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Data Can Transform the Water Industry, and It's in Reach for Even the Smallest Operator

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Water is taken for granted by nearly all of us. But keeping water coming to communities is no small feat. It requires the great work from our water corporations, and when it comes to them collaborating and testing and trialing new innovative technology, that's where work of Intelligent Water Networks comes into play.

[Intelligent Water Networks](#) (IWN) is a not-for-profit organization that test and trials new innovative technology across the Victorian and Tasmanian water industry, with a goal of driving business efficiencies and enhanced customer outcomes. Our membership consists of 15 water corporations in the state of Victoria, Australia, as well as TasWater, the Tasmanian water company.

The question the Victorian water corporations asked themselves was whether they should test new technology 15 times, or if it would be better to collaborate. IWN was born out of that choice to work together, and in my opinion, it was a great decision. IWN runs 11 programs, which include data and analytics, edge technologies, asset management optimization, pipeline intelligence, digital metering systems, energy and carbon, knowledge sharing and collaboration, biosolids and resource recovery, diversity and inclusion technology, alumni, and champions.

The Search for Better Risk Reporting

I've worked in the Australian water industry for 30 years. When I joined IWN in 2015, I was excited to be part of this organisation driving technological change within the industry, but inside the organisation, I came across an anachronism in IWN's risk analysis report. In its original form, the risk analysis report was a 10-page document. It was manual, it was paper-based, and it didn't make sense to me. Keep in mind that the members of our board also

all run executive jobs at their respective water companies—they're time poor. Could we be sure that everyone on the board read the whole thing? None of the other documentation I shared with the board ran to 10 pages, and to be honest, I'm not convinced a small organization like IWN faced so many risks.

For smaller organisations, you don't need to change all at once. In fact, a move that drastic might be overwhelming.

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To my mind, boards look at the strategic objectives of the business, which does include risk management, but at a high level. From a governance perspective, the board wants to know all aspects of the business are positive, and be alerted if some areas drift a little into the negative category, but it's for management to dig deeper into the detail and resolve any issues. I knew IWN could do better.

I also knew we didn't need to do everything at once. As a small organization, we could start with small change. You could give us a V8 car to drive, but I think it would be preferable to start with a four-cylinder and work up to six before moving on to the eight. My logic was essentially to embed the four-cylinder into the business, get it humming along nicely, and then add to that gradually, so our small association wouldn't be overwhelmed with change.

Evolving to a New Solution

My first step to move away from this massive document was to hone in on the key aspects relevant to the membership: some financials, some simple strategic corporate risks, and we included an opportunities register as well, all in consultation with the organisation including our board. In doing that, we turned the 10-page document into a one-page Excel spreadsheet, but I still thought this wasn't where we needed to be.

There was nothing innovative about this Excel spreadsheet. As an organisation that uses technology to improve processes, we needed to take our own advice by finding a solution that would provide information to different levels of the organisation in a way that would be useful to them.

That's when I was introduced to Claire Lange of [Cast Solutions](#). Claire had worked with a Victorian water corporation to manage their transitional risk using a tool called Qlik, and she showed me what they had achieved. It was a lot bigger scope than what we needed, but it was just amazing. I thought, wouldn't it be great if we could use a Qlik dashboard in our bi-monthly reporting to the board to track the progress of managing risk and opportunities? And if we could give our leadership team a more detailed view of the same information? This was only a small pocket of what Qlik could do.

We had a vision in mind of what we wanted to achieve. Qlik looked fantastic in terms of project and risk management, but I thought, "This is the V8, when we need to start at four cylinders." I said to Claire, "We're not against growing into the other stuff, but we need a slow implementation, starting small with the risk and opportunities register." Saying that, I also knew the board consists of 10 executives from across the water industry, so if they liked what they saw at the board level, they would likely want to use consider Qlik in their own business. Cast Solutions didn't say, "If you order the hamburger, it only comes with the works." They were very obliging on suiting the solution to exactly what we wanted.

We spent a few meetings with Cast Solutions explaining the risk and opportunities report and what it means to us. We then handed over the Excel spreadsheet to them, and they designed the dashboard and populated it for us. As part of the process, we provided iterative feedback to tweak the solution aligned to our key needs. Our next step is to take the dashboards to the board and leadership teams.

An Automated System That's More Efficient and Meets People Where They Are

I recently took on a new opportunity at the Water Industry Operators Association of Australia, but the progress we had already made was incredible to see.

I left the project at IWN at a point where it was ready to integrate into the board meetings every two months, as well as the leadership team meetings consisting of all the program managers, which is more operationally focused.

Importantly, in place of the 10-page Word document, board members can see at glance whether different aspects of the company are green, or if they are sliding into red. At the leadership level, the program managers can have a more detailed view of the same information.

The Qlik dashboards are improving efficiency at IWN through the automation of the process. An automated process means information can be reviewed more frequently with no additional effort. Board members can be alerted to changes in risk and respond a lot faster.

Qlik Sense brings near real-time data to the fingertips of board members and managers alike, meeting people where they are. We have so much information coming at us these days, whether it's social media feeds or business intelligence. How do you digest all this information in a meaningful way? To my mind, you need a system that provides that information at the appropriate level, in the appropriate way.

With increasing amounts of information available, you need to deliver it to your team at the appropriate level and in the appropriate way.

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Qlik's different reporting types provide that information in ways meaningful to each level. If I give the board too much information, they'll drown. By providing the board with high-level graphs, they can review all that information in a minute and have confidence the business is being managed well.

The leadership team, meanwhile, want reports that are in greater detail. With the new dashboards, IWN can give everyone what they need.

Qlik Can Scale for the Largest to the Smallest Water Corp

I'm proud of both the easy relationship we built with Cast Solutions and the solution we built together. On many projects, it seems that there's a twist and a turn and an obstacle and a barrier you have to climb over, but we didn't have any of that with this project. Cast Solutions delivered the outcome we were after, and nothing was too hard or got pushed back, other than due to IWN's own scheduling. That it was such smooth sailing impressed me. If everything ran like this, I'd be finishing early every Friday afternoon.

Being a small association, we wanted to lean on a subject matter expert to deliver the system in the way we needed. Cast Solutions was super understanding and supportive, and tweaked a whole range of things to suit our needs. 'Partner' is truly the right word for how they were there for us.

As for the solution itself, what impressed me most is Qlik has the flexibility to scale for individual organizational needs. I've seen how Qlik works for a large water corporation going through massive change, and I've also seen how Qlik works for our small association wanting to take things slow. It's dynamic enough to fit both ends of the scale.

IWN has started using Qlik for its risk register, but using it for other applications, from your CRM to financials, your customer support to asset management, could have a big impact. When I look across the industry, I see individual water corps at varying stages of operational evolution. A larger company may have already invested in a system like Qlik. Meanwhile, a little water corporation might still be at the stage of the Excel spreadsheet. IWN should be an inspiration to those smaller corps to take the next natural step. With the right partner and the right solution, you can do it at your own pace.

About Cast Solutions

Cast Solutions is an Australian-based business advisory and data analytics solutions provider. It provides strategic advice and data-driven insights, solutions and the confidence to make meaningful business decisions. It has extensive experience across diverse sectors including engineering, technology and infrastructure. By using the latest in innovative technology, including AI and machine learning technology, it is able to enhance business performance and growth. castsolutions.com.au

About Qlik

Qlik's vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. A private company, Qlik offers real-time data integration and analytics solutions, powered by Qlik Cloud, to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and