



LT-Innovate Needs Specification Daimler

-  Daimler (Stuttgart, Germany)
 - Global Multi-Billion Company
 - Vehicle Manufacturing (cars, trucks, vans, buses)
 - 2.2 M vehicles (2012)
 - 200000+ employees
 - Strategy:
 - Operational Excellence
 - Superior products
 - Offer sustainable and safe mobility.

- We move towards an always connected mobility
- Users want to be always online using apps (in the cloud)
- The number of functionalities in cars continuously grows (driver assistant systems, comfort functions)

- What's the problem?
 - The number of functionalities available in a car becomes so high that it becomes almost impossible for a driver to learn all the functionalities and to handle them in a safe way
 - Daimler wants that the driver can handle all this in a safe way, without being distracted from where his/her real focus should be: on the road

- Daimler's vision is that the driver can interact with his car via a conversational speech dialog to use all in-car available (networked) functionalities in a natural way without learning too many commands

○ Examples:

- How is the weather at my destination?
- Is there any cheap gas station on the route?
- What's that high red building over there / on my left?
- What's the speed limit here?
- Please, start the hot relaxing massage.
- Why does this red LED blink?
- Tell me the latest tweets about Syria.

○ GetHomeSafe:

- IVIS: Excuse me?
You are in the Provence, the highest mountain on the right is called Mont Ventoux. It is very famous among cyclists for its appearance in Tour de France.
- Driver: What is its height?
- IVIS: Mont Ventoux is 1,912 m high.
- Driver: How many times did it appear in Tour de France?
- IVIS: It appeared in the Tour eight times.
- Driver: Is there a road going there?
- IVIS: Yes, it is 30 km from here.
- Driver: Ok – take us there.
- IVIS: Confirm you want to set destination to Mont Ventoux.
- Driver: Yes.
- IVIS: Navigating to Mont Ventoux ...

- Daimler needs a solution to neatly integrate speech (ASR and TTS) into cars in such a way that it guarantees an expected dialogue flow and is at the same time very flexible to enable the users to add their own (speech capable) apps
- Daimler wants the solution to offer the user a real benefit with respect to smartphone speech integrations
- Daimler wants that the solution fulfills the following NLU requirements to achieve this:
 - a language-independent common sense ontology
 - general multi-lingual grammars and lexica available in the cloud
 - Equivalent parsing mechanisms both onboard and in the cloud
- Daimler wants that the solution fulfills the following NLU requirements with respect to interpretation models:
 - a language-independent common sense ontology including common knowledge categories (e.g. artists, points of interests, location names, vips ...)
 - general multi-lingual grammars and lexica containing the knowledge needed for parsing sequences of words and mapping them to an interpretation based on this ontology – available in the cloud

- Challenges for the LT vendor community:
 - Come up with a solution proposal that helps the customer solve his problem (cfr slide 3) and is a real answer to the needs and wants of the customer
 - Explain/Demonstrate how your solution proposal helps the customer solve his problem (cfr slide 3) and meets each of the needs and wants of the customer
 - Position yourself (or your consortium) as a reliable (long-term) partner

CHALLENGES



○ Some concrete questions:

● On the solution itself:

- describe the main difference in the customer experience before and after. What will be fundamentally different and how will it help solve the business problem (driver can interact with his car via a conversational speech dialog)?
- which applications are part of the solution and how do they interface with each other and with Daimler's platform and Daimler's own and 3rd party apps
- which part of the applications would you provide yourself, which parts would be developed by which partners

● On your position as a reliable (long-term) partner:

- References/Credentials: which cases can you and your partners provide that illustrate your experience/maturity in this field?
- Describe how you see the collaboration of the customer's teams and your team(s), how will you set it up, manage it? (or outsource it?)
- Tell more about the methodology you use and how you structure your work:
 - Which (if any) established methodology do you have experience with
 - how would you as a vendor translate / unravel the needs of our company into applications of technology
 - Which are the priorities that you take when approaching such problem
 - What are the typical risks you foresee or you have experienced in a similar project, how would you go about overcoming them
- Support and maintenance:
 - Once the solution is in place, how will you make sure it keeps running as it should - and if not: what will you set in place that guarantee fast maintenance?

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