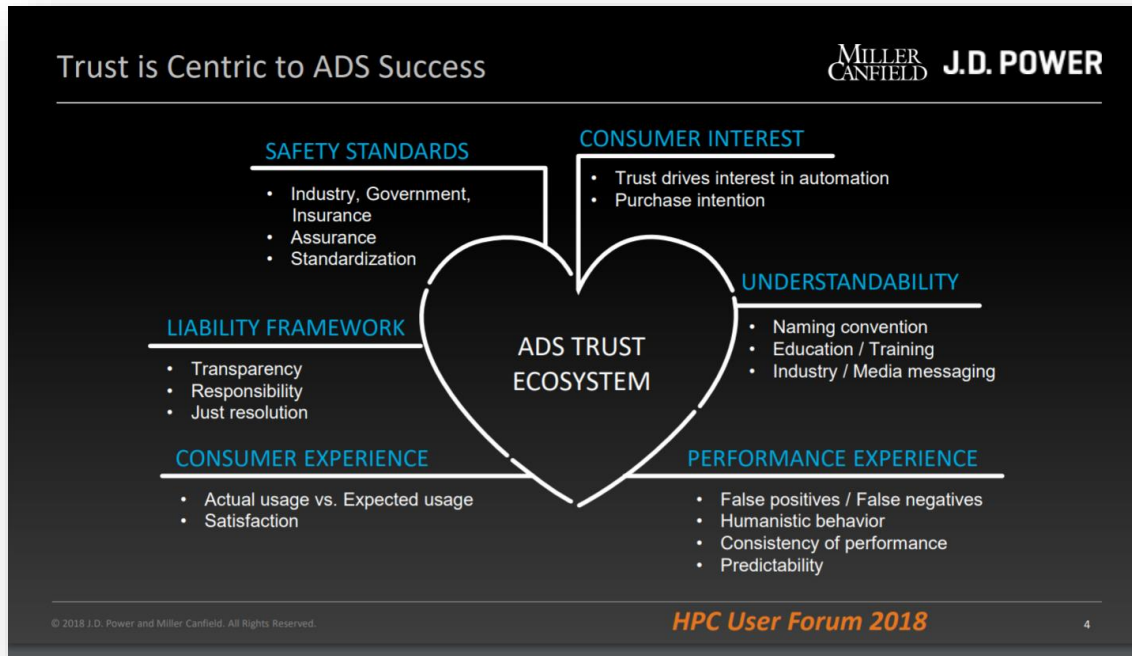
Kolodge discussed a two-part project undertaken by J.D. Power and the Miller Canfield law firm to help determine public sentiment on several matters regarding automated driving systems (ADS) and their potential impact on legal liability issues.

- The first part of the project surveyed over 1,500 consumers across the United States and asked questions that ranged from the basic, “would you be willing to ride in an automated vehicle?” all the way up to, “if your automated vehicle got into an accident, how would you want to resolve that situation?”
- The second part of the project entailed contacting top legal practitioners across the United States (both plaintiff lawyers and defense lawyers) to understand what they thought automated vehicle technology would do to their process of litigating. Issues discussed included the process for gaining expertise, gathering knowledge, contacting the company, length, duration, process, etc.

Most important, the survey revealed that any automated driving conversation must include the topic of trust. Specifically, the study revealed that currently available technology such as blind spot visualization, forward collision warning, and adaptive cruise control, are very highly satisfying experiences that have a high degree of consumer trust and interest. However, for the leap to a fully automated vehicle, consumers pull back and have more concerns. This element of trust is central to automated vehicle development. Kolodge anticipates that this is going to be central for quite a period of time.

FIGURE 1

ADS and Trust



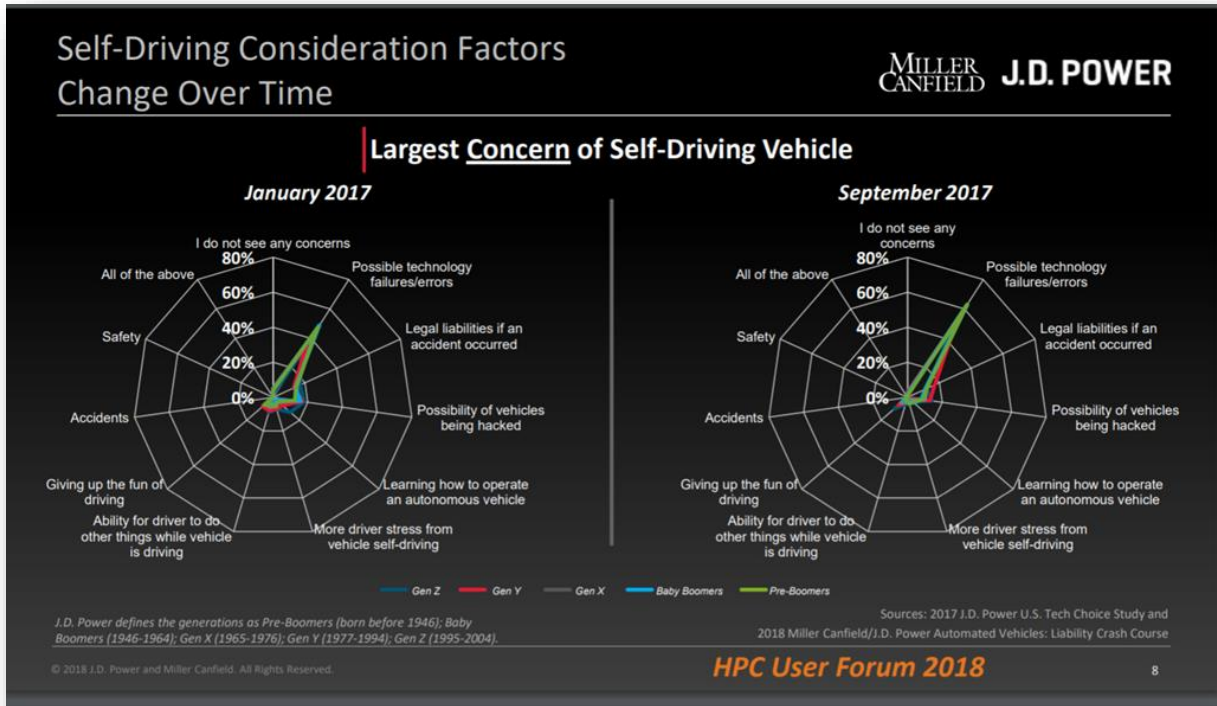
Source: J.D Powers, Miller Canfield, Hyperion Research, 2018

The effort also looked at the largest benefits and concerns related to automated vehicles. Key consumer concerns consistent across generations (Generation Z all the way back to the pre-boomer generation), as well as across two studies conducted at different times, included the fear of possible technology failures or errors, legal liabilities, and fear of the vehicle being hacked.

As for the largest benefits, there has been movement on this issue over time and it is going in a positive direction. When asked about ADS benefits in January 2017, the majority of people from the Gen-X, baby-boomer and pre-boomer generations said, “I do not see any benefits for automated driving.” However, by September of that same year, that negative number had decreased. More people believed that ADS will allow them to do other things while driving and will result in fewer accidents and less traffic congestion. Analysts believe that this positive outlook will continue to build over time.

FIGURE 2

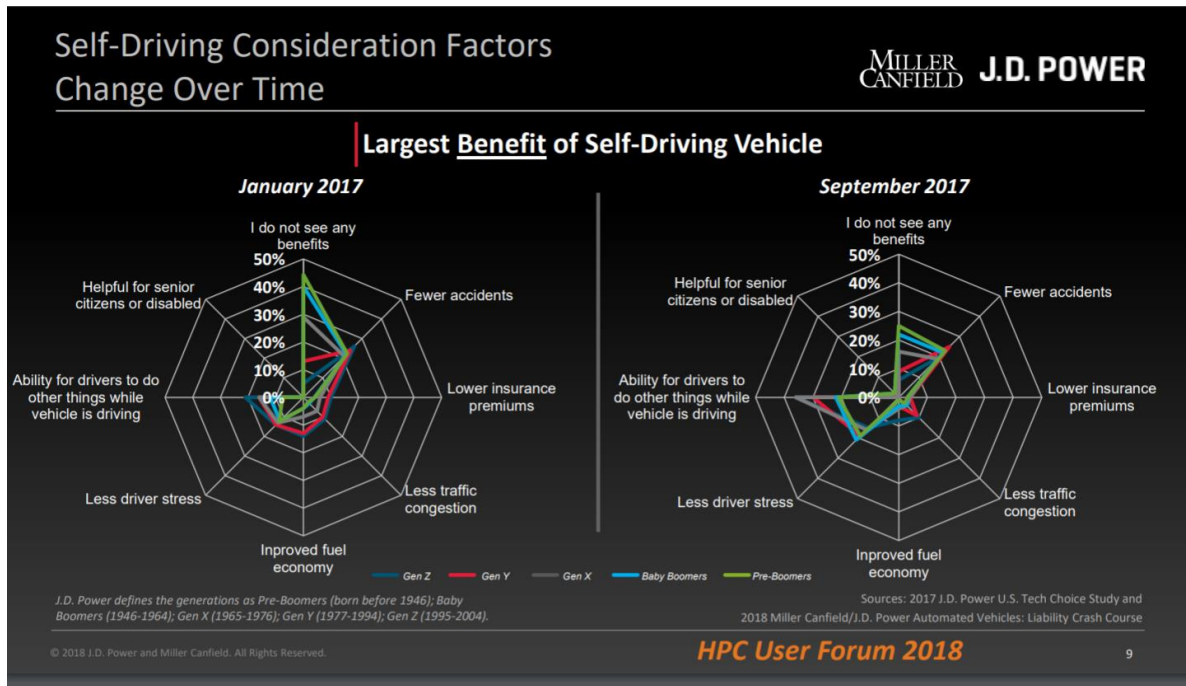
ADS Concerns



Source: J.D Powers, Miller Canfield, Hyperion Research, 2018

FIGURE 3

ADS Benefits



Source: J.D Powers, Miller Canfield, Hyperion Research, 2018

Shifting over to the legal practitioners, common across both the plaintiff and defense sides is the belief that with automated driving, the cost to litigate is going to increase quite dramatically. Both sides also agreed that the opportunity for legal claims to be resolved out of court and through alternative dispute resolution (ADR) is a more viable option than it is today. Finally, they agree with the consumers that the richness of this crash data is going to be very valuable and will accelerate the resolution of these cases.

FIGURE 4

The Legal Perspective

Legal Practitioners' Voice

MILLER CANFIELD J.D. POWER

- Both sides agree:
 - **Costs** to litigate product liability for ADS will increase dramatically
 - ADS provides an opportunity for legal claims to be **resolved out of court through Alternative Dispute Resolution (ADR)**
 - Availability of **additional crash data** would accelerate resolution and support ADR
- Most focus is on Level 5 with little consideration given to the **complexities of "shared control"** (Level 3)

Opportunity: Create a workable ADR framework to bridge the gap, creating stronger relationships between manufacturers and consumers by means of transparency and equity

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Source: J.D Powers, Miller Canfield, Hyperion Research, 2018

Kolodge concluded by noting that the expanding presence of ADS offers the opportunity to create a new framework for an alternative dispute resolution model: one that creates more transparency and equity between manufacturers and consumers. This is what consumers are loud and clear on, and what they're looking for in ADS-related legal proceedings. Consumers prefer dispute resolution for both non-life threatening serious injuries and deaths.

- When looking at the full spectrum of injuries that are possible in a crash, the desired legal outcome is in alternative dispute resolution where the claim is resolved out of court, private proceedings in a four to 12-month range, with one time, lump-sum settlements,

For more information or to view this and other presentations given at HPC User Forums dating back to 2008, visit www.hpcuserforum.com.

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