

Startup Brings CRM to the Inbox with Google Cloud Platform



At a Glance

What they wanted to do

- Build a richly featured CRM application quickly and easily
- Avoid costly investments in infrastructure
- Easily accommodate an increase in users

What they did

- Chose Google App Engine to build and deploy the service rapidly
- Integrated features such as the Memcache API and the LogService API to improve speed and track errors as they occur
- Used Google BigQuery to gain deeper insights into the service and improve the user experience

What they accomplished

- Scaled effortlessly to handle rapid growth
- Cut development time in half and maintenance time by 40%
- Achieved significant cost savings by using Google services, including a \$500-per-month savings with Google BigQuery

Organization

Streak, a startup backed by the prestigious Y Combinator venture fund and other elite Silicon Valley investors, uses Google Cloud Platform to power an innovative application that integrates directly into Google's Gmail service. The app, which allows users to group related messages, notes and files and share email chains with colleagues, is used for customer relationship management (CRM), hiring, customer support and other business needs. Google App Engine provides the rich functionality and scalability needed to deliver a superior user experience, while Google BigQuery allows for deeper insights into the service's performance.

Challenge

Streak co-founder and CEO Aleem Mawani wanted to build the new application as quickly and effortlessly as possible. Setting up and maintaining an in-house infrastructure seemed overwhelming, especially since the company consisted of only Mawani and his business partner at that time.

"We knew that dealing with machines would take time away from adding features that matter to our users," Mawani explains. "We wanted to be able to perfect our product without managing servers."

The company required a scalable platform, since it would ultimately need to handle incoming and outgoing messages across thousands or even millions of Gmail accounts. Mawani didn't want to worry about the service faltering as the number of users grew.

Solution

Mawani had used Google App Engine on an earlier project, and he knew it offered the quick deployment and automatic scalability he needed. He built the first version of the Streak service, which users access via a Google Chrome extension, in just two weeks. Because the platform makes it easy to test and add new features, he has been continually refining the application.

"Google App Engine has allowed us to be quick and nimble, which has been a huge advantage to us as a startup. It's been perfect for what we want to accomplish."

—Aleem Mawani, co-founder and CEO, Streak

Mawani relies on a number of App Engine features to enhance the service, including:

- **Memcache API** to provide temporary, high-speed data access through a high-performance memory cache, improving responsiveness to users

About Google App Engine

Google App Engine enables businesses to build and host web apps on the same systems that power Google applications. It offers fast development and deployment, effortless scalability and simple administration, with no need to worry about hardware, patches or backups.

About Google BigQuery

Google BigQuery is a web service that enables companies to analyze massive datasets – up to billions of rows in seconds – using Google's infrastructure. Scalable and easy to use, BigQuery lets developers and businesses tap into powerful data analytics on demand using the familiar SQL query language.

For more information about Google Cloud Platform, visit <http://cloud.google.com>

"The only way our service could handle as much load as it does is by using Google App Engine. We need to be able to operate at Gmail scale for our users, and we know we can continue growing without difficulties."
—Aleem Mawani, co-founder and CEO, Streak

- **Channel API** to update users instantly about changes made to data, such as when another user adds details about a prospective sale, and to enable real-time collaboration
- **LogService API** to track and diagnose errors as they occur

Mawani uses Google BigQuery, which allows interactive analysis of massive datasets, to analyze his App Engine logs and gain deeper insights into the service's performance. For example, he can query the data to learn which server requests are made most frequently or whether a new version of the app has addressed an error that certain users were experiencing. Using the LogService API allows him to move the logs into BigQuery every two seconds, around the clock.

In the future, Mawani plans to use Google Cloud Storage to give users secure, scalable storage for contracts and other sales-related files. He will also use Google's Prediction API to make the application more intuitive: When new emails come in, the API could suggest to users how to categorize them.

"Being able to use these Google services in combination will give us some amazing capabilities," Mawani says. "It will help us keep improving the service for our customers."

Results

Streak's user base grew 30% every week for four consecutive months after its March 2012 launch. The company now has more than 300,000 registered users and adds thousands of new ones each day. Google App Engine has scaled effortlessly to support the growth.

"The only way our service could handle as much load as it does is by using Google App Engine," Mawani says. "We need to be able to operate at Gmail scale for our users, and we know we can continue growing without difficulties."

App Engine also freed the startup from hefty infrastructure expenses. In addition, the company spends just \$5 to \$10 per month on Google BigQuery, since the service allows users to pay only for the queries they run. In comparison, a similar service Mawani considered would have cost more than \$500 per month.

Mawani says App Engine's greatest benefit has been the extra time it has given to devote to the application. Initial development would have taken twice as long without the platform, he says, while ongoing maintenance would have required 40% more time.

"Google App Engine has allowed us to be quick and nimble, which has been a huge advantage to us as a startup," Mawani says. "It's been perfect for what we want to accomplish."

