

Best Buy Slashes App Development Time and Resources with Google App Engine



At a Glance

What Best Buy wanted to do

- Quickly develop and deploy apps to achieve its business goals
- Create apps that are scalable and low-maintenance

What they did

- Used Google App Engine to re-launch Gifttag in only 11 weeks with roughly half the original development resources

What they achieved

- The app can now handle any amount of traffic, without maintenance
- Dramatic time and cost savings in app development, which has led to the creation of many more apps across other Best Buy business units

Organization

Best Buy® Co. Inc. is a multinational retailer of consumer electronics, home office products, entertainment software, appliances and related services, with 180,000 employees and 1,095 stores in the United States, Canada, Europe, China and Mexico.

Challenge

In 2008, a team of Best Buy developers launched Gifttag, a social application that lets users make online wish lists to share with friends through email, Facebook, Twitter and other social media sites. The app was promising, but the development effort was substantial – it took eight developers more than a year to create the app. Once it was developed, adding new features and scaling it for heavy use was onerous.

“The development platform we’d selected just wasn’t cutting it,” says Curtis Thompson, technical director at Best Buy. “Because of the platform design, an application administrator had to make changes manually, which was time-consuming and prone to errors.”

“Our experience transferring Gifttag onto Google App Engine really changed how we do things. We can use far fewer developers, and we don’t have to spend any time doing system administration or setting up servers, which allows us to focus on the development and testing new ideas.”

—Gary Koelling, director of emerging platforms, Best Buy

Solution

To ease the maintenance and performance bottleneck, Best Buy began looking for a new development platform. “We had a week or two of really intense discussions before we convinced everyone that we had to switch,” says Gary Koelling, director of emerging platforms at Best Buy. “One of the things that can doom these projects is that people attach themselves to a particular technology, which holds you back from finding something better.”

Once the Best Buy team switched to Google App Engine, the payoff was immediate. Best Buy developers rewrote the Gifttag application from scratch – improving on the original code – while only having to do an extract, transform and load on the existing data. The entire process took four and a half developers just 11 weeks – or roughly half the original development team, in 25% of the original time. The time savings enabled Best Buy to relaunch the app just in time for the 2008 holiday shopping season.

About Google App Engine

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

For more information visit:

www.google.com/enterprise/appengine

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—Gary Koelling, director of emerging platforms, Best Buy

Results

The Giftag app now runs smoothly with no maintenance requirements. But the most important outcome of switching to Google App Engine, according to Koelling, is that it transformed the Best Buy team's mindset about how to build apps. This shift opened the door for much more app development and a glimpse of what is possible in the cloud.

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Since Best Buy discovered that it can launch new apps in a matter of weeks with only one or two developers, the development team has launched more than ten other web applications on Google App Engine, including:

- **BBY Scan:** A QR-code generator that allows users to manage QR codes through various URLs, and routes the requests accordingly.
- **BBY Offer:** A real-time app that captures offer data from other systems and manages and uploads offers. It works with various web and mobile apps.
- **Universal View:** An app that recognizes the site visitor's device format (mobile, laptop, tablet, etc.) and adjusts the site view accordingly, with no lag time. It gives Best Buy flexibility of views without creating separate sites.

"Developing apps on Google App Engine takes one-fourth to one-tenth of the resources and one-fourth of the time compared to building something ourselves," says Koelling. "We can use far fewer developers, and we don't have to spend any time doing system administration or setting up servers, which allows us to focus on the development and testing new ideas."

Thompson says he would recommend Google App Engine to other businesses because, in addition to being powerful, it is easy to adopt. "I'm extremely happy with how fast we were able to change over to Google App Engine," he says. "From every technical vantage point, it's been a great success for us."

