Transformed Infrastructure Development: Achieved 99.9% Uptime with a Scalable Data Warehouse

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Overview

The client is a large enterprise with a diverse range of operations across infrastructure, energy, and aviation sectors. The company sought a robust solution to integrate and unify their disjointed data management process to drive actionable insights, and smarter decision-making.

Objective

The client aimed to establish a unified and scalable data infrastructure to eliminate manual data preparation, enhance data accuracy, and enable faster, data-driven decision-making. Key targets included achieving a 99.9% high availability setup, automating weekly/monthly reporting, and reduced IT dependency for streamlined operations.

Business Challenges

The client faced multiple challenges that hindered their ability to make data-driven decisions effectively:

- **Fragmented Data Sources:** Inconsistent data due to scattered sources and manual entries
- **Manual Reporting Burden:** Relied on Excel & Power BI for report preparation, consuming significant time & effort
- **IT Dependency:** Multiple tools required IT involvement for deployment & maintenance, hindering in data accessibility
- **Source Identification:** Delays in identifying and validating data sources; resulting inefficiencies across departments

The Solution

Our Data and Analytics CoE designed and implemented a scalable, high-performing Data Warehouse solution tailored to client's needs. Leveraging our deep domain expertise, we introduced data marts for complex KPI calculations, ensuring a single source of truth across the organization. We enhanced user experience through UX-focused data principles and developed a Power Apps-based custom UI for seamless manual data entry. This solution stood out by eliminating IT dependency, automating reporting processes, and empowering the client with actionable insights for smarter, faster decision-making.

Value Delivered

Our solution transformed the client's data management processes, enabling faster, more accurate decision-making while reducing manual efforts and IT dependency. The custom Power Apps-based UI for data entry streamlined manual tasks, improved the user experience, and provided teams with seamless access and input capabilities.

99.9% Claims processed monthly, showcasing the system's capacity and reliability.	Transitioned from manual efforts with automated reporting tools	Single source of truth across departments, with no data duplication

Business Benefits

Single Truth of Data	Improved User Experience	Aggregated Data Marts	Scalable Infrastructure