Case Study: Consistent and accurate geospatial data improves risk selection for large insurer

Overview

A large property casualty insurer based in the Northeastern United States differentiates itself by building long-term relationships with customers that have the right risk profile. Lack of standardization within the geospatial data underlying the company's different software systems was undermining employees' ability to make optimal underwriting and pricing decisions. The insurer rolled out Precisely Spectrum Geocoding software and datasets to provide a consistent companywide view of every address. As a result, the insurer is saving money, and decision-making throughout the company is substantially improved.

Business challenge

The insurer prides itself on effectively gauging risks and pricing policies. "Risk selection is our 'secret sauce," says the company's geospatial capability owner. "We need to know exactly where each property is located and how it relates to different risks. We use that information to charge each policyholder a fair price."

The company's legacy technology environment made risk selection more difficult. Different groups within the insurance company were utilizing a variety of geospatial tools, with no companywide address scrubbing. A claims analyst might enter a slightly different address for a property than the agent who wrote the policy. Minor address variations like misspellings or abbreviations were causing a lot of confusion. Worse, the insurer's personal and commercial lines of business did not use the same reference data for geocoding. This led to small differences in the information used to price policies and undermined the ability to develop an aggregated view of organizational risk.

Within one building in New York, the company's different divisions might insure a small retail business on the ground floor, a large company with a few floors of offices higher up, and then a penthouse residence. The insurer needed to understand its aggregated risk across the entire structure so that when a prospective new customer requested a quote for a property in that building, it was clear at a glance how much business the company had already underwritten there.

Client profile

- Large insurance company providing personal and commercial property casualty protection
- · Serves locales across the United States
- Has built a reputation for customer focus over many decades

"Risk selection is our 'secret sauce.' The ability to segment prospective policies based on the characteristics of the property, which the Precisely Spectrum Global Geocoding solution makes possible, drives profitability [for our organization]."

— Geospatial Capability Owner, Large U.S. Property Casualty Insurer

Solution

The insurer decided to standardize geocoding companywide. "We did a bake-off with nine of the top geocoding solutions," says the geospatial capability owner. "In terms of geospatial accuracy and address scrubbing, Precisely was the clear front-runner. Spectrum Global Geocoding provided a double-digit improvement in spatial accuracy over the nearest competitor."

The insurance company chose to implement Spectrum Global Geocoding with Master Location Data; the Geocoding Connector for GIS; and Property Attributes, Parcel Boundaries, and Buildings USA datasets. Spectrum product engineers supported the implementation, working side-by-side with the insurer's engineers for a week. At the end of that period, they had a data flow they could use, and the insurer's engineers were educated enough to troubleshoot the system.

The teams also worked together to develop the Geocoding Connector for GIS. The insurer was already using a best-in-class GIS solution. Now, when an employee enters a location into that software, the Geocoding Connector for GIS seamlessly connects to Spectrum Global Geocoding, which scrubs and standardizes the address, and assigns it a PreciselyID.

Spectrum Global Geocoding organizes PreciselyIDs in a hierarchy that clarifies relationships within a building. It also associates each location with property characteristics from Precisely datasets, such as roof type and square footage. By using Spectrum Global Geocoding across functional areas, commercial and personal lines of business are utilizing consistent and hyper-accurate location data, allowing for a companywide view of aggregated risk.

No matter where employees type an address — from the insurer's front-end quote generation system to back-end analytics to the call center — everyone is seeing the same data. When a claim comes in, the system does a reverse lookup on the PreciselyID and pulls up all the information that the insurance company has on that location. "The integrations with Spectrum Global Geocoding are saving us a tremendous amount of money, compared with having to manually move massive amounts of data to all the systems our thousands of employees require," says the geospatial capability owner.

Benefits

The granularity, precision, and consistency of the Precisely data ensure that the insurer's staff are making the best possible decisions. "Because everyone is looking at the same data, we know we're all talking about the same risk," says the geospatial capability owner. "Whether we're writing a policy, inspecting the property, or investigating a claim, the consistency throughout our systems improves our decision-making."

The speed of Spectrum Global Geocoding also enhances business decisions at the insurance company. The insurer can run 1 million geocodes in seven minutes and 50 concurrent real-time geocodes in under 200 milliseconds. This is more than twice as fast as the insurer's legacy systems, which means it can get more analysis done each night.

Previously, some desired operations simply didn't happen because of the time required to complete them. "Suppose a major retailer with 1,000 locations wants a quote," says the geospatial capability owner. "We might want to look at the wildfire risk for each location or whether each building has solar panels on the roof. There are

a lot of things we could analyze if we had time. In our legacy environment, we would either quote without all the information we wanted, or we would delay the quote and the business would be gone before we got the quote out the door."

He adds: "Today, we have achieved the best possible risk selection process by using the best geocoder on the market. The ability to segment prospective policies based on the characteristics of the property, which the Precisely Spectrum Global Geocoding solution makes possible, drives profitability [for our organization]."

In the course of rolling out this solution, the insurer and Precisely built a relationship that the geospatial capability owner expects to benefit his company for years to come. "We have a very good, symbiotic, long-term partnership," he says. "We share our use cases and our challenges with Precisely, and that helps them make their product better. As Precisely continues to invest in mastering location data, they will be poised to take us into the next generation of Location Intelligence."

Technology used

- · Spectrum Global Geocoding
- Geocoding Connector for GIS
- · Spectrum Spatial

Datasets used

- Master Location Data
- · Buildings USA
- Parcel Boundaries
- Property Attributes

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