

“FUJITSU Cloud Service K5 allowed us to analyze the IoT data and other measurement data we had collected and provide that information to customers in the form of solutions.”

Takashi Ueno
General Manager, WBC Center
Business Strategy Division
METAWATER Co., Ltd.



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Delivering new value with the latest cloud as a water business platform.

At a glance

Country: Japan

Industry: Facilities

Founded: 2008

Website: metawater.co.jp/eng/

Challenge

METAWATER Co., Ltd. planned to improve its range of services through analyzing data collected for its Water Business Cloud (WBC), while transferring valuable maintenance knowledge from experienced senior engineers. To increase the range and quantity of data to analyze, it needed to upgrade its cloud platform.

Solution

Fujitsu engineers worked with METAWATER to migrate its virtual servers and digital content to FUJITSU Cloud Service K5, giving it capability to capture real-time data, while improving its big data analysis and artificial intelligence functions.

Benefit

- Improved value of WBC as a shared platform for water-related businesses
- Reduced man-hours spent on developing applications
- Created new routes to PFIs and PPPs initiatives
- Minimized cost increases when boosting server numbers for data analysis

Customer

METAWATER was established in April 2008 as the first Japanese comprehensive engineering company engaged in the water and environmental business field. Since its foundation, METAWATER has expanded its business in the water, sewerage, and environmental fields both in Japan and abroad under the corporate philosophy of providing optimal water treatment solutions to create a cycle of water.

Products and services

- FUJITSU Cloud Service K5
- FUJITSU Digital Business Platform MetaArc

Offering Water Business Cloud as an open shared platform for water-related businesses

Local government water and sewerage utilities are facing numerous challenges, including reduced demand triggered by declining population and birthrate, aging facilities, and the retirement of experienced senior engineers.

METAWATER Co., Ltd. (METAWATER) is committed to overcoming these challenges with the most advanced information and communications technologies. After formulating its Water Business Cloud (WBC) concept, the company has worked to establish it as a shared platform for a range of stakeholders in water-related businesses.

As its first step toward this goal, in 2011, METAWATER began using Fujitsu's public cloud service, FUJITSU Cloud IaaS Trusted Public S5. The company was able to transform the maintenance and inspection business through its cloud-based Smart Field Service – a system that combined tablet devices with Fujitsu's augmented reality technologies. This service enabled more efficient operations while providing a means of transferring valuable maintenance knowledge from experienced senior engineers.

Takashi Ueno, WBC Center General Manager, Business Strategy Division at METAWATER, says, "We felt that if the WBC could provide valuable information for sharing between local government entities and a range of other sectors affiliated with the water industry, it would encourage private finance initiatives (PFIs), public private partnerships (PPPs) and other worthwhile initiatives." METAWATER planned to improve its range of services through analysis of data collected through the WBC.

METAWATER selects the K5 cloud to boost data analysis functionality

It was at this time, in 2015, that Fujitsu announced FUJITSU Cloud Service K5, a new cloud offering based on FUJITSU Digital Business Platform MetaArc.

"We were particularly impressed by the K5 architecture, which had a strong focus on external connectivity. We felt this would allow us to use external technical services instead of developing new functions, such as data analysis," reflects Takao Uratani, Manager of WBC Management Group, Information Technology Planning Department, Corporate Strategy Planning Division at METAWATER.

The company learned that employing the IoT platform to gather and use data would allow it to collect measurement data in real-time from devices in water purification plants and other facilities. That data could then be processed through the big data analysis and artificial intelligence functions, with the results seamlessly fed back to the management systems of water-related business operators.

Based on this research, METAWATER determined to migrate to the K5 cloud about 100 virtual servers and dozens of pieces of digital content, already being used for its Smart Field Service, with phased migration beginning in November 2016.

During this process, METAWATER relied heavily on Fujitsu's engineers and its migration support service. "In addition to considering the best procedure for trouble-free migration of our services, Fujitsu also offered a range of suggestions for optimizing our system settings as well as integrating and efficiently configuring multiple servers," comments Takao Uratani.

Accelerating the pace of solution deployment for water related businesses and opening pathways for information based, cross-industry collaborations

By migrating its Smart Field Service technology platform to the K5 cloud, METAWATER has improved the value of its WBC as a shared platform for water-related businesses. At the same time, it has created new routes to PFIs and PPPs initiatives in collaboration with other industries.

"We can now minimize cost increases when boosting server numbers for IoT support and data analysis," comments Takashi Ueno. "Using existing services has enabled us to drastically reduce man-hours spent on developing applications. It now takes us less than half the time."

API management functionality provided as part of the K5 cloud service also facilitates the addition of data analysis functions, provided by external technical firms, into the company's Smart Field Service. "One possible business avenue is to collect IoT data and measurement data, including water levels and volumes, from a range of water supply equipment to analyze and determine any impact that outflows from water treatment plants might have on ecological systems," suggests Takashi Ueno. "The results of that analysis could be provided to the aquaculture industry."

METAWATER is aiming to raise the operations of water-related businesses to a new level through an ecosystem comprising a range of stakeholders from both inside and outside the industry. The company also plans to make even more extensive use of the K5 cloud in the future.

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