



Case Study

VEOLIA North America Implements KloudGin for Asset and Workforce Management as Key Components of Digital Transformation Initiative



About VEOLIA

VEOLIA North America operates across all 50 states and Canada, with 2,800 employees dedicated to environmental sustainability and smart resource management.

The company provides drinking water, wastewater and waste collection service to nearly 7 million people on a daily basis; treats 560 million gallons of water and over 460 million gallons of wastewater each day; delivers water treatment and advanced network solutions to 16,000 industrial and municipal sites; processes 160,000 tons of waste for recycling; rehabilitates and maintains water assets for more than 6,000 municipal and industrial customers; and manages over \$4 billion in total assets. The company posted revenues of \$1.1 billion in 2020, and is a subsidiary of Paris-based VEOLIA.

The Challenge

As with many utility operators, VEOLIA is facing increasing customer expectations to respond quickly when issues arise, which requires adept management of their assets and field workforce. This covers the whole spectrum of asset operation activities, including preventive maintenance, corrective maintenance, and outage management.

These demands, along with the challenge to digitally transform its municipal distribution operations, led the company on a search for a central hub to consolidate multiple workflows and initiatives onto a single cloud accessible platform. Requirements included management of both linear and vertical assets with a single scheduling engine for asset maintenance, resource management, and customer service and support.

The Solution

Following an extensive bid process that included more than 30 vendors, the cross-functional VEOLIA selection committee selected KloudGin to deliver the cloud-based EAM platform for its Environmental Services group in 2019. KloudGin provides an industry-centric approach through its Machine Learning-based asset management cloud platform, which enables VEOLIA to quickly respond, run and operate requests. Access to real-time information provides a more predictable and cost-effective operational view of the distribution network, service interruptions, and crew remediation work activities.

The implementation of KloudGin Asset and Field Service Management within the Environmental Services Division was live within 20 weeks. In parallel, both the Advanced Solutions and Utility businesses of VEOLIA North America selected and began implementing KloudGin for their operations as well.

Results

Digital Transformation Key to Continuity

When the pandemic hit, VEOLIA was able to adjust and manage the water system very quickly. Customers were able to pay their bills and get their water service, and VEOLIA was able to continue to maintain their infrastructure. They attribute this to having invested in digital transformation prior to the pandemic. Utilizing technology which allows real-time access to asset and work order data helped keep VEOLIA employees safely away from the office, but still highly efficient in their work.

Future Outlook

Michael Salas summed up the project success saying, “We have completed phase one of the KloudGin application and are already planning to expand the functionality to include additional processes. The KloudGin platform provides real-time data and scheduling feedback, allowing us to capture information more quickly and increase efficiency in our planning and execution, and follow up all maintenance and service operations. The applications’ ability to combine the operational management of both linear and vertical assets is something we have not been able to do until now.”

VEOLIA divisions continue rapid deployment of the KloudGin solution pushing standardization in business processes and technology.

“KloudGin allows VEOLIA Utilities to efficiently collect and utilize data in the field. A perfect example of how we use this data is to track, analyze and push notifications any time a customer may be impacted by our work. We continually strive to find ways to leverage technology like KloudGin, to provide value to our customers.”

James Mastrokalos
Director of Operations



Connect with the KloudGin team to learn more.

1-877-256-8303 | [KloudGin.com](https://www.KloudGin.com)

© 2024 KloudGin, Inc. All rights reserved.
All other trademarks and service marks are property of their respective owners.

Solution

Several technology partners and integrators worked together with KloudGin on the Utility division implementation, including engineering consulting firm Black & Veatch, and GIS company Esri. KloudGin's strong partners, allied with its internal utilities expertise, were instrumental in executing one of the fastest deployments of mission-critical technology in VEOLIA's history. Their deep industry experience expedited integration, reducing typical months long deployment cycles down to a matter of weeks. KloudGin's tight integration with Esri's GIS mapping system allowed the solution to sync linear assets, provide real-time GIS map access across mobile devices, and deliver bidirectional read/write adapters.

KloudGin's scalable architecture built within AWS VPC using Autoscaling Groups and spread across availability zones provides VEOLIA a secured application on the cloud, accessible from anywhere without IT overhead.

The Digtalert functionality of KloudGin built with AWS Simple Email Service receiving capabilities to track emails coming from 811 creates assignments to the crew to validate the locations.

To empower its field service, VEOLIA put tablets in the hands of all the field crews, whether it was for meter services, or asset and work management platforms. After the initial tablet training, VEOLIA added the KloudGin mobile app - the field crews were amazed at the ease of usability, and instant access to information. For example, KloudGin's worker-first mobile solution took a complex water distribution flushing process, and turned it into a simple intuitive and easy-to-use app for VEOLIA crews.

Since the initial implementation, VEOLIA has successfully rolled out several additional projects, all requiring minimal support from KloudGin. The Utility Division has now gone live at three sites, with plans to expand to the remaining 40+ sites over the next three years.

Solution Components

- KloudGin Core
- KloudGin Work Management
- KloudGin Asset Management



Every time we came up with a new idea or possibility, KloudGin was able to deliver the integration and functionality to solve the challenge. In my 30 years' experience with utilities, I've been looking for a single solution that combines asset management and worker and customer service management – and found it with KloudGin.”

Michael Salas
CIO & CDO



Case Study VEOLIA North America

Results

Improved Data Collection & Analysis

KloudGin's mobile-centric platform replaced a variety of custom applications and single-point systems with one mobile-friendly platform that integrates with VEOLIA's existing compliance and security environments. Previously, crews had to log into multiple systems and replicate multiple data points and information. KloudGin has standardized these workflows onto a single platform that automates many repetitive tasks, normalizes information across all device types, and speeds both field work execution and central information gathering and analysis efforts.

KloudGin replaced existing systems which didn't allow efficient collection and real-time analysis of data in the field. Crews now have digital access to GIS data, system drawings, work history and more at their fingertips, through the KloudGin Mobile application. KloudGin provided an OLAP data model on AWS Redshift which is loaded with all transactional data from the application.

AWS Quicksight based dashboards and Reports built on top of this Redshift warehouse provides actionable insights to the VEOLIA team. This real-time data allows VEOLIA to better monitor impacts to customers, and provide notifications to improve service.

Scalable & Repeatable

With KloudGin, VEOLIA established a digital transformation framework, enabling the utility to dynamically respond and scale to future requirements. KloudGin's rapid deployment and platform scalability helped VEOLIA easily set up mobile workflows, using both online and offline capabilities for any device. When a worker goes to any site, including a basement or a different type of no-connectivity area, all data is captured regardless.

VEOLIA is rapidly deploying the KloudGin solution across its Utility, Environmental Services and Advanced Solutions divisions with

limited assistance from external partners. KloudGin has proven its rapid scalability, ease of use and simplicity in configuration and deployment.

KloudGin / ESRI Integration Drives Efficiency

The combined solution of KloudGin and Esri ArcGIS delivered a best-in-class asset tracking solution to VEOLIA. The ability to manage through one system their vertical and horizontal assets across large geographic regions drives efficiency in operations by reducing environmental impact, enabling better maintenance predictions on pipe networks, and delivering superior customer service. New operational benefits included:

- Valve exercising maintenance program
- Complex unidirectional flushing workflow highlights to crews which valves to open/close at each step, prior to flowing hydrants.
- Bidirectional asset updates for key GIS fields, such as valve status (open/closed), and hydrant status (in service, out of service, etc.).
- GIS views built into linear workflows to provide crews with valuable data throughout the process.
- Integrated map redlining and asset attribute correction workflows.
- Water Quality Customer Feedback feature enables CSR's to raise customer or water quality issues as a case in KloudGin from the Esri Map - viewing other active cases in the process.
- One system to plan and manage both short-term and long-term transmission and distribution work.