

PIPELINE RISK



Rezatec

Analyzing Earth Data



ZERO-IN ON WHAT MATTERS

Focus investment on the top 20% of pipeline risks for the greatest impact.

Pipeline Risk is 10% more accurate than other risk models, ensuring water network operators can determine the highest risk of pipeline failure across the entire network - and upgrade it - ahead of time.

BUSINESS CHALLENGE

North America saw a 27% increase in water main breaks between 2012 and 2018.

Faced with growing challenges from aging infrastructure, growing demand, and climate change to name but a few, water network operators need innovative methods to prioritize and optimize investment in their pipelines. Optimizing CAPEX and OPEX expenditure will be vital in creating value.

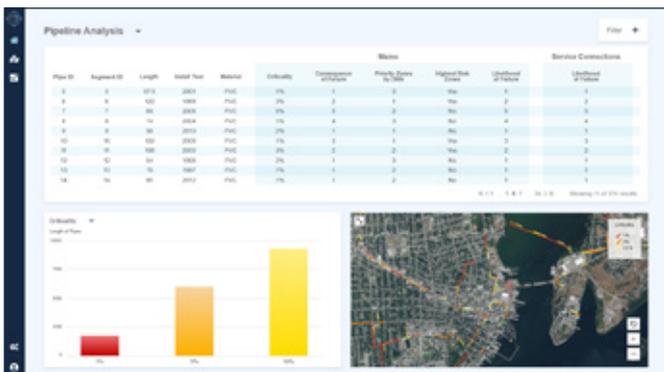


Image: Pipeline Risk highlights the most critical sections of pipeline.

PROACTIVELY MANAGE YOUR NETWORK

Evidence shows that 65% of your pipeline failures can be found in just 20% of your network.

Pipeline Risk quantifies the risk across the network to identify sections of your network to prioritise for replacement.

- + Build a digital risk profile of the entire network that incorporates both likelihood and consequence of failure
- + Mitigate risk and reduce costs by allocating pipeline risk values across the network
- + Prioritize teams and IoT deployment by focusing on the parts of the top 20% of the pipeline that 65% failures will occur



CONTACT

info@rezatec.com

+44(0)1865 817500



SOLUTION OVERVIEW

This is the only service of its kind that combines satellite data with the most advanced artificial AI analytics capability on the market, giving 10% more accurate results than the next best risk model. Your subscription

provides you with access to our interactive platform where you can view your visualization and analytics data from a dashboard. Quarterly updates ensure you are making judgements based on relevant information.

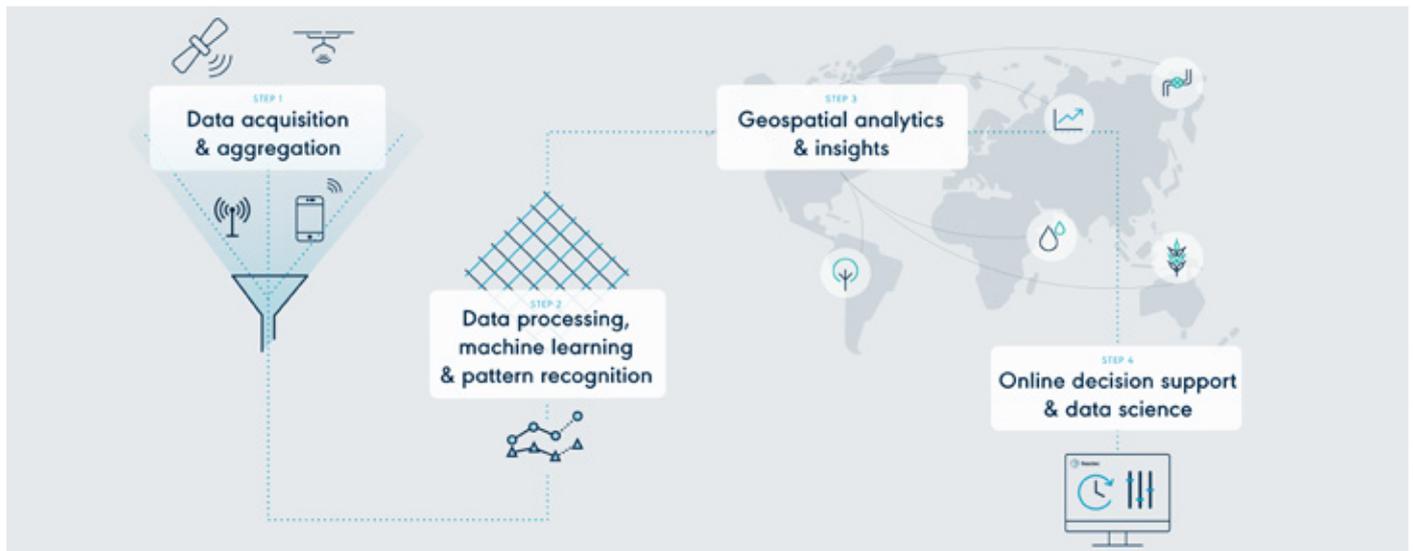


Image: Technology Overview

Our algorithms correlate your network data with global and local data to identify the risk value including the potential direct and indirect costs to your business.

- + Our AI is our secret sauce. In simple terms it corrals the data and identifies patterns and trends, and conditional assessment creates visual flags that can be read and understood by anyone.
- + The Pipeline Risk Value (PRV) is calculated using Likelihood of Failure (LOF) and Consequence of Failure (COF)
 - o Likelihood of Failure incorporates many data points to identify a 0-5 metric
 - o Consequence of Failure incorporates direct and indirect costs sustained in the event of a failure, helping to create a more granular and realistic prioritization of your network.

- + The minimum requirements for clients are 2 years of historical failure data and a GIS representation of your pipeline, however more advanced clients may have a richer data set that can help inform the model further.
- + We use both optical (multispectral from visible though to infrared) and InSAR satellite technology in our model to:
 - o Assess topography and vegetation with millimetric levels of accuracy.
 - o Deliver a dynamic picture from frequent temporal updates.
 - o Provide retrospective analysis from historical records collated since 2016

REZATEC GEOSPATIAL AI

Rezatec uniquely combines remote sensing analysis with data science to deliver Geospatial AI providing proactive risk management for clients across the globe in water, agriculture, energy and forestry sectors.

FIND OUT MORE OR
BOOK A DEMO

info@rezatec.com

+44(0)1865 817 500

www.rezatec.com

