

User name: Companhia de Saneamento Básico do Estado de São Paulo – Sabesp

Project name: Integra 4.0 cultural transformation through digitalization

Location: São Paulo, Brazil

Background:

- To ensure reliable access to clean water across 375 municipalities in São Paulo, Brazil, SABESP initiated a project to integrate water supply, sewage, and sanitation data in a single digital environment.
- Known as Integra 4.0, the program is an operational management model, combining business intelligence with AI for proactive network monitoring and maintenance to quickly identify and resolve system issues.

Challenges:

- Faced land use, technical, and coordination challenges on a short project timeline.
- Needed integrated hydraulic modeling and analysis software to develop systemic approach.

Solution:

- Bentley OpenFlows modeled hydraulics and monitored leaks and waste resources.
- The application enabled integrated, accurate, and efficient management of water resources and assertive maintenance of network infrastructure.

Outcomes:

- Reduced water losses by 29%, while also reducing carbon emissions.
- Within seven months, saved BRL 3.1 million in corrective maintenance, achieving a 30% reduction in corrective services to save 2,800 hours in field work.

Quote: “Bentley OpenFlows WaterSight and SewerSight are tools used in Sabesp’s INTEGRA 4.0, facilitating modeling activities, both for design and maintenance. The tools let us anticipate any leaks and thus reduce water losses, cut costs and increase the useful life of the assets used.” – José Hermínio da Silva Filho, *Technical Services Division Manager, Companhia de Saneamento Básico do Estado de São Paulo – Sabesp*

Image caption/courtesy 1: SABESP created Integra 4.0, which combines business intelligence with AI in a single digital environment for proactive network monitoring and maintenance to quickly identify and resolve system issues. *Image courtesy of Companhia de Saneamento Básico do Estado de São Paulo – Sabesp.*

Image caption/courtesy 2: Leveraging OpenFlows applications, SABESP modeled hydraulic project, and monitored leaks and wasted resources. *Image courtesy of Companhia de Saneamento Básico do Estado de São Paulo – Sabesp.*

Image caption/courtesy 3: Within a seven-month period, the digital solution saved approximately BRL 3.1 million in corrective maintenance, achieving a 30% reduction in corrective services to save 2,800 hours in field work. *Image courtesy of Companhia de Saneamento Básico do Estado de São Paulo – Sabesp.*

For more information, please contact Bentley PR at PR@news.bentley.com.