



Power Grid Use cases

AI-centric use cases for power grids

03.04.2024



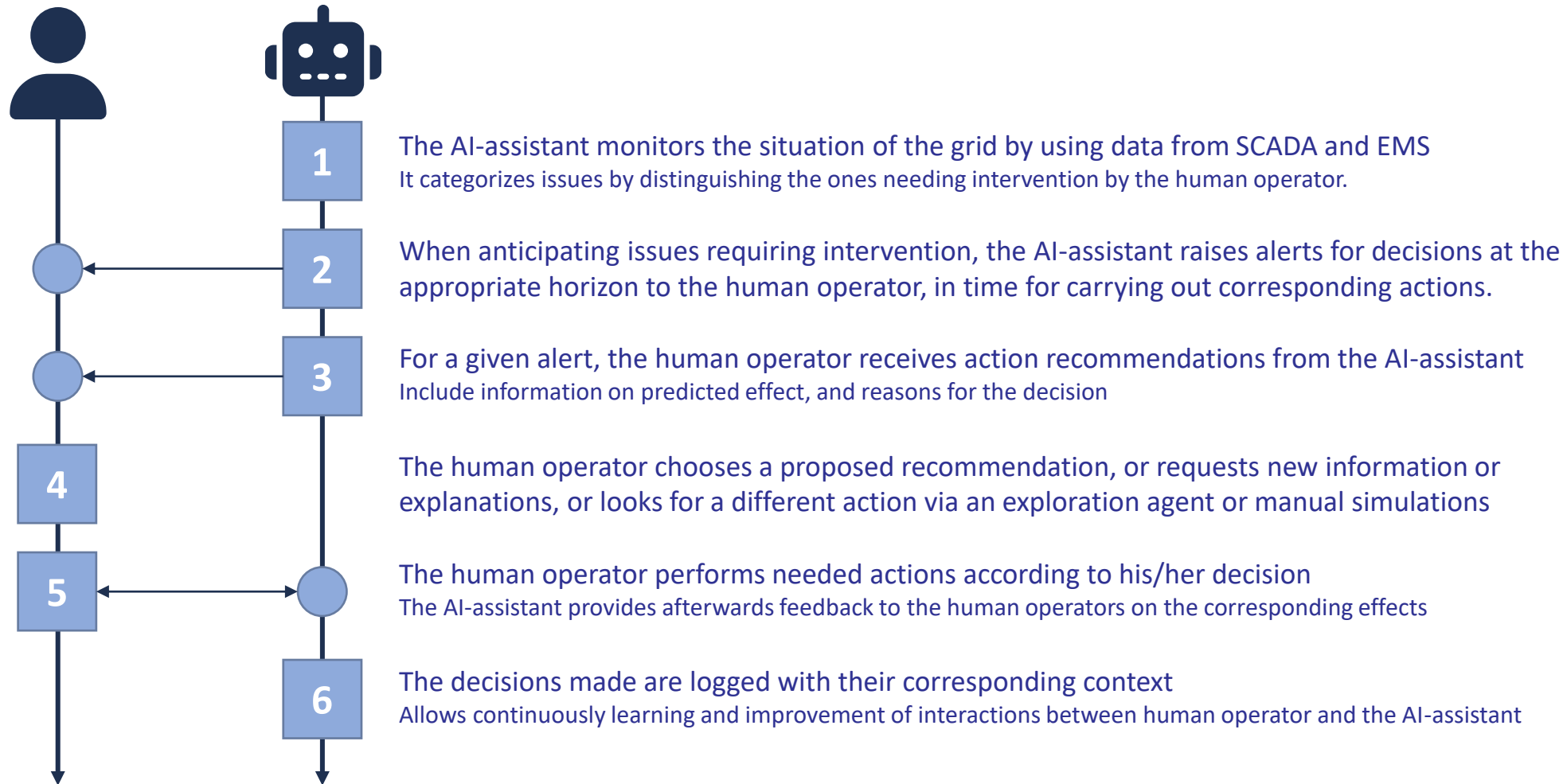
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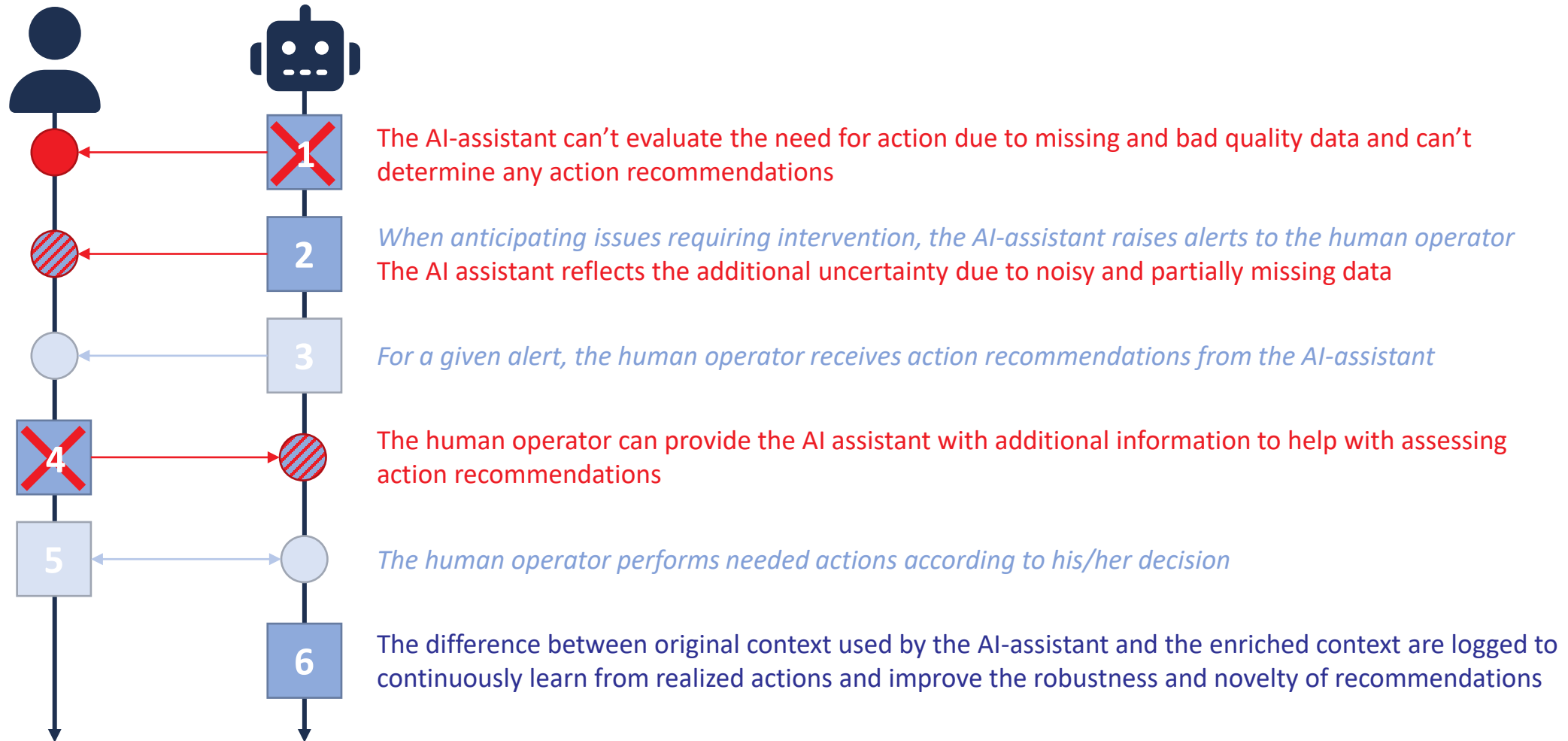
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UC1/ Power Grid assistant



UC2/ Sim2Real



Overview of scenarios



UC1 Power Grid assistant

#UC1.1 Preventive & remedial actions in case of unplanned outage

#UC1.2 AI assistant learns from human operator

#UC1.3 Human operator learns from AI assistant

Use UC1.1 data, and change actions chosen by the operator

UC2 Sim2Real

#UC2.1 Adaptation to real-world condition

Use UC1.1 data, and progressively alter data: introduce noise, replace data points by zero (or NaN)

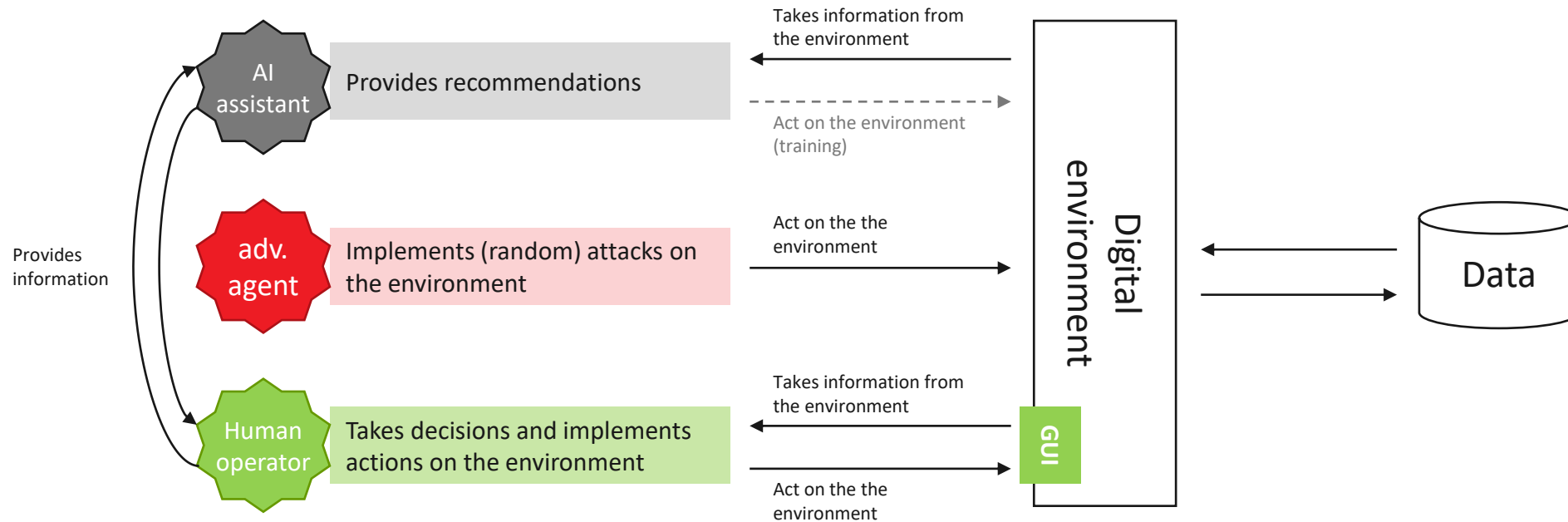
#UC2.2 Additional information from human operator

Dedicated scenario data

Reuse of other scenarios' data

"nice to have" scenario

Actors - agents



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