

DATA ANALYTICS

CUSTOMER STORY

Ensuring safe, efficient energy supplies

A single digital solution ensures accurate, efficient, real-time insights



SafetyCulture



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“You need good data, analysis and representation of trends and the outcomes to have a defensible rationale that you’re doing an effective job as a regulator.”

Brett Fox, Head of Electrical Network Infrastructure, Energy Safe Victoria (ESV)

Inefficient and time-consuming data collection and analysis

There are two key challenges facing regulatory needs in the Australian energy sector. One is accurate data collection, and the other is the availability of resources for analysis and to ensure compliance to expected safety standards. Teams are often faced with a high volume of data across work sites in remote locations. Added to that is the efficient generation and quality of data analysis required to meet Energy Safe Victoria’s (ESV) safety audit goals.

ESV is responsible for the safe generation, supply and use of electricity, gas and pipelines across the state, serving approximately seven million people living in Victoria. One of its priority areas is ensuring safety audits and inspections are thorough to meet its responsibility as a technical and safety regulator.

Brett Fox, Head of Electrical Network Infrastructure at ESV, explains that as auditing requirements get increasingly complex, a rapid response is less important than the flexibility and accuracy in data analysis for validity purposes.

“It’s more about being able to have the flexibility [of the data] to continue to mature that systematic approach and that representation of effective regulation,” says Fox in reference to Work Practice Observation (WPO) audits.

Solution Overview

Customer Name

Energy Safe Victoria (ESV)

Industry

Energy and Utilities

Geography

Melbourne, Australia

Function

IT

Business Value Driver

Reimagined Processes

Challenges

- Complex regulatory compliance auditing process was done manually
- Limited operational visibility of audit results, trends, status and actions
- Limited ability to benchmark, monitor trends or identify systemic behavior and issues

Solution

Deployed Qlik Sense in partnership with Cast Solutions to seamlessly bring field data for detailed analysis and effective regulatory needs.

Results

- Significant time-saving benefits
- Flexible data for effective regulation
- Efficient resource allocation for priority high risk areas

During an audit, field teams collect data manually, often on paper and across several devices and machines. Data is collected using spreadsheets which need to be streamlined with other functions. These tasks are time consuming, clunky and onerous, and may lead to possible errors. Inaccuracies then could delay risk assessments and outcomes which affect the monitoring of trends, anomalies and identifying systemic behavior and issues.

Portable and easy to use one stop solution

Together with Cast Solutions, ESV shifted from paper-based auditing and Excel-based analysis to a digital solution as part of the regulator's wider transformation program. In any given project, there are three broad areas where ESV has to get it right - the process, the data and the system.

ESV needs consistent, high-quality data and to be able to control the margin of error. From there, effective data analysis is required as a way to gather intelligence – be it reports, assessments or further recommendations needed for its stakeholders.

Qlik forms part of that partnership with Cast Solutions and provides a tool that delivers an end-to-end solution which greatly improves the auditing processes. This involves harnessing Qlik Sense's strengths to create an easy-to-use dashboard for ESV. Amongst the platform's features are data modelling and analytics, workflow management using Inphinity Forms and iAuditor, along with other data integration solutions.

By doing away with the pen and paper approach, workloads are minimized through just a single device. The teams are able to capture data easily with drop-down functions on digital dashboards. Images and videos are geo-tagged for identification and processes are streamlined across systems for automated responses and actions. With live data and one-click report generation along with pre-drafted emails available on the solution, preventive measures are more effective when charting trends and potential high risk areas. What used to take up to five steps to complete is now reduced to one.

A key advantage to this solution is its portability. Fox says having the solution established on a lighter tablet has been a lifesaver. "The solution has made staff out in the field much more efficient, as much of the manual entry has been eliminated and users can select via drop-down lists or use the built-in voice-to-text feature. This means they can complete gathering and documenting information about a job before they go back to the office."

Crucial time-saving benefits for improved productivity

In the past, all manual processes would have taken between three to five days to complete but the new platform has slashed it to half a day. Over the course of a year that equates to a massive saving, with an audit now taking ESV approximately 50 man hours to complete, down from 150 hours. This saved time allows for more efficient resource allocation and freeing up resources to focus on other risk areas is key to ESV. The regulator now finds that it's able to dedicate expertise to other sectors – such as line-worker licensing policies and practices.

Aside from improved productivity, having the ability to scale and replicate the solution adds a new perspective to ESV's function and ability to work with other government sectors. This solution can be adapted quickly and tailored for specific risk areas, along with a 60% improvement in eliminating human error and data anomalies.

ESV's collaboration with Cast Solutions and Qlik has been extremely rewarding. The digital provider has enhanced and supported ESV's own team of data scientists, technicians and engineers, some of which have over 30 years of subject matter expertise. Fox says, "I find they bring fresh perspective, and working with other entities and different approaches means you don't get caught up in group thinking."

The keys to success



50 man hours for an audit,
reduced from 150



1 step process cut down
from five steps

“Qlik is a one-stop-shop, you’ve got your dashboard reporting, your workflow, your proactive analysis, your link to templates and letters. It’s all in one place.”

Brett Fox, Head of Electrical Network Infrastructure, Energy Safe Victoria (ESV)



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. Qlik provides an end-to-end, real-time data integration and analytics cloud platform to close the gaps between data, insights and action. By transforming data into active intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

qlik.com



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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.

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