Optiv Empowers Global Consulting Firm to Expedite Data Processing Speed and Gain Customer Insight

OVERVIEW
Limited by the available hardware and the laborious on-premise Extract, Transform, Load (ETL) and Analytics process for their proprietary data format, a leading management consulting organization was challenged by a lack of speed to gain insights from customer data. The current data ingest process was taking much longer than the organization felt comfortable with and was slowing down business. The company needed a solution to help on-site data scientists who were spending too much time on tuning and managing their own environments. The data scientists were very disconnected from the data engineering layer, and multiple hand-offs between the siloed functions created a very tedious process.

In addition, the organization did not have the internal expertise required to securely apply data engineering to Databricks in Azure. As a result, the organization jeopardized productivity and increased security risks. They needed to create a unified data engineering and data science platform in the cloud to increase performance at scale.

HOW OPTIV HELPED
Often, on-premise infrastructures lack the functionality to scale based on business goals, and fast and flexible responses — while keeping data safe and secure — aren’t possible. Optiv Security embedded itself with the team to assess the current on-premise environment and get a comprehensive scope of the problems at hand.

By creating custom data engineering logic, the cybersecurity experts jumpstarted productivity and understanding of the technologies involved. Next, Optiv created and documented a standard for storage of processed and normalized data, creating an environment where data scientists were empowered to access their own data. Optiv also reviewed, replicated and improved the ETL process into Spark analytics to use within Databricks — expertise the client didn’t have in-house.

Optiv’s data scientists performed rigorous testing and validation of the new process against the original on-premise solution to ensure accuracy. The result was an 8x increase of speed in data ingest pipeline delivered via a unified, 100% cloud-based platform.

RESULTS
• Accelerate 400 GB of proprietary data ingest by 8x the speed (from 16 hours on-premise to under 2 hours)
• Accelerate 70 GB of proprietary data from 8 hours on-premise to 1 hour
• Alignment of data engineers with data scientists
• Ability with Databricks to scale the cluster size up and down, depending on need and cost
• Knowledge transfer, including teaching developers to write Spark analytics and train the next generation of developers within the organization
• Testing ingest process on-premise allowed Optiv to discover a major bug in production, identify it and replicate it so the client could create a patch

INDUSTRY
Management Consulting

CHALLENGES
• Lengthy time to extract value from customer data
• Difficulty meeting data ingest performance requirements
• Lacked expertise in securely capturing on-premise ETL and analytics process in a cloud environment while also meeting security requirements
• Process roadblocks to prepare clean data, at massive scale, for data scientists to analyze as needed

SOLUTION
• Optiv Secure Data Cloud service securely migrated the process of data management to the cloud
• Optimized horizontal scale without needing more on-premise resources
• Improved client architecture
• Investigated and vetted new Azure preview features for reliability and security

Optiv is a market-leading provider of end-to-end cybersecurity solutions. We help clients plan, build and run successful cybersecurity programs that achieve business objectives through our depth and breadth of cybersecurity offerings, extensive capabilities and proven expertise in cybersecurity strategy, managed security services, incident response, risk and compliance, security consulting, training and support, integration and architecture services, and security technology. Optiv maintains premium partnerships with more than 350 of the leading security technology manufacturers. For more information, visit www.optiv.com or follow us at www.twitter.com/optiv, www.facebook.com/optivinc and www.linkedin.com/company/optiv-inc.

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