Glenn Schmidt,
Vice President, Government and External Affairs, Americas.
August 20th, 2015.

ASILOMAR SESSION V: BIG DATA.

THE CONNECTED CAR OF THE FUTURE.
OPPORTUNITIES FOR SUSTAINABLE MOBILITY.
Question: How do customer expectations change over time and what does it mean for the carmaker?

I bought my brand new BMW vehicle and will use it for 7 years until a new model becomes available. It is parked in my own garage.

I don’t have a car on my own: I parked my **car sharing** vehicle at my friend’s house – traffic was horrific this morning so my Smartphone app advised me to take the bus to the city center. My friend will be awarded for the parking lot via the **JustPark** service platform. For my return trip this afternoon, I already made a reservation on a local **car sharing platform**.
DRIVE NOW. PREMIUM CAR-SHARING SERVICE BY THE BMW GROUP & SIXT.

500,000+ customers in 8 cities

DriveNow customers are the BMW Group’s youngest & most contemporary target group

3,100+ cars
BMW CONNECTED DRIVE. CONSISTING OF “HARDWARE” AND “SOFTWARE”.

“HARDWARE”
- Pre-fitted “hardware” and sensor technology

“SOFTWARE”
- Update and upgrade capable “software”
GAME CHANGER.
ELECTRIC MOBILITY.
CONNECTIVITY IS A CATALYST FOR E-MOBILITY.
BMW i. THE NEXT GENERATION OF CONNECTIVITY.

- Availability of charging stations, calculation of range outside of the vehicle,…
- Intermodal route planning with the use of information sources outside of the vehicle, Remote Smart Phone App,…
GAME CHANGER.
AUTONOMOUS DRIVING.
AUTOMATED DRIVING FUNCTIONS NEED TO ADDRESS THE REQUIREMENTS OF USERS.

Delegation
- Not enough – Not concentrated

Competence
- „FLOW“

Protection
- Too much – Not able to cope
The transition between partially and highly automated driving represents a major leap.

<table>
<thead>
<tr>
<th>Degree of automation</th>
<th>Driver performs longitudinal AND lateral control at all times.</th>
<th>Driver performs longitudinal OR lateral control at all times.</th>
<th>Driver must permanently monitor the system.</th>
<th>Driver no longer needs to monitor the system permanently.</th>
<th>Longitudinal and lateral control tasks are performed entirely by the vehicle, within specific applications. The driver does not need to monitor the system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No assistance systems active.</td>
<td>The other (longitudinal or lateral) control task is performed by the vehicle.</td>
<td>Longitudinal and lateral control tasks are performed by the vehicle (for a certain period of time and/or in specific situations).</td>
<td>Longitudinal and lateral control tasks are performed by the vehicle (for a certain period of time, in specific situations).</td>
<td>Longitudinal and lateral control tasks are performed entirely by the vehicle, within specific applications. The driver does not need to monitor the system.</td>
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</tr>
</tbody>
</table>

Regulated by law and introduced into the market.

Not regulated by law and under research.

- e.g. Parking Assistant
- e.g. Traffic Jam Assistant

(Source: BASi Working Group 2012)
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