

Sydney Water rips up IT to make business intelligent

\$5 million overall slashes operational cost

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Sydney Water will save more than \$1.6 million in operational expenditure (OPEX) after it replaced its ailing data collection system with an enterprise business intelligence (BI) platform.

The platform will organise a multitude of unstructured data streams into useful information which will make maintenance and control easier and cheaper, and create a standard, transparent backbone for new IT projects to plug into.

The water utility, the largest in Australia with 3000 staff and 4000 IT users, supplies drinkable water to more than 4 million people across Sydney. It has more than \$20 billion worth of assets and an operation expenditure of \$1.3 billion with a \$40 million IT budget.

The \$5 million BI project is part of an organisation-wide IT overhaul which will see improvements to data analytics, information management, data centre operations, and its Supervisory Control And Data Acquisition (SCADA) systems.

An IT assessment was conducted in 2005 after the old siloed system had given managers conflicting information on water distribution and infrastructure management which was presented in executive reports.

Sydney Water strategy and architecture manager Trent Brown said a BI system was needed to integrate its disparate systems and to standardise data records.

"We needed more transparency and centralisation of our systems," Brown said.

"Both the monitoring of the water and our water network operations provided us with useful information however, each system was quite isolated and it was difficult and time consuming to report and measure against.

"We have been able to reduce the water monitoring reporting processes from four days per month to a few hours and operational savings of \$265,000 per year [and] our network operations have been reduced by 50 per cent in terms of planning practices."

The BI platform aggregates data from water monitoring systems that track water levels, pressures and instruments, along with network operation platforms, asset maintenance, customer service, and financial applications.

Sydney Water will save \$310,000 in OPEX a year through its 257-user BI finance system that will streamline budget and expenditure, improve data integrity and cut down dependencies on long-serving staff. A whopping \$750,000 OPEX will be saved each year through its BI asset maintenance system, which has recently entered construction.

The organisation's new water network BI solution has saved \$289,000 OPEX each year through a 2100GB data feed which sorts important data critical to plant operations from the noise. The system has 25 users and has reduced reliance on individual employees.

A further \$265,000 OPEX a year was saved through its water monitoring BI tool that provides 450GB of water quality data to Sydney Water laboratories. A number of small data centres were consolidated into a single repository, and its EMC storage systems were upgraded to accommodate the increased data streams.

Sydney Water picked the Business Objects XI r2 platform for front-end analytics and used its Enterprise Information Management suite for data management in the data centre.

Rick Eager, local country manager for Sydney Water's IT services integrator Patni Computer Systems, said IT attitudes were shaken up and executive support was obtained to make the IT transformation possible.

"The project had to go ahead without impacting the business operations, and all staff and business managers had to get on board," Eager said.

"[Sydney Water] has thousands of assets to keep track of and maintain, which is very difficult, and having a stable platform makes it possible.

"There have been a lot of unforeseen benefits; technicians looking into a dodgy pump that was replaced a few times found out it was a very simple problem by looking at the [BI data]."

Project governance is split between local integrator Oakton, which defines and plans the BI systems; Patni which is responsible for design and build; and Sydney Water, which controls scope and direction.

Eager said the deployment is one of the first instances of government using an Indian offshore integrator. He said there were no cultural or communications problems.

Sydney Water will continue with the implementation of its BI customer service and asset maintenance systems during 2009, and introduce cross subject area analysis and associated data integration, along with dashboards and scorecards to support the system.

http://www.computerworld.com.au/article/258839/sydney_water_rips_up_it_make_business_intelligent?fp=4&fpid=78268965