Case study

pitney bowes

Comprehensive, high-quality location data gives digital assistant a competitive edge.

Client profile

- Creator of one of the world's most popular voice-activated digital assistants
- Focused on developing the most comprehensive global knowledge base possible, with location information as the baseline on which all other data is layered

Overview

The provider of one of the world's most popular voice-activated digital assistants needed to improve the quality of geographic data underpinning its global knowledge base. The company chose a combination of Pitney Bowes® datasets. Sourcing comprehensive location information from a single data provider minimises the staff time required to maintain the data feed. Utilising top-quality data from Pitney Bowes gives this digital assistant a competitive advantage by improving the quality of its answers to consumer questions.

Business challenge

How long should I bake a cake? What is the current temperature in Warsaw, Poland? Consumers love being able to ask these (and millions of other) questions about all kinds of people, places and things — and to receive an immediate answer. That's why the market for voice-activated digital assistants has ballooned over the past few years. It's also why companies that produce these systems emphasize the quality of the data in proprietary knowledge bases.

Data teams can focus on developing the best possible answers for consumers, rather than managing relationships and contracts, or integrating, updating and coordinating feeds from disparate data providers.

Digital assistants must provide the most accurate and complete information possible. The more frequently a device is stumped by a question or provides an incorrect answer, the less frequently consumers will engage with it. Thus, every digital assistant vendor has dozens of specialised teams honing its content in niche topic areas from cooking to sports to the weather.

For one of the world's most popular digital assistants, geography underpins all the other information in the knowledge base. Location data — from continent to neighbourhood, and everything in between — forms an information baseline on

Technology used

- Pitney Bowes® World Boundaries Premium
- Pitney Bowes Neighborhoods
- Pitney Bowes Time Zones

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top of which the system layers every other fact. The company that produces this digital assistant found that it was answering U.S.-focused questions very effectively. However, staff lacked confidence in its ability to navigate global differences in mapping practices, political boundaries or variations in terminology.

Solution

The producer of the digital assistant began looking for a new data source to provide reliable and consistent location information worldwide. It considered a wide array of data providers with a narrower focus but ultimately selected Pitney Bowes® for both the quality and breadth of its datasets.

The company deployed Pitney Bowes World Boundaries Premium, Neighborhoods and Time Zones datasets. World Boundaries Premium provides six layers of increasingly granular location information across every country on earth, including small and remote island nations. The Neighborhoods dataset delves even deeper, providing three additional levels of detail for the world's larger cities. And the Time Zones dataset provides the time zone for every location. Pitney Bowes updates all three datasets on a quarterly basis.

Benefits

Together, the datasets provide an integrated, comprehensive baseline for location data. If the digital assistant's creator had not selected Pitney Bowes, it would have needed to work with several companies to fill information gaps. Working with a single vendor brings efficiencies. Data teams can focus on developing the best possible answers for consumers, rather than managing relationships and contracts, or integrating, updating and coordinating feeds from disparate data providers.

In addition, the Pitney Bowes datasets provide both relevance and data quality, ensuring that consumers around the world receive accurate, up-to-date answers from the digital assistant. Now, when a customer asks for the address of a dry cleaner in New York City's Meatpacking District, the system searches by the point of interest (POI) code for dry cleaners within the neighbourhood's spatial boundary as determined by the Pitney Bowes datasets. When someone asks "Who owns Kashmir?" the response incorporates not only the United Nations' perspective on the disputed territory, but also whether the questioner is in India or Pakistan.

For the system's end users, these questions may seem simple, but creating the knowledge base necessary to answer them correctly is extremely complex. Physical location data brings accuracy and precision to every response — which is why this leading digital assistant relies on Pitney Bowes.

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