DATAWEEK

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Key challenges in digital transformation in the water sector

14th June 2023 Andrea Rubini

Water Europe

EUHUBS4DATA

BDV BIG DATA VALUE ASSOCIATION

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WATER EUROPE

Who are WE?

Values & members

- **Recognized voice and promoter of water-related innovation, research, and technology development in Europe**
- **Mission:**
  - Improve **coordination and collaboration** in the water ecosystem in the EU and beyond;
  - Enhance **performance and competitiveness** of the water ecosystem;
  - Contribute to solving **global water challenges** through RTD&I.
- **Water Europe Strategy:**
  - **Purpose-driven Multi-stakeholder** association representing the entire range of actors in the innovative water ecosystem
  - **Value-based** organisation: Water Vision

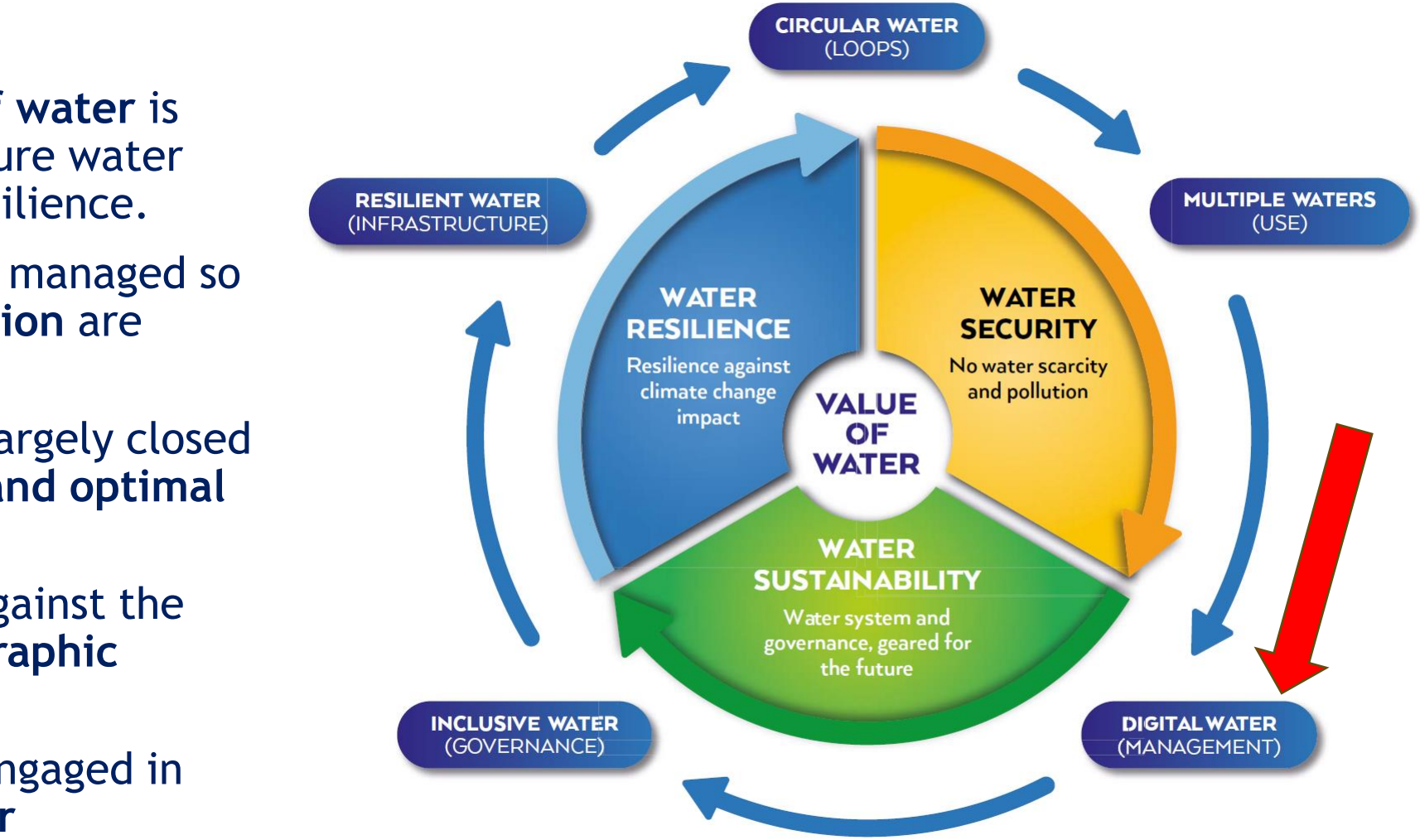
College A: Multinational corporations
College B: Research & Technology developers
College C: Utilities
College D: Suppliers & SMEs
College E: Large water users

College F: Public Authorities
College G: Civil Society Organisations

Water Vision 2023

Water-Smart Society:

- A society in which the **value of water** is recognised and realised to ensure water security, sustainability, and resilience.
- all available water sources are managed so that **water scarcity and pollution** are avoided.
- water and resource loops are largely closed to foster a **circular economy and optimal resource efficiency.**
- the water system is resilient against the **impact of climate and demographic change**.
- all relevant stakeholders are engaged in guaranteeing sustainable **water governance**.



Source: Water Europe

CHALLENGES PRESSURES OPPORTUNITIES

INDUSTRY

- Data privacy and security concerns: The digitalization of water-related industrial processes involves collecting and analyzing sensitive data, such as water usage patterns and industrial operations. Ensuring the privacy and security of this data poses a significant challenge.
- Scalability and interoperability: Implementing digital solutions across multiple industrial sites and ensuring interoperability between different systems and devices can be challenging due to the diverse technologies and protocols involved

CITIES

- Aging infrastructure: Many cities have aging water infrastructure that was not designed to support digital technologies.
- Data management and analytics: Managing large volumes of data generated by sensors, meters, and other devices is a significant challenge.
- Stakeholder engagement and collaboration: Engaging and collaborating with various stakeholders, including government bodies, water utilities, and residents, is crucial for successful digitalization.

RURAL

- Connectivity and access to digital technologies: Rural agricultural areas may lack reliable internet connectivity and access to advanced digital technologies.
- Data ownership and control: Farmers are concerned about the ownership and control of the data generated by digital solutions in agriculture
- Customization and adaptability: Agricultural practices vary significantly across regions and crops. Developing digital solutions that can be customized and adapted to different farming practices and conditions is a complex task.

RECOMMENDATIONS

We reiterate our recommendations for the digitalization of the water sector towards a Water-Smart Society:

Water Europe
Technology & Innovation
THE VALUE OF WATER
TOWARDS A WATER-SMART SOCIETY
DIGITALISATION TO ACHIEVING A WATER-SMART SOCIETY

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Thank you!

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