

A data-driven approach to reducing leakage

1Spatial understand the increasing pressure on utilities to reduce the amount of product lost through leakage, improve the reporting of leakage, and ultimately move towards a target of 'zero leakage'.

However, it can be difficult to effectively detect leaks when using traditional or manual data assessment methods.

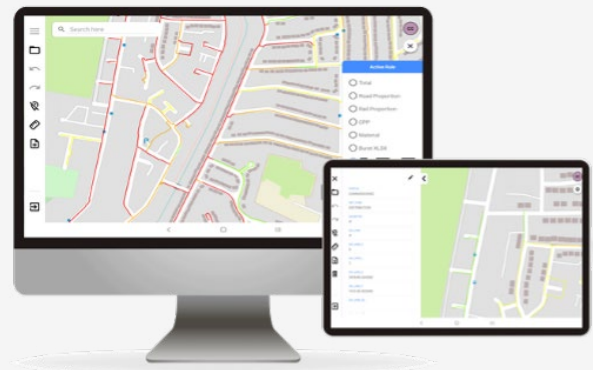
1Spatial's Leakage Solution

Loss of product through leakage is often calculated by large geographical areas such as District Metered Areas (DMA) or network zones. Once an area has been identified as having a high level of leakage, engineers then need to locate and repair the faulty assets.

Although engineers often have large areas to investigate, the point of impairment is likely to be small, meaning that it could take several days to detect the leak. During this time costs accumulate from ongoing product losses, accumulated engineering hours, and the potential disruption to customers.

1Spatial's leakage solution provides an automated, machine learning, data-driven approach for predicting and identifying assets that are at risk of losing product through leakage.

- Reduce leakage and the associated costs
- Minimise potential disruption to your customers
- Reduce the risk of receiving penalties or fines.



Machine Learning Technology

1Spatial's unique rules-based approach and spatial machine learning capabilities learn to understand the relationships between assets and their environments. The solution learns to recognise patterns not otherwise identified by traditional methods and tools, and to make sense of the proliferation of data, making it much easier to integrate more data sets for use in analytical assessments.

Hidden relations can be identified between the previous history of leaks and various structural properties of the network such as the pipe material, it's age, location relative to roads or buildings, length, diameter or elevation of the install.

Weighted totals of scores which represent the risk of leakage for pipes help you to identify a prioritised list of high-risk leakage areas. These are visualised as a "heat map" to direct resources more efficiently and prioritise pipe maintenance and leakage repairs.

What is key here is the data, which sits at the heart of any organisation.

The solution can also be used to validate, cleanse, transform and enhance data and ensure it is consistent, complete and correct before predications are made. A range of data inputs, both spatial and non-spatial can be used including data from sensor technologies. Combined, these allow you to predict leakage more reliably and prioritise maintenance more effectively.

To find out more about how 1Spatial can help reduce leakage and the associated costs, contact:
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Find out more at 1spatial.com/leakage