

IVE (PRESCRIPTIVE PRODUCTION ASSISTANT)

START: Q1/2020

200.000€ EIT Funding

Kickoff at TU Darmstadt 02/2020

Configuration of data-model completed 05/2020

Development of user interface 08/2020

Evaluation of added value 12/2020

Future goal: Implementation at partner's sites

CHALLENGE



- Rework of products is very time consuming and capacities are hard to plan
- Rework requires specific knowledge



SOLUTION



- Error Score to identify and prioritize main errors
- Predict rework probability per product to forecast manpower requirements
- Action recommendations



BENEFITS



- Reduce rework time
- Improve informational exchange on a worker-to-worker level
- Identify main errors for problem solving

MAIN PROJECT RESULTS

Improved data quality



STANDARDIZED DEVIATION & REWORK RECORDING TOOL

Identification of main errors



DEVELOPED ERROR SCORE SHARPENS THE DAILY FOCUS ON THE SHOP FLOOR

Machine learning model



PROTOTYP TO PREDICT MANPOWER REQUIREMENTS & TO GIVE ACTION RECOMMENDATIONS TO REWORKERS

“thanks to EIT we were able to... shapen the future of manufacturing”



LUKAS LONGARD

Research assistant at PTW TU Darmstadt EIT project IVE

AIM: Reduce rework through data analytics and machine learning



<https://www.linkedin.com/company/ptw-darmstadt>

<https://www.linkedin.com/company/sfmsystems>