

- Digitalization - opportunities for implementing SDG 6

Christian Malewski
Wupperverband



MuDak-WRM



WUPPERVERBAND
für Wasser, Mensch und Umwelt

The Wupperverband and SDG 6

2,300 km rivers/streams

ecosystems

6.6



14 water reservoirs



11 Sewage-Works

water quality and reuse

6.3



6.1

drinking water

6.4

water-use efficiency

6.5

water resource management

≈ 1 Mio. residents

sanitation and hygiene

6.2



Vision:

Digital Twin

≈ 800 km² catchment area

2,300 km rivers/streams

ecosystems

6.6

14 water reservoirs

11 Sewage-Works

water quality and reuse

6.3

6.1

drinking water

6.4

water-use efficiency

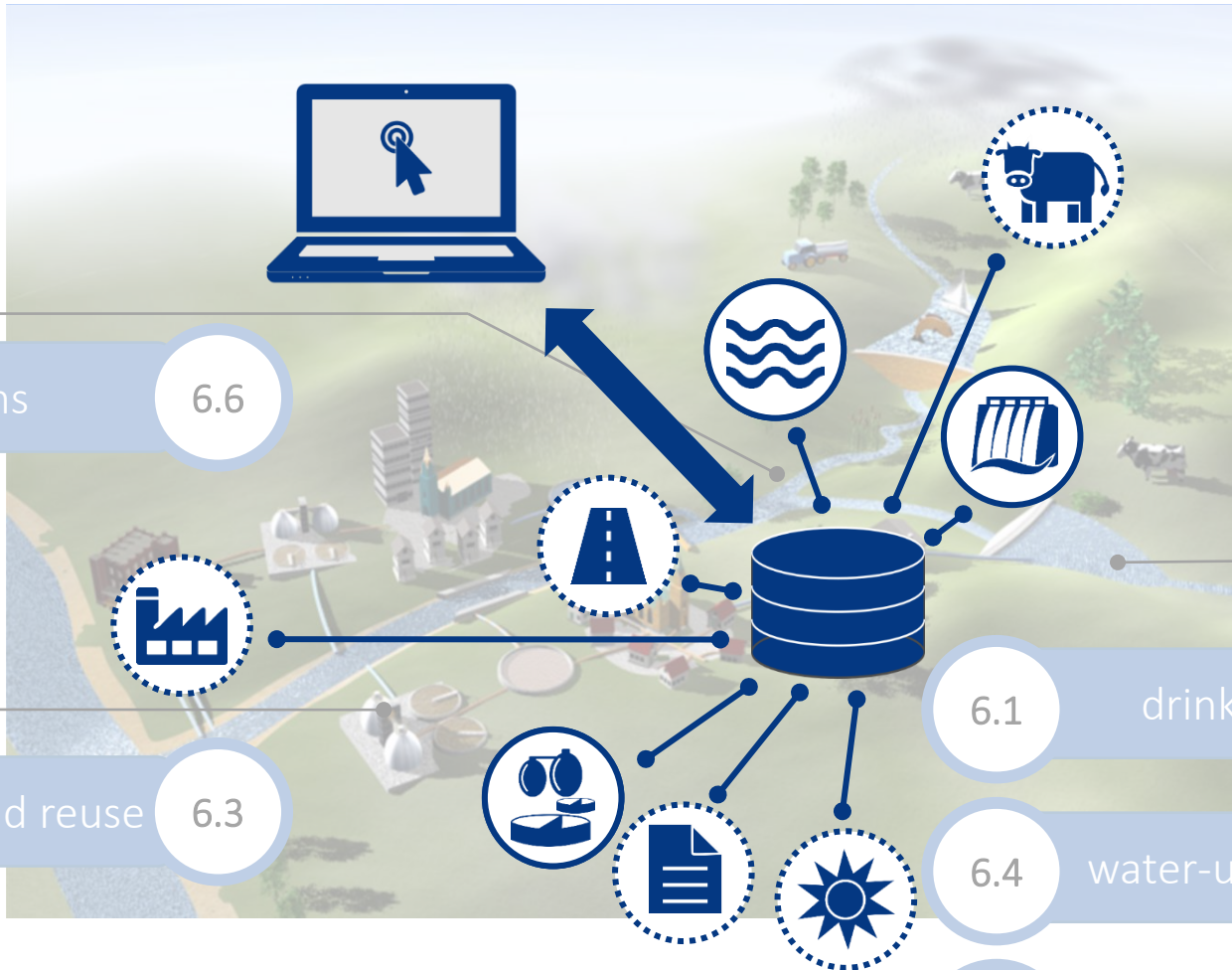
6.5

water resource management

sanitation and hygiene

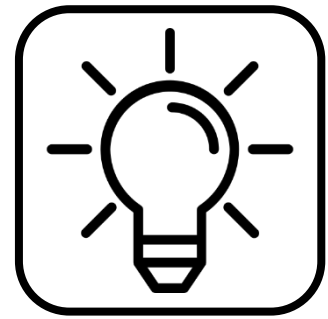
6.2

≈ 1 Mio. residents



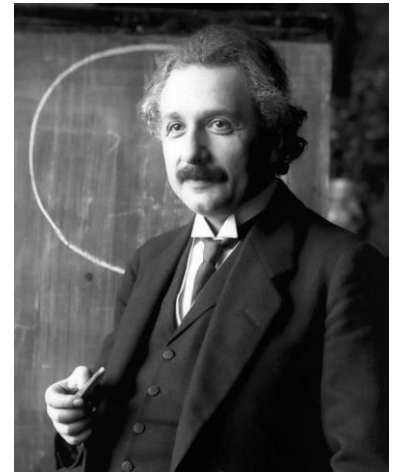
Prerequisite 1

research and innovation



“A person who never made a mistake
never tried anything new.”

Albert Einstein



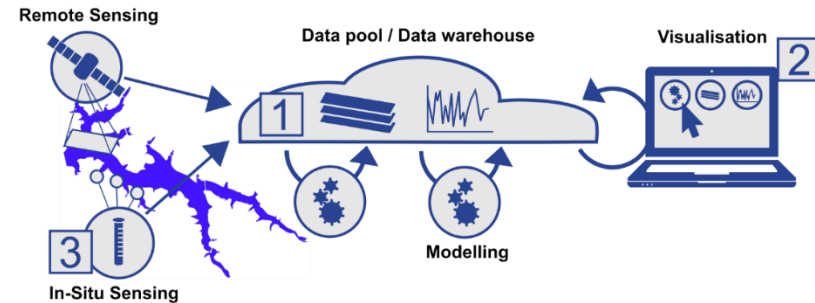
- Space for experimentation
- Certain degree of fault tolerance
- Thinking process and information flows new, rather than copying previous analogue process flows
- Collaboration with research institutions and companies

Prerequisite 2

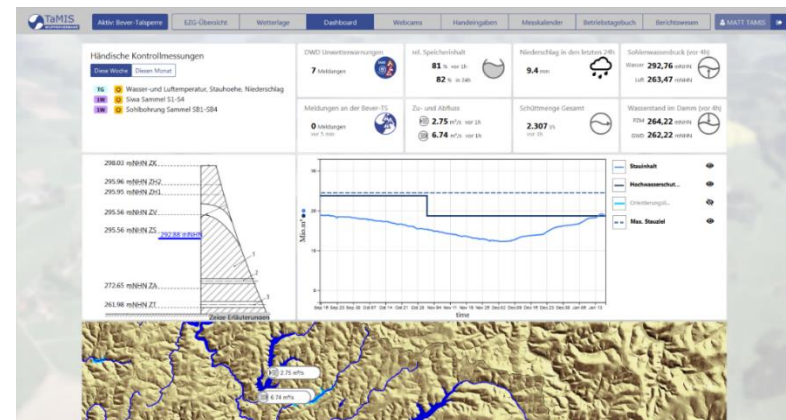
iterative and collaborative development



- Quick realization of low hanging fruits
- Let applications continuously grow
- Serve 80% of use cases, add 20% special cases when operative

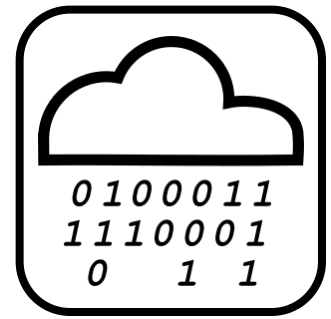


- Regular feedback loops with users, institutions and clients
- Visualization

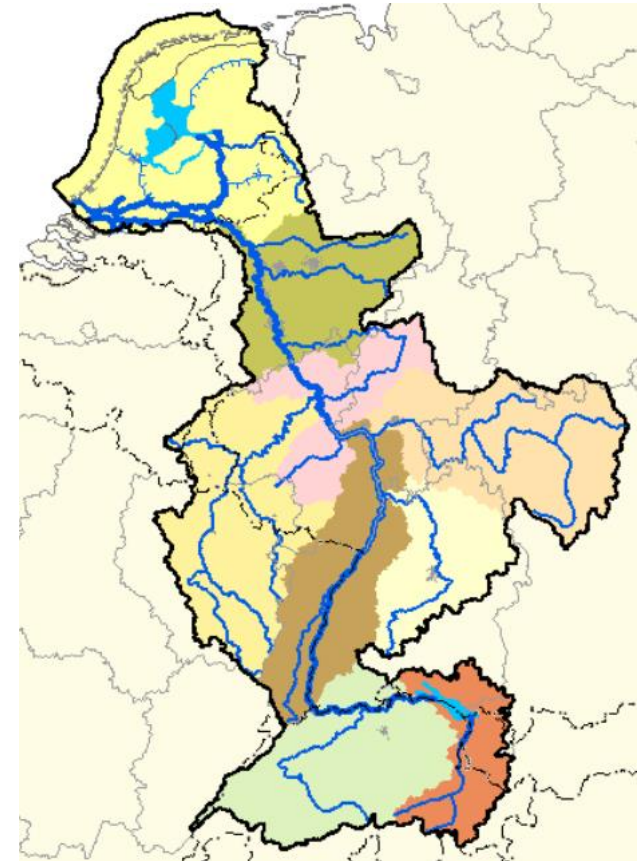


Prerequisite 3

open data communication culture



- Usage of fit for purpose standards for data communication
- Ease data share among institutions and administrative boundaries
- Data reuse enhances data quality
- Data security and protection essential for sensitive data



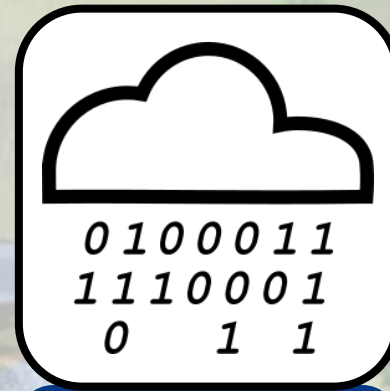
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research &
innovation



iterative &
collaborative
development



open data
communication
culture

Christian Malewski – cmi@wupperverband.de
www.wupperverband.de

Open Data: fluggs.wupperverband.de/swc



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References



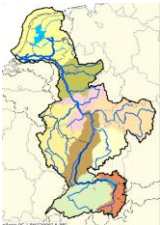
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