

Sector: Energy
 Offerings: Sopra Steria Cloud Services
 Solutions: Consulting, Change Management, Operations Services

Success Story

« Cloud First » Strategy: how Sopra Steria is supporting Veolia's digital transformation



Veolia – Olivier Guerin

«Sopra Steria's Managed Cloud Services have enabled us to focus on providing high value-added services for our business lines. »

Jean-Christophe Laissy, Board member, Global Chief Information Officer, Veolia Group

What You Should Know

The global leader in optimised resource management (water, energy, waste management, etc.), Veolia began its Digital Transformation in 2015, with the modernisation of its workstations and digitisation of its service offers.

To create its "Digital Environment," the company has focused on three main areas: the digitisation of its workspaces, a “data centre-less” and "Cloud First" strategy, and lastly the creation of a business data platform to support its IoT strategy.

In order to accelerate this change, Veolia called upon Sopra Steria teams to roll out Cloud best practices – including a Digital Factory fostering the creation of new and innovative services for the business lines.

Sopra Steria is supporting Veolia in its choice of Cloud applications. It is also assisting Veolia with the migration process for these applications as well as optimised Cloud operations management in agile mode, as inspired by the Site Reliability Engineering - SRE concept.

Advantages

- Mass scale and rapid adoption of the latest generation of Cloud technologies underpinning an Industry 4.0 strategy.
- Transformation of Human Resources by integrating new collaborative practices
- Substantial financial gains thanks to pay-per-use and automation principles

Veolia, a global leader in optimised resource management, operates on five continents and generated revenue of more than €25 billion in 2017.

The group designs and implements water, waste and energy management solutions for both public and private sector clients.

It provides clean water to 96 million people, manages energy at 2,291 industrial sites and supports more than 700,000 businesses in the recycling industry.

CHANGES IN USAGE

In 2015, Veolia began the digitisation of its working environment and its service offers. These changes were the result of changes in usage. Employees want to ensure that they can work safely, wherever they are, at any time and on any type of device.

Clients and partners appreciate being able to interact with the company through various channels, at any time of day or night.

THE DIGITAL TRANSFORMATION DIGITALE : A CULTURAL PROJECT

Spurring a company of 170,000 employees into the digital world is a technological challenge as well as a human one. To prepare for this change, Veolia decided to foster a "Digital Environment": a climate in which we live but which also has an influence on all of us.

« For improved responsiveness, flexibility and cost control, we choose the Public Cloud ».

Hervé Dumas, Group CIO, Veolia France

At Veolia, this environment is made up of three components :

- The « Digital Workplace », or a workstation accessible using any device with a Chrome browser;
- A Cloud architecture that enables the company to improve business agility;
- A « Data Centric » strategy in which IoT and data are the key drivers for creating value.

CLOUD STRATEGY AND SERVER-LESS ARCHITECTURE

«For improved responsiveness, flexibility and cost control, we choose the Public Cloud", said Hervé Dumas, Group CIO, Veolia France

"For all of its support functions, where there is no competitive advantage for the business, Veolia has opted for SaaS solutions, which are simple to implement and offer great flexibility of use. The closer we are to the business, the heart of operations, the more the company wants to differentiate itself from the competition with innovative tools that, for example, use AI and data analysis. In these cases, the company opts for PaaS. This "server-less" strategy has enabled Veolia to focus on innovation and application development. Since 2016, we have been assembling a team of experts to implement our custom-made solutions. Without the burden of platform management, we can focus on programming, algorithms, data, and the user interface."



KEY FIGURES

- **170,000 Veolia employees** in 50 countries.
- **25,000 servers and 10 million connected objects.**
- **50 billion operational files** in the Datalake.
- **Transition in 80 days** without service interruption.
- **More than 150 applications managed** in Cloud mode and plans for up to **1,000 instances** in the future.

Finally, for its existing portfolio of applications, Veolia has opted for an IaaS multi-cloud approach. The goal for 2020 is to have replaced all data centers around the world with a data center-less strategy.

FROM CONSULTING TO MANAGED SERVICES: SOPRA STERIA'S END-TO-END SUPPORT

This strategy was implemented by Beamap, a Sopra Steria entity specialised in Cloud consulting, and Sopra Steria's Infrastructure Management teams. First of all, Beamap was involved in creating business cases to determine which existing applications could be migrated to the chosen Cloud - in this case it was AWS. Beamap then helped Veolia to develop a vast "Digital Factory" plan which incorporates more than 200 teams. The purpose of this structure is to be a facilitating force for digital transformation.

«Migration to the Cloud and associated operations are now essential topics to be addressed for the Group's key accounts. Sopra Steria Cloud Services enable users to respond to strategic, organisational, technical, financial and operational challenges. Our Cloud-based managed services use an agile methodology and NoOps/DevOps automation, thereby speeding up the time to market».

Jean-Marie Souchu, Managing Director,
Sopra Steria Infrastructure Management.

By reflecting on the new uses of Cloud platforms, the Digital Factory lays the foundations for new business services.

In addition, Beamap also helped to establish a Cloud Marketing plan which paved the way for acculturation tools for Veolia's staff (white papers, newsletter etc.).

In a second phase, Sopra Steria's Infrastructure Management teams took responsibility for managing Cloud operations in sync with Veolia's teams, ensuring migration to the Cloud. They implemented multimodal governance covering the areas of On-Premise, Cloud and Cybersecurity.

The goal is to provide a suitable response to each generation of IT, while maintaining a unified vision and quality of service. As part of the Site Reliability Engineering - SRE approach, particular emphasis was given to operations' automation - "Infrastructure as Code" - to take full advantage of Cloud services.

Cloud Operations are therefore aligned with NoOps approaches, for the purpose of reducing repetitive set activities and encouraging the auto-remediation of services.

In addition, a suite of DevOps tools was deployed to enable Veolia to fully exploit the agility offered by the Cloud. At the same time, Veolia's teams benefited from coaching sessions on the agile method, conducted by Beamap.



ADVANTAGES

For the IS Department:

- Cloud transition risk control.
- Cost reductions, with automation of changes and auto-remediation.
- Pay-per-use for Cloud and managed services, incorporating budget predictability.
- Organisational efficiency thanks to revamping of organisations, processes and tools.
- Improvement in quality of services, with a single tool

For the business line teams:

- A more innovative service offering, making it possible to manage the mass of exponential data created by Industry 4.0.
- Enhanced business responsiveness with pre-assembly of turnkey components.
- Flexibility of scope, and automated and fluid integrations and deployments.