

LA Pro Cloud Developer Case Study

LaGiftArt Case Study

Company Overview

LaGiftArt is an application that makes it easy to send art and artisan gifts from one specific locale to another. The app highlights and shares cultural exchanges between the giver and recipient while promoting regional artists. LaGiftArt has been successful in initial efforts in Northern Texas and Ohio and is now poised to expand across the US and around the world. The cross-cultural emphasis is finding a new audience in today's market.

Executive Statement

Our app brings people and their cultures together through the time-honored practice of gift-giving. LaGiftArt has worked well in our test markets and we have sufficient capital and support to expand our efforts world-wide. However, we have to move quickly to make the most of our unique vision and allow customers to share their worlds across the city, the state, the country and the world.

Solution Concept

To fulfill its vision, LaGiftArt needs to extend their current abilities to other locales, both in the US and in other countries around the globe. They need to expand their staffing in the various areas to better support the infrastructure as it experiences rapid growth, smoothly with as little downtime as possible.

Existing Technical Environment

LaGiftArt has extended their infrastructure into the cloud somewhat, while maintaining their current on-prem environment. Although, the present team works well with the

existing system, they feel they are not well prepared to handle a world-wide expansion. At the moment, the LaGiftArt's technical set-up includes:

- Running Google Cloud Compute Engine instances to run existing APIs.
- A single Cloud SQL instance with a PostgreSQL database is used to maintain state.
- An on-prem data warehouse holds exported data
- An on-prem Hadoop system conducts data analytics operations
- Logging has not been implemented for the application
- Monitoring is minimal with fundamental uptime notices and unresponsive API alerts.

Business Requirements

LaGiftArt is looking to broaden their market. Requirements to achieve this goal are:

- Make the app available in new regions around the world.
- Support an increased number of simultaneous users.
- Standardize the experience for users across the globe.
- Gather customer activity data to facilitate product monetization.
- Keep compliant with regional regulations, such as GDPR.
- Lower the effort and the expenditures for managing infrastructure.
- Integrate Google Cloud best practices.

Technical Requirements

- Increase both front-facing and backend application monitoring and usage metrics.
- Enhance API authentication and access authorization.
- Implement and enhance logging, ensuring that the data is maintained in a cloud analytics system.

- Enhance scaling by migrating to serverless architecture.
- Secure internal applications via enhanced authorized access.