#### **Problems/Challenges**



Increasingly stringent legal noise emisson requirements

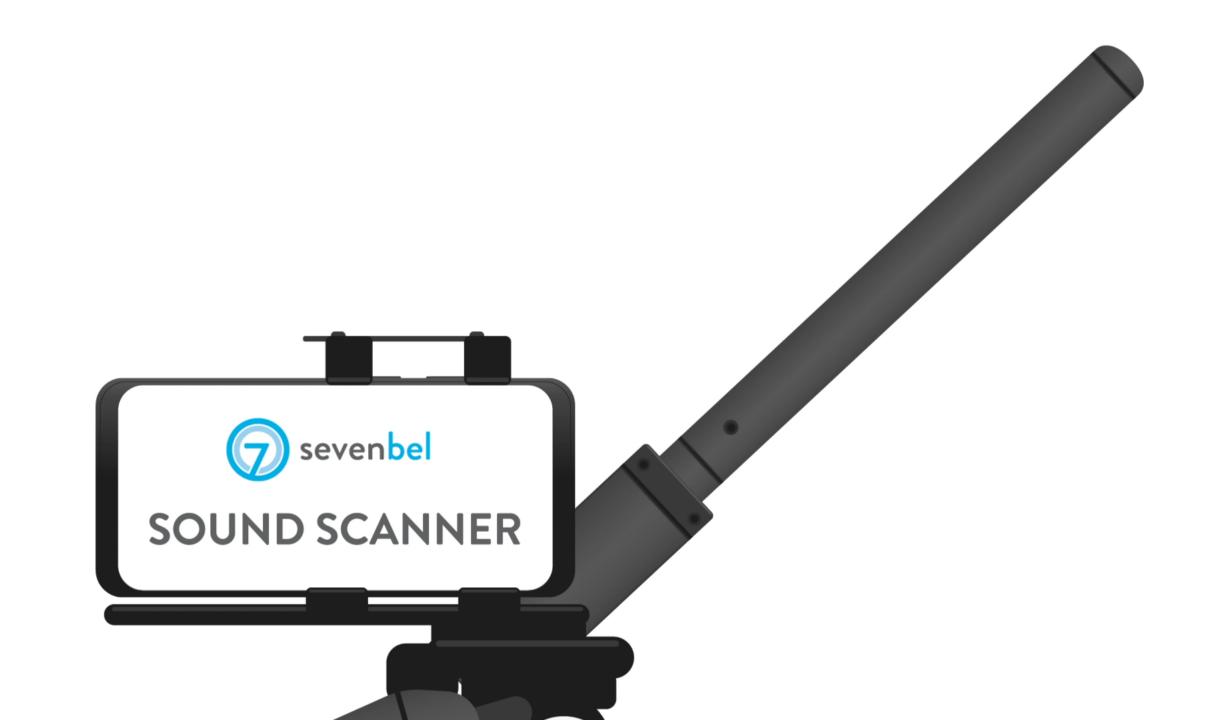
High complexity and cost for conventional measurment systems systems

Increasing importance of acoustic properties (e.g. new technologies)



Late identification of noise issues during product development and maintenancce





### **Use case: Example I**





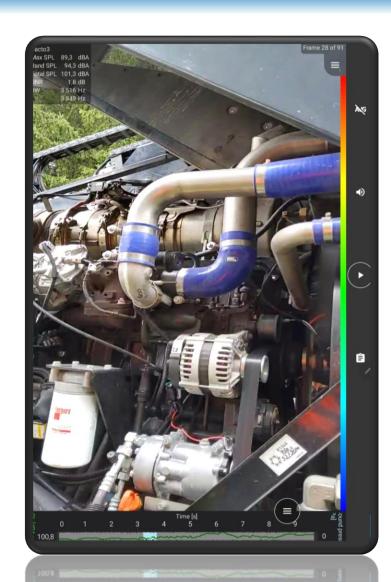


TASK

Idestify acoustic leakages / weak spots, subject to entimization of sealing material and/or properties



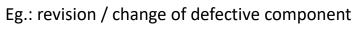
### **Use case: Example II**





TASK

Idestify defective component, subject to maintenance





# Mode of operation (picture-/video recording)

1. Rotatersensor 4. Demonstration of acoustic image (Heatmap)

2. Raw data to end-device

3. Data processing (Cloud)





## Intuitive analysis due to App-surface



#### **SPECTROGRAM**

X-axis: timeline (sec)

Y-axis: recorded frequencies (Hz)
Colour-Code: sound pressure level (dBA)

red: high blue: low

#### **FREQUENCY BAND**

X-axis: recoderded frequencies (Hz)
Y-axis: sound pressure level (dBA)

#### **TIMELINE**

X-axis: timeline (sec)

Y-axis (1): sound pressure level (dBA)

Y-axis (2): sound pressure (Pa)



