

Webinar #2:
**DEVELOPING DIGITAL
PROCESS LANDSCAPES:
THE FLEX AND CRF SCENARIOS**

February 10, 2023
14:00 – 14:30



Project-ID. : 101069499

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Union's Horizon Europe Framework Programme

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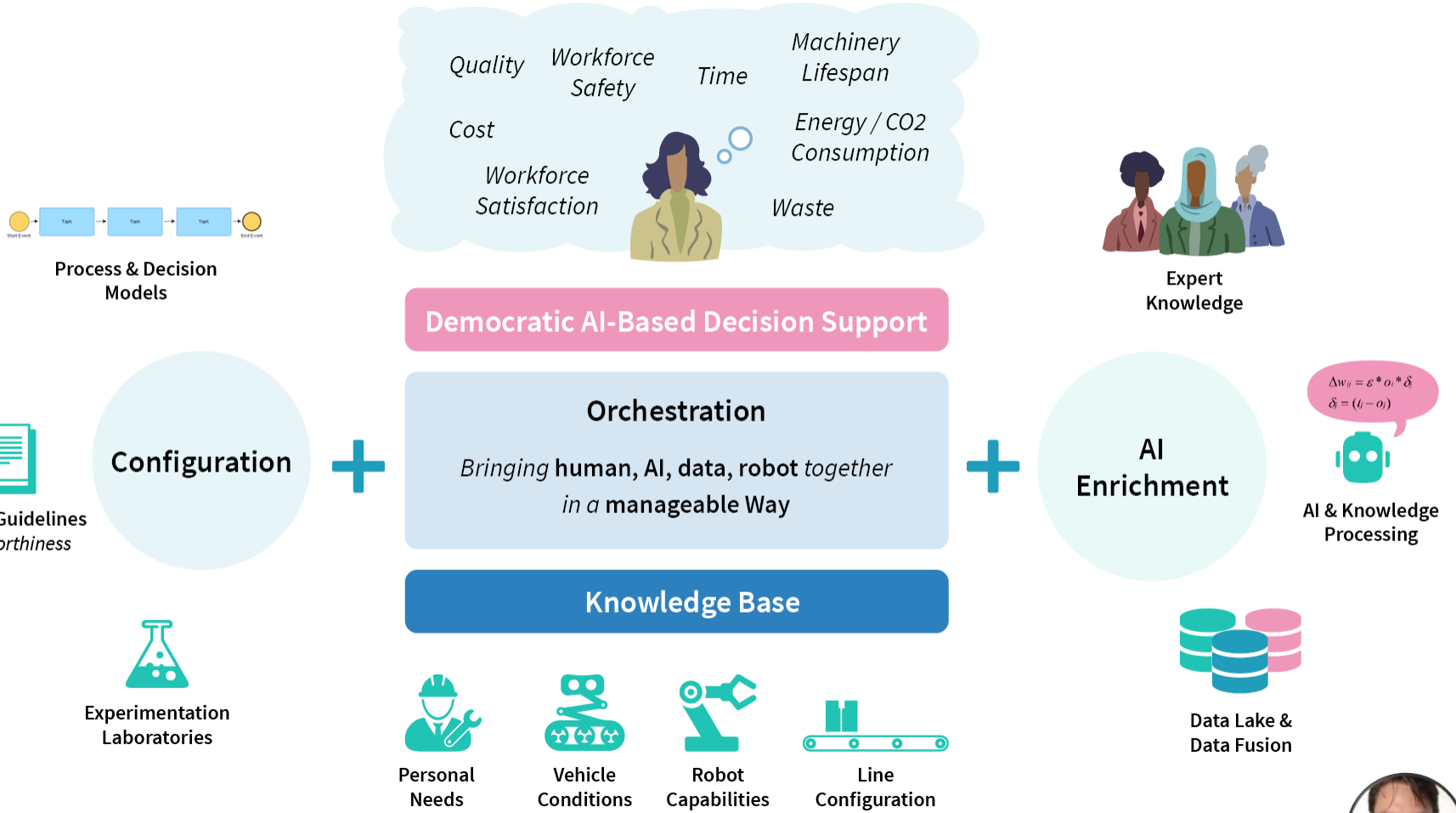
Moderator:
Wilfrid UTZ (OMiLAB)

INTRODUCTION OF THE CONSORTIUM



Robert Woitsch (BOC)

PROJECT IDEA



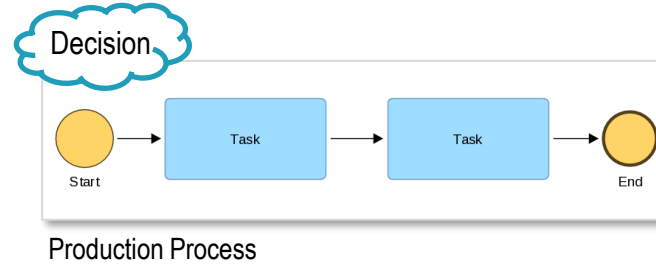
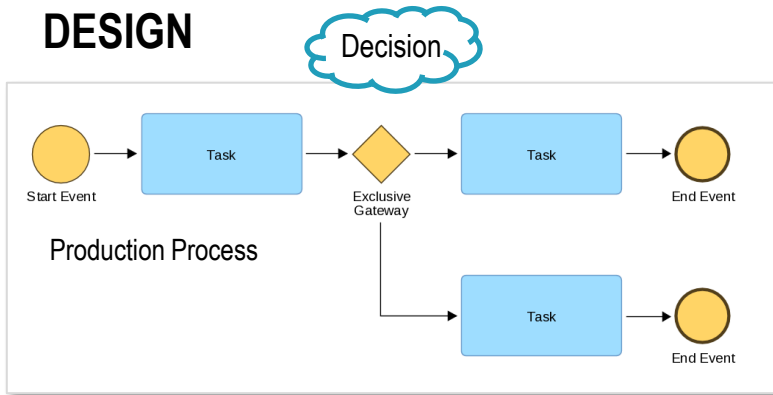
Robert Woitsch (BOC)



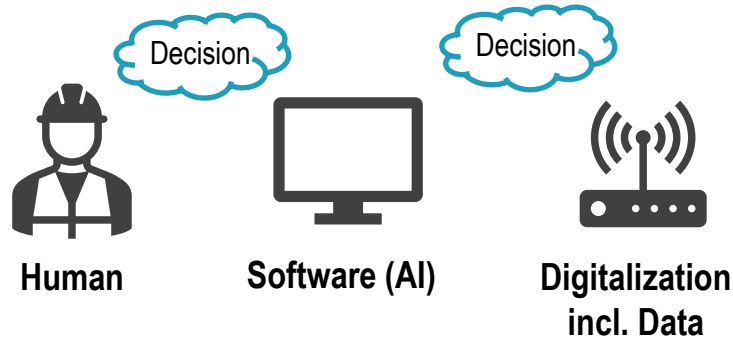
RESEARCH CONCEPT

ABSTRACTION OF DECISION MAKING

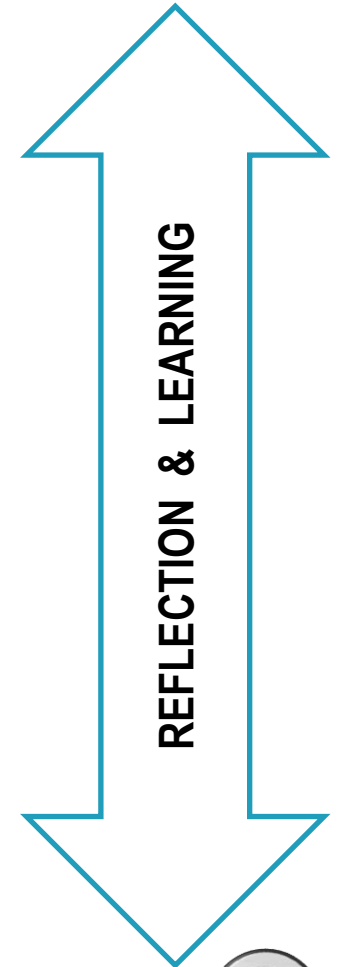
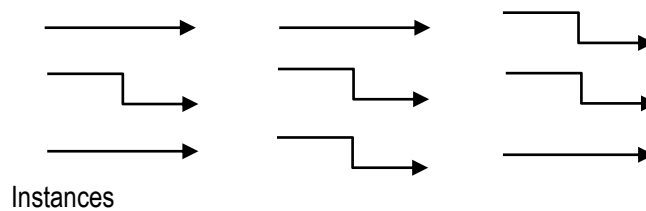
DESIGN



DECISION

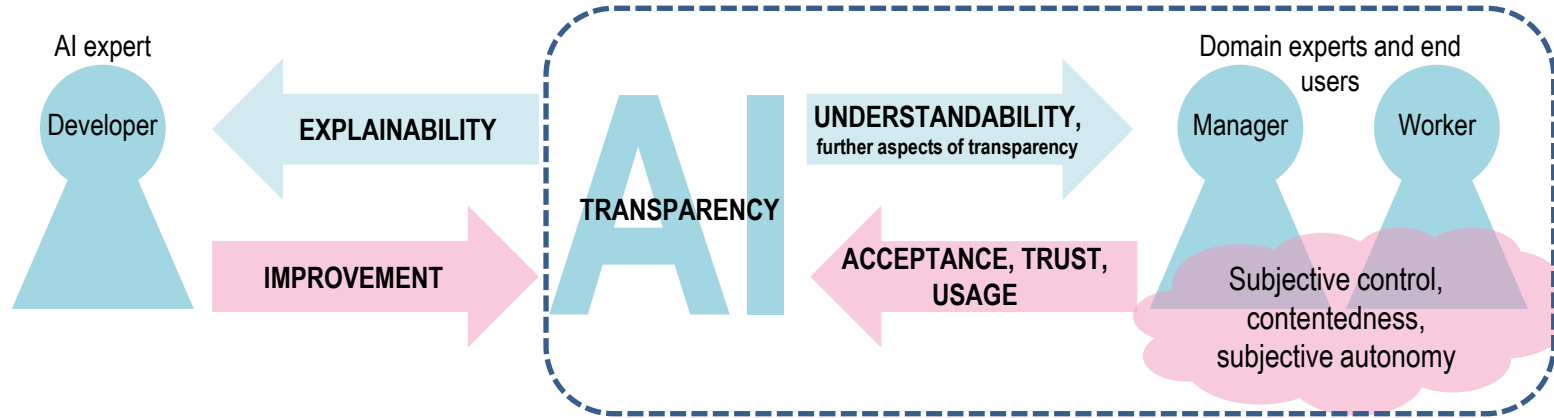


EXECUTION



Sylwia Olbrych
(RWTH)

HUMAN FACTORS IN AI: TRANSPARENCY AND TRUST



What does successful AI enriched decision making look like for the human stakeholders?

How are individual practices of decision-making constituted?



What is the influence of the socio-technical context in democratic decision making?

What are boundary-conditions of practicing specific affordances related to AI – and what are the limits of such an approach?



Stefan Böschen (RWTH)

DECISION

- **Human**

- Collaboration via MS Teams
- Receiving input via questionnaires
- Collecting opinions of other actors
- Weighted collection of opinions other actors
- ...



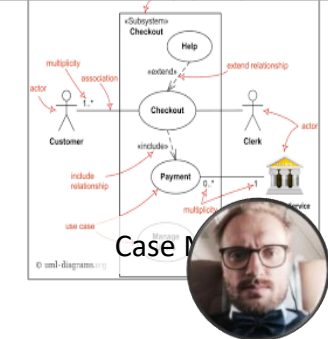
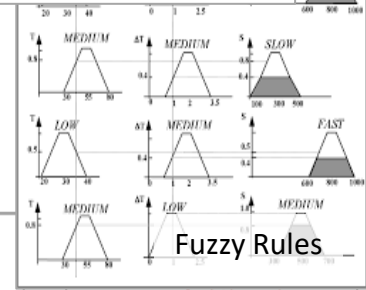
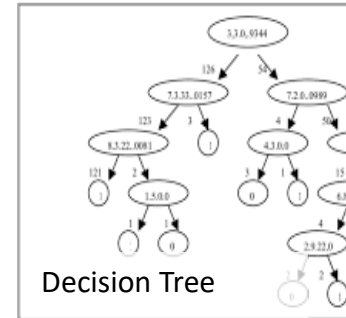
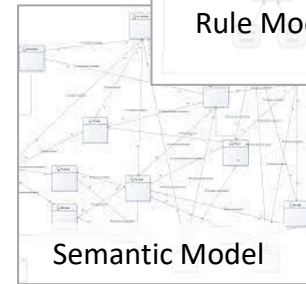
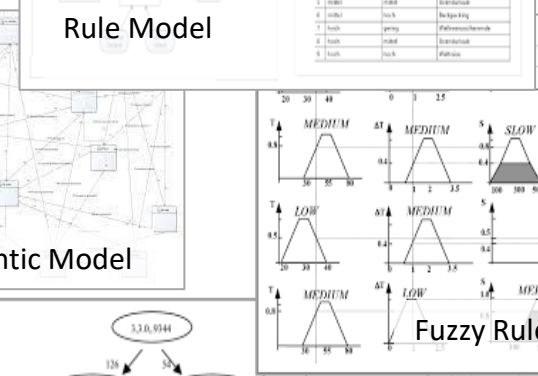
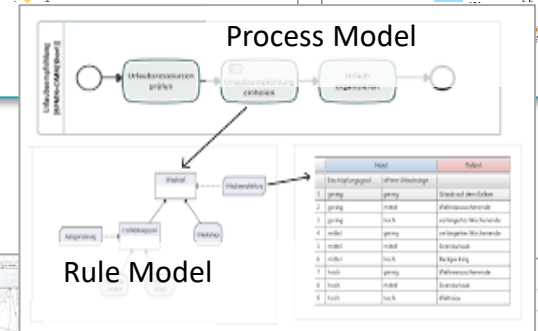
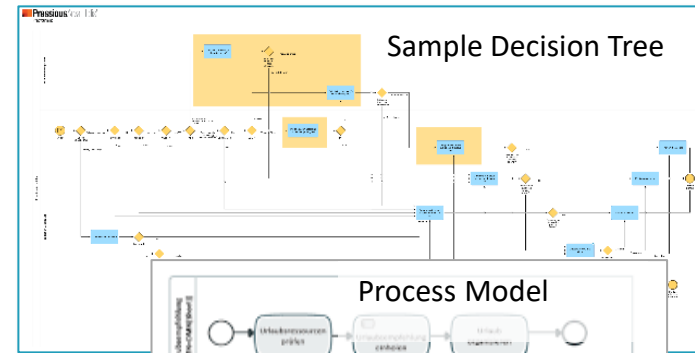
- **AI**

- AI can support the design
 - Semantic search, collaborative modelling, questionnaire...
 - Process template recommendation,...
- AI can support the decision making
 - Data fusion, log mining, comparison planned vs is data,...
 - Simulation for forecasting, crowd intelligence,...
- AI can support Human machine interaction
 - Speech interaction, image recognition,...



- **Digitalization**

- Appropriate digitalization devices
- Digitalization patterns
- ...

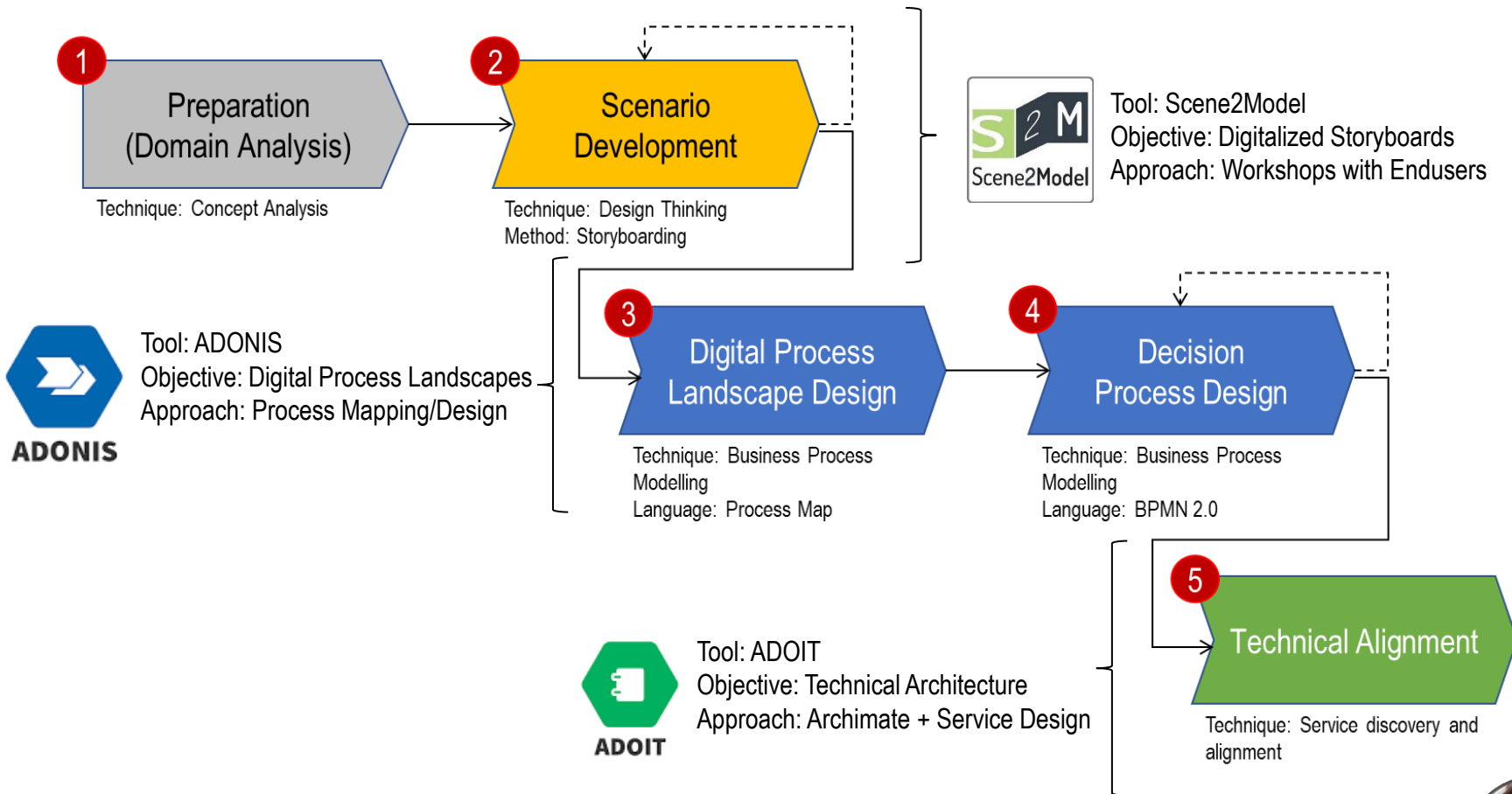


Wilfrid UTZ (OMiLAB)

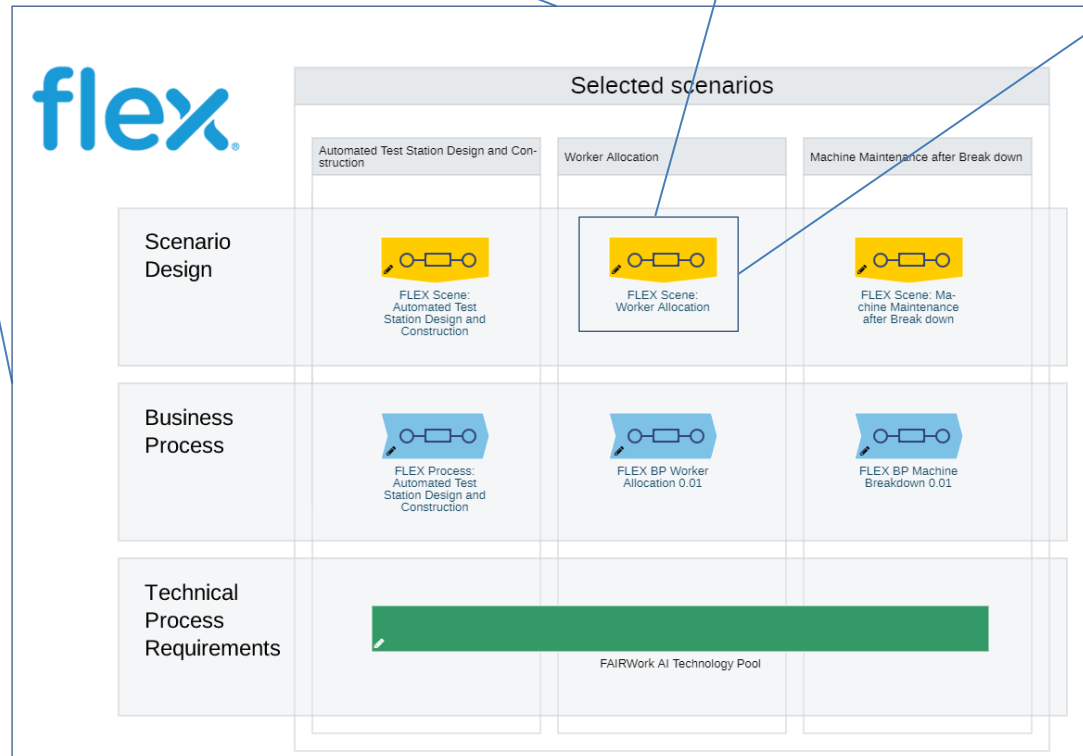
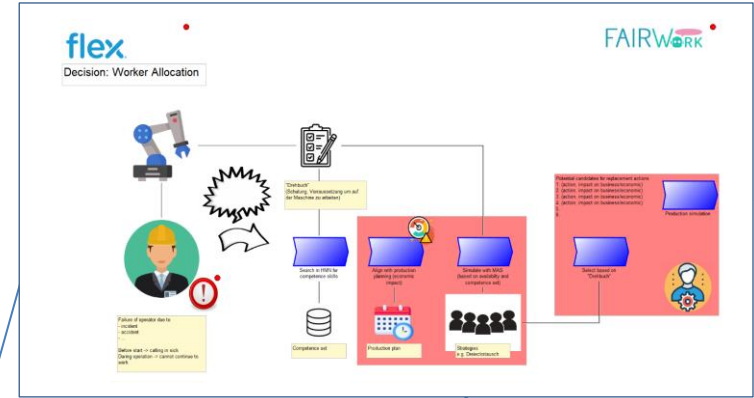
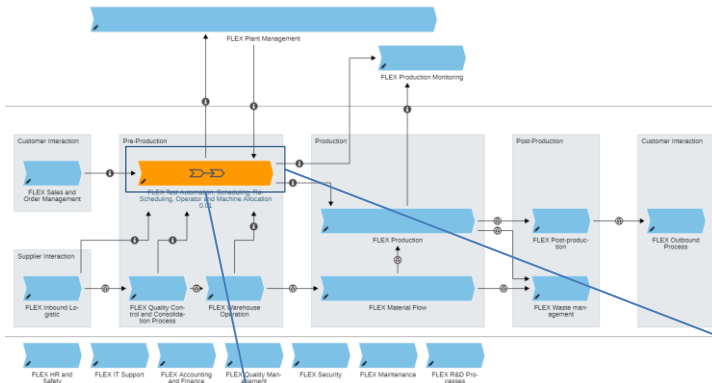
CRF and FLEX Scenarios in FAIRWork

END-USER SCENARIOS

END-USER SCENARIOS – METHODOLOGY APPLIED

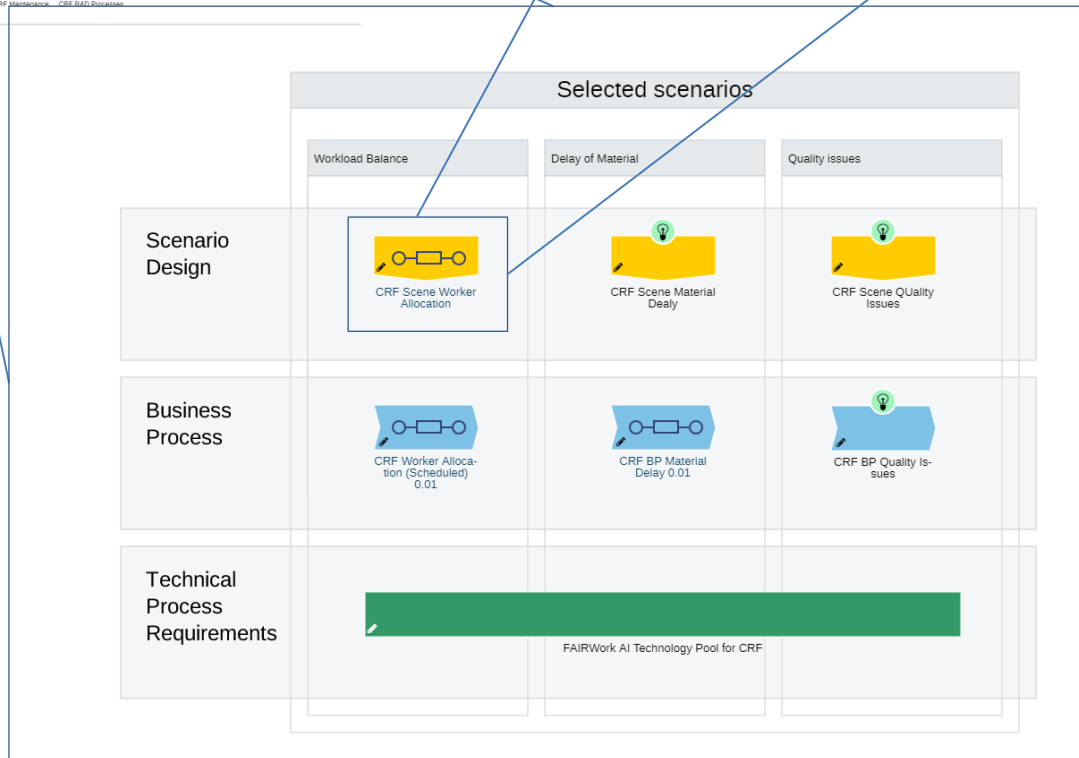
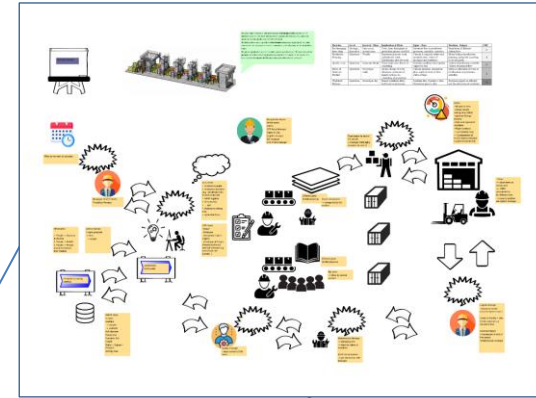
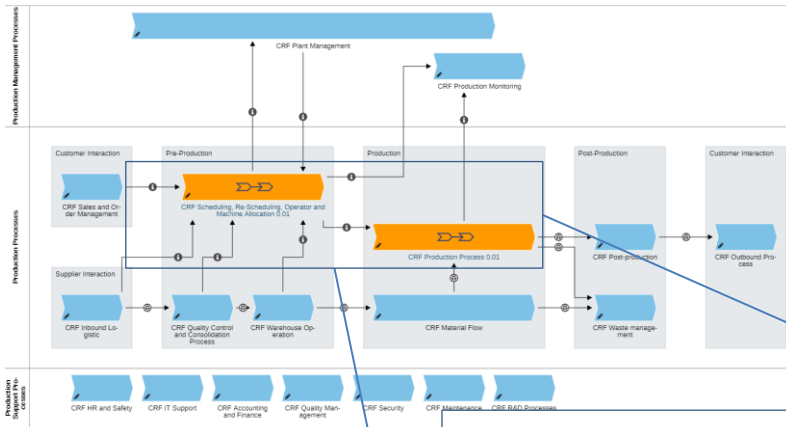


END-USER SCENARIOS @ FLEX



Roland Sitar
(FLEX)

END-USER SCENARIOS @ CRF

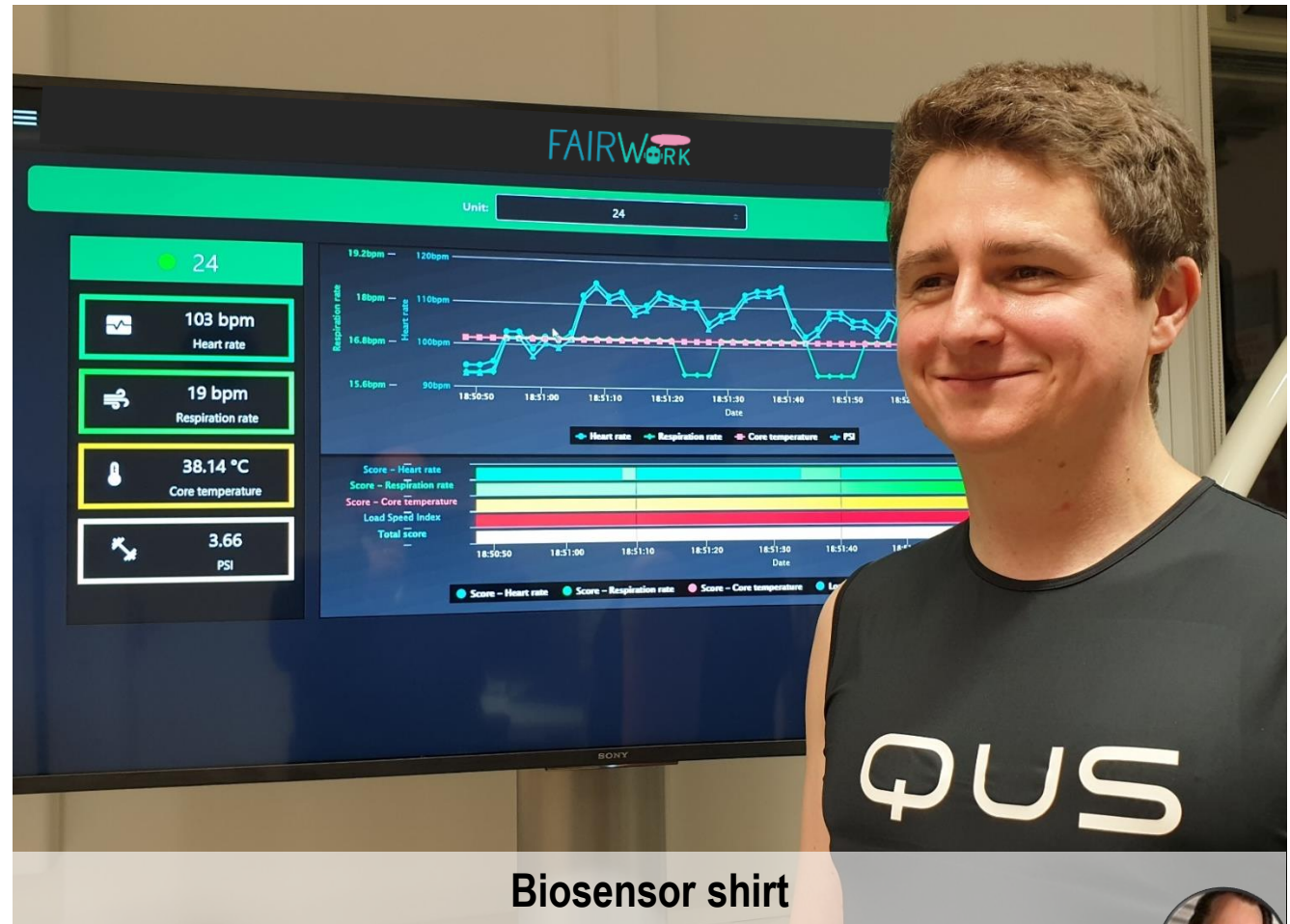


Davide Masera
(CRF)

Digital Human Factors Assessment



Eye Tracking

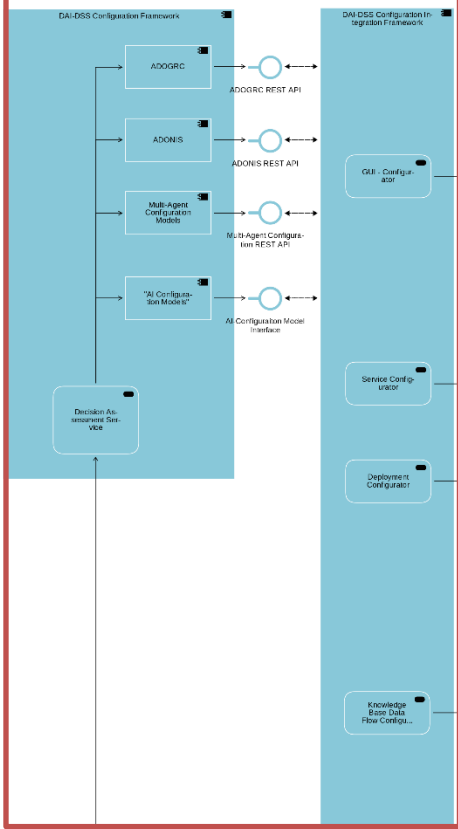


Biosensor shirt

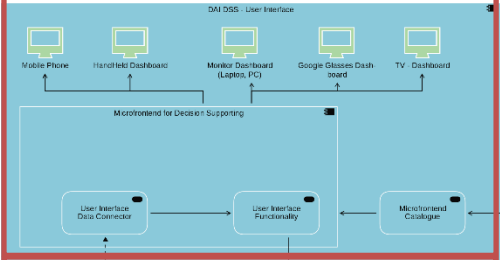


IMPLEMENTATION

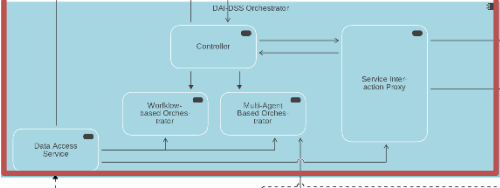
3. DAI-DSS Configuration Framework



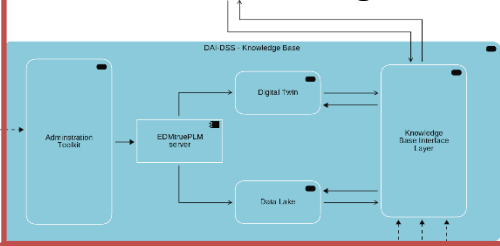
6. DAI-DSS UX



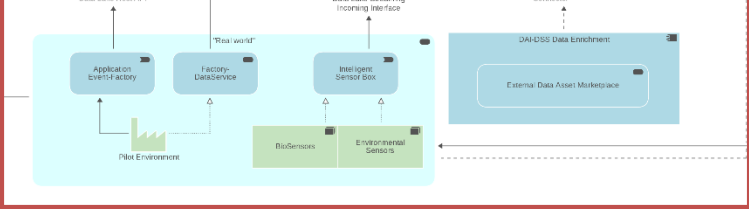
5. DAI-DSS Orchestrator



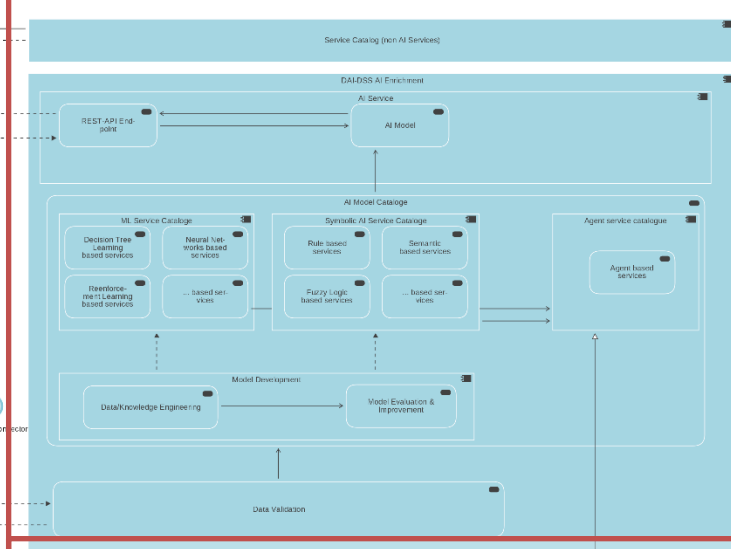
2. DAI-DSS Knowledgebase



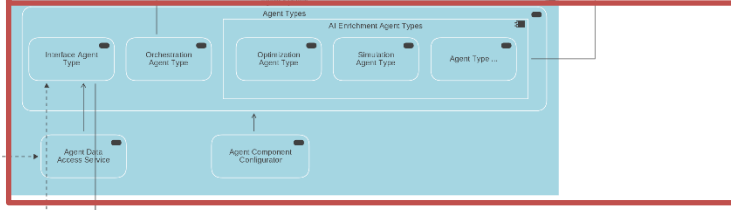
1. Real-World Use Cases in the Production



4. DAI-DSS AI Enrichment Services



Multi Agent Systems



Herwig Zeiner (JR)

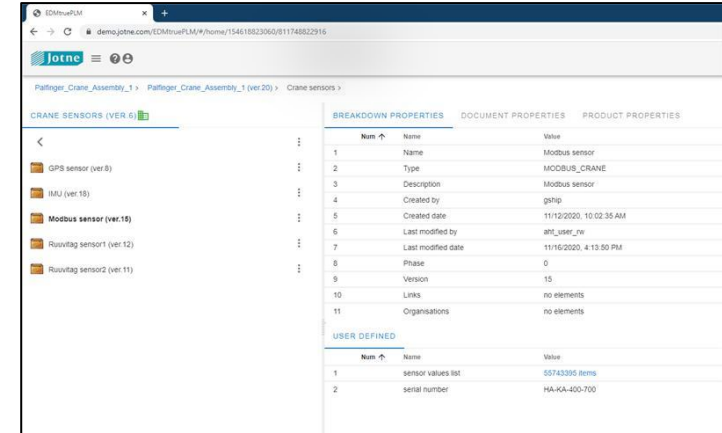
DAI-DSS KNOWLEDGE BASE



Rishyank Chevuri (JOTNE)

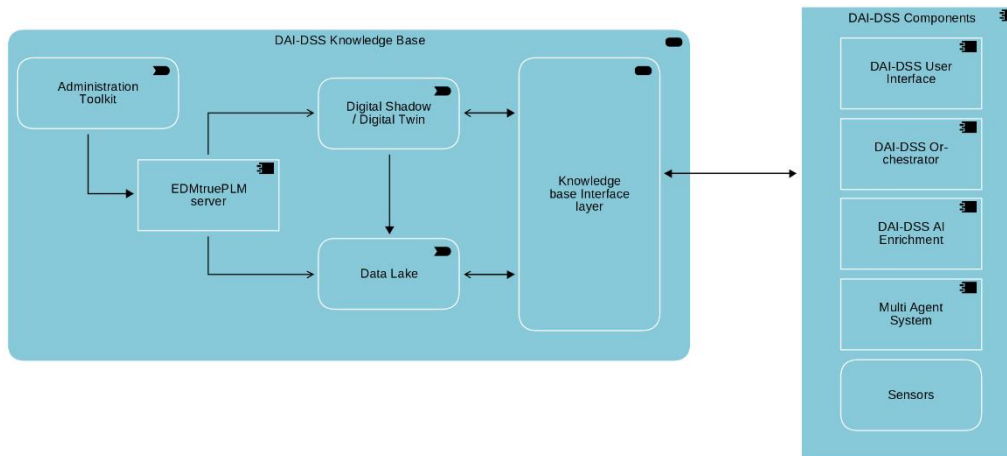
Development of DAI-DSS Knowledge Base

- Knowledge Base is the main data repository used in the DAI-DSS architecture. It is where all data required to be processed or analysed is imported to and stored. It is also where results from decision makings are collected and stored
- **ISO 10303** – a collection of standard data models that covers many life-cycle phases and engineering domains related to product development – i.e. design, analysis, testing, manufacturing etc.
- Jotne’s applications embed these standards and put them in use in the context of PLM, data management, Digital Twins, Digital shadows , IoT and general engineering data management.



Representation of the aggregate property

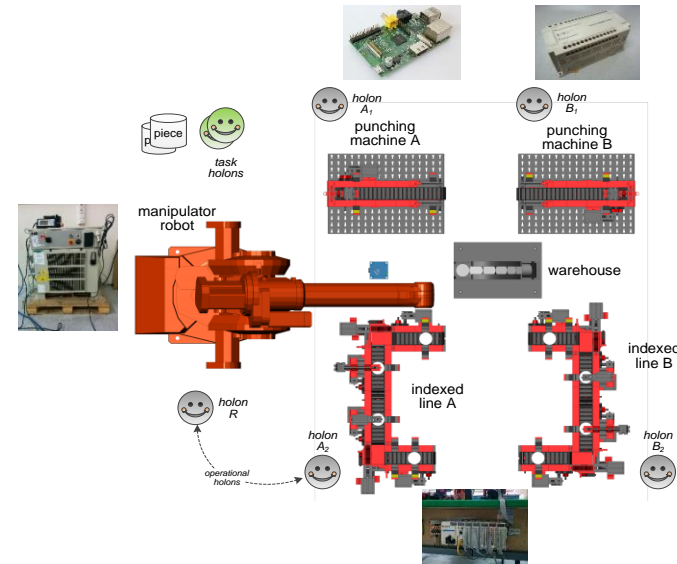
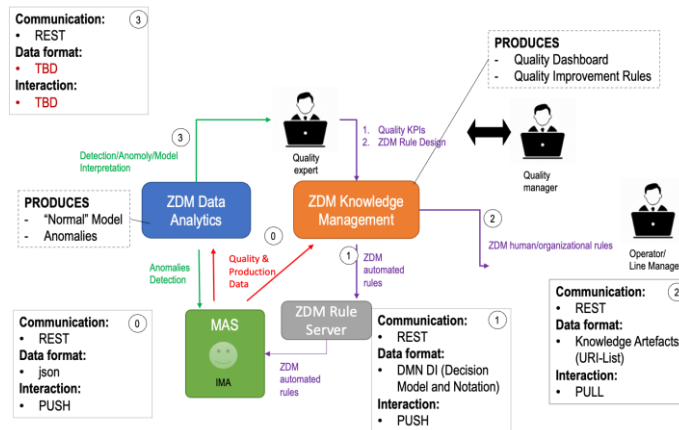
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DAI-DSS MULTI-AGENT SYSTEMS



- Multi-stage quality control
- Flexible production process



GOODMAN Project (www.go0dman-project.eu)

Located at IPB-Portugal (www.ipb.pt)



Gustavo Vieira
(MORE)

LET'S KEEP IN TOUCH

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QUESTIONS?