

## LogBox use case

LogBox is a very powerful device since it combines data from multiple sources in an effective way.

In the process of finding a use case it's relevant to combine data from the engine, gps while taking advantage of the GSM capabilities of the module.

The main issue, as pointed out during the presentation, is making the device appealing to a large user group making sure it proves useful to them.

We found a solution unique to this type of device that gives the users a practical benefit. We plan to improve the Logbox users insurance rates by monitoring their driving style and their behaviour while combining those with GPS location data to improve the data-context relation.

We use many of the parameters (useless per se) combined together to get a real feeling of the how the driver performs on the road, his mood and his driving.

For example taking into consideration the following three fields:

*BEHAVE\_ACC\_X\_PEAK* - Acceleration on X at the peak of the event in mG

*MDI\_RPM\_MAX* The RPM - max value during a journey

*MDI\_OVERSPEED\_COUNTER* - Number of overspeed during the latest journey

and sampling the data obtained from the sensors, while comparing them on the server with data sent by most users, or users known to drive in a responsible way (either real or simulated) we may find out a specific user X is in a hurry or is distracted.

This, when detected multiple times, may interest an insurance company.

On the other side if a user is found to be driving responsibly; parameters from the engine and GPS data show a smooth experience, points may be assigned to him and he may get a reduction of his insurance fee. In other words the user is effectively given a money prize as a reward for his behaviour.

Moreover, we implemented Leaderboards, both Local (friends only) and Global to push the final user to drive even better and ultimately everyone gets a benefit out of it: road safety has always been quite a relevant concern all around the world; in the end we aim to reduce the number of victims resulting from car accidents by encouraging everyone to drive more prudently.