

Morris & Opazo Helps Aguas Nuevas Innovate IT on AWS to Modernize Water Services for 400,000 Customers across Chile



Executive Summary

Aguas Nuevas is meeting its goal of continual innovation by moving important IT operations to the cloud, making customer service and community interaction more efficient. The Chilean company provides drinking water and wastewater services throughout the country. With help from AWS Partner Morris & Opazo, it takes advantage of Amazon Simple Email Service to handle communication with over 400,000 customers, Amazon S3 for database backup and data recovery, and Amazon Redshift for data warehousing.

A Long-Term Strategic IT Connection

[Aguas Nuevas](#), which operates under a Chilean government concession, collects and treats water for hundreds of thousands of homes, agricultural operations, and businesses in some of the Andean country's most arid regions. In an area fraught with cyclical droughts and home to the Atacama Desert, the driest place on earth, water companies play a pivotal social role. Any complications with supply can affect individuals' access to drinking water as well as the country's water-intensive copper mining operations, Chile's main export.

The company's IT team is split into four areas: projects, systems, databases, and support. The team looks after approximately 1,300 employees and manages more than 400,000 customers across Chile. In addition, it monitors the alert system in case of emergencies at water collection and treatment plants.

[Morris & Opazo](#), an Amazon Web Services (AWS) [Advanced Consulting Partner](#), has been a trusted ally of Aguas Nuevas in communications and IT strategy for nearly a decade. It is also an AWS Public Sector Partner and the first AWS Partner in Latin America to achieve an AWS competency in Data & Analytics Consulting.

The cornerstones of their collaborative relationship are tacit knowledge sharing and ongoing training. Together, they have successfully completed more than 100 projects. In the move to the cloud, Morris & Opazo's experts were on hand to provide advice and assistance to Aguas Nuevas teams during the ideation, proof of concept, and implementation phases. "Morris & Opazo is always on the lookout for the newest and best technologies, offering recommendations, holding meetings, and giving presentations," said Francisco Javier Soriano Carrillo, IT support and infrastructure manager at Aguas Nuevas.

Pushing for More Innovation

The Aguas Nuevas IT team continually runs technical assessments of its operations to discover opportunities for improvement and feasible turning points in its strategy. By doing so, the team is often able to proactively address concerns before they become problems that affect operations and need immediate attention.

One opportunity for improvement was in the backup and recovery of its databases, which led to an investigation of the possible benefits of the cloud. "Our team is always looking at ways to roll out new services to Aguas Nuevas employees and customers," says Soriano. "A cloud migration seemed promising—to free up resources, improve existing services, and explore new offerings." However, a wholesale shift to the cloud was considered too disruptive for the company, so it decided to move one area at a time.

About Aguas Nuevas



Aguas Nuevas is a Chilean water services company that provides this essential resource to over 400,000 customers across the Andean country. It plays a crucial role in Chilean society, impacting households, businesses, agriculture, and mining. Its mission is to satisfy its customers' needs, to care for the environment, and to help develop the cities in which it works. It strives to constantly streamline and enhance its IT operations for its customers and approximately 1,300 internal users.

Moving Targeted Areas to the Cloud

In considering its first cloud project, Aguas Nuevas got in touch with its longtime partner. Marco Morris, founder of Morris & Opazo, recalls, "Aguas Nuevas asked about cloud options for storage with high durability and reliability. Of course, AWS has those capabilities, and an evaluation of options showed that AWS also has the best technology-quality-price ratio for its needs."

To begin, Aguas Nuevas decided to move its development servers from its on-premises data center to [Amazon Elastic Compute Cloud](#) (Amazon EC2) instances. Once the IT team confirmed that this move to AWS was successful and the servers were operating smoothly, they looked for additional areas to streamline and innovate. According to Soriano, "We considered several factors when choosing our next project. Backups were complicated to manage, requiring the attention of numerous people and frequent maintenance. They were also extremely expensive." Database backups seemed another prime candidate to move to the cloud. Now these backups are in [Amazon Simple Storage Service](#) (Amazon S3) buckets, which, Soriano notes, "is a huge improvement."

As for innovation, Aguas Nuevas is now using [Amazon SageMaker](#) to detect fraud through machine learning. The company is also managing its data warehouses with [Amazon Redshift](#), and it recently began using [AWS Lake Formation](#) to manage its data lakes, which are fed in part through data pulled from statements and invoices using [Amazon Textract](#).

Tracking Costs, Speeding Up Decision Making

The Chilean government regulates the final price of water services for consumers, so Aguas Nuevas has to ensure that its operations are as lean as possible. Here, the cost transparency that AWS provides with its pay-as-you-go model was especially appealing.

Marcelo Rybertt, chief technology officer and country manager for Morris & Opazo in Chile, emphasizes how the cost-for-use flexibility provided by AWS has driven the decision to keep innovating. "We know that today a certain technology is better than what we have but that tomorrow another technology could be superior," says Rybertt. "We can make well-informed decisions to change without being afraid of the financial investment."

Improved Customer and Community Service

Achieving customer satisfaction is a core value at Aguas Nuevas, and effective communication with its 400,000 customers is key to that goal. "We have a large email database, and mailings were cumbersome to handle," says Soriano. "Using [Amazon Simple Email Service](#) (Amazon SES) helped us to make those communications more efficient."

Not everyone affected by the company is a customer, however. One of its most critical processes is sending community-wide alerts. "Imagine you have a production plant that starts flooding the city," explains Soriano. "Now we can manage that with [Amazon CloudWatch](#). We can monitor plant applications, expedite responses, and quickly inform the regional population if needed."

And Aguas Nuevas won't stop there. Soriano reflects, "With the help of Morris & Opazo and use of AWS, we are able to take advantage of cutting-edge cloud technologies. AWS is always innovating, and there are always new services coming out to empower Aguas Nuevas to increase efficiency and better serve our customers."

About Morris & Opazo

Morris & Opazo is an AWS Advanced Consulting Partner in the Data and Analytics Competency, with clients in Chile as well as the rest of the Americas. It works with public and private customers, driving big data analytics and cloud resources to deliver improved business solutions. Its talent is its most valued resource, expanding technical knowledge with its customers and staying at the forefront of innovation to help extract the most from the technology available.

