Case Study: Global HCM leader adopts geocoding to help monetize customer data

Overview

When you provide payroll and HR solutions for large and small businesses across the globe, you collect a lot of valuable data. That's why this human capital management (HCM) solutions leader recognized the opportunity to monetize its data at an aggregated, anonymized level. By improving data quality and geocoding millions of records, the company was able to start offering customers new tools to support a wide range of corporate decisions.

Business challenge

As a leading HCM provider, the company compiles massive amounts of payroll, benefits and tax information on behalf of its clients. Management saw that matching this information to precise geographic locations (i.e. geocoding) would provide rich demographic intelligence that could be used for marketing, business planning and sales prospecting.

While the company was excited by the prospect, initial attempts to match its information to precise geographic locations were disappointing. Data accuracy was a challenge, and there were scalability limitations. The company also found that geocoding was slow and unwieldy as a stand-alone process.

The HCM provider is well on its way to converting its data into several high-value revenue streams.

Client profile

Global provider of human capital management solutions

- Offers a full range of cloud-based HR services for businesses of all sizes
- Specializes in payroll, taxes, and benefits administration

precisely



Solution

The company began exploring the geocoding capabilities offered by Precisley. First, Precisley performed a proof of concept to demonstrate the rigor of its technology. It ran several million customer files through Spectrum Geocoding for Big Data. The pilot project returned each file with the appropriate geographic coordinates and, where necessary, corrected address information. Results were very positive, with the application producing a high percentage of match rates and high-quality data.

The company decided to expand the pilot into a phased rollout, engaging Precisley Professional Services to embed Spectrum Geocoding for Big Data into the HCM provider's existing Apache Hadoop environment. The implementation of the geocoding technology took less than a day. The Precisley team has continued to refine the solution, achieving better, more accurate results with each subsequent iteration.

The PreciselyID feature contributed to the success of the project. As the geocoding solution processes each record, it assigns a PreciselyID — a unique and persistent identifier — to each location. This enables the HCM provider to perform a simple lookup to access information about any site in its Hadoop data store, including demographics, risk, and property attributes, even if addresses change over time.

Benefits

The ability to integrate Spectrum Geocoding for Big Data into Hadoop, as opposed to running a stand-alone application, has enabled the HCM provider to use familiar tools and simplified the learning curve.

Running the application directly in Hadoop also facilitates much simpler deployment than an extract, transform and load (ETL) process, which would pull data out of Hadoop into a separate geocoding environment, then bring the updated data back into Hadoop. After the initial installation took less than a day, subsequent updates to fine-tune the solution have taken even less time, many requiring only phone support from Precisely.

Now, the HCM company has introduced a product that combines its own trend data with geocoding information to support customers' strategic decisions. This may be just the first of many opportunities to monetize its vast data stores, now that it has a proven solution for validating and geocoding data and supplementing its internal information with impactful datasets from Precisely. As a result, the HCM provider is well on its way to converting its data into several high-value revenue streams.

Technology used

Spectrum Geocoding for Big Data

The implementation of the geocoding technology took less than a day.