

Case Study

Data Science Platform Modernization

*Market Leader in
Communication*

Business Advantages

- Reduced infrastructure bill by 40%
- 10x increased productivity of analytics team
- Better access to insights with self service capabilities for analysts

Technical Advantages

- Multi environment deployment and provisioning from code
- Enablement for larger Data science teams to develop on the go experiments
- Release time improved from 2 weeks to per day

Service Stack

- Kafka on EC2, Amazon Redshift, Snowflake, Amazon EMR (Spark), Looker on Multi-AZ EC2, Spark Notebooks and M, S3

The Customer

The undisclosed customer is market leader in providing communication, learning, and payment services platforms for prison systems and correctional facilities. The company was serving 2,000+ facilities and 1.8 million inmates across 50 US states.

The Challenge

The company managed a diverse ecosystem of over 20 platforms and applications, serving as sources for data collection. They maintained an on-premises environment that relied on traditional data warehouse and Big Data technologies, encompassing a combination of MS SQL Server, Netezza, and Hadoop. The company's extensive onpremises infrastructure struggled to meet the increasing demands of the business while also incurring escalating operations and management costs.

The Solution

Digitalstates equipped with its globally diverse and multidisciplinary team of Data Science and Cloud specialists, collaborated with the customer to DevOps and executed a comprehensive migration and management strategy. This initiative entailed a seamless transition of the client's data estate from an on-premises data warehouse to the AWS Cloud, leading to significant improvements in performance, scalability, uptime, and costeffectiveness.

The Outcome

By capitalizing on Digitalstates' knowledge of big data and data warehouse modernization, the organization was able to meet the strict legal and security requirements for multi-tenant access. This allowed for effective data sharing and simplified procedures for granting and rescinding access, making management quick and painless. Implementation heavily emphasized consumer data security, creating a reliable protection system.