





ENSURE - Use Case and Transferability

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Interaction between the uncertainties

...An exemplary comparative overview of key aspects

Parameter uncertainties

Rock parameters (e.g.,

location of fractures,

permeabilities)

Recommendation

Identification and documentation of source, value range and characteristics, use of probabilistic methods

Counteracting human factors

Anchoring bias, confirmation bias, group polarization, law of the instrument, authority bias

Scenario uncertainties

Long-term climate evolution, Impact of climate modeling on repository design

Recommendation

Systematic procedure for developing scenarios, documentation of procedure & decisions

Counteracting human factors

Confirmation bias, authority bias, groupthink, overconfidence bias

Model uncertainties

Model input parameters, model selection, creation of model ensembles

Recommendation

Model conception according to S&T status, software quality assurance, model qualification through comparisons

Counteracting human factors

Law of the instrument, confirmation bias, groupthink, anchoring bias

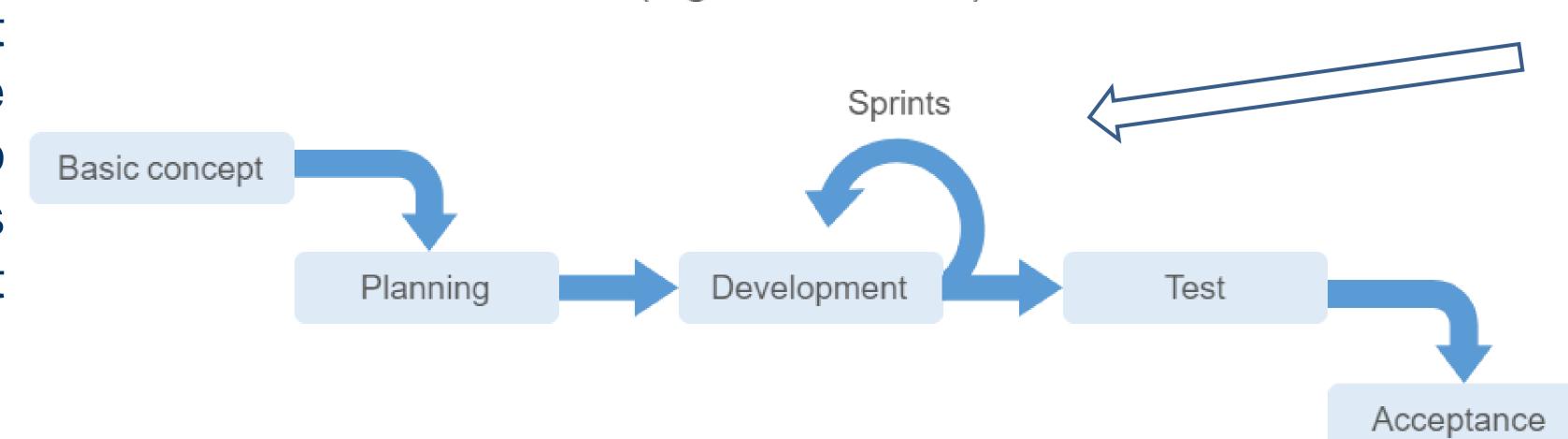
To ensure a reliable and safetyoriented approach to scientific and technical uncertainties, essential to verify human uncertainties. The AHRIC-M can be used for this assessment.



Transferability of the uncertainties due to human factors to the overall site selection process

The AHRIC method should be integrated into both traditional and agile project management approaches to strengthen the site selection process. This would help to systematically consider uncertainties due to human factors in project milestones and decision meetings.

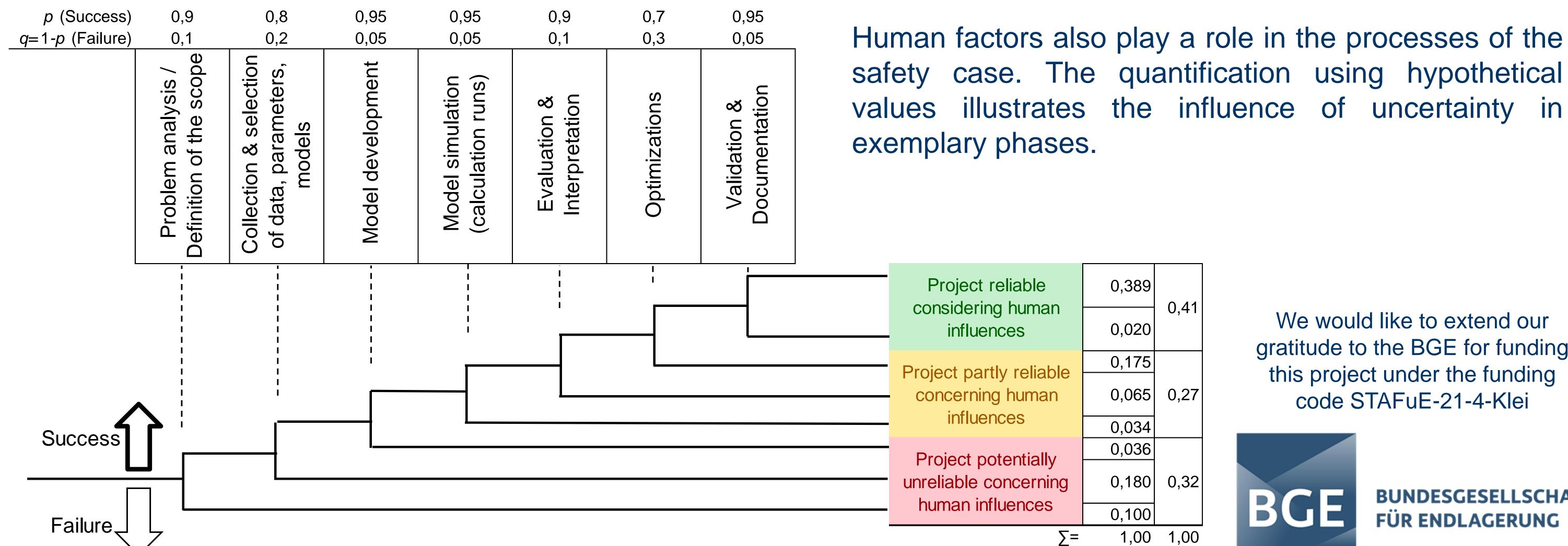
Hybrid project management (e.g.Water-Scrum)



AHRIC - S (Screening Version with 9 Items)



Value for safety cases by the integration of human factors



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