



Leverage powerful competitive  
market intelligence to improve  
store performance and accelerate  
decision making



→  
pass\_by technologies limited

→  
established\_2023

all rights reserved  
copyright 2023

London\_UK  
New York\_USA

[PROPRIETARY AND CONFIDENTIAL]



# Agenda

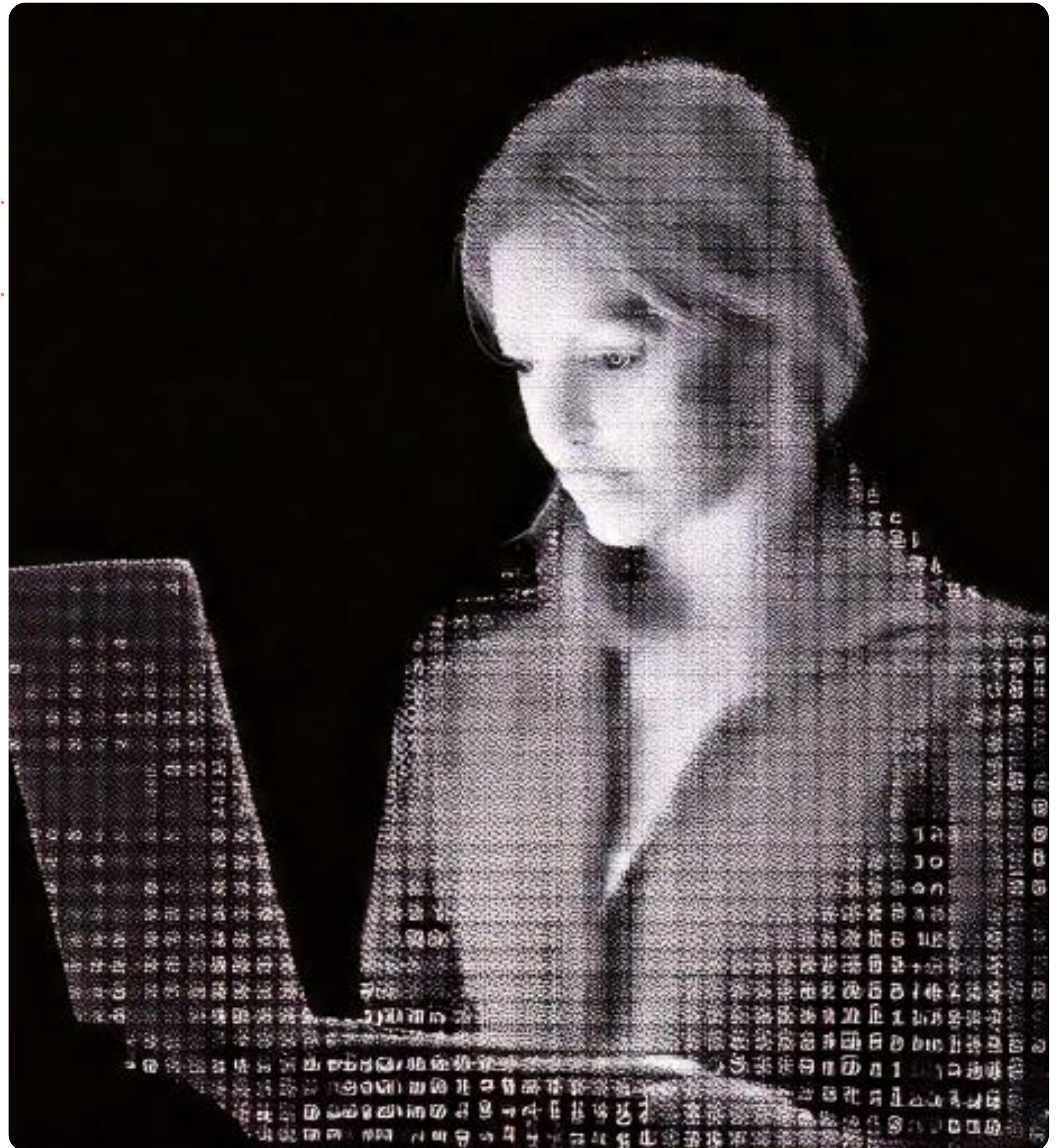
01 Why pass\_by

02 The product and data

03 The accuracy

04 Use cases

05 Case Studies





Are you lacking visibility into competitors?

Are you missing growth opportunities?

With pass\_by you can:

□ **Win the battle for the customer**

See where your competitors pull ahead—and how to pull ahead of them.

□ **Turn data into operational gains**

Align teams with actionable insights that reduce costs and increase impact.

□ **Unlock the customer journey**

Connect visit patterns to behavior, intent, and outcomes.



# The Retail Data Blind Spot

**❑ Data is Hard to Access, Interpret, or Link to ROI**

Fragmented data systems obscure the full picture.

**❑ Over-Reliance on One Dataset Skews Decisions**

Single-source data misses the complexities of modern retail.

**❑ Competitors Seem Ahead of Market Changes**

Without predictive insights, you're always reacting.



You *already* have this data for ecommerce.

Now, pass\_by is bringing this to  
brick-and-mortar commerce, too.



Competitor 1

Daily Visitors

Outperforming You By

The mall

Category Sales Growth

Loyalty

**This is your  
store.**

**You measure it  
perfectly. But  
ever wondered  
what's happening  
in all the stores  
around you?**

Competitor 2

Key Shopper Profile

The zip code

Category Transaction  
Growth

The city

Your Category Rank

Competitor 4

Trade Area

Competitor 1

Daily Visitors

5,445

Competitor 2

Key Shopper Profile

School Run  
Families

Competitor 3

Outperforming You By

+3.68%

The mall

Category Sales Growth

+8.63%

Loyalty

13%

pass\_by uncovers  
not just your  
competitors  
performance, but  
also the  
intentions and  
actions of  
customers in your  
local markets.

The zip code

Category Transaction  
Growth

+4.74%

The city

Your Category Rank

4/13

Competitor 4

Trade Area

// pass\_by

# This helps retailers to answer competitive questions that help them grow

Which underserved customer groups are we missing in our current trade areas?

Where are the optimal locations to expand our reach and attract more of our target customers?

Does this store's location support our long-term customer retention and growth goals?

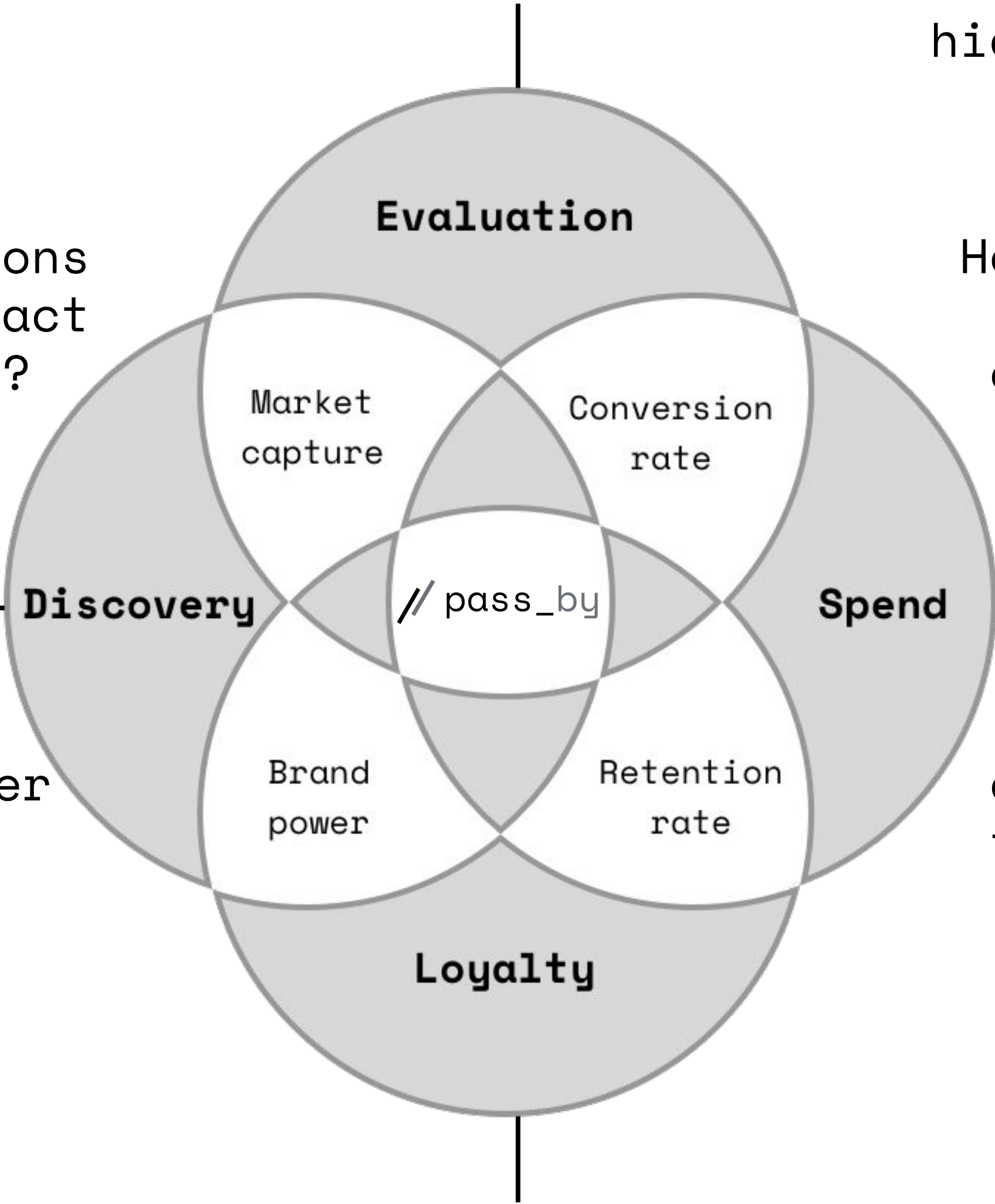
What strategies will drive higher visits from customers already close to our stores?

Are competitors capturing higher-value customers within our shared market?

How do our store visits stack up against direct and indirect competitors in key trade areas?

Is our specific product category seeing favorable spend trends in this mall/trade area?

Are our store's performance gaps due to internal execution or external market conditions?





# Agenda

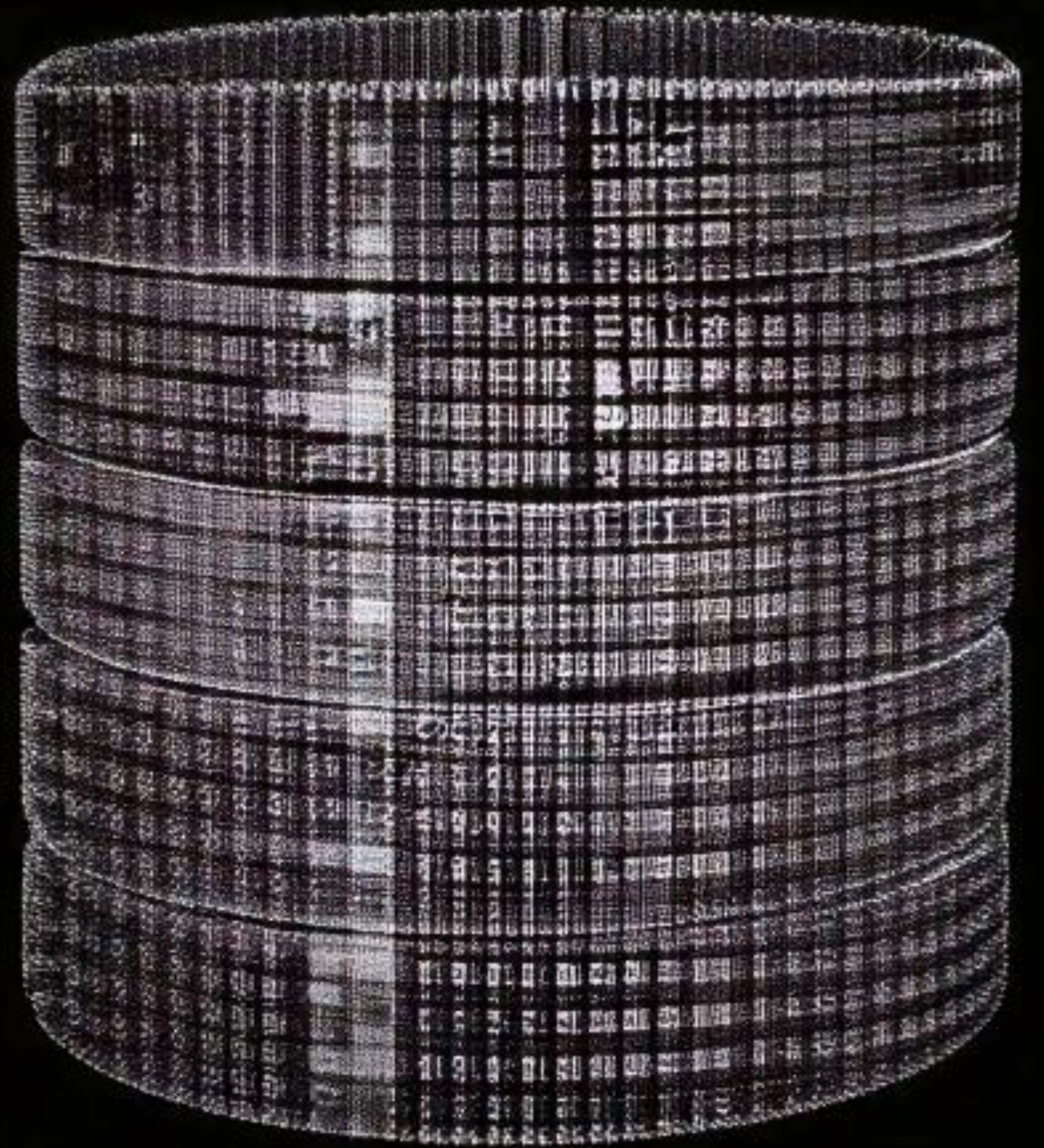
01 Why pass\_by

02 The product and data

03 The accuracy

04 Use cases

05 Case Studies





// pass\_by leverages unique data to deliver best in class real world intelligence.

**95%**

Inside mall coverage

**93%**

Coverage of US retail stores

**6+**

Years of data history

**#1**

Ranked data provider accuracy in relation to S&P 500 retail brands

**Powerful Location Intelligence** on the customer journey at any geographical level

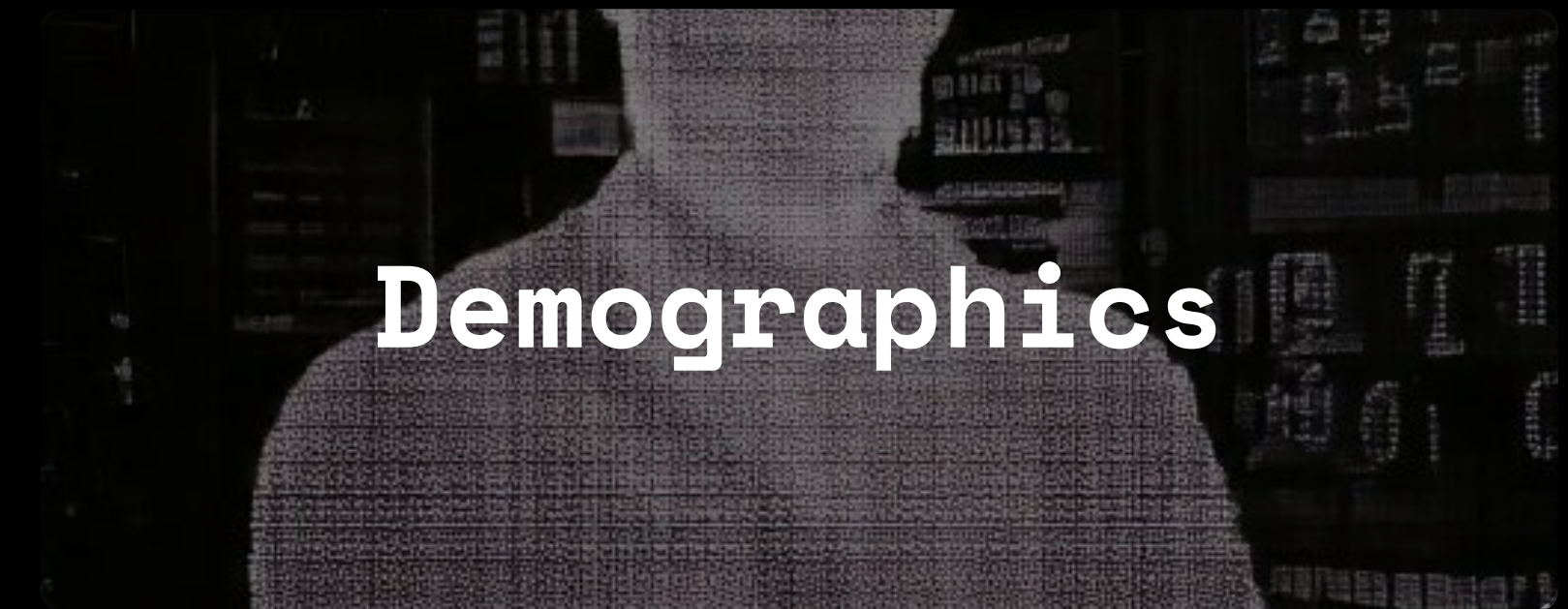


// pass\_by

# What's in our data?

Our AI is designed to cut through the noise, seamlessly connecting and making sense of the messy, disconnected, and incompatible datasets found in the brick-and-mortar world.

Revealing consumer behavior in brick-and-mortar for, unlocking insights, and leveling the field with e-commerce.





# Our Products

## Almanac

Core intelligence platform  
combining traffic,  
demographic, competitor  
data

## Data Feeds

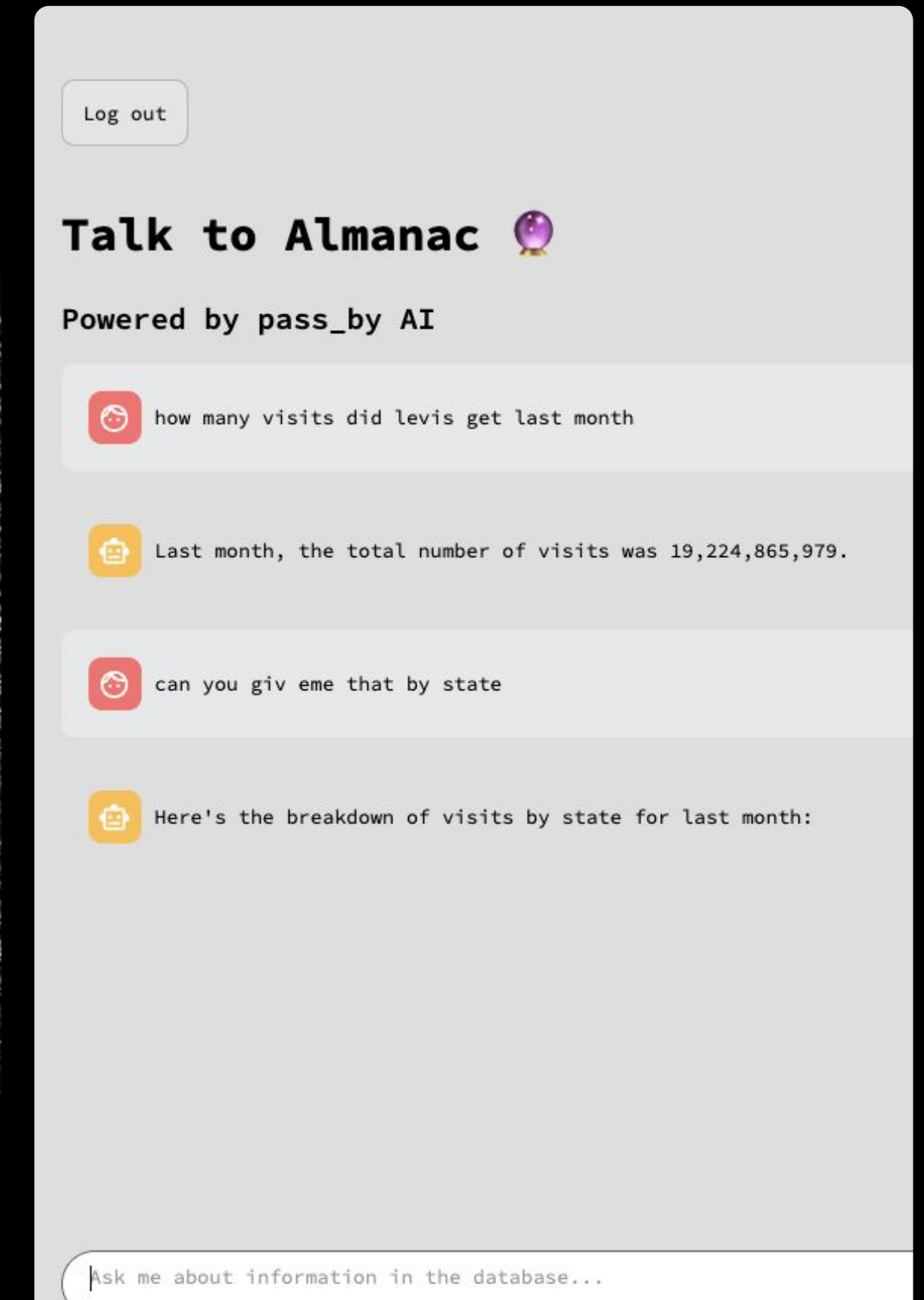
Ongoing feeds for  
store-level and  
competitor analysis

## API

Integrate pass\_by data  
into existing systems

## LLM (coming soon)

Ask natural-language  
questions, get instant  
insights



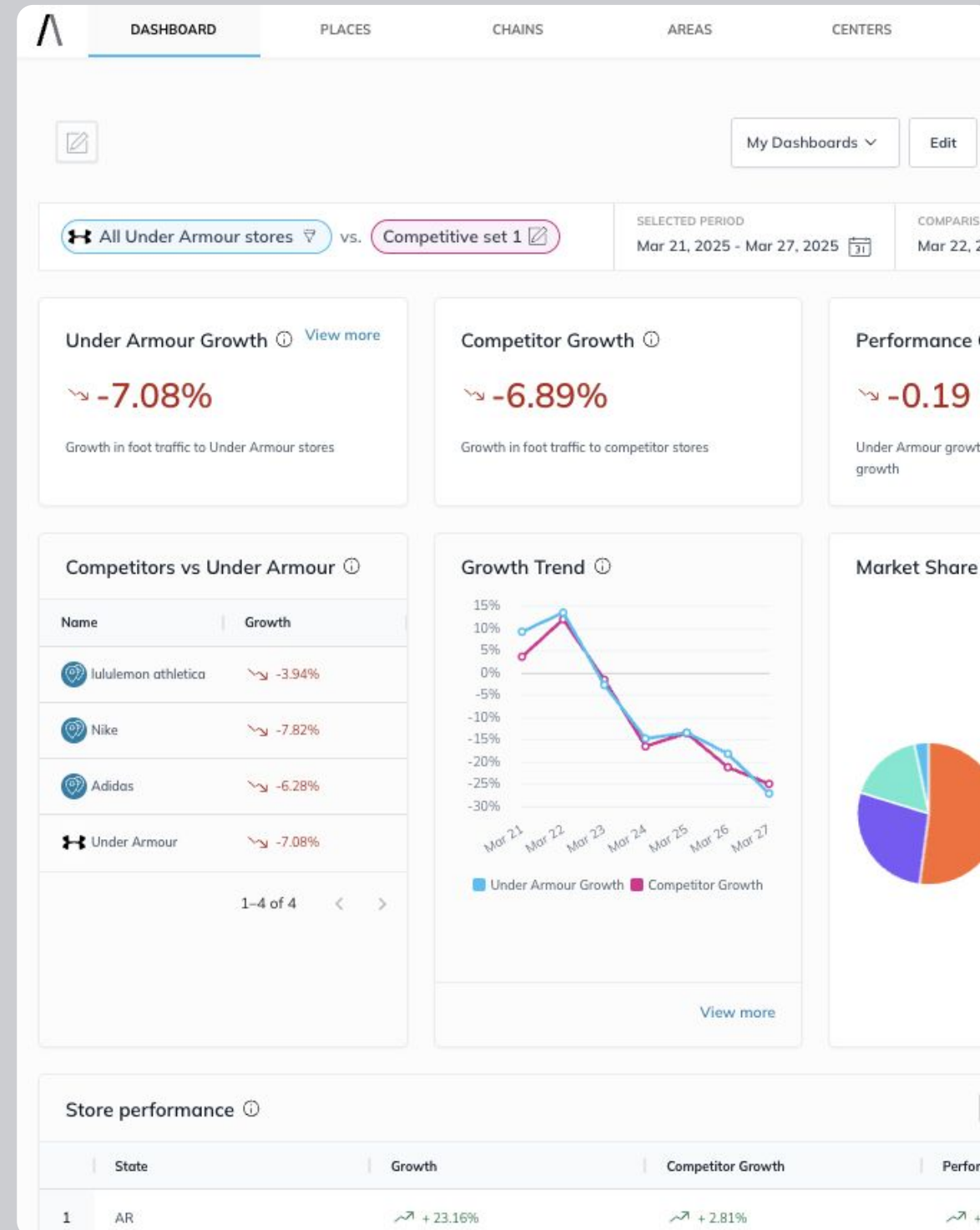


# Almanac

The easiest way to  
access powerful market  
intelligence on your  
competitors.







Win the Battle for the Customer

Track foot traffic winners

Identify share losses to rivals

Spot sales gaps vs. competitors

Pinpoint competitor performance edges

Assess your standing in trade areas



Turn Data into Operational Gains

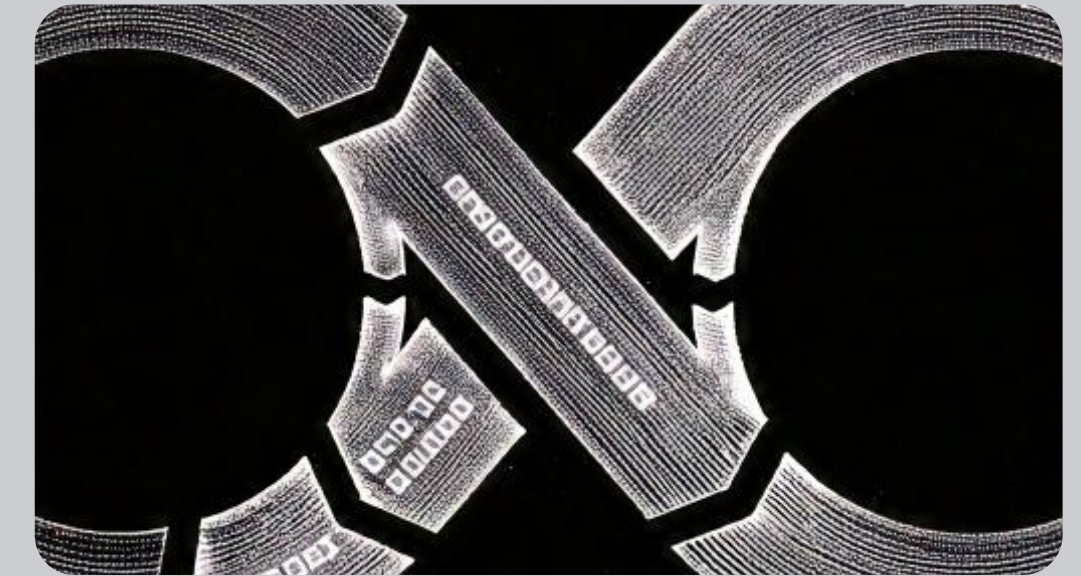
Monitor changes with dynamic dashboards

Identify underperforming stores, act fast

Prioritize geos with precise insights

Give teams actionable answers, not just data

Find locations to improve or replicate



Unlock the Full Customer Journey

Target high-value shopper segments

Psychographics to explain customer visits

Track customer origin and cross-shopping

Link foot traffic to revenue insights

Align strategy with true customer profiles

Almanac -  
what's inside



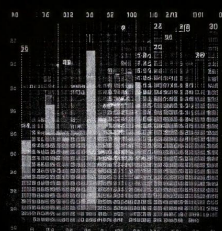
# Data feeds & API

Ongoing feeds for  
store-level and  
competitor analysis,  
directly into your own  
data infrastructure





# Data feeds



## Data tables

store\_visits: Tracks daily visits to stores, detailing the total number of foot traffic occurrences.

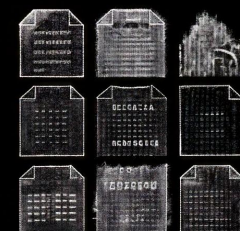
store\_visitors: Provides anonymized visitor profiles to understand demographic and behavior patterns.

store\_info: Contains detailed information about each store, including location, brand affiliation, and classification.



## Delivery options

- Bulk API
- Push to SFTP
- Snowflake Share
- Push to S3 Bucket
- Pull from S3 Bucket
- Databricks Data Share
- Push to BCG Bucket
- BigQuery
- Push to Azure Blob Storage



## Format

- Parquet
- CSV
- JSON Lines



## Frequency

- store\_visits: Delivered daily with a 5 day latency
- store\_visitors: Delivered on the first Monday of every month containing data for the prior month



# Agenda

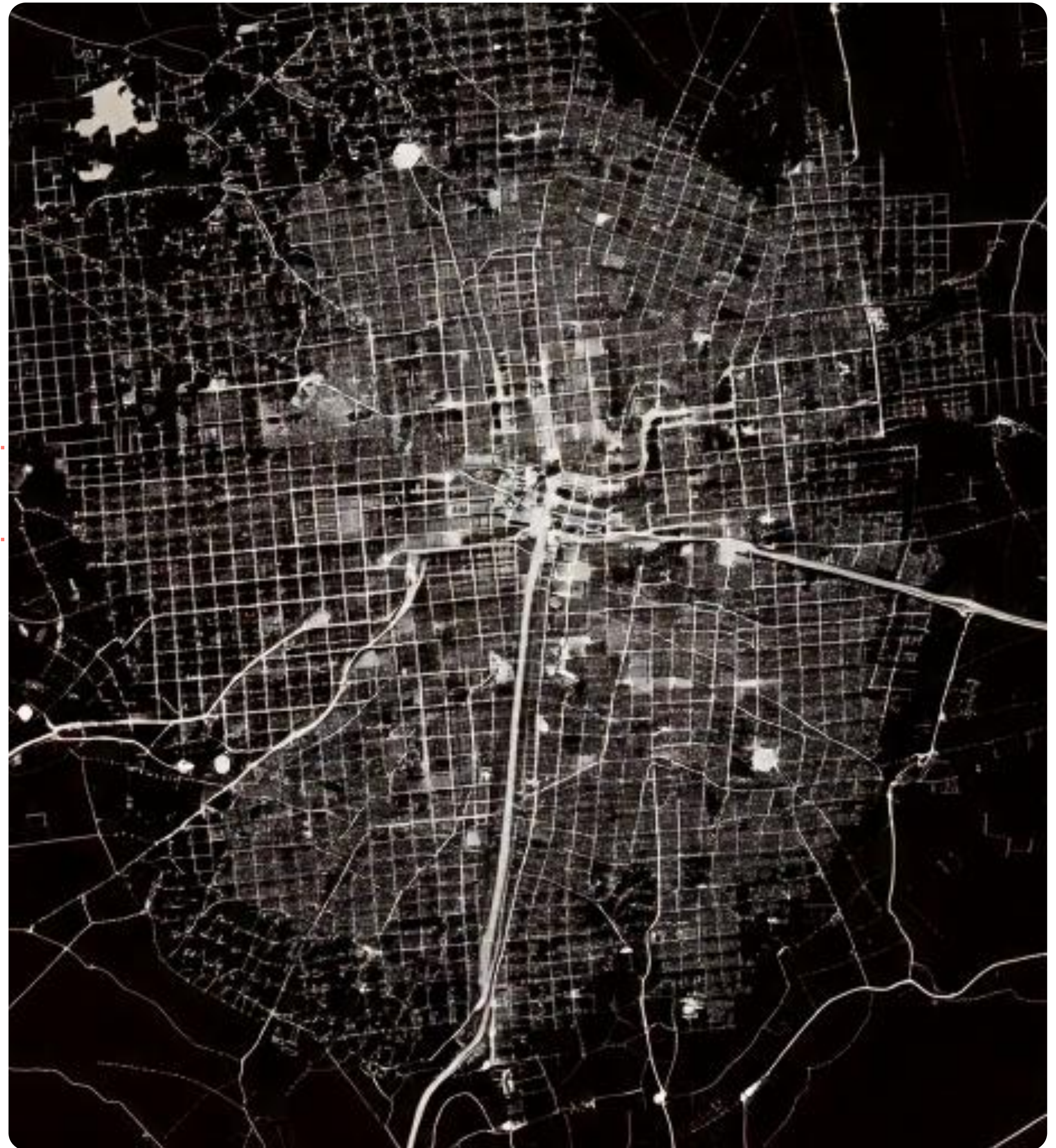
01 Why pass\_by

02 The product and data

03 The accuracy

04 Use cases

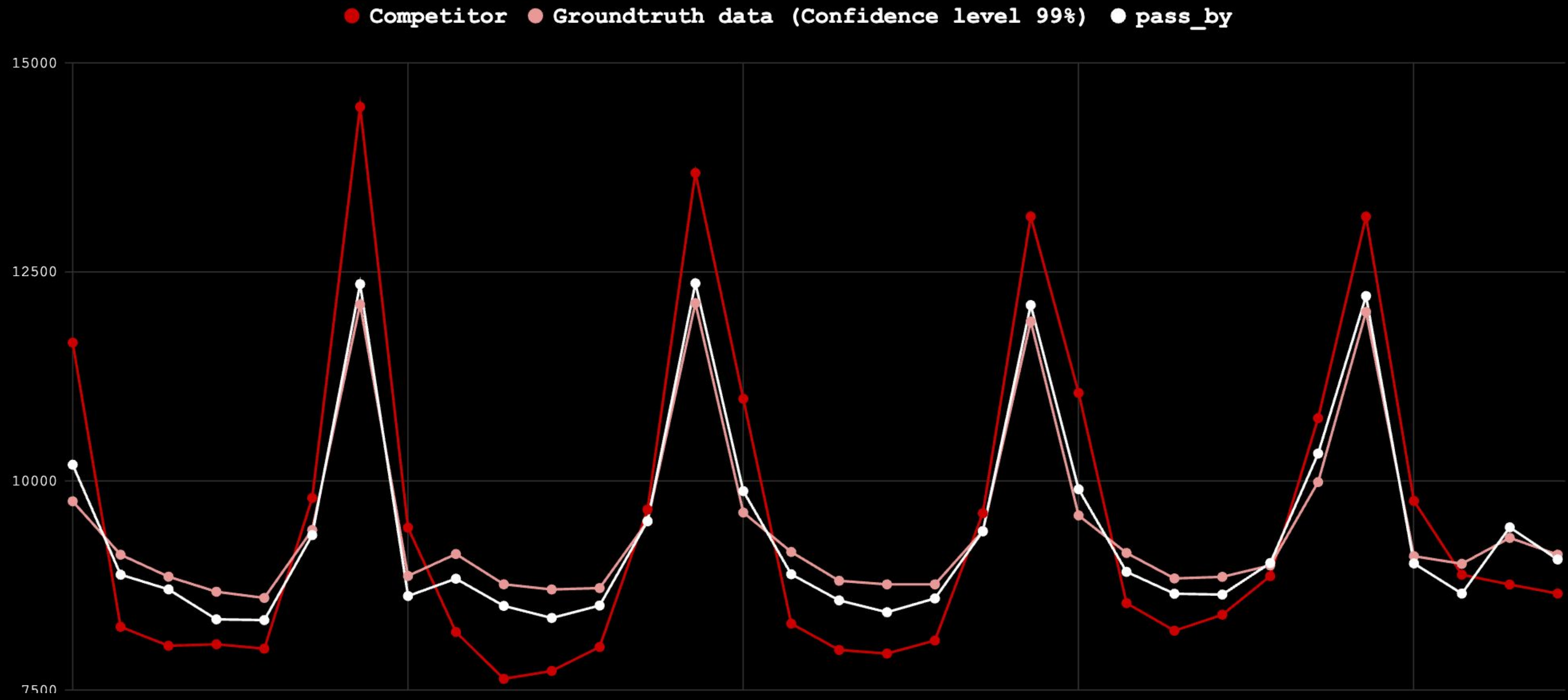
05 Case Studies





// pass\_by

# Our accuracy is unrivalled



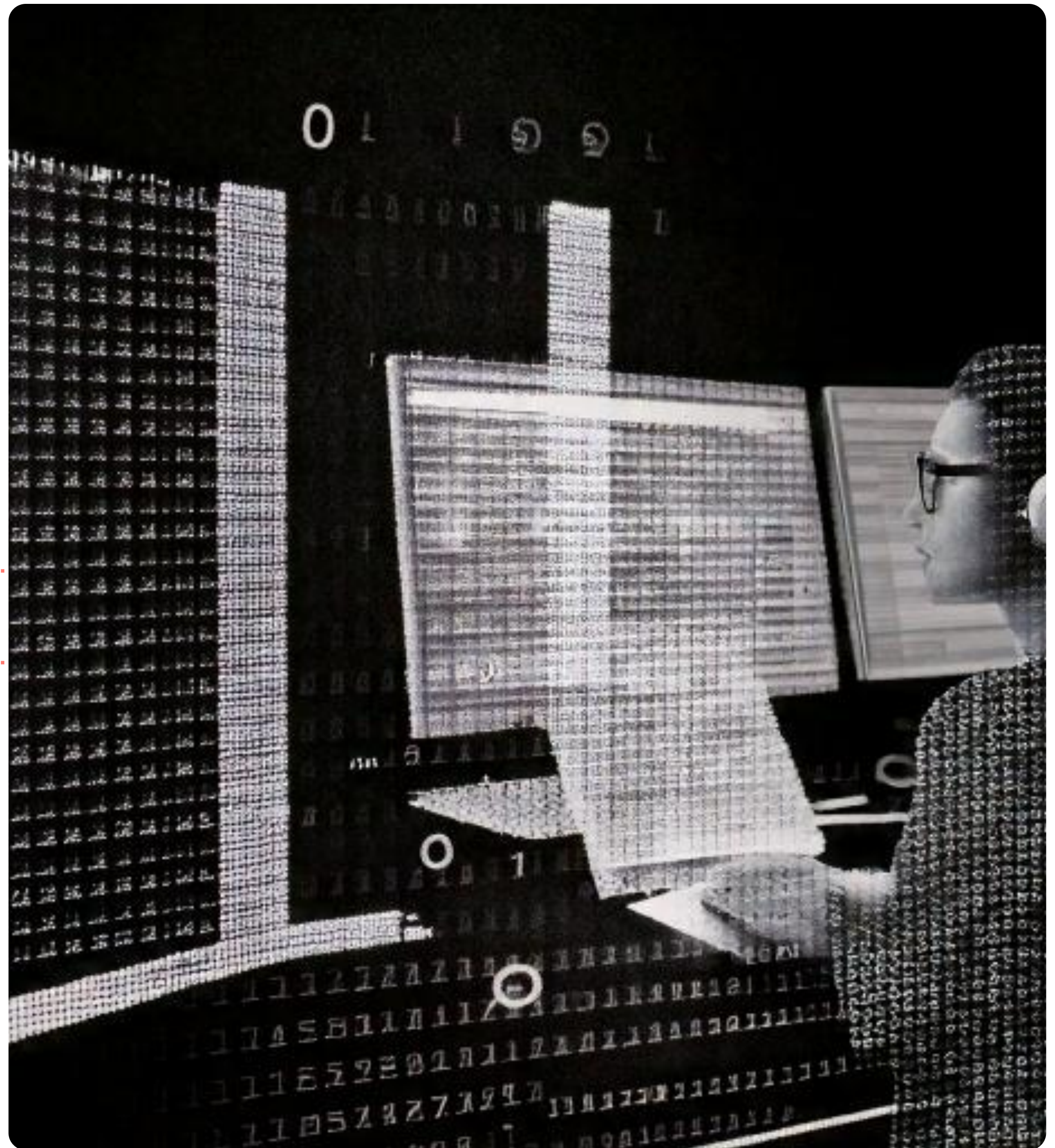
Time series comparison of our data v. a notable competitor; both anchored against actual traffic counts



# Agenda

- 01 Why pass\_by
- 02 The product and data
- 03 The accuracy
- **04** Use cases

---
- 05 Case Studies



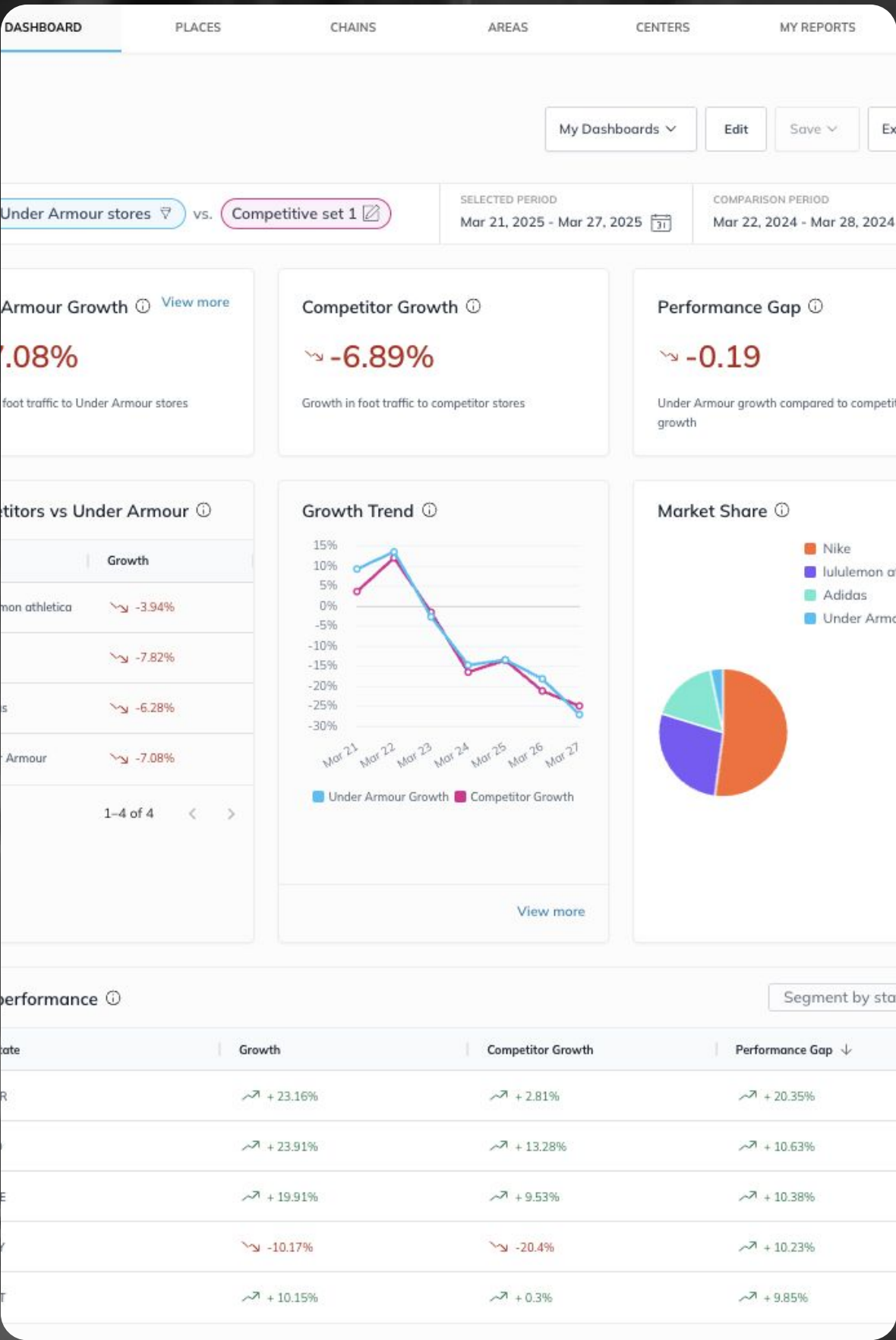




## Demand Forecasting

Useful for:

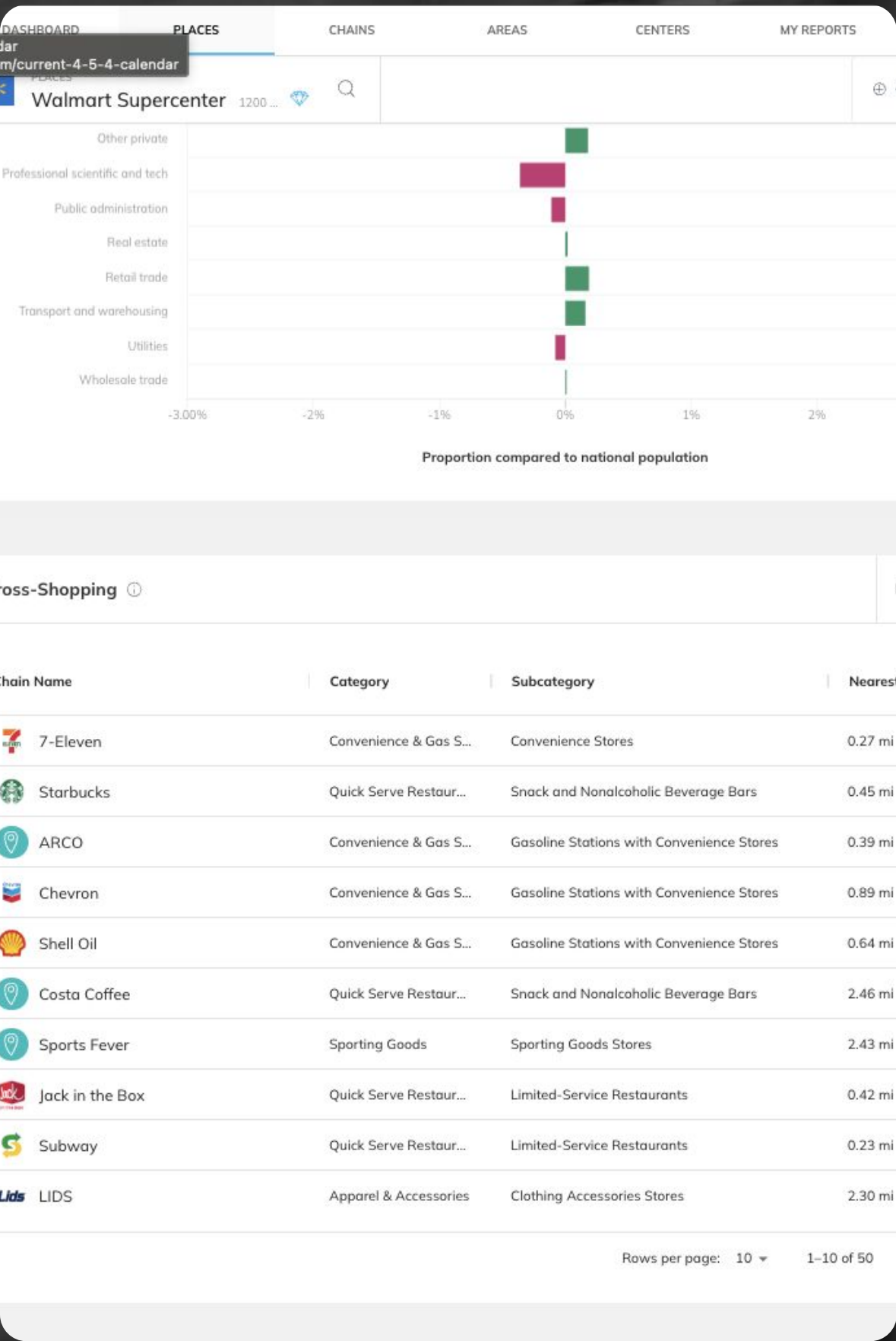
- Inventory Planning
- Workforce Planning
- Promotion Planning



## Competitor Benchmarking

Useful for:

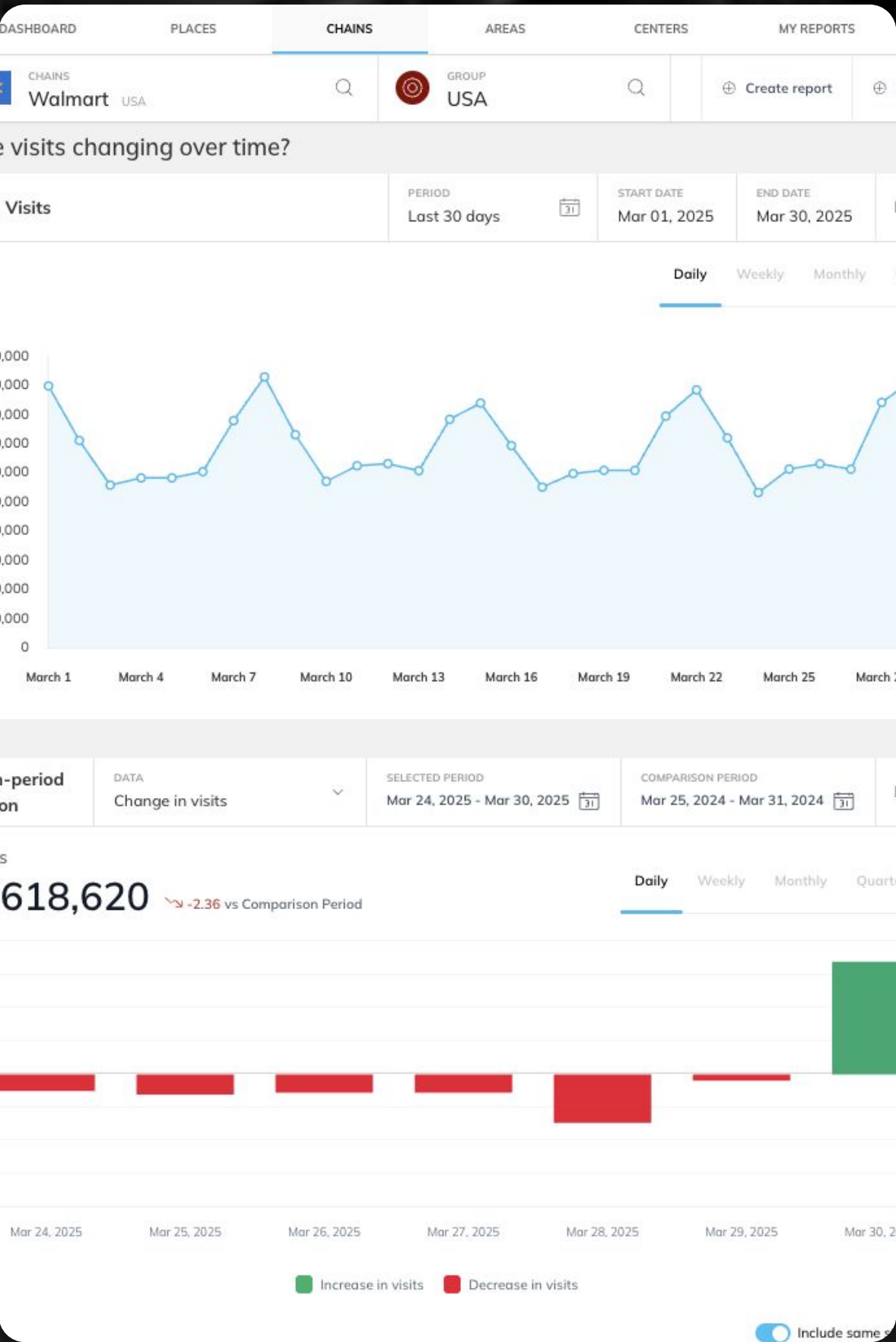
- Comparing store traffic
- Tracking share shifts
- Benchmarking by market



## Cross Shopping

Useful for:

- Spotting shared shoppers
- Revealing brand overlaps
- Targeting switcher audiences

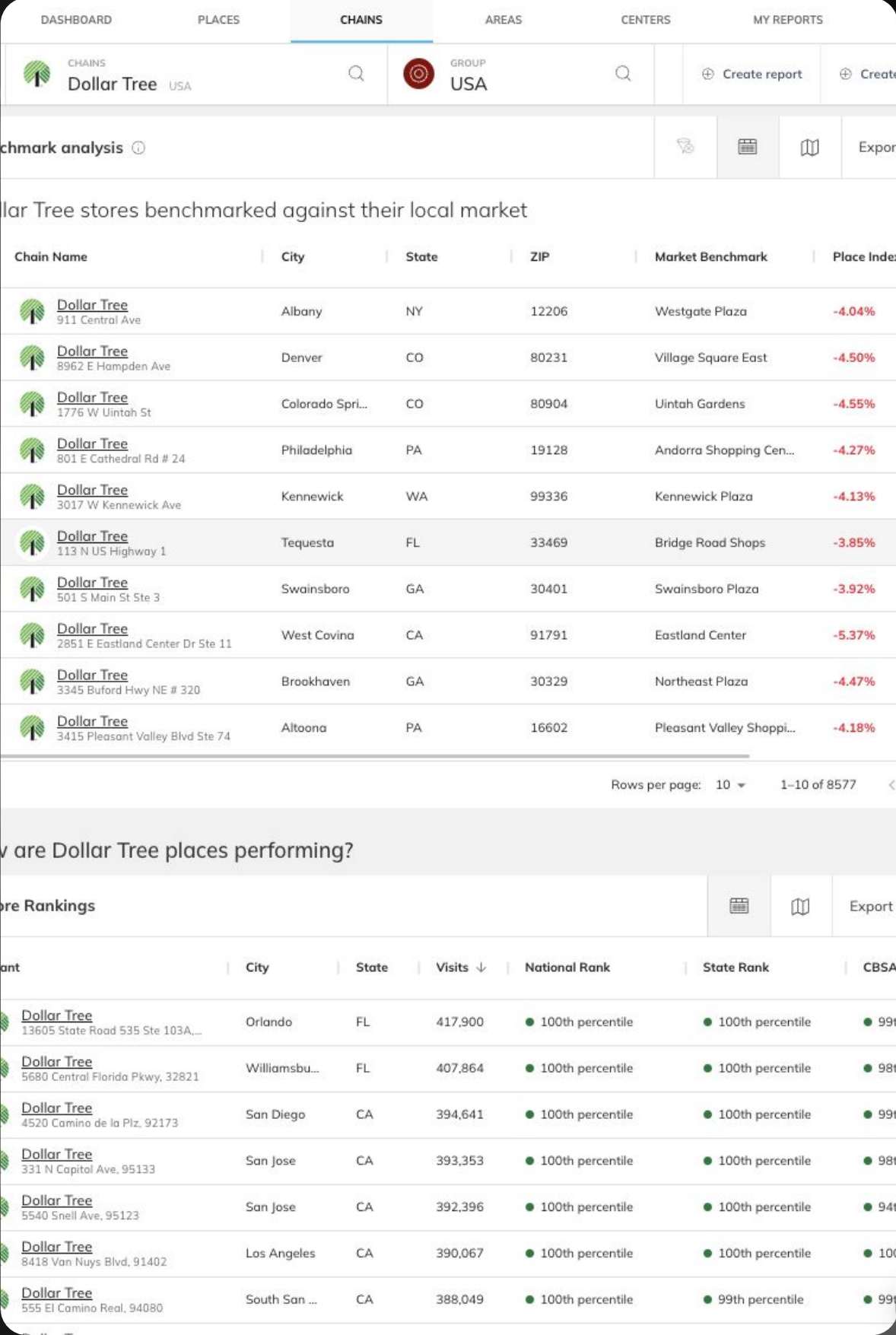


## Performance Troubleshooting

Useful for:

- Flagging weak locations
- Diagnosing traffic drops
- Prioritizing key fixes

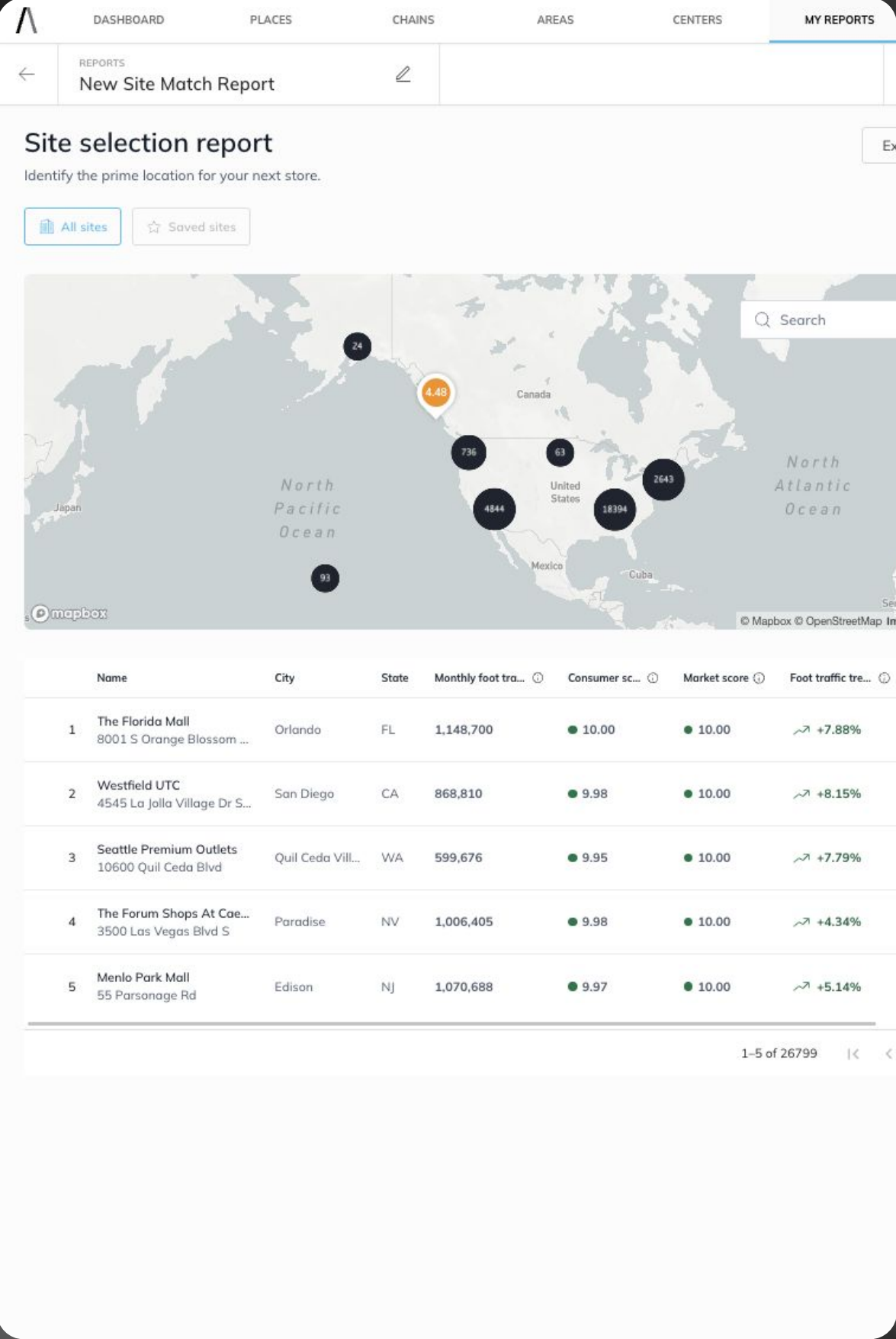




## Site Management

Useful for:

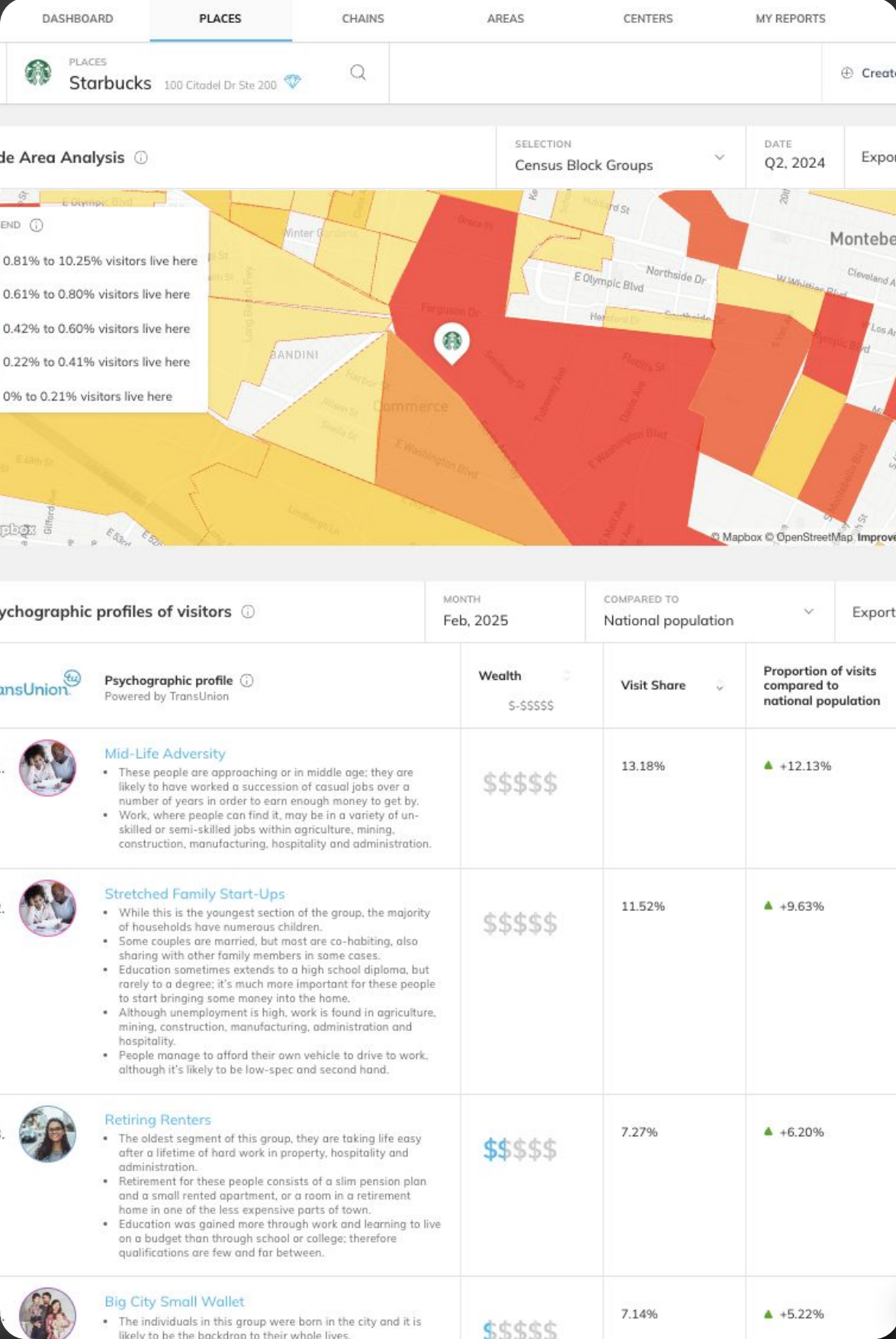
- Ranking store potential
- Reallocating by need
- Tracking store impact



## Site Selection

Useful for:

- Predicting site traffic
- Finding and comparing location options
- Matching with demand



## Trade Area Analysis

Useful for:

- Mapping customer origins
- Comparing trade areas
- Finding growth gaps



## Audience Demographics

Useful for:

- Profiling real shoppers
- Comparing brand audiences
- Targeting top segments



# Agenda

- 01 Why pass\_by
- 02 The product and data
- 03 The accuracy
- 04 Use cases
- 05 Case Studies





Case studies

Four recent examples from different verticals to illustrate direct value from market intelligence.

Site selection for  
geographic expansion

Eyewear

Competitive Benchmarking  
for Customer Loyalty

Department store

Case studies

Analyzing Customer  
Origins and Gaps

Footwear

Benchmarking Competitor  
Performance for Growth

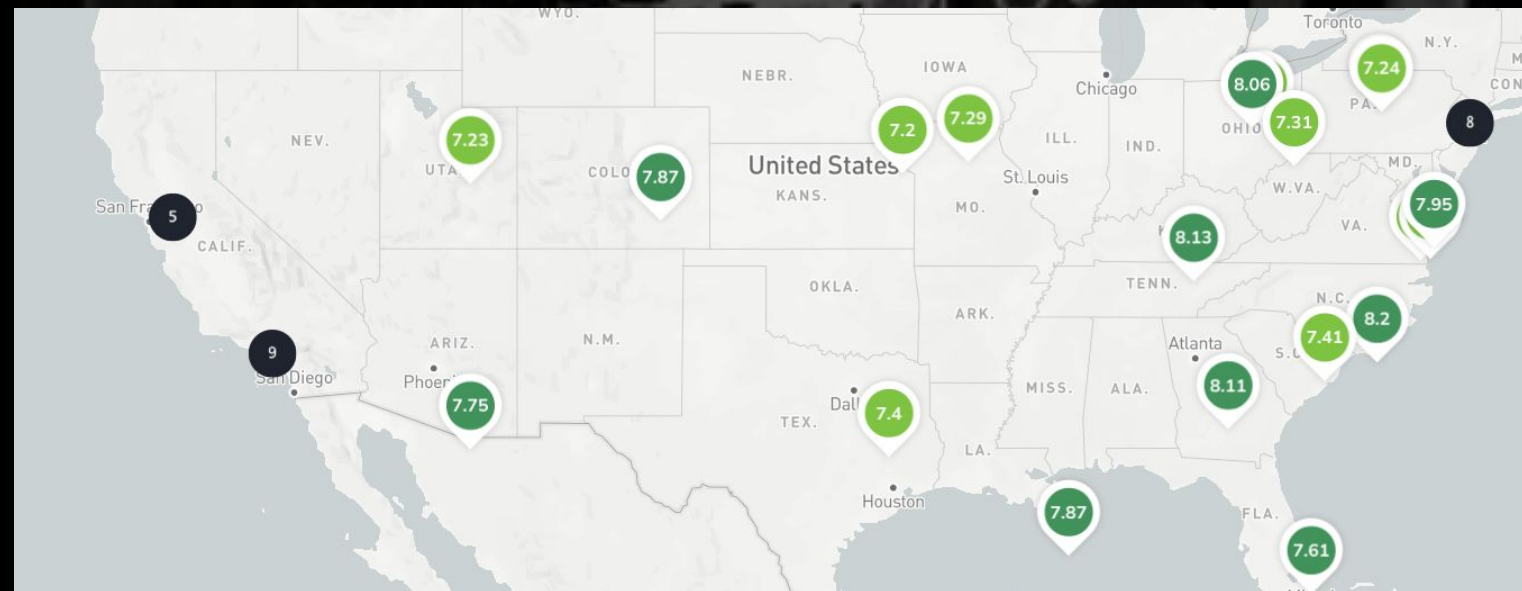
Jewelry



## Case studies

### Site selection for geographic expansion

**Client Profile:**  
Nationwide eyewear retailer  
with ~800 locations



**Problem:** Choose the right location for business expansion based on the data.

### Approach:

- Used pass\_by's Almanac to benchmark trade areas.
- Pulled foot\_traffic data to assess volume patterns in key malls.
- Evaluated demographic alignment with brand target audiences.
- Compared visit trends across potential and competitor sites.
- Prioritized locations with high conversion potential.

### Result:

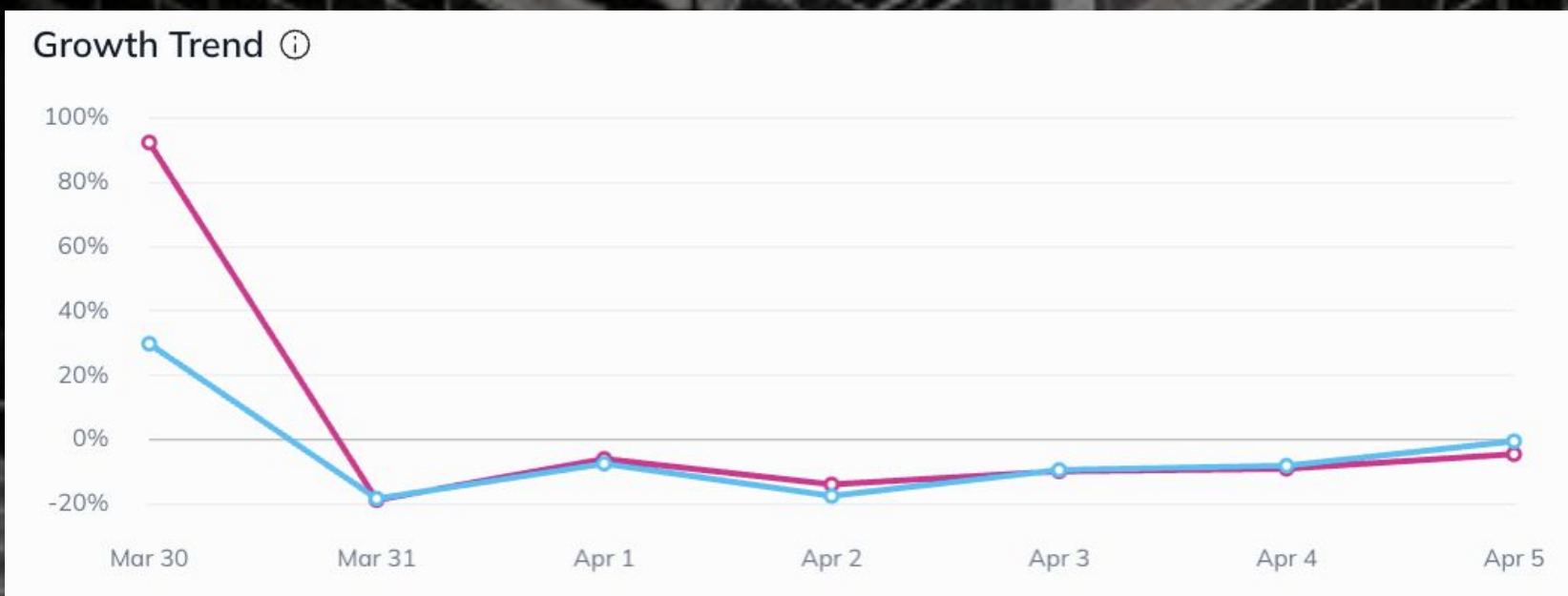
- The brand now consistently selects high-performing locations with strong foot traffic and aligned demographics.
- Opened up 21 new stores within the first 12 months of working with pass\_by.



## Case studies

### Competitive Benchmarking for Customer Loyalty

**Client Profile:**  
Department store with ~300  
locations across  
Southeastern US



**Problem:** Enhance loyalty and customer experience by understanding local competition.

### Approach:

- Integrated pass\_by's API for real-time access to competitor traffic.
- Analyzed store-level demographic and visitation trends.
- Identified key competitive threats by market.
- Benchmarked performance against nearby retailers.
- Enabled field teams with competitive insights for local execution.

### Result:

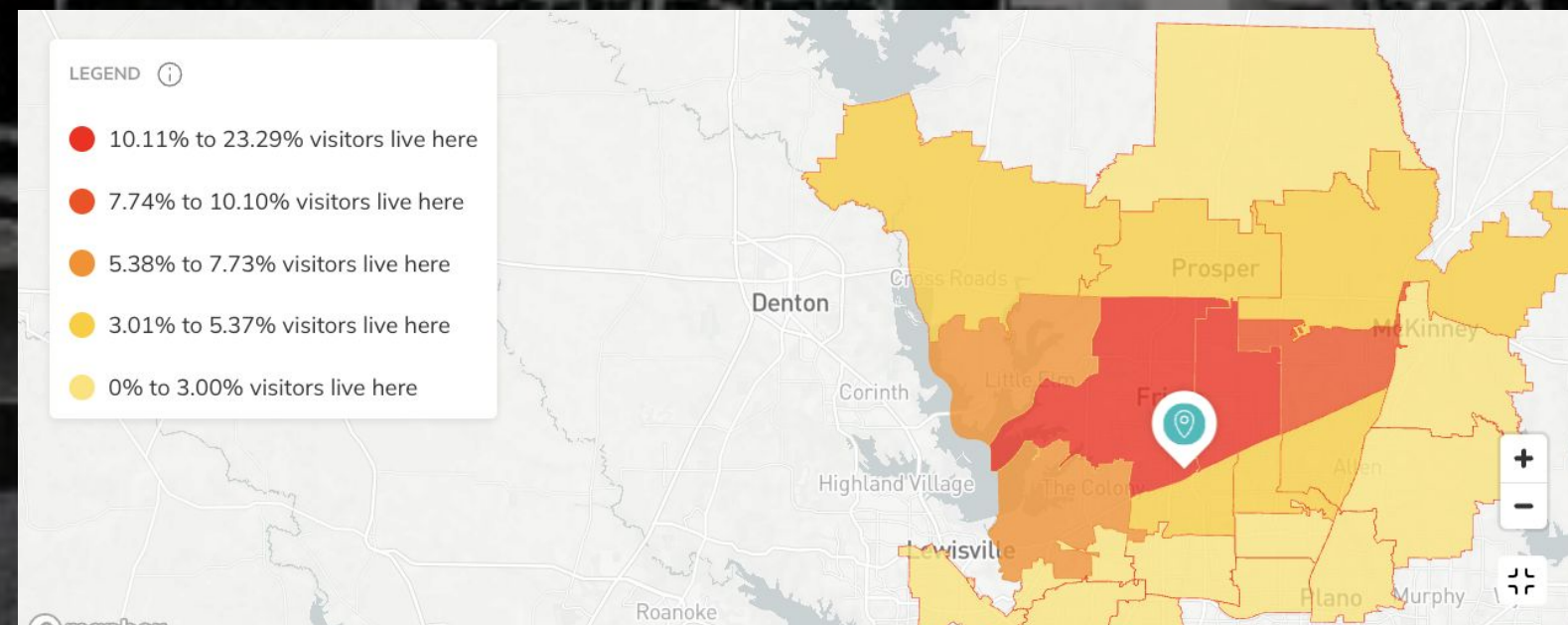
- The retailer now adjusts strategies at the store level based on local competition, improving customer retention and market responsiveness.
- Closed the performance gap to key competitors by 7.37% within the first 12 months of working with pass\_by.



## Case studies

### Analyzing Customer Origins and Gaps

**Client Profile:**  
Global footwear brand with  
~200 stores throughout the  
US



**Problem:** Lacked visibility into customer origins and trade area traffic patterns.

### Approach:

- Leveraged pass\_by's Almanac platform for comprehensive trade area analysis.
- Analyzed foot traffic patterns over time to understand customer movement.
- Identified customer origins and key market gaps.
- Mapped potential growth areas based on customer data.
- Refined marketing strategies to target underserved markets.

### Result:

- Mapped customer origins and identified growth opportunities, enabling the brand to enhance in-store experiences, increase loyalty, and improve conversion rates.
- They expanded the number of zip codes attracting customers by 23% in the first 12 months of working with pass\_by.



# Case studies

## Benchmarking Competitor Performance for Growth

**Client Profile:**  
Global jewelry brand with ~500 stores throughout the US

Place Index	Market Index	Difference ↓
+4.38%	-46.09%	+50.46
+3.41%	-41.60%	+45.01
+9.32%	-26.32%	+35.64
+1.86%	-31.04%	+32.90
+2.90%	-29.60%	+32.50
-0.31%	-31.02%	+30.71
+5.40%	-22.85%	+28.24
+1.63%	-24.48%	+26.12
+1.24%	-23.71%	+24.95
0.00%	-24.81%	+24.80

**Problem:** Understand competitor performance in malls and identify opportunities to capture market share.

### Approach:

- Benchmarked the brand’s performance against competitors in key malls.
- Analyzed competitor customer origins, visitation trends, and demographics.
- Identified areas with the highest potential for market share capture.
- Refined marketing strategies to target the right consumer segments.

### Result:

- The brand successfully targeted high-potential regions with precise marketing efforts, capturing market share by focusing on the right consumers.
- Since partnering with pass\_by, they’ve achieved 2.16% period-over-period traffic growth, with 96% of their malls trending above the average retail performance in each mall.

// pass\_by