



Cloud process engineering for SQM

Client:

SQM

Industry:

Mining

Technology:

Cloud Azure, SQL Server database, Apache Kafka, and Power BI

Country:

Chile

The challenge

SQM is a global mining company that is present in northern Chile in strategic industries for sustainable development, such as health, food, technology, and clean energies that move the world.

In this new project, our client faced significant challenges that impacted their operational efficiency and system reliability. One of the main challenges was the presence of low-performing business processes, which required a thorough analysis and optimization of the existing processes to enhance performance. Other challenges included the lack of auditability in the existing systems and the overload experienced in the operational area, which not only affected productivity but also impacted employee motivation and customer satisfaction. Additionally, the systems' intermittent nature due to the geographic location posed further challenges, as unreliable connectivity or access to systems led to disruptions, delays, and potential data loss.

The main challenges:

- Business processes with low performance.
- Operational area overload.
- Systems do not have audit information.
- Systems are intermittent due to geographic location

Solution overview

In order to address the challenges faced by our client, we did a transformative journey to optimize their business processes. We conducted a thorough analysis to identify areas of improvement and implement the necessary optimizations and ensure operational excellence.

To solve the overload experienced in the operational area, we reengineered the existing processes. By redefining workflows and rearranging operations, we aimed to improve overall efficiency.

The lack of auditability in the existing systems posed a significant challenge, affecting data integrity and delaying decision-making processes. To address this, we implemented a robust architecture that facilitated the ingestion and publishing of business information.

Leveraging cutting-edge technologies such as Cloud Azure, on-premise SQL Server database, Apache Kafka, and Power BI, we ensured the availability of real-time, accurate data for timely decision-making. This not only enhanced transparency and compliance but also reduced costs by eliminating manual data processing and enabling data-driven insights.

The intermittent nature of the systems, caused by geographic location challenges, required a reliable and resilient solution. We implemented measures to improve connectivity and system availability, mitigating disruptions, delays, and potential data loss.

Accomplished results

- Optimized business processes through a transformative journey, resulting in enhanced operational efficiency.
- Efficient workflows and rearrangement of certain operations to alleviate operational area overload, improving overall efficiency.
- Implementation of a new and robust architecture for enhanced auditability, facilitating timely decision-making.
- Leveraged cutting-edge technologies (Cloud Azure, on-premise SQL Server database, Apache Kafka, and Power BI) to provide real-time, accurate data, enhancing transparency and reducing costs.

