



Affinity Water

Optimising asset management with smart, accurate field data capture

Key points

- QR code scanning identifies assets instantly, saving up to 10 minutes per asset
- Intelligent digital data capture reduces effort by 20 percent
- Better data quality empowers the company to make smarter asset management decisions

Summary

Affinity Water set out to improve asset data quality and drive smarter maintenance by helping technicians assign maintenance tasks to individual assets accurately.

By upgrading to Fieldreach from AMT-SYBEX, Affinity Water has gained a mobile solution that streamlines data capture processes for technicians in the field.

The solution enables technicians to identify assets by scanning a QR code, and then guides them through an intelligent workflow that helps them capture the right data quickly.

The challenge

As part of its work to improve efficiency and provide services that offer customers excellent value for money, Affinity Water must make intelligent infrastructure investments—moving away from large-scale capital works and focusing on targeted asset replacement to maximise return on investment. To achieve this, the company must be able to capture detailed, accurate insights into the condition and history of every asset.

Targeted asset replacement

Affinity Water is using Fieldreach to capture detailed information on the condition & history of every asset. Moving away from capital works it enables them to maximise return on investment

The solution

Affinity Water has embarked on a major initiative to tag 85,000 above-ground assets with QR codes, which will help technicians identify assets and associate them with relevant maintenance tasks. Fieldreach from AMT-SYBEX streamlines the mobile data capture process: when an asset is scanned, it automatically launches an appropriate workflow to help the technician capture the precise information they need.

The benefits

- The built-in QR code scanner enables technicians to find and select assets instantly, saving up to 10 minutes per job
- Accurate allocation of unplanned maintenance jobs to asset records helps to improve data quality, supporting more detailed asset analytics
- Intelligent data capture capabilities reduce the number of questions a technician needs to answer by up to 20 percent, helping them focus on maintenance tasks rather than data entry
- Increased visibility of asset reveals the maintenance history of each asset to help technicians make smarter maintenance decisions
- More detailed tracking of non-productive time (time off the tools) helps Affinity Water identify opportunities to streamline operational processes
- Ultimately, the solution should give Affinity Water the accurate data required to increase the effectiveness of asset care while maximising its resource

Affinity Water is the largest water-only supplier in the UK, providing on average 900 million litres of water each day to a population of more than 3.6 million people. The company supplies water to customers in Bedfordshire, Berkshire, Buckinghamshire, Hertfordshire, Surrey, and several London boroughs, as well as the Tendring peninsula in Essex, and the Folkestone and Dover areas of Kent.

Meeting ambitious targets through intelligent investment

The success of Affinity Water's business depends on its ability to deliver a high-quality, safe and reliable water supply to customers, 24/7. But its responsibilities do not end there: according to [its 2015-2020 business plan](#), the company also aims to help its customers reduce water usage, cut leakage by 14 percent, and make over £100 million of efficiency savings.

“High-quality data is a prerequisite for efficient asset management.”

Kevin Martin
Maintenance Strategy Manager
Affinity Water

Kevin Martin, Maintenance Strategy Manager at Affinity Water, comments: “To achieve our goals, our treatment processes and pumping systems need to be reliable and efficient. An approach that is focused on our most important assets, while still actively maintaining and inspecting all other assets, gives us the best opportunity to deliver on our commitment to our customers.

To make the transition to a more predictive asset management strategy, Affinity Water knew that its asset data had to be as detailed, accurate and up-to-date as possible. With reliable data, it would be possible to analyse and understand the condition and maintenance history of each asset, evaluate the likelihood of failure, and plan maintenance and replacement cycles to minimise both risk and cost.

“High-quality data is a prerequisite for efficient asset management, so we kicked off a number of initiatives to ensure that our asset information is as good as it can be,” says Kevin Martin. “For example, we have been working on a Data Verification and Asset Care Optimisation project to assess how critical each asset is to our operations, and we’re also working on tagging all of our above-ground assets with QR codes to help our technicians positively identify and assign non-programme work to the right asset.”

One thing that most of these initiatives have in common is the need for Affinity Water's field teams to visit sites, maintain, inspect and capture accurate data to update Ellipse, its central asset management system. Although the company did have access to a mobile solution that would allow technicians to interact with Ellipse in the field, this solution was only used by one of the company's three main divisions, and it was approaching end-of-life.

“It was time to refresh both the hardware and the software of our mobile solution, but we didn't want to settle for a like-for-like replacement,” says Kevin Martin. “We saw there was an opportunity to reconsider our mobile requirements and introduce new capabilities that would help us streamline the data capture process and improve data quality.”

Building on Fieldreach

Affinity Water decided to work with its existing technology partner AMT-SYBEX to design more efficient data capture processes and upgrade its mobile platform to the latest version of Fieldreach.

“The AMT-SYBEX team has a lot of experience in the water industry and that’s vital for this kind of project...they spoke our language.”

Kevin Martin
Maintenance Strategy Manager
Affinity Water

“The AMT-SYBEX team has a lot of experience in the water industry, and that’s vital for this kind of project,” comments Kevin Martin. “They spoke our language and understood how we wanted to use their solution from the bottom up. The project involved both our asset management team and our IT team, and AMT did a great job of helping us reconcile the technology and business perspectives and deliver a solution that worked for everyone.”

A key requirement was that the new solution should be able to scan and recognise the new QR codes that Affinity Water is attaching to its above-ground assets.

“Fieldreach supports QR code scanning with tablet devices and smartphones as standard,” says Kevin Martin. “There’s no need for expensive specialist hardware or peripherals, and it’s easy for users to learn, as it’s as simple as taking a photo with a smartphone.”

Now, when a technician scans a QR code, Fieldreach automatically looks up the asset record in the Ellipse database, and displays a brief maintenance history of the asset, including the five most recent work orders. This equips the technician with vital information on how the asset has been performing, and helps them to make better decisions about how to complete their task.

Once the job is complete, Fieldreach uses its intelligent data capture system to guide the technician through the process of capturing updated data about the asset. Users are only asked to fill in data that is necessary to the task at hand—so it is much quicker and easier than making them fill in a generic form where many of the questions are irrelevant.

As well as helping to capture data about assets and work orders, the solution also enables technicians to keep track of their non-productive time: for example, time spent in team meetings, or travelling to a site. By categorising these different activities, Affinity Water can analyse resource utilisation and compare the performance of different teams—helping the company to identify the most effective working practices.

The benefits begin to flow

With the new Fieldreach platform in place, Affinity Water can capitalise on its QR tagging and Asset Care Optimisation projects by establishing and maintaining a new standard of asset data quality.

Efficiency improvements

Using Fieldreach has enabled technicians to save time on the job by answering fewer questions as part of the data capture process.

“We now have a single mobile platform that all three of our businesses can use to improve data capture while their technicians are out in the field,” says Kevin Martin. “The combination of QR scanning, improved naming conventions and a much faster search feature means that finding asset records—which used to take up to 10 minutes—can be almost instantaneous.”

Kevin Martin adds: “With the latest version of Fieldreach, it’s much easier to ensure that you’re looking at the right asset, and there’s much less risk of capturing the wrong data. As a result, we can gradually build up a clearer picture of the condition of our assets, and be confident that the data is accurate.”

By refining some of the intelligent digital workflows and pre-populating fields where information is already known, Fieldreach also simplifies the data capture process, reducing the risk of errors even further.

“On average, technicians now need to answer about 20 percent fewer questions than they did before,” says Kevin Martin. “What’s more, because we now automatically select the workflow based on the type of work order, there’s no risk of a technician accidentally misclassifying a job. Again, it helps us to be more confident that the data coming into Ellipse accurately reflects the work that is taking place out in the field.”

He concludes: “Looking back on the project, we definitely made the right decision to treat it as more than just a technical upgrade. The new version of Fieldreach unlocks powerful capabilities to help us improve and maintain data quality—which will ultimately give us the insight we need to reduce costs, improve service levels, and hit our business targets.”

© Copyright AMT-SYBEX

AMT-SYBEX
The Spirella Building
Bridge Road
Letchworth Garden City
Hertfordshire
SG6 4ET
United Kingdom