

## We provide collaborative self-directed teams with an ownership mindset

## **SUMMARY**

Our client, a Fortune 500 financial services company, wanted to transform their future actuarial community, re-engineer and automate manual workflows, and modernize technology tools to gain a competitive position in the market. We began with a customer-focused approach. Because the end-users consisted of the actuarial community and resident data scientists, we began by first understanding workflows and the existing analytics tooling already in use. We sought to strike a balance in supporting existing tools (PowerBI, SAS) while introducing new cloud native tooling (Sagemaker Notebooks tied into the data sets) for the actuarial community to leverage. By meeting end users where they were at, while also offering access to new tooling, actuaries could adopt the new tooling at their own pace, leading to a higher adoption of the new data platform.

## **SOLUTION**

- We built our partner's first enterprise cloud data lake and established a framework for actuarial modeling within this new environment that will serve as a blueprint for subsequent analytic model migrations for their offshore partners.
- Our team deployed a streaming data ingest architecture that delivered data real-time to the lake. With a customer-focused mindset, we gave downstream consumers the option to leverage either batch or stream processing, depending on their needs.
- Understanding the dimensions of value for this initiative, we challenged the status quo of batch oriented data sourcing resulting in real-time insights and actionable benefits across the enterprise.
- Tech Stack: Python, PySpark, AWS (Glue, Sagemaker Notebooks, Cloudformation, Lambda, S3), Debezium, DB2 z/OS, Docker

## **RESULTS**

98%

Automated data for financial compliance reports, prep time from 3 months to 1 day

50+

Framework for actuarial modeling will be the template for 50+ models

12x

Aggregating data from over 12 lines of business for centralized report efficiency