State Government

Development and implementation of an efficient and secure data pipeline, maintaining functionality of critical business operations.

exposé
Data Exposed

State Government – Data Pipeline Design and Implementation

Development and implementation of an efficient and secure data pipeline, maintaining functionality of critical business operations

PROBLEM

This state government department was responsible for the development of a new decision-making platform to replace an older solution. This development was required due to an expectation of increased user volumes, which necessitated more automated actioning and greater stability.

Due to the existing solution (to be replaced) having numerous dependent data operations including warehousing, extraction, and reporting, a data pipeline was necessary to avoid having to rebuild these operations – something which the timeframe for development would not have allowed.

The nature of the data and the relationship between governmental bodies meant a secure, robust, and automated solution was the only practical option. The solution also needed to be functional from day one, to avoid any interruptions in decision-making for related business units.

SOLUTION

Exposé were engaged to design, develop, and implement a data pipeline solution for a new platform being deployed without significant downtime in the changeover from the old platform.

Due to the complexity of the relationships between the various dependent components and the extremely short timeframe in which the platform was being developed, Exposé leaned on existing structure as a template into which the data from the new platform could be transformed. This served numerous purposes past the time saving, including continuity of business terms, a seamless transition between systems, and ease of understanding for analysts.

A cloud-based, automated solution was designed with security best practices at the forefront. It provided full ETL processing to allow matching of the expected formats, as well as a centralised control portal that significantly reduced the time required to make changes or further improvements.

This solution was ratified with key stakeholders, implemented and tested in time to successfully deploy with the new platform.

BUSINESS BENEFITS

The work which Exposé had undertaken helped enable the successful rollout of the new platform while minimising interruptions to both users and stakeholders. The critical data continues to reach all key decision-makers, and the visibility provided by the pipeline has also allowed for debugging efforts to be much more efficient.

The design of the pipeline meant that future optimisations and extensions are fully supported and can be implemented without any downtime.

In addition to full documentation and alert mechanisms, Exposé also provided data reporting (primarily utilising Power BI) which enabled Executive teams to self-serve information on an as-needed basis. This further facilitated informed and data-driven decision-making, anywhere, anytime and on any device.