

Eramosa

Empowering Utilities with Effective Data Analysis

With sophisticated technologies and a tech-savvy clientele, the utility sector has truly entered the digital era. However, despite these tremendous advancements, many in the industry struggle to manage a vast amount of data spread over different applications. This glut of disorganized data prevents utilities from uncovering innovative insights that can transform their business.

Recognizing this dilemma, Eramosa, a technical consulting firm that has built water industry automation solutions for over two decades, shifted their focus. Their solution, called e.RIS, is a single platform that allows users to access data from multiple applications. “Even with the presence of smart applications for the water utility industry, a missing link and a major barrier to success is a way to integrate all of an enterprise’s data in one place. With e.RIS, we bridge that gap and bring a solution to the market to help make effective decisions,” says Tim J. Sutherns, Eramosa’s board chair.

Despite the immense analytical potential of tools like artificial intelligence (AI) and machine learning, companies in the utility sector are hesitant to adopt them. Eramosa empowers businesses with easy access to their data and the ability to use their information effectively. Their three layer approach begins when e.RIS connects to various data repositories and databases. Second, the data is normalized. Finally, the e.RIS user interface provides simple data visualizations to give raw numbers meaning. e.RIS doesn’t copy data and make a new data store. Instead, data is sourced directly from the corporate applications and systems where Eramosa firmly believes it should live. However, when dealing with data from distributed sources, the concepts of data ownership and custody are important. Eramosa handles this by referencing the source system directly each time data is used. If data is ever modified in a source application, the new values are automatically included in e.RIS ensuring users get accurate data.

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In as little as a week after the deployment of e.RIS, with proper training, clients can begin implementing data from connected systems. If a client wants to move their regulatory reporting to e.RIS, development of these reports can take up to three to six months. e.RIS is most commonly deployed as a virtual appliance within the customer’s existing technical infrastructure and security framework, although other deployment options exist.

In one successful implementation, a utility with 500 regulated data points spent a huge portion of time reviewing data manually before deploying e.RIS. With Eramosa’s help, they set up nearly twenty business rules which assess, flag and mark, or even exclude invalid data points for compliance use. By implementing e.RIS’s data validation tool, they reduced time spent analyzing data sets to just three percent of their day. e.RIS can use this same technology to prepare data for use in even more sophisticated data analytics. “We provide a stepping stone for companies to collect and analyze their data and prepare them for AI and machine learning embedded tools,” adds Sutherns.

By understanding the current challenges and regulatory framework of the water industry, Eramosa built the right solution for a critical infrastructure sector. Beyond partnering with AI platforms, they are involved in government-funded research and work with universities to bring analytic solutions to the market. Eramosa plans to form more partnerships and to find even more groundbreaking analytics to include in their solution. Looking ahead, they aim to establish a foothold in the European Union. **ER**



Tim J. Sutherns