

Digital Twins for an efficient, sustainable & resilient water infrastructure

Blau Grüner Dialog, Anja Eimer, June 19, 2024



Siemens as strong technology partner for the water & waste water industry

Market Leader

#1 in DCS market

(27% market share)

#1 in SCADA market

(33.3% market share)

#1 in Flowmeters

(18.1% market share)

#4 in Industrial Ethernet Switches (11.3% market share)

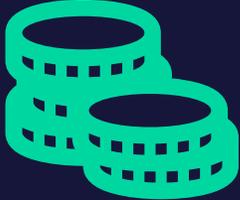
Source: ARC Study 2022

Unrestricted | © Siemens 2024 | Anja Eimer

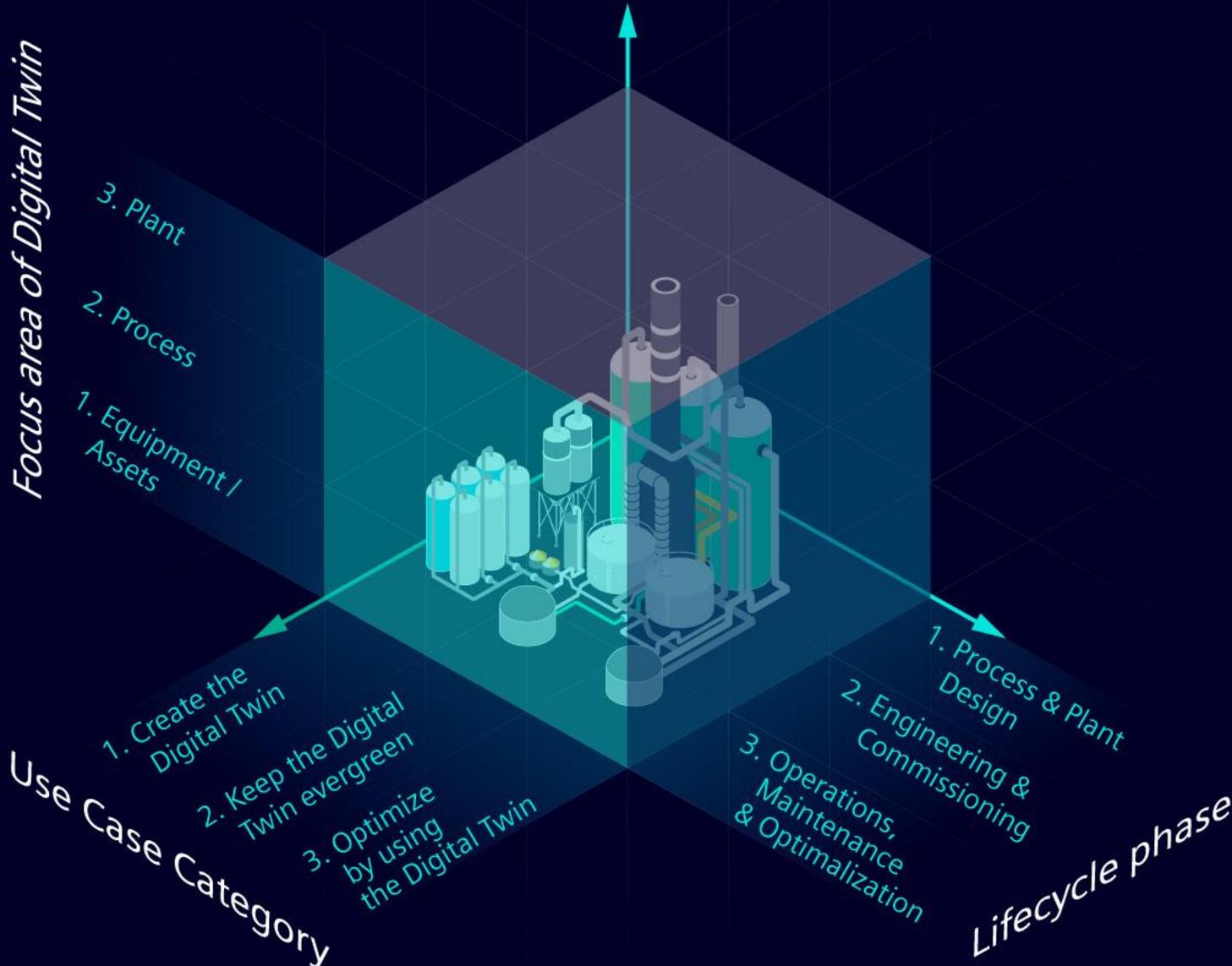
Global references



Today's water industry is facing many challenges to become more efficient, resilient and sustainable

Regulation	Capital efficiency	VUCA world	Labor market	Climate change
				
 <p>Increasing regulatory demands</p>	 <p>Underfunded infrastructure</p>	 <p>Ever new technologies</p>	 <p>Lack of skilled workforce</p>	 <p>Net zero transition</p>
 <p>Higher risk of penalties</p>	 <p>Secure water supply and quality</p>	 <p>Cyber threats</p>	 <p>Loss of plant specific know-how</p>	 <p>Increasing number of extreme events</p>

Digital Twins – A Comprehensive approach



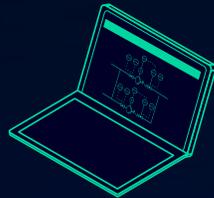
Digital Twin for smart city development

siemensstadt square

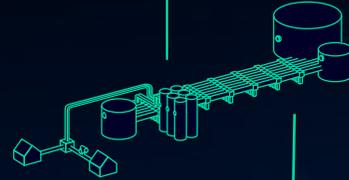
Our digital twin approach for the water industry

- **COMOS**
Engineering & commissioning
- **PlantSight**
One complete Digital Twin in the cloud
- **Ecodomus**
BIM-enabled plant lifecycle management

ENGINEERING



SIMULATION



- **SIMIT**
Virtual commissioning and operator training
- **gProms**
Integrated modelling suite across the entire process lifecycle

AUTOMATION

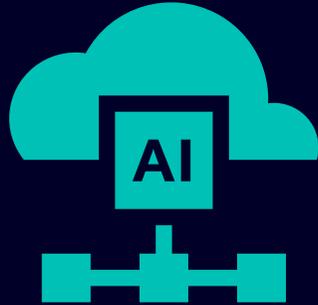
- **SIMATIC PCS neo/ PCS 7**
Powerful, flexible, and scalable and web-based process control system
- **TIA Portal**
Total integrated automation for SCADA systems
- **Simatic PAA**
Integration of automation planning and control technology
- **Hardware**
Common hardware platform and application architecture for SIMATIC PCS 7 and SIMATIC PCS neo



APPLICATIONS

- **SIWA Suite**
for water distribution network and sewage networks
- **Asset management**
for strategic (Brightly) and operational (myExpert, Senseeye) asset and inventory management (SITRANS Store IQ)
- **Operational intelligence**
for monitoring of operational assets and processes, incl. SITRANS serve IQ, SITRANS SCM IQ, InsightsHub)

Potential of digital twins is huge, but stronger pull required to leverage full effectiveness



Making data integration a must in each public tender (BIM Compliance)



Ensuring data availability along the complete lifecycle



Strengthening collaboration between public entities and technology provider

Thank You