## ZHAW Plattform Industrie 4.0



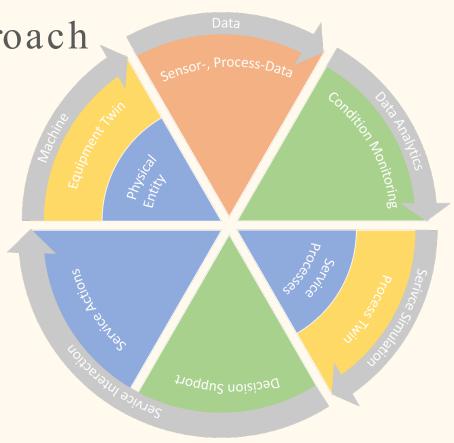


# Digital Twin for Near-Real-Time Decision Support Services

Lukas Schweiger, Jürg Meierhofer

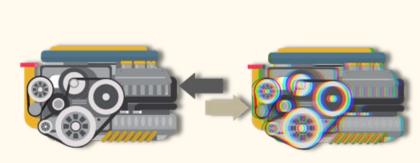
End-to-End Service Approach

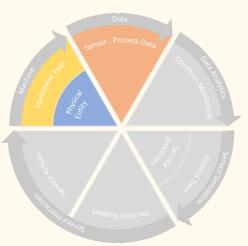
- Innosuisse project multiple case study
- Decision support for after sales services
- Combining twins, data analytics and service engineering



#### Equipment Twin - Machine and Data

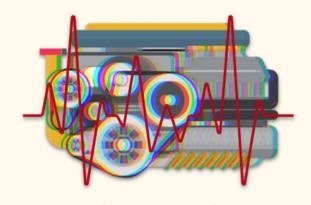
- Digital twin of equipment
- Using and generating data
- First prototype with shipbuilder

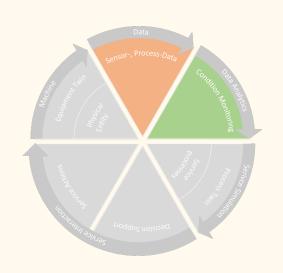




### Condition Monitoring - Data Analytics

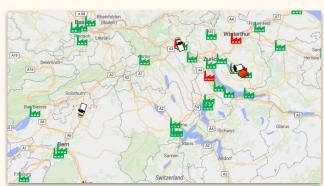
- Using the data for condition monitoring
- Acts as trigger for process twin

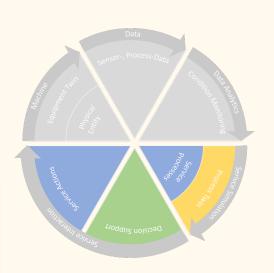




#### Process Twin - Service Simulation / Interaction

- Simulates service process when triggered
- Provides scenarios for decision support
- Basis for service actions





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