

# Mexican retailer improves reporting with move to BigQuery and Google Cloud

**Industry**  
Retail

**Location(s)**  
Mexico

**Technologies**

- Google Cloud
- BigQuery
- Composer

**Overview**

Pythian helped a large Mexican retailer trade up from an outdated and costly on-premises data warehouse to sleek and efficient analytics with Google Cloud and BigQuery. Business users now have ready access to the data from across the retailer's footprint, and the company's computing costs dropped to just 10-20 percent of their previous expenses.

## Migrating data warehouse to cloud dramatically boosts performance and cuts costs

For retail executives, daily store performance data is the heartbeat of the business. However, the larger a chain's footprint and sales, the more muscle their data warehouse requires to handle these critical pipelines and analytics.

As a large Mexican retailer grew, its on-premises Teradata data warehouse struggled to keep up with the load. Pythian stepped in to migrate the company to a sleek and efficient Google Cloud and BigQuery environment sufficient for their current needs—and their future growth.

The resulting infrastructure gives stakeholders fast access to store reports, eliminates performance issues and dramatically reduces computing costs compared to their previous system.

## Challenges

The retailer struggled with:

- **Poor performance.** Their legacy system, a Teradata data warehouse, lacked capacity to handle the scale of their operations.
- **High costs.** Maintaining an aging on-premises environment taxed the company's budget with unnecessary expenses.
- **Limited cloud expertise.** The retailer knew migrating to the cloud was the answer, but they realized they did not have the in-house experience to develop the new Google Cloud and BigQuery platform on their own.

## Solutions

Pythian took a leadership role and delivered:

- **Flexible cloud architecture.** Using Google Cloud and BigQuery, Pythian developed a scalable and efficient infrastructure for the retailer's data needs.
- **Code migration.** With the new environment in place, Pythian helped migrate their existing code while minimizing disruption for business users.
- **Custom Composer interface.** Pythian's custom solution enables the retailer to continue using their on-premises tools Control-M and DataStage for orchestration, which maximizes their investment.

## Costly on-premises data warehouse impedes timely reporting

**An aging data warehouse lacked capacity to handle the growing retailer's needs.**

Across Mexico, the retailer is a household name, selling everything from clothing and shoes to household goods at their numerous locations. That success translates to approximately 8 terabytes of data, extracted daily from more than 30 systems into an on-premises Teradata data warehouse.

Company stakeholders relied on this environment for timely reporting and analytics. However, their aging system lacked capacity to handle the scale of their operations. Data pipelines routinely failed, stranding important reporting and causing headaches for the IT team.

The retailer also struggled with the high cost of maintaining the Teradata system.

## Retailer migrates daily reporting to Google Cloud and BigQuery

Change was in order. After investigating their options, the retailer chose Google Cloud and BigQuery. Pythian took a leadership role in the next phase of the project, as the retailer lacked internal expertise in cloud solutions.

After a deep dive to understand the retailer's on-premises systems and their go-forward needs, Pythian devised a flexible cloud architecture. The new infrastructure taps the inherent strengths of Google Cloud and BigQuery and delivers a robust, scalable and easy-to-manage solution.

Next, Pythian worked with the retailer to migrate their existing code to the new environment. This move eliminated the pipeline and performance issues that plagued the company in their on-premises data warehouse. Pythian supported the internal team during the testing process.

**Google Cloud and BigQuery now easily handle the daily reporting pipelines.**

Finally, Pythian configured a custom Composer interface which enables the retailer to continue using their on-premises tools Control-M and DataStage for orchestration. This hybrid environment gives the company a bridge to maximize their investment in both their legacy systems and their modern Google capabilities.

## Users achieve fast, scalable performance at a fraction of the cost

## Results

With their new Google Cloud environment, the retailer has:

- **Fast and stable reporting.** Pipelines run quickly, with no issues for users or the IT team.
- **A foundation for growth.** The highly scalable environment of Google Cloud and BigQuery arms the retailer with ample ability to scale for future needs.
- **Reduced costs.** With the tremendous efficiencies of cloud, the company pays just 10-20 percent of the cost of their previous on-premises solution.

Moving the retailer's data to a scalable cloud framework produced immediate results. Stakeholders now can access necessary data and analytics every day—from across the business—without issues. They use the same business intelligence tools and interfaces as before, which makes the transition seamless for users.

For IT, solving their capacity challenges freed up time for value-added activities rather than troubleshooting. They're also confident in their ability to manage growth, thanks to the solid cloud foundation now in place.


**A cloud environment costs just 10-20 percent of the retailer's previous expenses.**

The switch to BigQuery and Google Cloud made a significant bottom line impact.

Compared to their legacy on-premises system, their new cloud environment costs just 10-20 percent of their historic Teradata expenses.

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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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