Energizing Big Data Analytics for a Global Telecommunications Media Company with Google Cloud

Client
A multinational telecommunications and networking company

Technologies

Google:
- BigQuery
- Cloud Composer
- Google Cloud Storage (GCS)
- Dataproc
- Dataflow
- Google Kubernetes Engine (GKE)
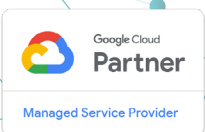- Google Compute Engine (GCE)

Other:
- Teradata
- Oracle GoldenGate

Telecommunications media company needed to scale its analytics for competitive differentiation

As a major telecommunications media company with multiple global IT centers, the customer provides vital equipment for telecommunications networks, connected vehicles and other applications. The customer wanted to differentiate themselves from competitors by unlocking deep insights from their data, illustrating industry-leading quality of service through superior analytics and performance reporting.

The company's large on-premise Teradata data warehouse appliance couldn't keep up with the requirements of the business. Analytics reports for clients took longer than desired to produce, largely due to massive volumes of complex data being ingested daily from large global networks. Upgrading the legacy system wasn't a realistic option, due to the operating costs and the poor fit to the future needs of the business.

Pythian's global, multidisciplined team collaborated with Google and the customer to develop and execute a comprehensive migration and management plan to move the client's data estate from Teradata to Google Cloud, improving performance, scalability, uptime and affordability.

Google Cloud
Partner
Managed Service Provider

Pythian

The company can now run complex reports with Google Cloud's highly available infrastructure in 10 minutes for a fraction of the previous cost, allowing them to provide valuable, timely insights to customers. Scaling their big data analytics is also now a simple matter of adding or deleting virtual machines, rather than paying significant CapEx to upgrade an on-premise legacy system.

The customer has a global footprint, with several IT centers around the world. Pythian's global service delivery team and deep bench of DevOps specialists, solution architects, big data engineers, and SQL experts were perfectly suited for the engagement.

Results: Increased speed, scale and agility
As a result of Pythian and Google's engagement, the client now enjoys:

Faster client reporting
Telco network operator reports that once took 12 hours to complete are now produced in only 10 minutes.
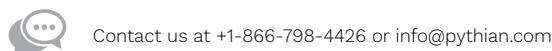
More affordable data
Instead of paying nearly $2 million per year for a system that couldn't keep up with its business needs, the client now pays in the low six figures for better performance and reliability.

Easily scalable
Previously locked into a single vendor's database that couldn't scale without an expensive upgrade, the client can now scale easily, with high availability, and can use third-party tools when required.

Increased cloud and Agile knowledge
Pythian educated the client's technical team on the best ways to manage their new Google Cloud data platform, along with the importance of Agile development and integration.

Solution
- Provided a global team that could handle 24-hour operations from multiple continents, with expertise in Google Cloud, big data analytics and SQL.
- Migrated the customer's 50 TB Teradata data warehouse to Google BigQuery with minimal downtime, including data modeling and SQL conversions.
- Wrote a proprietary scheduling script on top of Google Cloud Composer to meet the client's unique velocity requirements for reporting.

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ABOUT PYTHIAN
Founded in 1997, Pythian is a global IT services company that helps organizations transform how they compete and win by helping them turn data into valuable insights, predictions and products. From cloud automation to machine learning, Pythian designs, implements and supports customized solutions to the toughest data challenges.
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