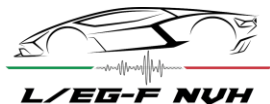






Automobili Lamborghini

LAMBORGHINI WHOLE VEHICLE NVH DIGITAL TWIN



AUTHORS



Mario Mautone

NVH & Data analysis Coordinator

Cesare Lupo Ferrari

NVH Innovation Engineer



WHY DO WE NEED DIGITALTWIN?



Concept

Sign off

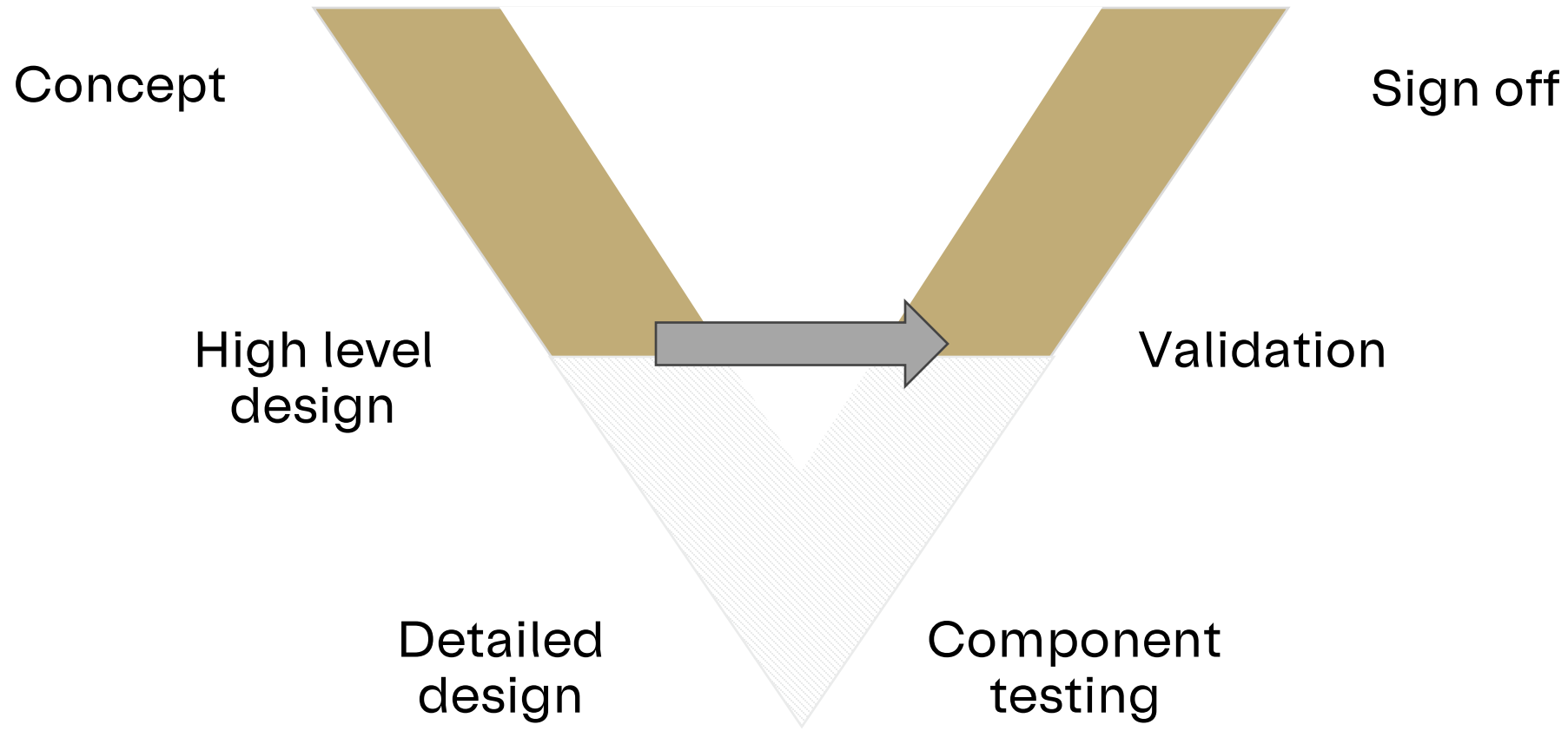
High level
design

Validation

Detailed
design

Component
testing

WHY DO WE NEED DIGITALTWIN?



WHY DO WE NEED DIGITAL TWIN?

NVH DESKTOP SIMULATOR



- Reduce **cost** in the testing phase
- Reduce **time** in the whole development process
- Optimisation of the acoustic insulation **weight**
- **Drive** Jury test

WHY DO WE NEED DIGITAL TWIN?

SOUND CONTRIBUTION MEASUREMENTS



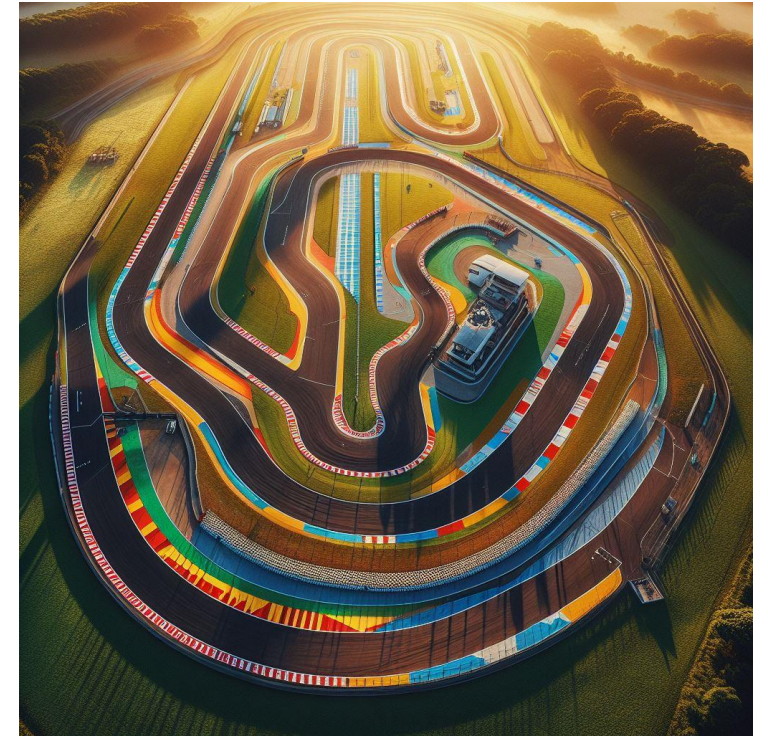
Wind tunnel
measurements



Sensors



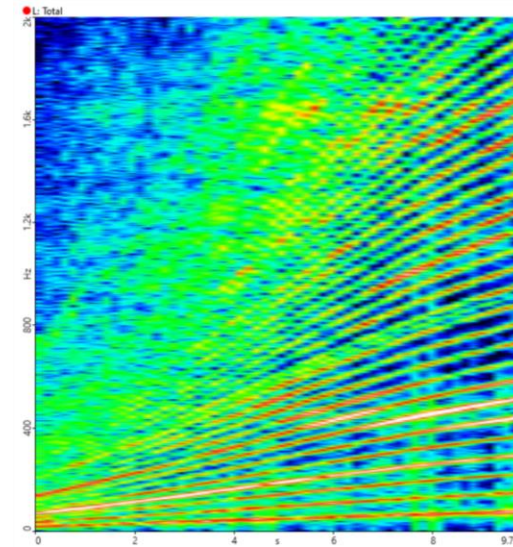
Test track measurements



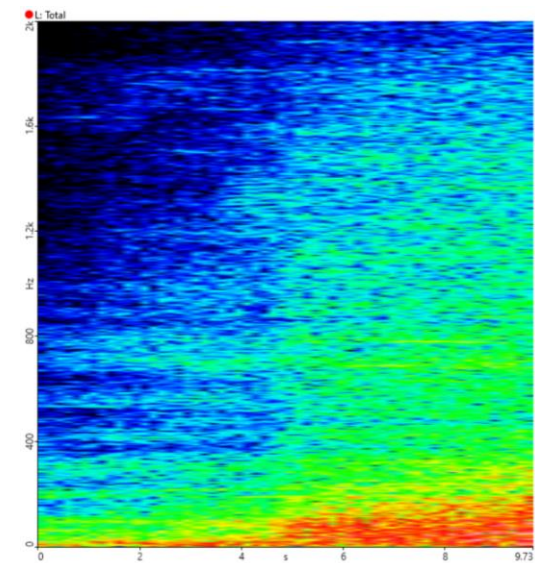
ANALYSIS OF SOUND CONTRIBUTIONS



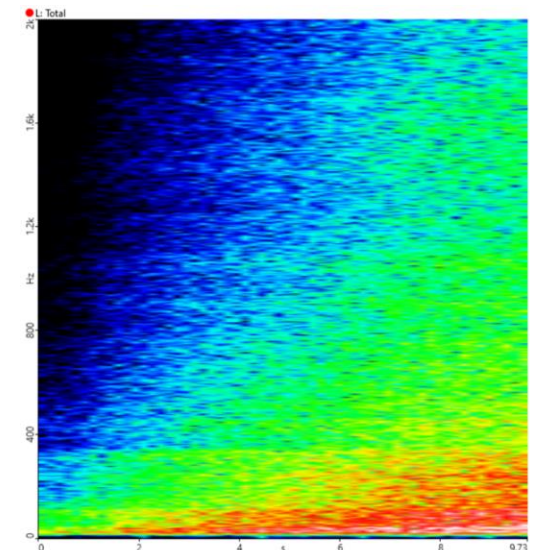
Powertrain sound



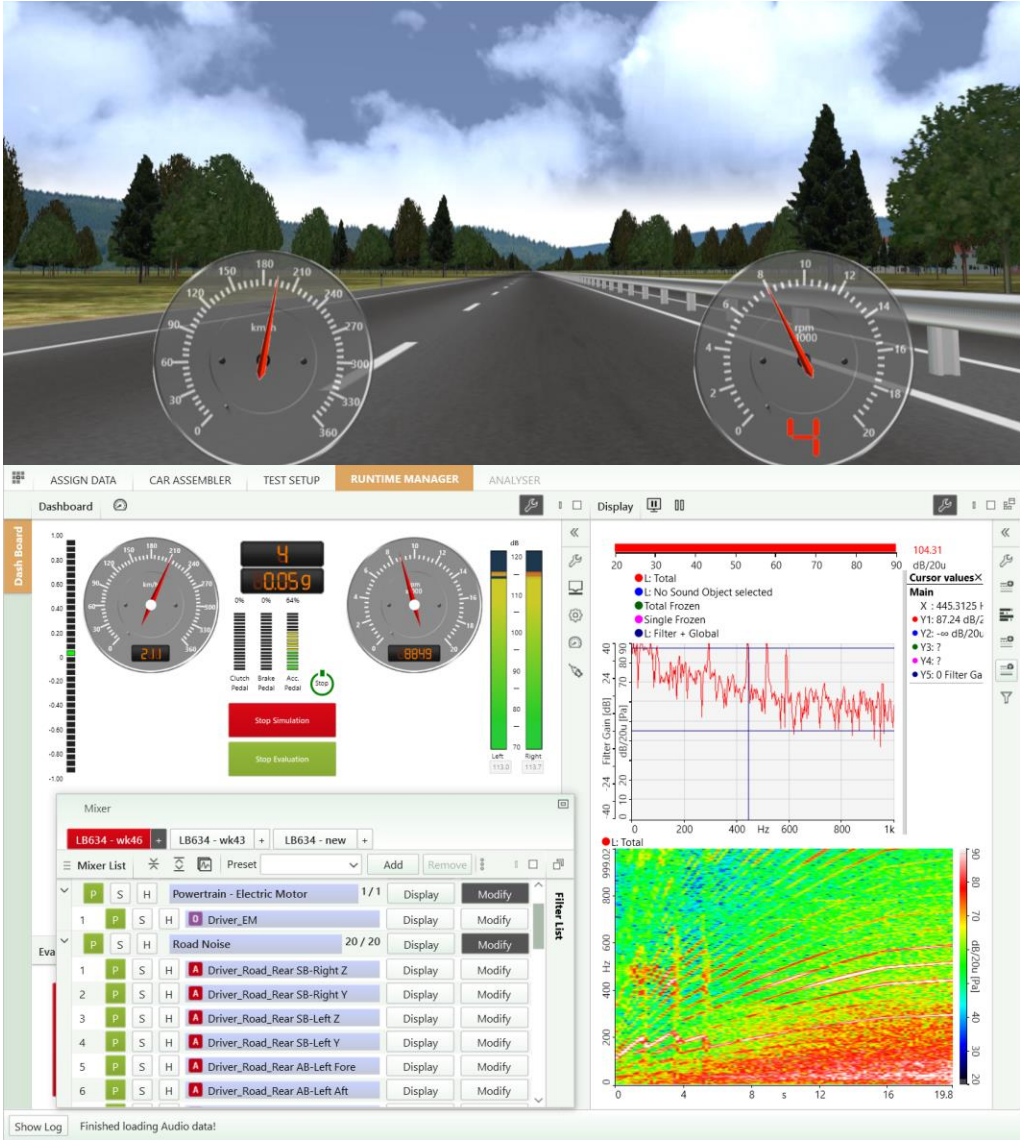
Road noise



Wind noise



NVH SIMULATOR





NVH Sound Simulator





THANKYOU

