

Overcoming challenges

How water utilities can use data and IIoT devices

72%

of utilities report that aging infrastructure is the biggest challenge they face.

The American Society of Civil Engineers report

240K

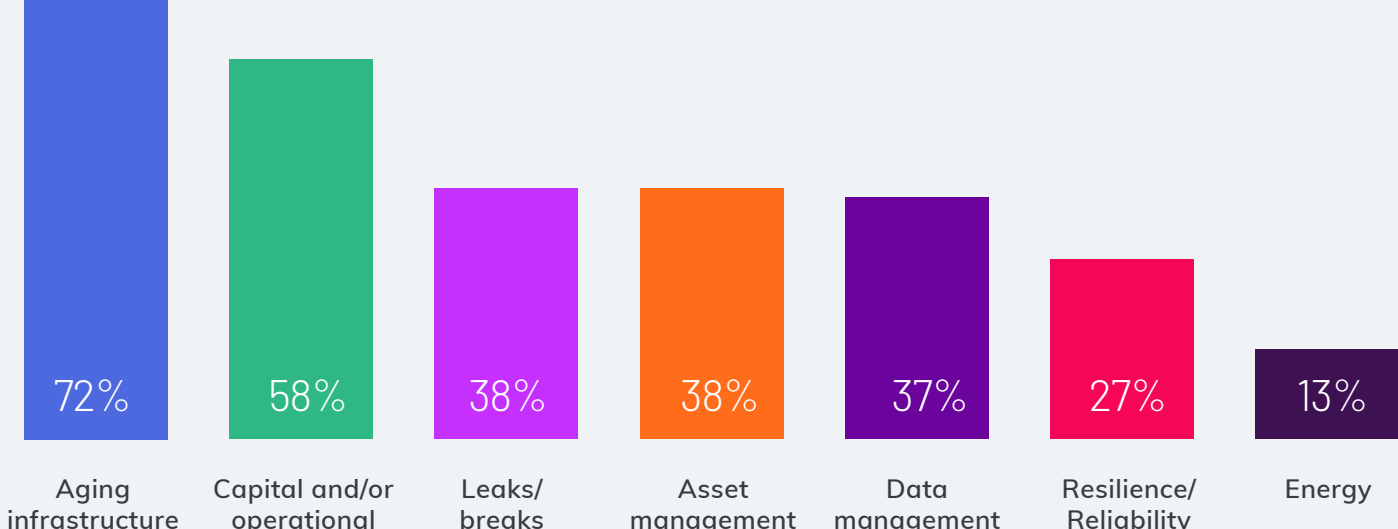
water main breaks every year, with a cost of over \$2.6 billion a year.

American Society of Civil Engineers 2017 Infrastructure Report Card: https://www.infrastructurereportcard.org/cat-item/drinking_water/

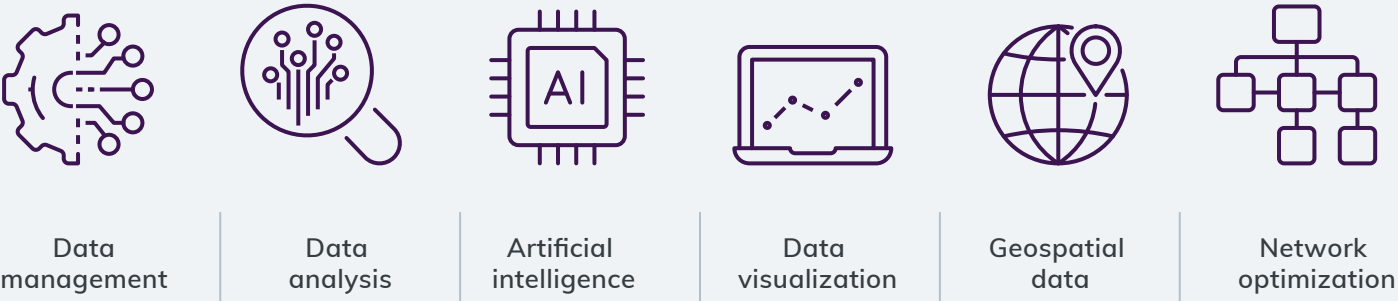
\$1 trillion

in investment is needed over the next twenty-five years to maintain and expand services to meet demand.

Primary challenges facing water utilities



Utilities are increasingly turning to software, IIoT devices, and data to tackle challenges like maintenance, water safety, asset health, and operational efficiency.



As with any newer technology there are still concerns around IIoT devices and data.

Areas of concern for IIoT devices

The biggest concerns around the deployment of IIoT devices are network security (67%) and data privacy (62%). Data analysis capabilities (54%), realistic efficiency opportunities (51%), and sufficient budget (47%) concerns also highlight utilities' uncertainty about enough investment and properly managing data to drive sufficient ROI.

79%

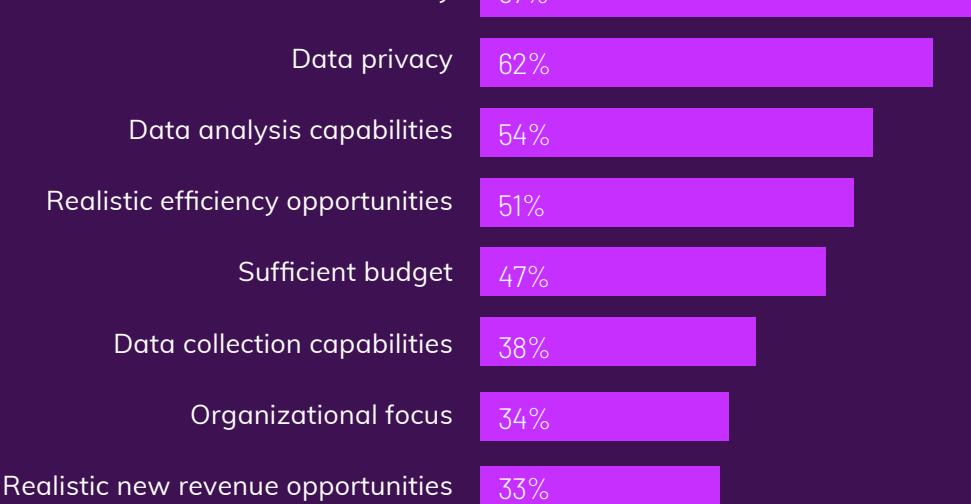
of water utilities agree that IIoT is an important technology.

49%

report that it is critical to their organization's success.

33%

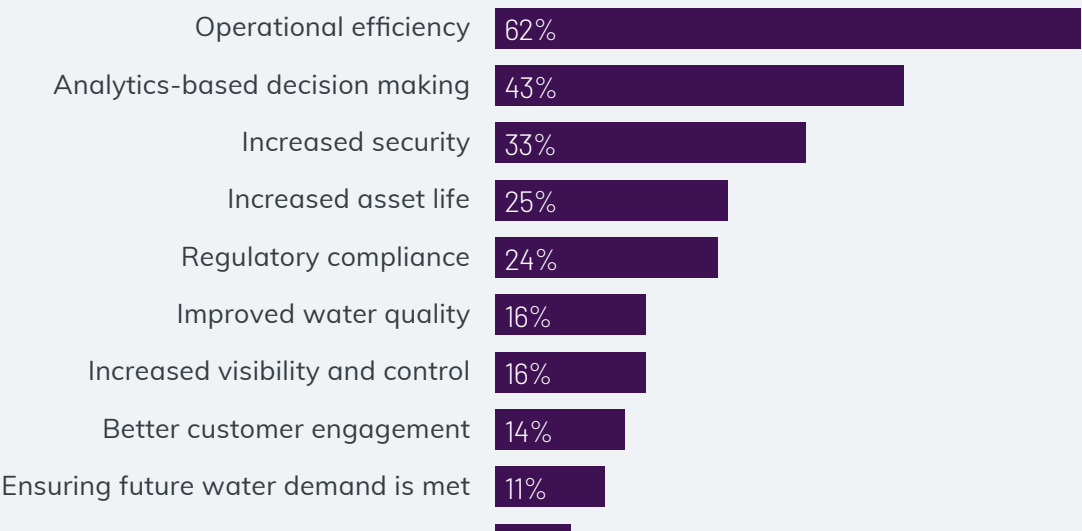
report they are already using it.



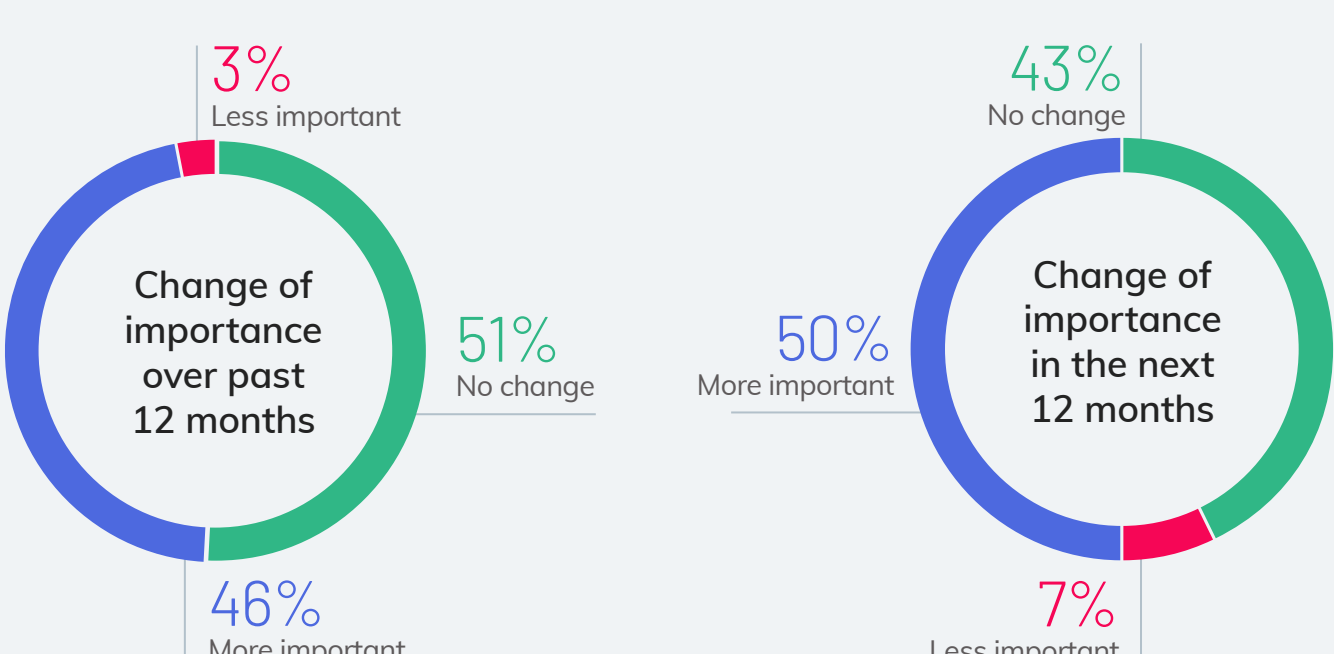
With such a large delta between the number of utilities that recognize the importance and the number that are already using IIoT, it is clear utilities need more education about the benefits.

Benefits of deploying IIoT devices

To answer the challenges around aging infrastructure and capital investment, IIoT device deployment is a cost-effective way to improve asset management, extend asset life, and optimize capital expenditures.



As a result, IIoT is becoming a more important technology for water utilities.



Water utilities are clearly recognizing that despite the challenges associated with data and IIoT devices they clearly present a solution to the biggest issues facing the industry.

46% of utilities report that it is more important now than it was 12 months ago, and 50% say it will be even more important 12 months from now.

Recommendations

- Develop a coordinated strategic roadmap that is centered around using AI to maximize the benefits of IIoT data.
- Create a digitally enabled workforce. Analytics and IIoT require skilled people and processes to execute effectively.
- Develop a change management and communication plan that emphasizes the importance of IIoT data to employees, customers, policy-makers, vendor partners, and regulators.
- Training the existing workforce and hiring top quality data professionals will be essential for utilities to thrive.
- Develop strong relationship with key vendor partners that can help optimize data management and analytics.