

CUSTOMER STORY

How ElectraNet transformed asset management operations through advanced image recognition in KNIME

Key results snapshot

- ✓ 80% time savings by reducing time spent on manually auditing.
- ✓ Model accuracy of 99.5%, leading to an improved SAP data quality.
- ✓ Enhanced SME efficiency, leading to improved asset management and decision-making.

Why Prophix® and KNIME?

ElectraNet made the strategic decision to grow their digital capabilities to allow end users (Engineers) to make informed decisions, improve data quality and increase return on investment.

To achieve this, ElectraNet has been working with Prophix Australia (formerly Forest Grove) and KNIME for over 2 years.

They have collaboratively built advanced image analytics solutions to identify insulator asset sub-class accurately and effectively across 15,000 transmission towers.

Who is ElectraNet?

ElectraNet manages the South Australian energy transmission network, which extends to an area of over 200,000 square kilometres.

The network owns 100,000+ assets and equipment totaling \$2.5 billion AUD.

With a large asset base and vast network, digital solutions are critical to enabling their decision making.

System integrations

SAP



Key results

Advanced Image Recognition Solution using KNIME

By leveraging KNIME, along with the support of Prophix Australia, ElectraNet developed an advanced image-processing and data auditing tool to:

- ✓ Reduce time spent on manually auditing all insulator entries (72,000 in SAP).
- ✓ Accurately identify and rectify discrepancies in SAP data.
- ✓ Improve the quality of the asset database.
- ✓ Allow SMEs to focus on more important areas of their jobs.

The solution is deployed in two ways:

- ✓ As an automated workflow for technical users.
- ✓ As an intuitive web app allowing SMEs to upload images and run analysis.



By integrating the outputs of these advanced analytical solutions into SAP, ElectraNet unlocked significant efficiencies, freeing up SME capacity, streamlining data validation, and empowering smarter, data-driven decisions. This transformation elevated the reliability and effectiveness of transmission line maintenance and asset management, setting a new benchmark for operational excellence.