E-Commerce Boom Requires the Flexibility of Google Cloud to Support Global Expansion

Industry
e-Commerce

Platform
• Google Cloud Platform

Solution
• Cloud Migrations

Technologies
• Atlantis, Cloud SQL
• Cloud DNS
• Cloud Interconnect
• Google BigQuery
• Google Cloud
• Google Kubernetes Engine (GKE)
• Google Security Command Center
• Terragrunt

Online travel booking site moves to the cloud to dramatically improve scalability

As more people seek out global experiences, they book their tickets, stays and tours online. This practice is excellent news for a global travel booking company based in North America: It has seen its data and users increase significantly. To date, more than 50 million users have downloaded its app and have planned more than 175 million trips. In just a few years, the company forecasts this usage to increase tenfold.

To support this growth, the IT leadership recognized that it needed the flexibility and scalability of the cloud. The company needed to migrate, and do so quickly.

The business chose Pythian to develop the cloud migration plan using proven best practices. Scalability, data governance and flexibility were essential. In less than five months, the project was executed, tested and completed without disrupting the business.

Today, the travel company is using Google Cloud and BigQuery to:

• Scale to support ongoing growth with no capital investments

• Uncover trends and business opportunities with data insights

• Control and govern its data to mitigate risk and enforce compliance

By partnering with Pythian, the company achieved its goals in only a few months and is well-positioned for growth.

Pythian

Business Need

Given the increasing popularity of online travel bookings, the e-commerce company expected significant growth. Internal forecasts predicted 10 times growth of its users and data volumes over the next 24 months. Only by migrating from outdated legacy systems to the cloud would the company address the upcoming challenges.

Growth trajectory outpaces current aging, on-premises environment

Given the increasing popularity of online travel bookings, the company expected significant growth. Its forecasts predicted user and data volumes to grow by 10 times in the next 24 months. It needed a new environment that would scale and support the business. Only migrating from outdated legacy systems to the cloud would address its upcoming challenges, including:

- Scale to support big data. The number of users and amount of data was accelerating with the growth of the company's e-commerce site. Without a cloud-based infrastructure, it couldn't scale its environment without the delays or capital investment of on-premises IT equipment purchases.

- Offer adequate data protection. The company needed to employ a solution that improved data governance and mitigated risks. It required additional controls that would allow it to detect potential threats and policy violations as its user base grew.

- Provide analytics to inform business decisions. In e-commerce, it is critical to use buyer activity and performance data to guide the business. The travel company knew that advanced and actionable insights from its data would identify new business opportunities and give the business a competitive edge.

Travel booking sites must be dynamic, scalable and flexible to provide users with the most up-to-date fares, dates and availability. Data is the foundation of any business, but especially so in a competitive industry like online travel booking. This company forecasted double-digit growth and found its current environment lacking the ability to keep pace.

Modernization of its infrastructure with Google Cloud

The company's new IT leadership wanted to accelerate its move to the cloud as it saw the fragility of its aging on-premises environment. It engaged the proven Google Cloud experts from Pythian for this critical project needed to support its growth. The solution would be a significant step forward for the company as it advanced its infrastructure after years of neglect. The new cloud environment would equip the business with better data management, improved security and data governance, and robust business intelligence. The solution included:

- A cloud migration plan using proven best practices. Pythian developed a migration plan after a thorough evaluation of its codebase. The project would deliver a solution that delegated permissions, allowed for cluster sizing with Google Kubernetes Engine (GKE), and used Google Cloud Interconnect.

Solution

The company's new IT leadership wanted to accelerate its move to the cloud. They engaged the proven Google Cloud experts from Pythian for this critical project to:

- **Develop and execute a cloud migration plan.** Pythian experts conducted a thorough evaluation of the codebase, created a detailed plan and executed the migration using proven best practices.
- **Deploy Google BigQuery.** By unlocking insights within its data, the travel company can identify new business opportunities and measure performance, as well as become aware of potential risks.
- **Improve the deployment process and workflows.** Pythian advised this business on how to best export usage data and documented the patterns for accessing the workloads.

- Deployment of Google BigQuery. This solution would unlock new insights from within its data to identify new business opportunities, measure performance and become aware of potential risks. The BigQuery business intelligence solution is the gold standard for analytics and reporting across large data sets like those of the travel company.

- Improvements to the deployment process and workflows. Pythian advised this business on how to best export usage data to BigQuery for analysis and documented the patterns for accessing the workloads for Google Cloud Interconnect, host/service virtual private clouds, private Google access and domain name system (DNS). This guidance directed the project and set the company up with a scalable infrastructure designed to support future growth.

Pythian performed and tested the Google Cloud migration. The company was actively using the new platform and the BigQuery solution in less than five months.

Results

Pythian completed the cloud migration in record time, especially given the volume of the data involved. The company is ready to grow with confidence as the new Google Cloud environment delivers:

- **Superior performance and scalability.** Internal teams and customers are benefiting from faster and more reliable performance, even during peak booking seasons.
- **Improved data governance.** With Google Security Command Center, the company has better control of its big data and visibility to potential risks and policy violations.
- **Support for new business.** The cloud infrastructure provides the company with the confidence to grow its business with new performance insights and without any interruption to its service.

Scalable cloud infrastructure supports global expansion and increasing user engagement

With its new Google Cloud and BigQuery solution, the company is experiencing:

- Superior performance. Internal teams and customers are benefiting from faster and more reliable performance. This improvement is maintaining remarkable service, even during peak booking seasons.

- Improved data governance. With Google Security Command Center, the company has better control of its big data and visibility to potential risks and policy violations. It is now equipped to proactively mitigate issues.

- Support for new business. The cloud infrastructure provides the company with the confidence to meet growing consumer demands for its business. It has expanded its global operations and increased user engagement without any interruption to its service.

Pythian completed the cloud migration in record time, especially given the volume of the data involved. The company is ready to grow with confidence and no longer worries about the capacity and capabilities of its infrastructure. The new Google Cloud environment will support its needs.

linkedin.com/company/pythian   twitter.com/Pythian   Contact us at +1-866-798-4426 or info@pythian.com

OFFICES

Ottawa, Canada   New York City, USA   Minneapolis, USA   London, England   Hyderabad, India

Pythian