

# Instacart uses PredictHQ data to optimize grocery transactions for millions

## Building technology to power every grocery transaction

As the leading grocery technology company in North America, Instacart is creating a world where everyone has access to the food they love and more time to enjoy it together. The company makes it possible for millions of people to get the groceries they need from the retailers they love, and for approximately 600,000 Instacart shoppers to earn by picking, packing, and delivering orders on their own flexible schedule.

Over the last 10+ years, the company has signed up over 1,400 retailers with more than 80,000 stores, making same-day delivery available to millions of families. Today, Instacart partners with retailers that represent more than 85% of the U.S. grocery industry.

## Analytics are key to Instacart's competitive advantage

At the heart of what makes this possible is a lean team of operators who serve as the air traffic controllers of Instacart. Leveraging advanced analytics and cutting-edge technology, the Platform Excellence Operations team meticulously analyzes every aspect of the ordering, shopping, and delivery process to identify and address any potential defects or inefficiencies. This team intervenes when there are incidents that may impact operations, such as:

- Storms
- Fires
- City Events
- Network power outages

### COMPANY PROFILE

**Name**

Instacart

**Bio**

Instacart makes it possible for millions of people to get the groceries they need from the retailers they love, and for 600,000 Instacart shoppers to earn by picking, packing and delivering orders on their own flexible schedule.

**Website**

[www.instacart.com](http://www.instacart.com)

**Head Office**

San Francisco

Instacart partners with hundreds of national, regional, and local grocers across the U.S. and Canada to bring their businesses online, so consumers can get the groceries they need delivered from the local retailers they love. Instacart's Platform Excellence Operations team supports this by validating the company's systems and analyzing defects to ensure high-quality fulfillment for Instacart shoppers and customers. This attention to detail ensures that customers can trust Instacart to consistently meet and exceed their expectations.

## Manual data collection was impossible to scale up

Prior to using PredictHQ, the Platform Excellence Operations team was spending hundreds of hours per year researching and interpreting city event data from countless sources and trying to piece together what the impact would be for shoppers and customers. The team would source city event data from a myriad of places including Google, individual event websites, and sometimes even hand-drawn images.

That meant that not every source was the same and not every event source had all the information needed to paint a complete picture. This led to the team facing several gaps. They would rely heavily on their historical data and had to guess when it came to important details such as local event volume and timing.

Researching relevant city event data took upwards of 10 hours per person per month. Think about the thousands of cities that these stores are in and the amount of manual work required to be able to get a sense of event impact across those cities.



If the team missed a major event, orders could be delayed, rescheduled, or even canceled entirely, leaving customers without the groceries they need.

When Instacart's Platform Excellence Operations team was first created, the company operated in only a few major US cities, but now the service is accessible to 95% of households in the US and Canada, so the manual effort needed for data collection just could not scale.

## A hassle-free method to access complete, accurate city event data

The Platform Excellence Operations team at Instacart performed various data quality checks to validate that PredictHQ could provide the information they needed, and cut down on their team's manual research time.

The Instacart team quickly realized the operational benefits PredictHQ could bring to their business, specifically in how [Polygons](#) visually displays the geographic areas impacted by events, as opposed to latitude/longitude coordinates or venue location alone, which they were used to.

The team also tracks [Predicted Attendance](#) and [PHQ Rank](#) for events within their service areas to make crucial decisions that protect the end-user experience. For example, if there is a disruptive event taking place such as a parade or marathon, they will shut down those areas where service would be severely impacted.

## Instacart integrates intelligent event data and polygons into their process

Instacart's engineering team used event data to build a new, map-based tool that overlays the PredictHQ pins and Polygons with their internal markers as well as geographic signals like zip codes.

With the new automated process, they can simply click in for added details and access all that the API has to offer, all in one place. From there, the team was able to easily set parameters around the events, and know that shoppers and customers will experience a smooth delivery.

Since partnering with PredictHQ, it's now clear which events will be the most impactful for their grocery partners. Polygons within the API is the most useful feature for the Instacart team, as it helps them visualize the event in relation to their stores and customers.



*“PredictHQ Polygons were a must for our business. The most burdensome part of our research process was digging through websites, looking at course maps, reading road closures listed by street names, and so on. With Polygons, the guesswork is gone, the translation is gone, and we can clearly see where each event is happening and what stores and zip codes they will pass by.”*

**ERICA QUINTANA**  
**MANAGER, MARKETPLACE OPERATIONS**

## Results

Before PredictHQ, setting up events took the team upwards of 400 hours per year from start to finish. With PredictHQ and their integration with the API, Instacart's team has been able to **cut their research time by 50%**, which was the most time-consuming portion of the events setup process.



*“Removing the time-consuming hurdle of finding events ourselves has freed up time for us to focus on creating parameters to protect fulfillment quality as we work around these events.”*

**ERICA QUINTANA**  
**MANAGER, MARKETPLACE OPERATIONS**

This improvement gives the Platform Excellence Operations team at Instacart dozens of hours back per month to focus on real-time impacts that are out of their control, such as extreme weather and store outages. Working with PredictHQ’s intelligent event data has deepened Instacart's understanding of:

- Live events and their impact on the local area before, during, and after they take place
- What actions to take to preserve a high-quality experience for both shoppers and customers
- How to leverage PredictHQ data to harness growth opportunities for current or potential customers

Additionally, the precise attendance numbers and locations for events have powered Instacart’s ability to align with marketing and target demand shifts in cities where big events will cause fulfillment disruptions. Compared to other similar marketing messaging, Instacart has seen a significantly improved conversion rate.



*“Our customers love knowing we have their best interests in mind and are helping them have a worry-free experience before an event-driven disruption comes to their neighborhood!”*

**ERICA QUINTANA**  
**MANAGER, MARKETPLACE OPERATIONS**

## **Instacart continues to innovate to shape the future of grocery**

Instacart is a prime example of an innovative industry leader investing in third-party data to streamline data collection and analysis, and accurately predict demand levels across their business locations at scale. The integration of PredictHQ data supports their goal to build the tech to power *every* grocery transaction.

Instacart's collaboration with national, regional, and local grocers has revolutionized the online grocery shopping landscape. By continuously analyzing and optimizing their systems with new data, Instacart remains at the forefront of the industry, delivering groceries from beloved local retailers to customers' doorsteps with unparalleled convenience and quality.