

Client: Large Victorian Water Utility

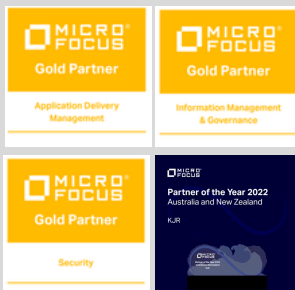
Project: Risk assessment of customer-facing AI application

TOOLS & TECHNOLOGIES

- KJR AI Risk Assessment Process
- SQL for data testing
- Azure platform



databricks



ABOUT US

Our services are purposefully designed to provide a cohesive experience for organisations embarking on digital transformation. Our business aptitude is your advisory, our technical skills are your project delivery and our training roots enables your team to build upon success.

+61 1300 854 063

BACKGROUND

This long-term client wanted to implement a Common Extract Database (CED) to unify all its disparate data sources, and integrate with cloud data sources. This provided an opportunity to then deliver some AI-enabled services such as Leak Detection and customer billing prediction. This required complex data ingestion and transformation using databricks on the Azure platform. KJR was required to assist with an AI risk analysis and to conduct thorough testing of data and transformations. This was a 14 month project.

CHALLENGE

Data validation of nearly 200 objects containing data on millions of water meters and customers.

Risk assessment of customer-facing AI application.

SOLUTION

1. AI implementation Risk Analysis - KJR held several workshops and 1-1s which revealed to the client they had to do a lot more thinking about the ethics of data quality/selection and AI governance, and we uncovered a lot of risks for them, eg monitoring model drift, data transformation errors, data ingestion error handling etc.

2. Data verification testing: checking that the right fields and tables were ingested and used at each stage by the SI. This required very complex SQL scripting to compare the correct fields across multiple tables.

DELIVERABLES

- Test Cases and Test Reports on Validation Testing of Tb of data ingested into the Data Platform and made available for AI.
- AI implementation Risk Analysis Recommendations

KEY OUTCOMES

- Identification of key AI implementation risks, for example monitoring model drift, data transformation errors, data ingestion error handling
- Assurance for the customer that data had been ingested and aggregated and transformed correctly.
- Assurance for the customer that PII data was secure.
- KJR also improved the customer's awareness of AI risks and of possible unintended errors in data transformation.

VALUE TO CLIENT

Incorrect data and insecure PII data can be very costly to clients, especially in customer-facing aspects of a utility. KJR testing gave the client assurance their implementation is correct and secure.