

# MORE ACCURATE LABOR OPTIMIZATION WITH DEMAND INTELLIGENCE

FACTORING IN DEMAND-  
DRIVING EVENTS FOR  
MORE EFFICIENT  
STAFFING





# UNLOCKING THE IMPACT OF EVENTS ON YOUR DEMAND

The last two years made one of the hardest problems in business even harder. Labor optimization was never easy and required constant re-evaluation and iteration. Then the pandemic blew demand patterns to pieces.

A lot of effort and investment is going into optimizing the supply side of the equation:

- Updated capacity analyses
- Revising par levels for pandemic "norms"
- More generous worker compensation packages
- More outsourcing
- And of a hard war for talent

This report focuses on some major **innovations on the demand side** that are saving businesses huge amounts of wasted staff hours and missed sales. Namely: identifying which events drive demand for your company specifically and ensuring you're ready for similar events.

Knowing this for each of your locations is not only possible, but highly profitable. The right kind of event data provides context and actionable insight into your **demand drivers** so you can align your staffing plans for more specific and accurate demand forecasts.

It's called demand intelligence - and this report will introduce you to how leading companies are using it to ensure they have the right amount of staff and contractors ready to go for each day's demand.

# DEMAND DRIVERS EXPLAINED

Demand drivers are events that impacts demand significantly enough, either higher or lower, to require a change to staffing, inventory or pricing strategies. Demand drivers are particularly impactful in labor optimization research, enabling you to both pinpoint previous drivers that might distort forecasts and lead to overstaffing, as well as prepare for incoming demand drivers.

**+45%**

*For a global QSR chain, certain kinds of festivals can drive demand for their breakfast offerings up by ~45% per impacted store.*

**+124%**

*For another of the USA's top ten QSR companies, heat waves can drive demand for ice cream up by 124%, but down for burgers down by on average 41%*

**-20%**

*For one of the world's leading hotel brands, analyzing event impact on their demand vs their competitors revealed they were missing 20.6% of available of conference-related demand.*

**+10%**

*For world-leading hotel chain, implementing PredictHQ's event data led to a ~9% improvement in forecast accuracy on highly impacted days, and almost 12% on low impact days.*

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LABOR OPTIMIZATION**

# STEP 1: UNDERSTAND HOW EVENTS IMPACT YOUR INDUSTRY'S DEMAND

If your business fits into the industries listed above, you're in good company. Leading brands are already using intelligent event data in their demand forecasting and planning.

While tapping into the anecdotal knowledge from your team can be valuable, with today's chaotic new normal, companies need a data-driven process to prove the relevance of each event type.

Each company's demand drivers vary slightly, based on their locations, target market demographics and operational priorities. The summaries here are just a starting point of the most broadly impactful event categories per industry, requiring staffing adjustments.

## **Accommodation Demand Drivers**

From our data, we know among the most impactful categories for accommodation (as well as airline and travel platforms) are:

- Expos
- Conferences
- Festivals
- Tier one sports games
- School holidays
- Key academic dates (think graduations)

*"Understanding why your demand surges enables you to make the most of every opportunity."*

## **QSR and Retail Demand Drivers**

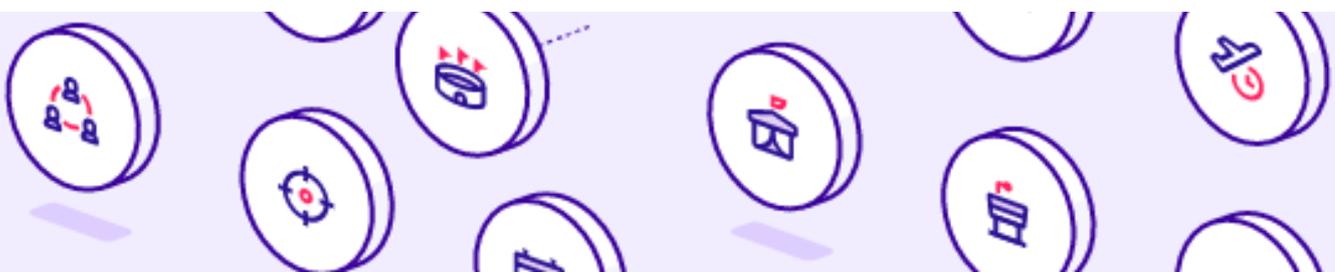
While a high-end salad bar is different from a major burger chain, our customer data reveals the following events impact most QSR and restaurant companies:

- Sports games
- Concerts + Festivals
- Performing arts
- Severe weather
- School holidays
- Academic events
- Expos + Conferences
- Televised sporting events

## **Transport and Parking Demand Drivers**

This is one of the most important industries for data-led analysis, as it is an incredibly dynamic demand space. But above and beyond the key Retail Demand Drivers listed above, they are also impacted by:

- Larger community events
- Strikes and protests
- Public holidays
- Observances



# HOW INDUSTRIES USE DEMAND INTELLIGENCE

Applications vary, but regardless of industry, the process for using intelligent event data to improve labor optimization follows the **same five steps**.

This report will walk you through the process, and the PredictHQ team is standing by to assist and customize the process for your team's goals and resourcing.

## RETAIL

Retailers (and retail platforms) are using demand intelligence to know when events nearby will drive up footfall and demand near each store or delivery hub, so they can align their staffing and inventory strategies to incoming demand volumes.

[Retail Case Study](#)

## TRANSPORT

Transport companies use demand intelligence to inform drivers, fleet managers and logistics teams about where surges in demand will occur so they can be ready to meet it with minimal wait time, delays and misplacement of assets.

[Transport Case Study](#)

## TRAVEL

Particularly impacted by the pandemic, travel groups are using demand intelligence to architect their recovery strategies. Knowing exactly why people will travel in this new era enables accurate pricing, packaging and staffing.

[Accommodation Case Study](#)

## PLATFORMS

Platforms seek out and use demand intelligence as a powerful differentiator in the hyper competitive marketplaces they operate in. It both makes their offering more accurate, but also more explainable for their customer's stakeholders.

[Platform Case Study](#)

## STEP 2: PINPOINT EVENT IMPACT ON YOUR DEMAND AND STAFFING NEEDS

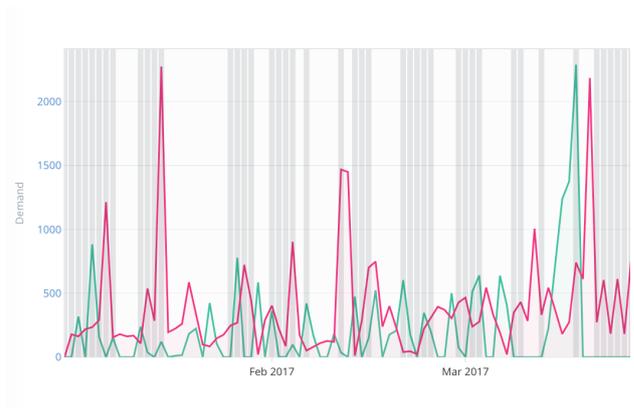
Drawing on anecdotal information from your team or composite, industry-wide trends is valuable. But the breakthrough is pinpointing what impacts *your* demand specifically.

This is achieved by comparing your transaction data with historical events data to pinpoint impact. This should factor in:

- Event type + subtype
- Event frequency/rarity
- Event size
- Proximity to your locations

Once the demand impact has been revealed, you can re-calibrate labor strategies to be real-world aware: flexing up or scaling down staffing as needed. Often, companies discover attributable patterns that appeared random, such as college sports, academic sessions or mid-tier professional conferences.

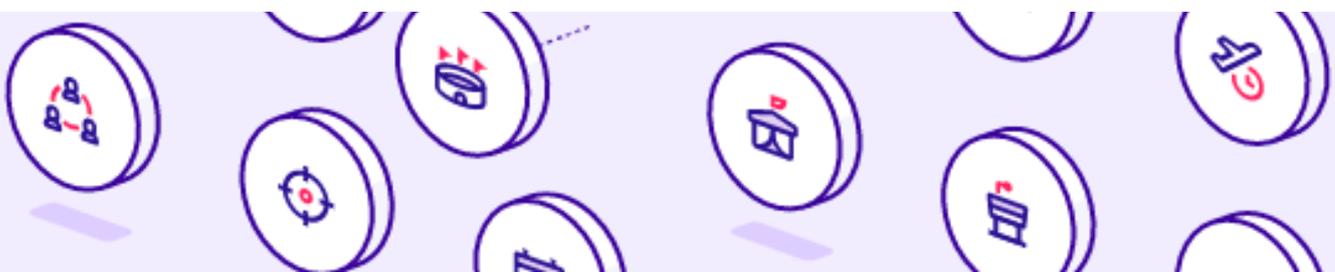
Whether you choose to ingest event data directly into models; integrate it into existing business intelligence tools or simply arm your location managers with a list of impactful events, this knowledge enables a scalable and targeted approach to labor optimization.



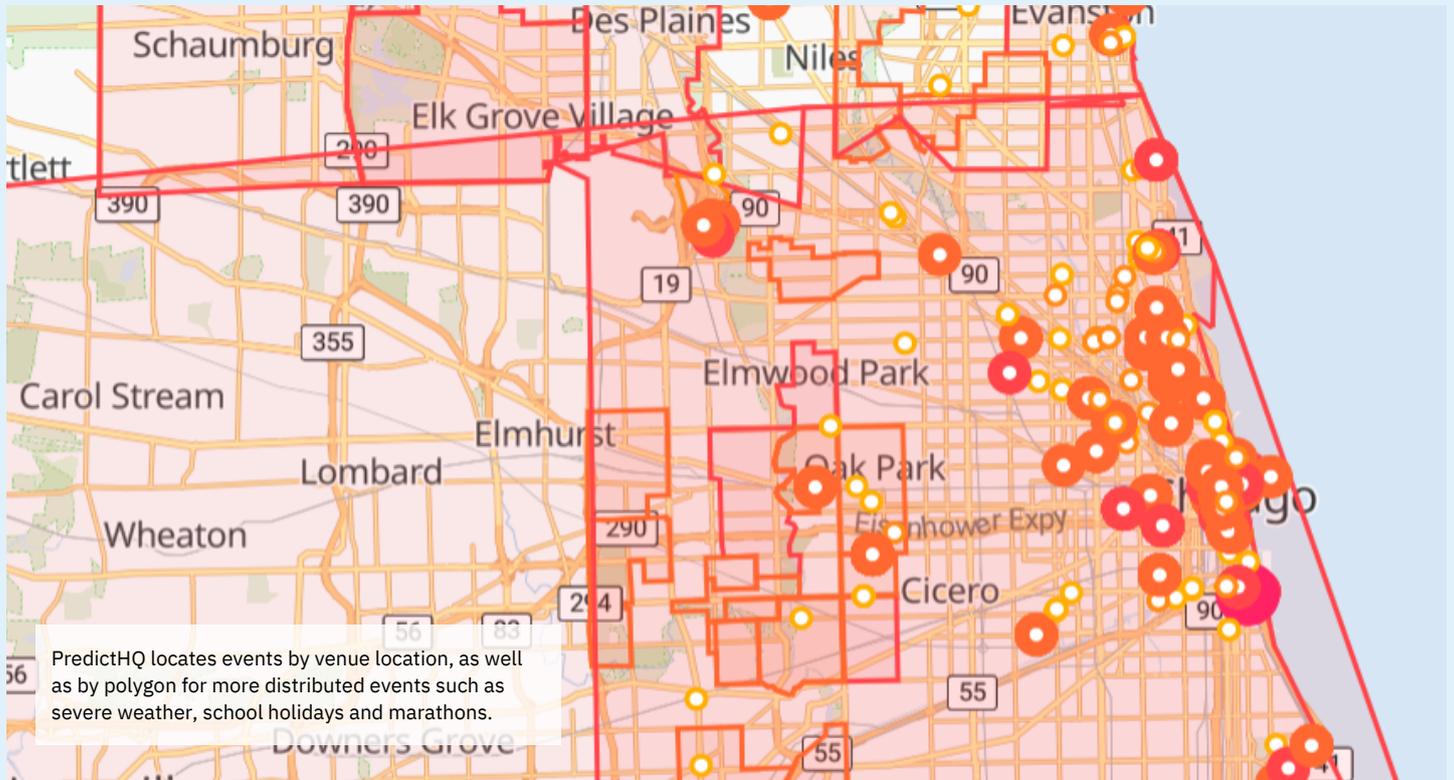
correlation engine, which compares each store's transaction data with historical events within a certain radius. The pink is relevant events, and the green is demand.

### Example impacts

- A coffee chain with 10,000+ stores across the USA found they required on average one to three fewer staff during college holidays (which vary by school).
- A major QSR were able to account for clusters of demand-driving sports events more accurately, so they prepared for the roughly monthly surge rather than expecting it to repeat (and overstaffing).
- A major ride-share company was able to identify when events would end and send alerts in advance to drivers nearby to ensure minimal wait time for passengers and for driver partners.



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### STEP 3: DIFFERENTIATE BY LOCATION

A hotel in the central business district is going to be impacted by different kinds of events when compared to one in an emerging culture hub of town. And a store near the stadium will be more impacted by sports and concerts than one in the city that looks after business travellers, and one across town beloved by college kids and school parents post the morning drop-off.

Identifying the demand impacting events for each location or type of location is critical. There are 6,400+ events with more than 10,000 people in Q1 of 2022 in the USA, so being able to identify which events matter to which location is critical.

Above is a heat map of events in Chicago in February 2022. As you can see, they range in size and location, but they also range in frequency. Most cities will have highly active venues, as well as dining, retail, accommodation and transport hubs that benefit from this activity.

Understanding both how each city is impacted by events and your locations within each is important.

*"Many businesses will have multiple locations per city, each impacted differently."*

How you identify which events matter most for each location will come down to how you want to use event data, which we explore in step 5.

## STEP 4: UPDATE YOUR STAFFING STRATEGIES TO FACTOR IN EVENTS

How companies operationalise these insights varies on their size, stage and resourcing approach.

### **Companies with substantial fixed staffing costs can identify a more accurate baseline**

Establishing a more accurate quantitative baseline enables companies to invest in training and retaining their core full-time and part time staff. This is a model many of our accommodation and travel customers use. By accounting the cause of anomalies in demand, and excluding these from rolling averages that guide forecasting or planning comes the ability to flex their spending on casual or other staff augmentation strategies for demand surges caused by events.

### **Companies with a substantial flexible staffing base can more accurately assign shifts, providing reliability to employees**

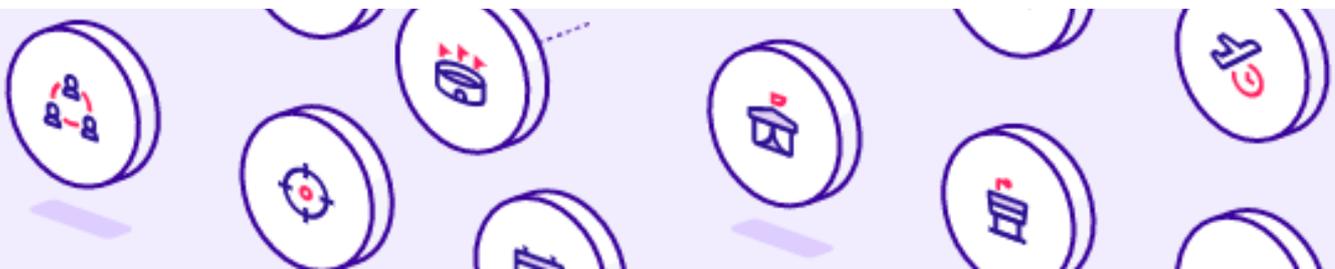
A key challenge for many of our QSR and retail customers is the enormous competition for staff right now. It's hard to drive accountability and performance when your staff can walk across the road or next door and get another job in a heartbeat. Being able to predict

upcoming peaks and troughs in demand several weeks in advance enables these companies to more accurately roster staff on with fewer last minute changes, building trust, commitment and ensuring availability.

### **Companies with a dependency on delivery or on-demand partners can win contractor loyalty and availability**

The battle for on-demand labour such as drivers, delivery couriers or shoppers has never been fiercer. Being able to notify your on-demand team in a timely way about upcoming surges in demand ensures having enough contractors or flexible workers ready to meet demand to build trust and reliance on your on-demand partners, while minimizing wait times for customer.

*"Ultimately, aligning your demand forecasts and plans to the real-world drives more efficient investment and more reliable opportunities for your personnel."*



## MORE ACCURATE LABOR OPTIMIZATION

Sunday 27 Feb	Monday 28 Feb	Tuesday 1 Mar	Wednesday 2 Mar	Thursday 3 Mar	Friday 4 Mar	Saturday 5 Mar
Chicago Dental Society Midwinter Meeting	NHL - Chicago Blackhawks vs St. Louis Blues	Logan Square Indoor Farmers Market	Logan Square Indoor Farmers Market	Logan Square Indoor Farmers Market	NHL - Chicago Blackhawks vs Edmonton Oilers	Milwaukee Bucks vs Chicago Bulls
LMT LAB DAY Chicago	Chicago Theatre Week	Cordae with Justine Skye	BakingTech Conference	Marquette Golden Eagles vs DePaul Blue Demons	Logan Square Indoor Farmers Market	Logan Square Indoor Farmers Market
Memphis Grizzlies vs Chicago Bulls	Logan Square Indoor Farmers Market	First Day of Women's History Month	Come From Away (Chicago)	Retrofit USA	BakingTech Conference	Lane 8
Chicago Theatre Week	St. John's Red Storm vs DePaul Blue Demons	Isra and Mi'r'aj	OneUs	BakingTech Conference	Alvin Ailey Dance Theater	Get the Led Out (Rescheduled from March 6, 2021)
		First Day of	Ash Wednesday			

## STEP 5: SECURE A FORECAST- GRADE EVENT DATA SOURCE

While each company has their own requirements and goals, the way PredictHQ customers use our data falls into three categories:

**1. Visibility:** empower your end users such as hotel managers, store or area managers, driver partners or revenue managers to know about impactful events so they can decide what action to take in response, or to better trust and respond to directions from head office. As the pandemic blew demand patterns to pieces, this is increasingly being viewed as a must-have source of insight.

**2. Integration:** factor events into existing business intelligence platforms and processes to make your planning or forecasting real-world aware. This is a low-code solution that ensures you are tapping into more of the impact of events, and is more feasible for organizations with more than five locations as it can help automate smarter decision making. This is our fastest growing approach to using our enriched and verified event data.

**3. Machine-learning forecasting:** ingest demand intelligence directly into your relevant machine learning models for better informed and more accurate forecasting at scale.

**Whatever approach you choose, the PredictHQ team is ready to assist you to create your most accurate workforce strategies yet. [Get in touch today.](#)**