

Montage keeps the water moving

A key to maintenance fleet management is to pick the right vehicle for the job

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IF you can't buy it, try building it yourself. This was the mantra that Kevin Hutchings, South East Water general manager, adopted a decade ago so his staff on the ground could pinpoint customer problems more accurately.

The state-owned company provides water and sewerage services to more than 600,000 households in the southeast of Melbourne.

"One of the things that was lacking at South East Water was computerised systems for the staff who were out in the field," Hutchings says.

Due to the manual nature of the systems, the water utility couldn't send customer information to its field staff who were on the road.

He scoured Europe for a solution but to no avail, so back in Melbourne the creative, self-taught programmer decided to write his own code to overcome the problem.

"We looked around for a system that would suit our needs but there wasn't really anything suitable, and that's when I wrote a program called WaterLog," Hutchings says.

With WaterLog, as a call came in the jobs would be dispatched wirelessly straight to trucks already on the road.

"We were the first utility in Australia to put in remote computing," he says.

WaterLog was airtight for 10 years, then it started bursting at the seams. The program grew larger as more features were added.

"It just became bigger than Ben Hur," Hutchings says.

South East Water wanted more bells and whistles added to the system to help manage its 8000km of sewer pipelines and 3500 square kilometres of land.

With an average of 150 fault reports per day and WaterLog going underwater, it went shopping for an updated field service management system three years ago. The utility called for tenders

CASE STUDY SOUTH EAST WATER

The problem: Melbourne utility South East Water needed a robust system to help manage the 150 fault reports it received every day.

The process: It selected Infosys to build a customised system after a worldwide search for a new system failed.

The result: The utility is now able to respond to calls in eight hours, as opposed to four days previously.

and received about eight submissions from vendors, including four off-the-shelf solutions.

"We visited some of their locations but what we saw wasn't what we were after.

"So we did a global search and didn't find anything that was really going to meet our needs. That's when we met up with Infosys," Hutchings says.

The company embarked on a \$25 million project with Infosys to create the new platform, called Montage.

"Infosys made \$1.6 million from the deal, with the rest being spent on internal resources," Hutchings says.

He knew some software development work would have to be done in India but says the time difference and offshore arrangement didn't pose any problems.

"Infosys had done some work with us before, so we were quite familiar with them," he says.

"We had video links with teams here and in India discussing the project," he says.

"It went very well."

Montage has been designed to service South East Water's 250 office users and 120 field workers and is flexible enough to handle more users.

At the office, workers can tap into electronic dispatch capabilities for both emergency and planned work and provide field workers with the right tasks to



Going with the flow: Kevin Hutchings discovered the limits of DIY

Picture: Bob Finlayson

execute. Like any utility company South East Water's trucks come in a variety of sizes.

It even recently purchased three Mercedes smart cars to do

its bit for the environment but Hutchings says all vehicles have the same equipment regardless of size. This includes a notebook (non-ruggedised), 3G modem to

transmit data in real-time, and satellite tracking on the vehicles. Montage is key to fleet management, matching the right vehicle to the appropriate job.

"You don't want to be sending large trucks for small jobs," Hutchings says.

The system is now more accurate, nailing down problem areas in a flash compared with WaterLog.

Additionally, Montage has been designed in a very user friendly way, which enables field staff to enter data quickly and easily, he says.

"We're a 24-hour operation, so that when a field staff member gets a call at 3am we have an electronic trace function in place to decide which valve should be turned off.

"At that hour of the morning the field staff don't have anyone to guide them on-site but with Montage, everything is digitised so we know where the access holes, pumps and valves are," Hutchings says.

"That takes out a lot of the guesswork."

There have been myriad benefits from using Montage.

"Four years ago it would have taken us four days to respond to a tiny leak in a customer's meter, but now we are able to attend to all leaks in eight hours regardless of how small or major it is," Hutchings says.

Apart from the Mercedes smart cars, another environmental bonus is the utility's paperless workflow.

It used to take four people to sift through piles of paper to dispatch one job but now only one person is required.

"We don't have paper in our system now.

"I remember when I first started work they put a pile of invoices in front of me and it was 15in high.

"I had to sign each and every one of them! Where was the value in that?"

"People need to approve this as it goes through the system," he says.

It now takes South East Water seven days to pay contractors who carry out work for it, as opposed to 60 days previously.

Hutchings says there are plans to add other functionality to Montage to reap more productivity gains.