HipLocal

Company overview

HipLocal is a community application designed to facilitate communication between people in close proximity. It is used for event planning and organizing sporting events, and for businesses to connect with their local communities. HipLocal launched recently in a few neighborhoods in Dallas and is rapidly growing into a global phenomenon. Its unique style of hyper-local community communication and business outreach is in demand around the world.

Executive statement

We are the number one local community app; it's time to take our local community services global. Our venture capital investors want to see rapid growth and the same great experience for new local and virtual communities that come online, whether their members are 10 or 10,000 miles away from each other.

Solution concept

HipLocal wants to expand their existing service with updated functionality in new locations to better serve their global customers. They want to hire and train a new team to support these locations in their time zones. They will need to ensure that the application scales smoothly and provides clear uptime data, and that they analyze and respond to any issues that occur.

Existing technical environment

HipLocal's environment is a mixture of on-premises hardware and infrastructure running in Google Cloud. The HipLocal team understands their application well, but has limited experience in globally scaled applications. Their existing technical environment is as follows:

- Existing APIs run on Compute Engine virtual machine instances hosted in Google Cloud.

- State is stored in a single instance MySQL database in Google Cloud.

- Release cycles include development freezes to allow for QA testing.

- The application has no consistent logging.

- Applications are manually deployed by infrastructure engineers during periods of slow traffic on weekday evenings.

- There are basic indicators of uptime; alerts are frequently fired when the APIs are unresponsive.

Business requirements

HipLocal's investors want to expand their footprint and support the increase in demand they are experiencing. Their requirements are:

- Expand availability of the application to new locations.

- Support 10x as many concurrent users.

- Ensure a consistent experience for users when they travel to different locations.

- Obtain user activity metrics to better understand how to monetize their product.

- Ensure compliance with regulations in the new regions (for example, GDPR).

- Reduce infrastructure management time and cost.

- Adopt the Google-recommended practices for cloud computing:

    a. Develop standardized workflows and processes around application lifecycle management.

    b. Define service level indicators (SLIs) and service level objectives (SLOs).

Technical requirements

- Provide secure communications between the on-premises data center and cloud-hosted applications and infrastructure.

- The application must provide usage metrics and monitoring.

- APIs require authentication and authorization.

- Implement faster and more accurate validation of new features.

- Logging and performance metrics must provide actionable information to be able to provide debugging information and alerts.

- Must scale to meet user demand.