

Building technology that radically simplifies the way families connect with sitters they love

 Sittercity

Technologies

Google Cloud

Overview

When container management became a headache for Sittercity, the company moved to Google Cloud Platform, using Google Kubernetes Engine and Google Cloud machine learning tools to automate and improve key business processes.

Results

- Gives parents a better customer experience and sitters a more efficient process
- Automates quality control for sitter photos with a high degree of accuracy
- Frees up two-thirds of sitter review team for more strategic, customer-focused work
- Reduces cloud hosting costs by 60%
- 40 hours a week saved in container management

Finding reliable childcare is a major challenge for many parents, and the hassle of texting, scheduling, leaving allergy instructions, and making ATM runs can take a big toll. Sittercity, the pioneer in tech-enabled childcare, has connected millions of families with responsible, adult sitters since its founding in 2001. Today, the Sittercity team is reinventing the category they created with a major product overhaul that will allow families and sitters to connect seamlessly, at every step and on any device, from the initial sitter search to ongoing booking, payment, and communications.

With as many as 1,500 new sitters signing up every day, Sittercity needed a more scalable infrastructure. Using Kubernetes to manage Docker containers solved part of the problem, but Sittercity's IT staff still had to manage the Kubernetes clusters in the cloud, including provisioning virtual machines (VMs) and solving networking and configuration challenges. When Sam de Freyssinet, Sittercity's Head of Technology, attended the Google NEXT conference, he learned about Google Kubernetes Engine (GKE) on Google Cloud Platform (GCP).

"I realized that a lot of the things that were time consuming about running Kubernetes, Google could manage for us," he says. "It was clear that we could save a lot of time, money, and energy if we used GKE and just focused on the containers we need to deploy."



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Head of Technology
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Faster builds, lower costs

When Sam’s team began testing GKE, they saw the value immediately. “My team told me, ‘this is exactly what we need, it’s so much simpler,’” he says. “Our process for building the Kubernetes clusters we need went down to 10 minutes with GKE, versus spending an entire day on our old web services platform.”

Sittercity worked with Agosto, a Google Cloud Premier Partner and recipient of the Google Cloud 2016 Americas Partner Award for Google Cloud Platform (GCP) Customer Success, to plan and execute a lift-and-shift migration to GCP that did not require any changes at the application level. Agosto helped move 3TB of photos and customer data to GCP, while Sittercity’s Google Cloud sales team recommended using preemptible VMs to reduce costs without sacrificing application stability.

“Agosto helped us keep our MySQL databases in synch during our cutover to GCP, avoiding any significant business disruption,” says Sam. “And Google kept finding ways to help us be as efficient as possible, reducing our cloud hosting costs by 60% compared to our previous provider.”

Optimizing with managed services

Once on GCP, Sittercity began optimizing its application platform with other Google Cloud offerings such as Cloud SQL, a fully managed relational database service. Cloud Pub/Sub listens for customer activity and business events and sends changes to the appropriate database or data lake, from which data can be analyzed using BigQuery. By analyzing customer behavior and visualizing the results with Looker, a business intelligence tool that integrates directly with BigQuery, Sittercity can better understand what its customers want and make changes to its app to serve them better.

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Keeping photo quality high

Every sitter that joins Sittercity must be over 18 and is required to upload a photo for identification purposes and to help them connect with families. Photos must match certain quality standards. For example, faces cannot be obscured by hats or Snapchat filters, and pictures containing alcohol, drugs, or other inappropriate or illegal materials are automatically rejected.

That meant Sittercity's photo review team of six people had to manually review approximately 1,500 photos a day during peak times of the year. The lengthy review process sometimes caused a two-day delay before a sitter's photo could be published to the app, representing lost employment opportunities for sitters and missed revenue opportunities for the company.

With the goal of automating parts of the photo review process with machine learning (ML), Sittercity joined the alpha testing team for Cloud AutoML, a suite of products that enables GCP customers to train high-quality ML models for specific business needs without the need for ML expertise. Cloud Auto ML Vision allows Sittercity to detect photo features like obscured faces, Snapchat filters, and inappropriate content with greater than 90% accuracy, meeting the company's requirements.

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Maintaining better security and performance

When Sittercity facilitates messaging and interactions between parents and sitters, it uses the Cloud Data Loss Prevention (DLP) API to detect and redact any personal information, helping to keep its service secure. To maintain consistent service levels, it uses Stackdriver to monitor application performance.

“Before Stackdriver, our application monitoring was limited to log-based analysis, so we never had a good sense of how the app was really performing in the moment,” says Sam. “Going from our Elk stack to Stackdriver was like going from a standard screen to 4K Ultra HD overnight.”

Enabling global collaboration

Years ago, Sittercity migrated from traditional office software to Google Workspace (formerly G Suite), transforming how its employees work with cloud apps such as Gmail, Docs, Sheets, and Slides. Remote employees from as far away as New Zealand and London now enjoy productive meeting experiences with the Chicago team using Hangouts Meet. Business documents and images are more securely and easily shared on Drive and Team Drives.

“G Suite (now Google Workspace) allows us to collaborate on documents in real time in a way that we couldn’t do before,” says Sam. “Hangouts Meet is fundamental to our engineering and operations. We’re able to hire talent from around the world, and it’s no different than if they were here in Chicago.”

Building a trusted child care marketplace

By moving to GCP, Sittercity is giving parents a better customer experience and sitters a more efficient process. It can keep its web and mobile apps available and responsive, while focusing employees on the innovation and service levels required to keep parents and sitters coming back.


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