



SYDNEY WATER'S X-FACTOR

Slashing meter reading costs while improving efficiency and quality outcomes of meter data collection has been the result of Australia's largest water utility adopting DataCol's SevenX.

SUMMARY

Customer

Australia's largest water and wastewater provider, Sydney Water

Challenge

Improving meter data collection efficiency, while being prepared for future technology developments

Solution

DataCol's SevenX solution

Outcome

Lower customer metering complaints, reduced meter reading costs and a flexible meter reading platform for future innovation

ABOUT SYDNEY WATER

Australia's largest water and wastewater service provider, Sydney Water provides safe, refreshing drinking water to over five million customers across Sydney, the Blue Mountains and the Illawarra. Its network covers 12,700 square kilometres and services over 1.9 million properties with drinking water.

After scouting the international market for a solution, Sydney Water evaluated DataCol's SevenX as the best replacement for their existing Manual Meter Reading (MMR) application, with the added capability of rolling out Automated Meter Reading (AMR). In 2013 DataCol was chosen as the solutions provider that could best meet Sydney Water's stringent meter reading requirements.

THE SMARTEST WAYS TO GATHER METER DATA

BLENDING AMR, AMI AND MANUAL READINGS

Sydney Water understand that a completely automated Advanced Metering Infrastructure (AMI) approach wasn't the optimal solution. "We've done a lot of work on it, we understand exactly what the pros and cons are, and the case just isn't there for an AMI roll out at this stage," says Mirko Sramek, Customer Metering Manager of Sydney Water. "In the foreseeable future, in the next five or ten years, there is a very strong place for manual meters and a very strong place for AMR meters."

"Sydney Water is one of the largest utilities in Australasia and their needs are varied. There couldn't possibly be a 'one-size-fits-all' solution that would work for these requirements - 'out of the box'. The DataCol team delivered a solution that was flexible and customised specifically for Sydney Water's business requirements," says Bruce Franks, Business Development, DataCol Group.

Implementing SevenX has enabled Sydney Water to improve and simplify their quarterly reading cycle by providing added functionality and visibility. "It's enabled us to pull in new technologies and there are some significant benefits in how the SevenX system allows us to read mixed routes with manual and AMR meters," says Jason Dagger, Program Manager Metering at Sydney Water. "This ability to cost effectively read AMR allows us to defer a large capital outlay that comes with implementing AMI."

ACHIEVING EXTRAORDINARY BENEFITS

Supported by the smart application of technology and building a strong partnership with DataCol, Sydney Water have received valuable business improvement benefits with meter data collection:

20% REDUCTION IN METER READING COSTS

Along with other business initiatives, SevenX has empowered Sydney Water to achieve a 20% reduction in meter data collection costs. This represents a significant saving for the business which was not factored into the original business case.

Another benefit of implementing SevenX, is that Sydney Water was able to create competitive tension by contracting two meter reading providers. SevenX enables near real-time performance monitoring of meter data collection across Sydney, which has led to improved attainment rates and quality, which contributes towards reduced reading cost.

YEAR-ON-YEAR DECREASES IN BILLING ENQUIRIES

According to the latest (2016/17) Sydney Water Annual Report, "The total number of complaints has dropped significantly over the past five years, mainly due to considerably fewer complaints about account and meter adjustments."



Since 2014, SevenX has helped Sydney Water to achieve record year-on-year reductions in the number of customer queries and complaints about the accuracy of their account. As their confidence in the integrity of the meter data collection process expands, Sydney Water have been able to proactively focus on other continuous improvement initiatives, which in turn, improves overall performance.

FREE FLOWING CASH FLOW

Unlike other reading systems that require entire routes to be read before bills are produced SevenX updates billing systems as individual meters are read.

“Under the new solution our cash flow, or billing process, hasn’t been held up while we wait for the entire route to be read,” says Mirko. This has helped Sydney Water to send bills faster, which has sped up the cash flow process, helping customers and the utility to stay up to date with payments.

“The speed, accuracy and quality of meter reading is essential to a utilities organisation striving for customer satisfaction, as well as being cash-positive. SevenX allows the streamlining of the ‘meter-to-cash’ process,” says Bruce.

IMPROVED CUSTOMER SERVICE

The SevenX Health and Safety and Property note notification features, ensure that customer messages and information updates are passed on to readers.

“The photo capability has reduced our need for check reads and improved the efficiency of our back end office processes, where previously if you had a reading, you didn’t know if it was a data entry error”

“It’s a big improvement to make sure that the reader got that message,” says Jason. “It makes for much better customer service and a lot less customer calls.” The meter readers are empowered with the data to capture the necessary information at each metering site in a safe and productive way.

Customer service has also benefitted from photo identification of meter faults. “The photo capability has reduced our need for check reads and improved the efficiency of our back end office processes, where previously if you had a reading, you didn’t know if it was a data entry error,” says Jason. “But with a photo you don’t need a check read and that exception can be processed there and then and then it’s done.”

The customer can be notified and action taken immediately to remedy the problem.

THE SEVENX-FACTORS

1. FLEXIBILITY

During the deliberation process, Sydney Water was attracted to SevenX features, and flexibility to fulfil the utility’s specific needs. Sydney Water worked with DataCol to enhance the standard SevenX product to make it the perfect fit for the large utility’s needs. “The best thing about working with DataCol was to be able to lay out exactly how we wanted the project rolled out, the roadmap, the interfaces etc. That was really good for us” says Jason.

2. WIRELESS MOBILITY

A weakness of Sydney Water’s previous meter reading system was a reliance on constant radio reception and when a meter reader was in a reception ‘black area’, information gathering was difficult. SevenX replaced outdated technology to bring in more reliable meter reading. “Now, the DataCol product downloads all the information required but you are able to keep working flawlessly whether or not you have radio reception,” says Mirko.

DATA COL CASE STUDY



3. PHOTOS

Another feature of SevenX Sydney Water has used effectively is the photo functionality. SevenX has an automation system that triggers a photo to be taken when there is an extreme breach of the norm, whether it is incredibly high or incredibly low consumption. Sydney Water's customised tolerance check then rates the breach as high 1, high 2, low 1 or low 2.

The organisation also has the ability to make it mandatory for the meter reader to take photos when some 'no read' scenarios are encountered as well as for ad-hoc check reads.

This ability to perform quality management remotely was a significant component that contributed to Sydney Water choosing SevenX as its meter reading technology. "We like the configurability in the system. It makes the job a lot easier," says Jason.

4. MULTIPLE METER READING CAPABILITIES

SevenX AMR enables Sydney Water to read all meters in a building as one group, regardless of meter brand, rather than one by one. "The ability to adapt the system to be able to read AMR, and particularly to be able to read multiple AMR manufactured meters and be able to incorporate them with our manual reads has been a real bonus," says Mirko.

"The open technology framework of SevenX protects the utility's investment - if they add another type of meter to the infrastructure in the future, Sydney Water would still be able to read that meter-generated data using the DataCol solution."

Bruce says, "The open technology framework of SevenX protects the utility's investment - if they add another type of meter to the infrastructure in the future, Sydney Water would still be able to read that meter-generated data using the DataCol solution."

5. NOTES NOTIFICATIONS

Sometimes simple features are often the most helpful. This was the case for Sydney Water's experience with the SevenX 'meter location note verification' function.

"In the previous system there was no way to know when a note on a meter location had changed," says Jason. "Now if a customer has rung in and said 'my meter is next to the letterbox', the meter reader will be prompted to verify this advice is correct," says Jason.

6. DASHBOARD

Greater visibility to data has been another key for Sydney Water. "The SevenX dashboard of progress was a bigger improvement to us than what we previously had," says Mirko.

Data is received in near real-time from meter readers in the field. This means decisions that can improve productivity can be taken during the day and in near real-time. For example, if an abnormally high number of exceptions are being recorded, a meter reading route can be locked for export and an auditor sent to check captured readings. This reduces that chance of incorrect billings and additional customer calls to the contact centre.

7. GPS

"Better insight into meter reading teams is another gain," Bruce adds. "Because the system tracks where all readers are since their last read, you know where they are at any time, which helps with health and safety programmes and with scheduling."

GPS functionality helps to give Sydney Water visibility over where their meter readers are located in relation to the location of the meters themselves.

DATA COL CASE STUDY



“GPS has been a winner,” says Mirko. “Now we’ve got some enhancement opportunity there in how we capture and how we measure current GPS coordinates against previous or historical GPS coordinates to make sure the reader is in the vicinity of the property.”

CONTINUOUS IMPROVEMENTS

Although added confidence, efficiency and functionality have been the outcomes of the SevenX rollout, the real success x-factor throughout this process has been the strong partnership between Sydney Water and DataCol.

DataCol are available for any enhancements and upgrades and can turn these around in a timely manner - another advantage that the giant vendors often struggle with. There is an open exchange of ideas between the two organisations that then make up a roadmap for ongoing enhancements.

MISSING READS ON A READ ROUTE - RECENT INNOVATION

A new feature implemented last year focused on improved attainment. If a meter reader had previously read a property over a number of cycles, then failed to read the same property on the next cycle, a warning message is now shown and message sent back to an operations supervisor in near real time. This means that there is no excuse to not read meters. This has made a significant improvement in attainment and reduced calls to the call centre.

ANDROID PLATFORM THE NEXT STEP

Gaining access to lower-cost handhelds will be one key benefit of Sydney Water moving to the Android-version of SevenX in 2018. They will gain greater choice and flexibility by using the operating platform that now makes up 85% of smartphone purchases worldwide. It further reinforces Sydney Water’s original decision to move away from proprietary handheld devices - such as the Itron FC300.

ABOUT DATA COL GROUP

The task of implementing an Intelligent Water Network such as infrastructure, data collection and analysis, is a complex one. Utilities and Councils need a partner with significant expertise and proven experience to execute and implement the water metering and data collection plan.

A single solution provider with the breadth of services that include deploying smart meters, contract meter reading, data collection and analysis will always be far more preferable over dealing with multiple entities that can perform only parts of the project.

The DataCol Group is a fully owned subsidiary of Arthur D. Riley and Co Ltd, a company supplying and servicing the utility industry with special emphasis on electricity and water metering, and high voltage equipment for distribution networks.

From process consulting to field services including contract meter reading and management reporting - DataCol is the solution partner bringing fresh ideas and capabilities to the table.

If you would like any clarification or to have a further discussion around water metering and everything involved, please get in touch to see how we can work together.

www.datacolgroup.com