

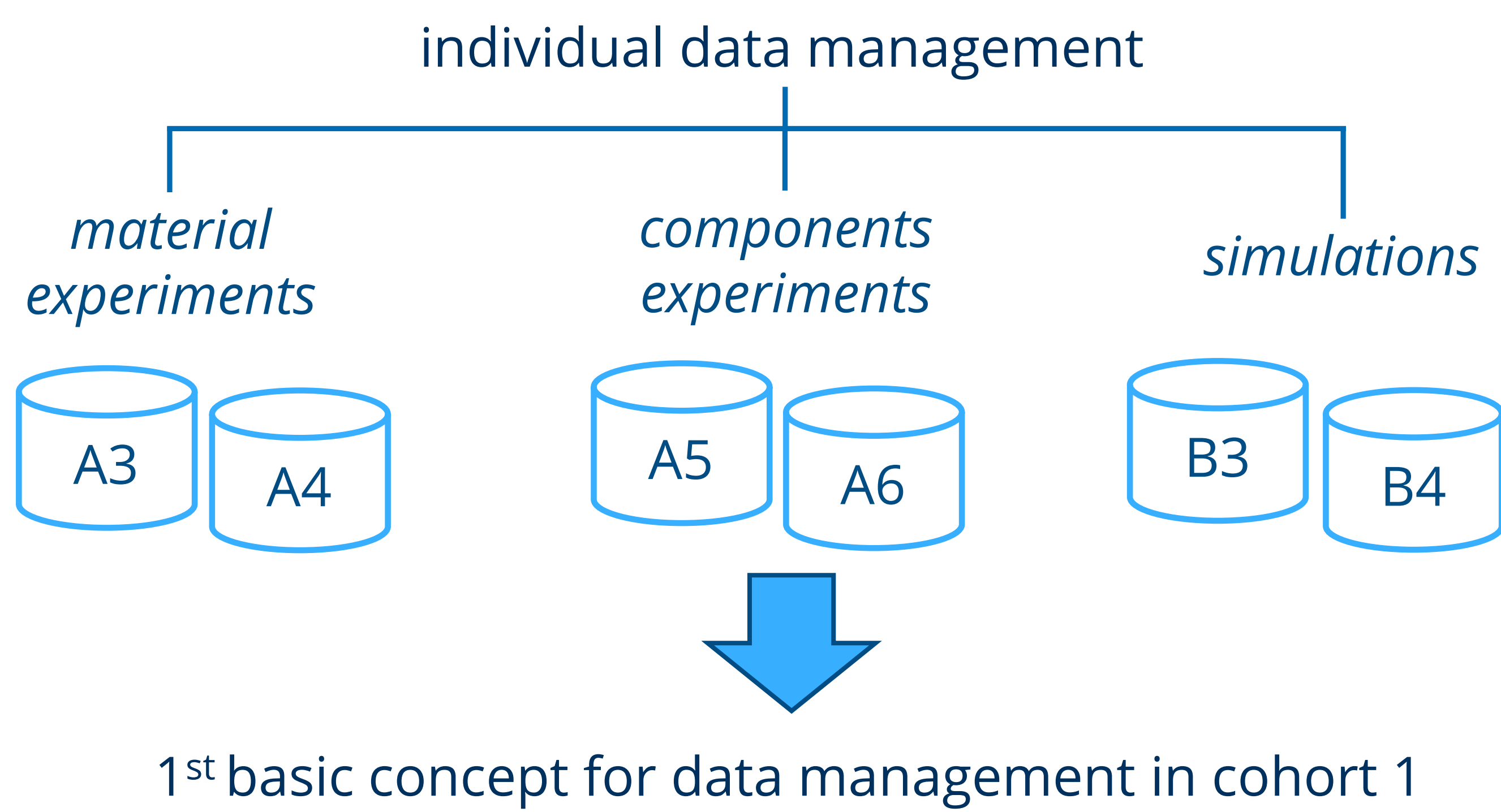
Felix CONRAD – Doctoral Project C3/II

AI METHODS FOR THE SYNERGETIC USE OF THE INVESTIGATION RESULTS OF GRK 2250 FOR THE DESIGN OF IMPACT PROTECTION SYSTEMS

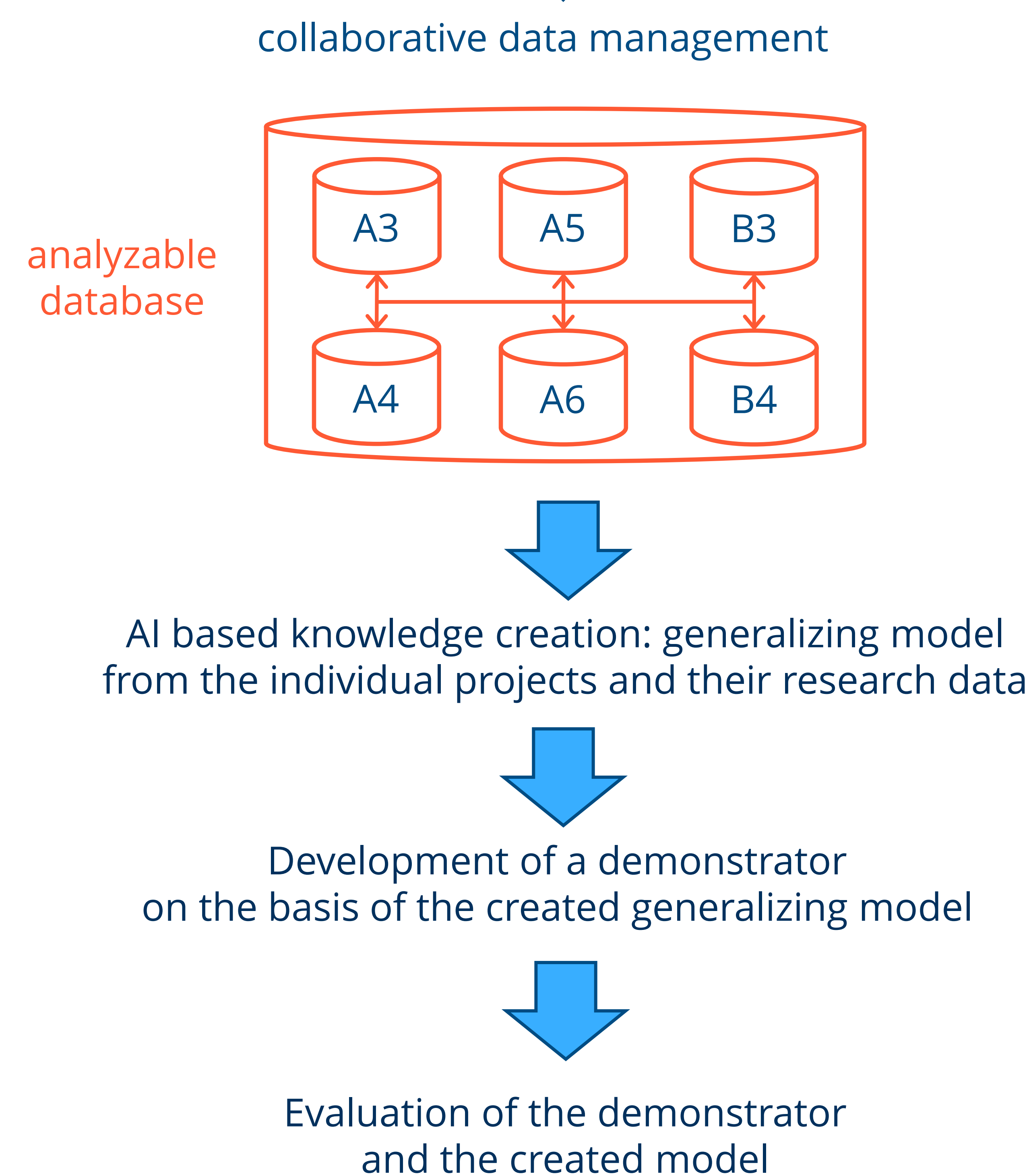


1 STATE OF THE ART

- Heterogeneous data storage
- Data of the test series have problem-specific content
- Requirement for AI application is deficient



2 OBJECTIVES

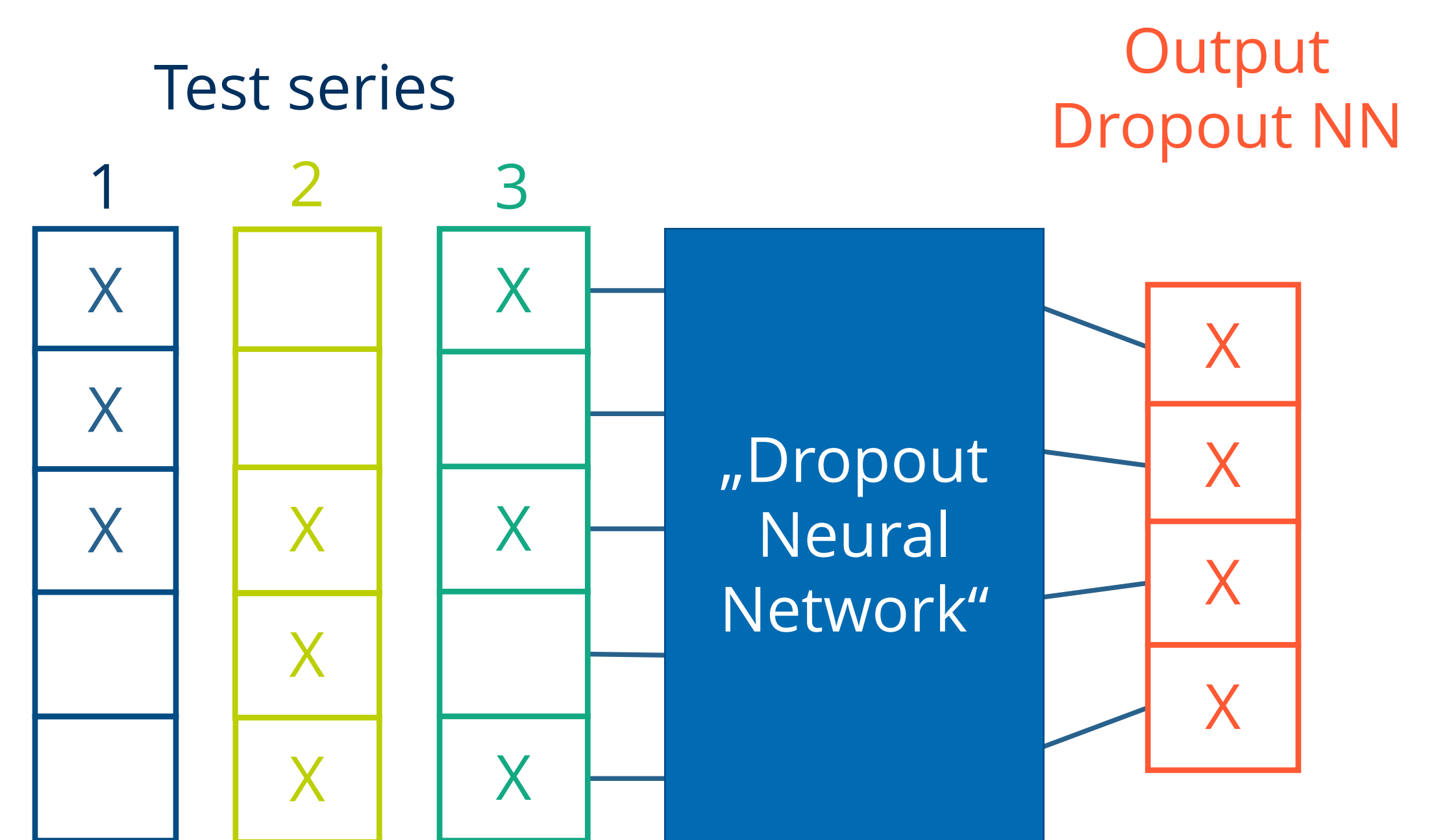


- Solutions:**
- Uniform and systematic data-storage
 - Problem specific content is connected
 - Requirement for AI application is fulfilled
 - + overarching knowledge creation

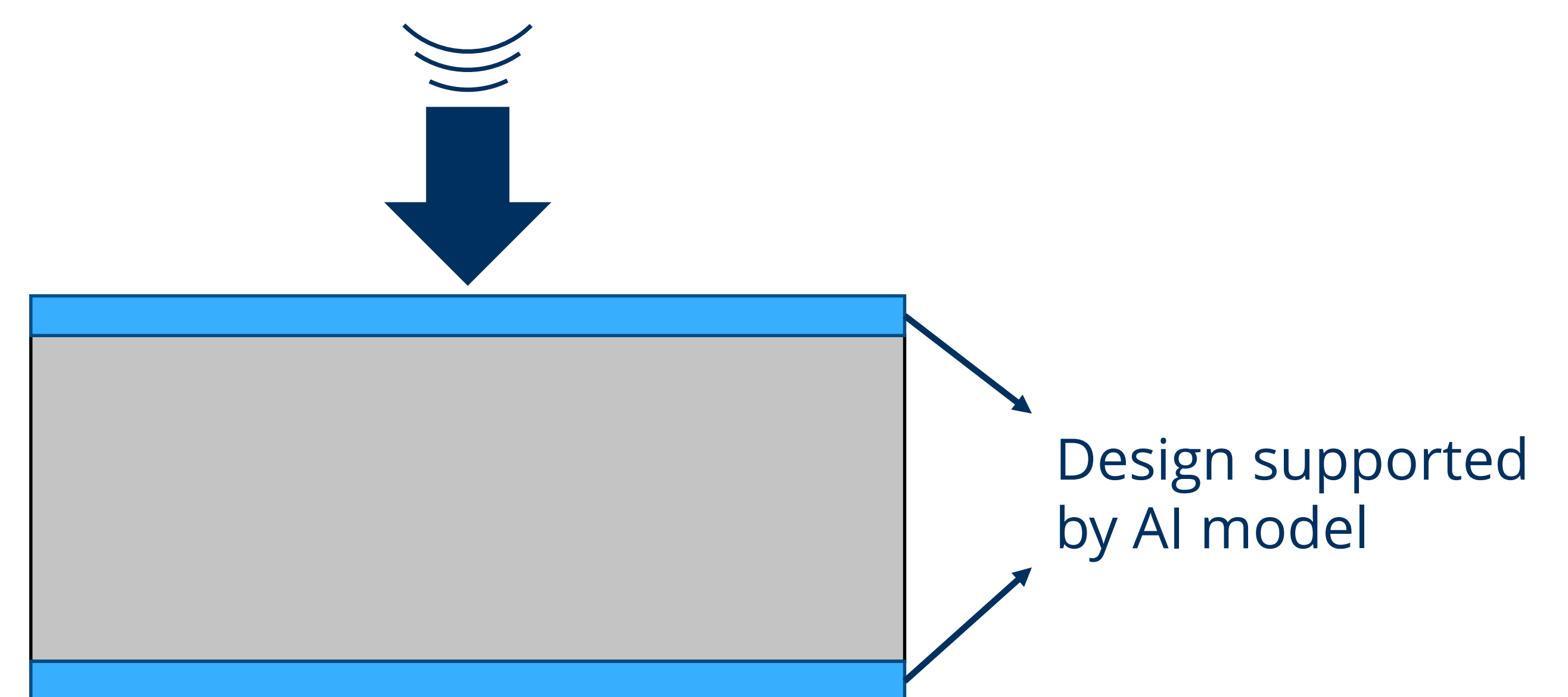
3 CONCEPTS

- Method for meta data and research data management
- Pipeline for creating an algorithm
- Optimized demonstrator
- Prediction of the properties of an adapted component

Potential AI-Algorithm for combining the single projects and their experiments in an generalizing model:



Potential demonstrator for the evaluation of the model



4 PLANNED COLLABORATIONS

Established collaborations in the initial project phase

