Startup Powers Online Ad Sales with Google Cloud Platform

crystalloids innovations

At a Glance

What they wanted to do
- Help Auto Camper Service International (ACSI) increase its online ad sales by using a robust data analytics system
- Enable ACSI to avoid buying costly hardware and software
- Permit ACSI's sales staff to easily compare clickthroughs, reservation requests and other data for nearly 10,000 campsites

What they did
- Built a user-friendly application based on Google App Engine and Google BigQuery
- Loaded 50 million data sets into the BigQuery-based platform and added fresh data daily via Google Cloud Storage
- Enabled sales staff to easily find the data they need

What they accomplished
- Helped ACSI avoid hardware, software and implementation costs of more than $1 million
- Reduced the time to run queries from days to just seconds
- Made it easier for ACSI's sales staff to persuade prospects to advertise online

Organization

Crystalloids Innovations helps companies use big data to improve their profitability. The Amsterdam-based startup relies on Google BigQuery, Google App Engine and other Google products to create intuitive, web-based tools so clients can analyze vast amounts of information quickly and easily. Auto Camper Service International (ACSI), one of Europe's leading camping guide publishers, is working with Crystalloids Innovations to improve its online ad sales with the help of big data insights. It can accomplish this at a fraction of the cost of an onsite analytics system.

Challenge

Principals at ACSI wanted to improve online ad sales on the camping guides' companion websites, which contain listings for nearly 10,000 campsites and allow users to sort through variables such as location, size and amenities in order to choose a site to book. The company knew a powerful data analytics tool could help its sales team sell ads more effectively, by showing owners of the listed campsites how they could benefit from purchasing an ad as well. Specifically, the tool could show these prospects how online advertising was benefiting campsites similar to theirs.

ACSI had no way to get this information. The IT team had to collect data stored across several separate applications and move it into a spreadsheet for analysis. Because the ACSI system contains highly detailed data on each of the campsites – more than 200 features, as well as clickthrough data and reservation requests – the process was daunting.

"It could take staff members two or three days to get the answers they were looking for," explains Richard Verhoeff, founder and managing partner of Crystalloids Innovations. "For example, they might have tried finding the average number of clicks or reservation requests for campsites in a particular region and with particular features that advertise, compared with campsites in the same region and with the same features that don't advertise. Sometimes, they couldn't find this information at all."

> *"With Google services, we're able to focus on our customers' goals without worrying how we'll achieve them. This lets us truly make a difference in our customers' businesses."*
> *—Richard Verhoeff, founder and managing partner, Crystalloids Innovations*

The ACSI principals wanted to avoid investing in an in-house infrastructure to analyze the data faster and more effectively. They thought the Google-based solutions provided by Crystalloids Innovations could help.

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, Google BigQuery lets developers and businesses tap into powerful data analytics on demand using familiar SQL query language.

For more information, visit
cloud.google.com/bigquery

About Google App Engine

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

For more information, visit
cloud.google.com/appengine

"Using Google BigQuery, we know customers will get answers in seconds. This gives us confidence we're delivering the best possible service."
—Richard Verhoeff, founder and managing partner, Crystalloids Innovations

Solution

Verhoeff knew that Google BigQuery, which allows for large-scale data analysis on Google's infrastructure, was an ideal way to solve challenges like ACSI's. He had used BigQuery and Google App Engine to build a solution called InsightOS, which helps travel and leisure companies gain actionable insights that shorten their time to market and improve their revenue.

"We were impressed by how fast BigQuery could analyze huge amounts of information," Verhoeff says. "We saw that BigQuery and other Google cloud products had so much potential that we founded Crystalloids Innovations to leverage these technologies."

Verhoeff created a custom solution for ACSI based on the InsightOS platform. His staff loaded 50 million sets of ACSI data into the BigQuery-based platform, including campsite region, features, clickthroughs, cost-per-click rates, reservation requests and timeframe. To keep the information up to date, fresh data is loaded into the platform daily via Google Cloud Storage.

A web application built on App Engine called InsightOS Viewers lets ACSI staff focus on the data they need without any technical knowledge. For example, they can view average numbers of clicks, reservation requests and other information for campsites in a particular region, of a particular size and with certain amenities, which helps them explain the benefits of online advertising to prospects with similar campsites. With BigQuery performing the underlying analysis, retrieving the information typically takes about five seconds.

"The sales team can tell prospects how many more transactions their competitors are getting through the website as a result of their advertising," Verhoeff says. "Because they can focus on specific campsite features, they can provide really detailed information."

Results

By using an application built on Google services, ACSI avoided significant upfront costs for a data analytics solution. Verhoeff estimates the company saved more than $1 million in hardware, software and implementation costs. Because ACSI and Crystalloids Innovations fully automated the extract, transform and load process, ACSI did not need to increase its staffing.

The ACSI team, which began using the application in December 2012, is already benefiting from the InsightOS service and BigQuery's superior performance. "In my experience, you might wait eight minutes for a business intelligence solution to deliver a query result," Verhoeff says. "Using BigQuery, we know customers will get answers in seconds. This gives us confidence we're delivering the best possible service."

Verhoeff knows his products will continue to be reliable, scalable and secure. Because Google manages the underlying infrastructure, he and his team can devote their efforts to solving business challenges.

"With Google services, we're able to focus on our customers' goals without worrying how we'll achieve them," he says. "This lets us truly make a difference in our customers' businesses."