



APPLICATION ASSESSMENT FOR GOOGLE CLOUD PLATFORM MIGRATION

If you're considering a move to Public or Hybrid cloud to modernize and reduce support costs for your applications and databases, our five-day on-site assessment will bring clarity to your team with:

- A review of the technical and business performance of your current application and data environment, identifying areas for concern and areas of opportunity based on best practices
- The pros, cons, and costs associated with moving your application and/or data to a GCP cloud architecture
- Recommendations regarding your future state, including tooling recommendations that will help on your path to better business outcomes
- Pricing scenarios

This evaluation will focus on mapping business goals to a technology plan by taking into account both current and future needs. The emphasis will be on:

- **Agility** - Quickly and easily adapt to application changes and adopt new GCP technologies
- **Performance** - Cost-efficient delivery of SLAs
- **Efficiency** - Reduce development and support overheads
- **Scalability** - Easily add or remove compute and storage resources on demand
- **Security** - Ensure compliance, privacy, and audit needs are met
- **Availability** - Meet business demands for service or application uptime

The top-level decision for application migration is to choose the optimal migration model from the options outlined below:

1. **Rehosting (AKA "lift and shift")**: E.g. time-constrained migration
2. **Replatforming**: Core architecture remains the same, "lift, tinker, and shift", e.g., migrating to a database-as-a-service platform to save time spent on managing database instances
3. **Refactoring / Re-architecting**: Re-imagining how the application is architected and developed, using GCP cloud-native features, e.g., migrating from a monolithic architecture to microservices (Cloud Functions) architecture to boost agility
4. **Replacing**: Use a SaaS offering to functionally replace components of the application
5. **Retire**: Turn off IT portfolio that is no longer useful

HOW IT WORKS

An experienced Pythian GCP Transformation Architect will come to your location for up to five days to collaborate with your team(s). Working with business unit(s), security team(s), development team(s), and operations team(s), the DevOps architect will help you determine the key business goals for the migration and map these to a technology plan that will be delivered within two weeks of the on-site session.

Prior to the on-site portion of the assessment, you will have the opportunity to curate your own list of priorities to focus on during the assessment, including some or all of the following:

- **Current application environment review:** Including infrastructure, databases, security, availability, compliance, privacy, SLAs/SLOs, monitoring, and technology stack.
- **Data sources and databases review:** Including technology, size, data velocity, and data retention strategy to help determine database platform strategy and planning horizon.
- **Current opportunities for tech stack modernization:** Includes an assessment of current application(s) software and data structure, and considerations for migration to GCP for the purpose of adopting GCP PaaS services (such as GKE, AppEngine, Cloud Functions, or ISTIO) and decomposing application components into independent services.
- **Data migration requirements:** Including data and service uptime, required data conversions to utilize new data technologies (such as Cloud SQL, Cloud Spanner, or Cloud Big Table) performance and cost targets, and operations process constraints for migrations.
- **Cutover strategy constraints:** Pre-migration POCs, acceptable downtime, migration cost.
- **Disaster recovery strategy:** Includes identifying known shortcomings around data such as backup frequency, backup volume, data recovery times, storage costs, data security, privacy, and current infrastructure and application recovery times (such as Cloud Storage or Cloud Filestore).
- **Infrastructure automation strategy:** Includes an assessment of shortcomings, and operations process restraints, and identification of automation opportunities with moving to the cloud (such as Stackdriver or Cloud Deployment Manager).
- **Compliance and data privacy constraints:** Assesses the impact of security, RBAC systems access, authorization, and data privacy isolation (such as Cloud Security Command Center or Cloud IAM).
- **CI/CD best practices:** Includes creating scope of responsibility in CI/CD code pipelines, assigning the correct ownership to service teams and shared services such that updates of each service are independent of each other.
- **Operational visibility:** Monitoring, logging, and alerting tool options and recommendations to increase operational visibility (such as Stackdriver, Apigee or Prometheus).
- **Minimizing cloud costs best practices:** Designing GCP cloud-native solutions and recommended tools for cost-efficiency at variable scale, data policies, and compliance, PII considerations including masking/encryption, monitoring tooling.
- **Platform/technology selection:** Assesses the best choice between or a mix of GCP services, open source, SaaS and other.

METHODOLOGY

Pythian puts an emphasis on running your workshop as an agile engagement, coupling interviews with daily whiteboard sessions that summarize what was uncovered and discussing implications for your application and data migration strategy. Interviews are pre-scheduled and typically include application business owners, key development and operations team members, architects, and IT/security.



linkedin.com/company/pythian



twitter.com/Pythian



+1-866-798-4426



info@pythian.com

ABOUT PYTHIAN

Pythian excels at helping businesses around the world use their data to transform how they compete and win in the data economy. From cloud automation to machine learning, Pythian leads the industry with proven innovative technologies and deep data expertise. For more than 20 years Pythian has built its reputation by delivering solutions to the toughest data challenges faster and better than anyone else.

OFFICES

Ottawa, Canada

New York City, USA

London, England

Hyderabad, India

DELIVERABLES

We will deliver an interactive presentation of recommendations and results, followed within two weeks by a report that includes application assessment and recommendations for a GCP migration report.

The report will also include:

- High-level reference architecture
- A high-level GCP infrastructure and database roadmap, short term and long term with tooling recommendations
- Application components to be refactored to GCP cloud-native services (such as Cloud Functions, Kubernetes, ISTIO, or Cloud SQL)
- High-level solution schedule with an implementation plan
- Detailed application and data migration plans including cutover
- Solution cost with an estimated range of public cloud services costs

YOUR ROLE

To ensure the success of your application assessment for a GCP migration project, we recommend that you establish a project team, provide full top-down executive support, and make available the following personnel:

- Those who own the business aspects of the application; cost, performance, scale, etc.
- Those who know the app software and data structure
- Key development and operations personnel
- IT and Security teams
- Those who are responsible for cloud infrastructure

PRICE

Starts at \$30K USD plus travel and living costs. Should you decide to engage Pythian to implement a solution, 50 percent of the assessment fee can be applied against the cost of the ongoing engagement.

WHY PYTHIAN FOR THIS PROJECT?

We have:

- 20 years in infrastructure & data
- GCP infrastructure, data, and DevOps certified experts
 - Google Cloud Platform Qualified Systems Operations Professional
 - Google Cloud Platform Qualified Solution Developer
 - Google Cloud Platform Qualified Data Analyst
 - Google Cloud Developer
 - Google Solution Architect
 - Google Data Engineer
 - Google Sales

GET STARTED TODAY

[Contact us](#) to find out how Pythian's experts can help you become a truly cloud-leveraged organization by aligning your cloud strategy and technology to your business needs.