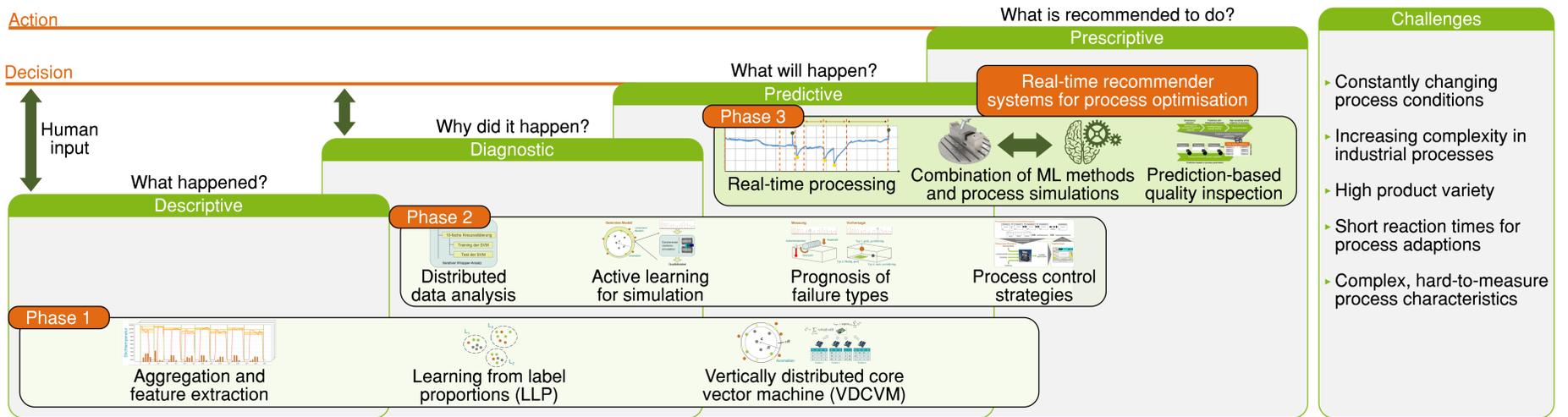




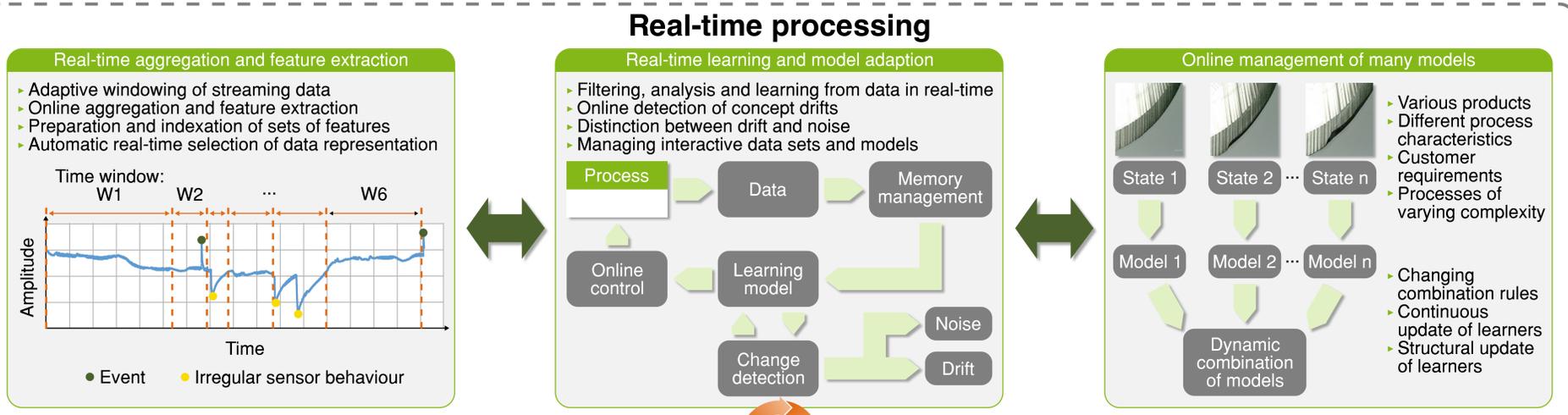
Project B3 Data Mining on Sensor Data of Automated Processes

Project Management: Prof. Dr. Katharina Morik, Prof. Dr.-Ing. Jochen Deuse, Prof. Dr.-Ing. Petra Wiederkehr

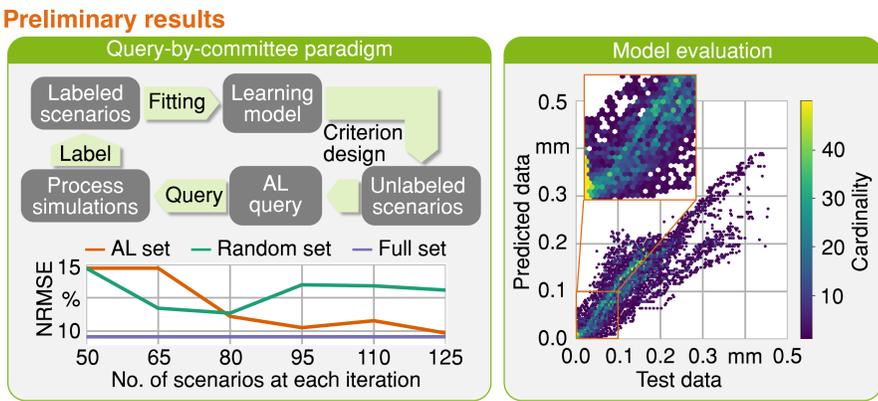
Problem



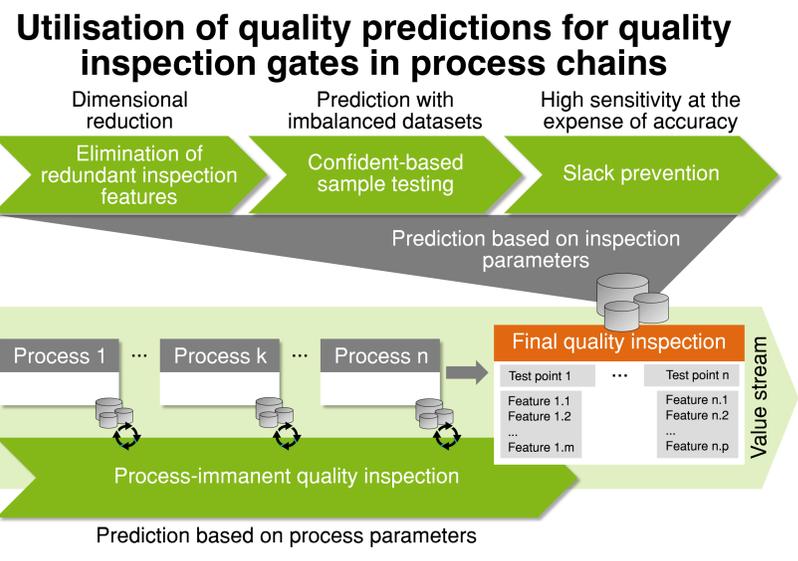
Planned Research



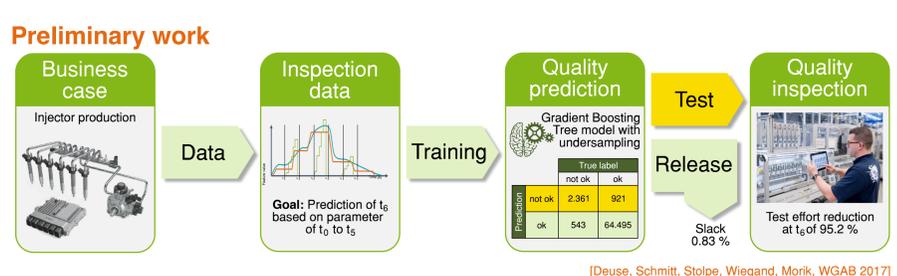
- How can process simulations and machine learning be reasonably combined?
- How can process configurations be identified to refine pre-trained models?
- How should processes be adapted online based on model predictions?



[Saadallah, Finkeldey, Morik, Wiederkehr, Procedia CIRP 2018]



- Main research topics**
- Quality prediction for bottleneck relief in EOL-testing
 - How can the final quality inspection as a bottleneck be relieved by means of suitable strategies?
 - How can the ratio of test duration to slack be optimised?
 - Prediction-based quality gate design for process chains
 - How can relevant product and process parameters for quality prediction be identified and measured?
 - Where should quality gates be positioned within the process chains?



[Deuse, Schmitt, Stolpe, Wiegand, Morik, WGAB 2017]

