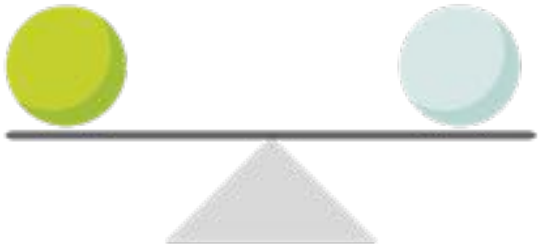
LOCATION DATA 360°



factual™

WE'RE A DATA COMPANY



NEUTRAL DATA PROVIDER

Our technology sits across multiple ad ecosystem partners.

WE'RE TRANSPARENT

You can see our location data right from our website.

WE NEVER SELL MEDIA

We focus completely on delivering high quality ad targeting technology.

TRUSTED

Top tech companies trust Factual to provide the highest quality location data.

ADVERTISERS STRUGGLE TO UNDERSTAND THEIR CUSTOMERS ACROSS CHANNELS





WHAT IF LOCATION CAN HELP YOU CONNECT THE DOTS?



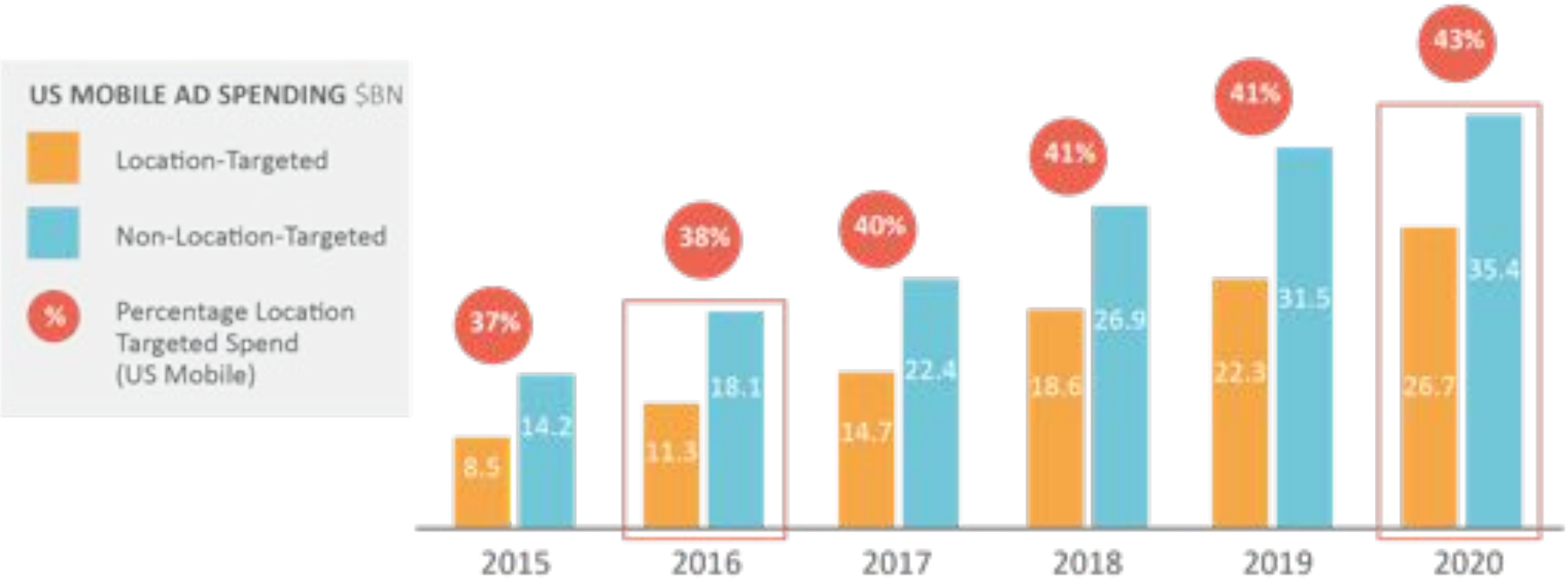
90%
OF SMARTPHONE OWNERS USE LOCATION BASED SERVICES.

#1
ACTIVITY IS SEARCHING FOR LOCATION SPECIFIC INFORMATION.

146%
INCREASE IN SEARCHES WITH 'NEAR ME' YoY.

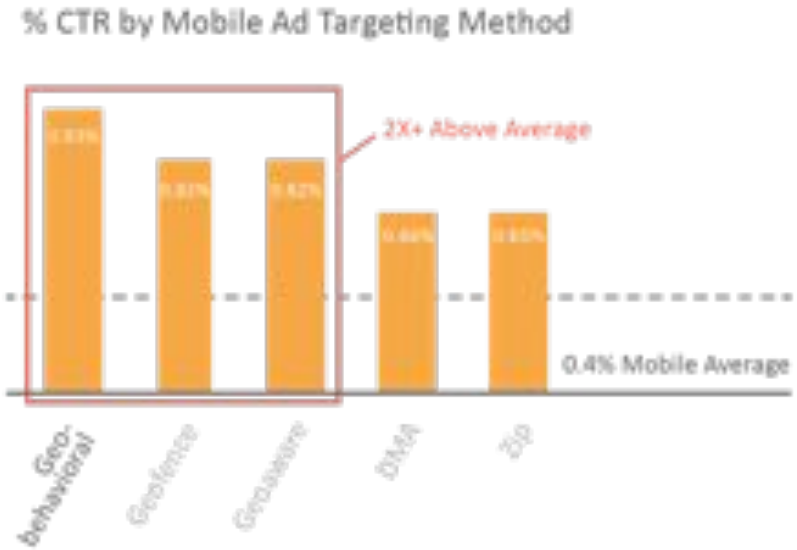
Source: Pew Research – Jan 2016, eMarketer – April 2016, Google – Mar 2016

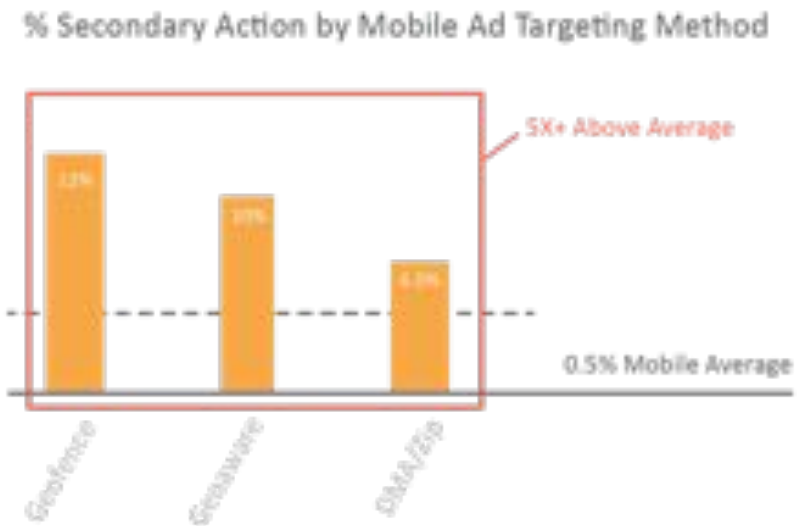
ADVERTISERS ARE INCREASING THEIR INVESTMENT IN LOCATION TARGETING



Source: BIA/Kelsey, "US Local Advertising Forecast 2016"

LOCATION TARGETING DRIVES HIGHER CTRS & SECONDARY ACTIONS





INGREDIENTS FOR QUALITY LOCATION TARGETING

PLACES DATA QUALITY

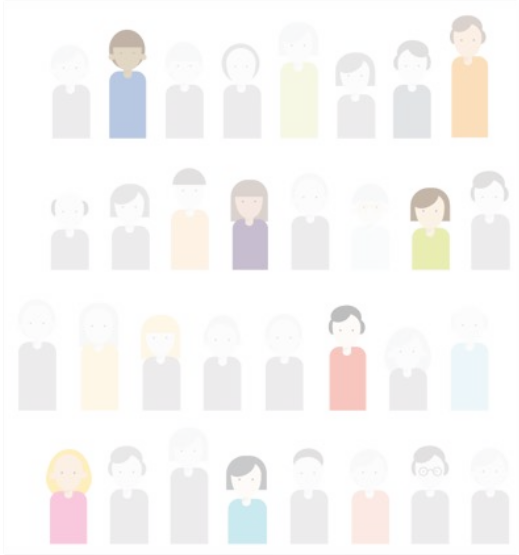


+

LAT/LONG QUALITY

=

QUALITY TARGETING



NEW BUSINESSES ARE CONSTANTLY OPENING

3 GYMS OPEN PER DAY

In the United States.



...AND CLOSING

The average lifespan of a gym is 18 months.

Source: Barnes Report

WE PROVIDE THE BEST PLACES DATA

90MM+	466	29	50
PLACES	CATEGORIES	LANGUAGES	COUNTRIES

CHANGES TO GLOBAL PLACES, Q2 2016

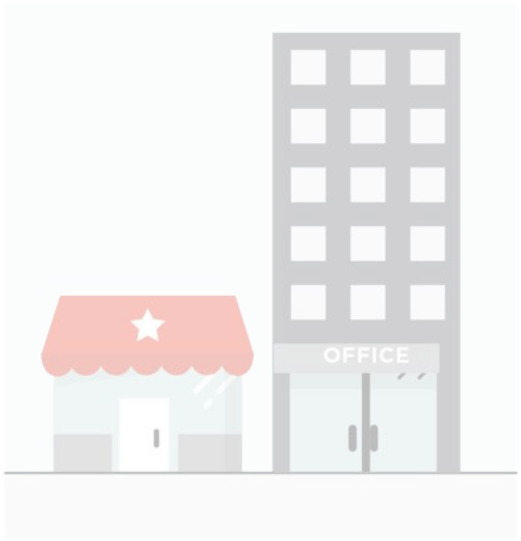
(Millions of records)





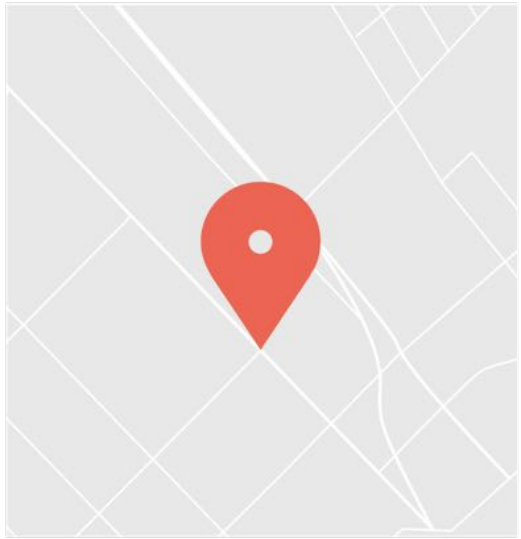
INGREDIENTS FOR QUALITY LOCATION TARGETING

PLACES DATA QUALITY



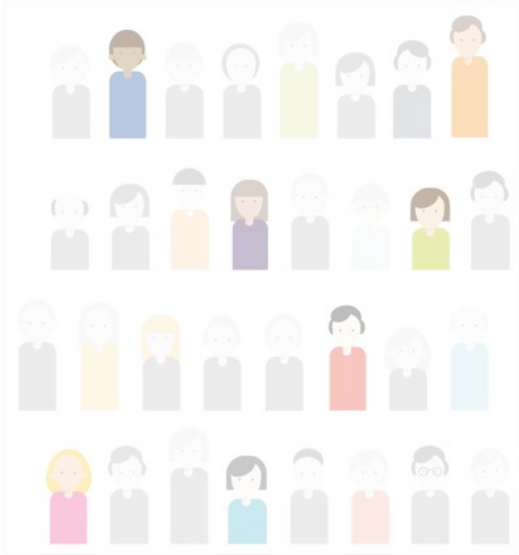
+

LAT/LONG QUALITY



=

QUALITY TARGETING



NOT ALL COORDINATE DATA IS ACCURATE

Some sources for error include…



COORDINATE TRUNCATION

Lat/long coordinates that record where a device has been.



INVALID COORDINATES

Coordinates with bad numbers, such as (0,0).



OUT OF BOUNDS COORDINATES

Coordinates at places where people are highly unlikely to live, like the ocean and the North Pole.

BLACKLISTED COORDINATES

Coordinates that have statistically unlikely volumes of users for a given location, including centroids.



BAD DEVICES & APPS

Devices or developers that commonly provide poor quality location data.

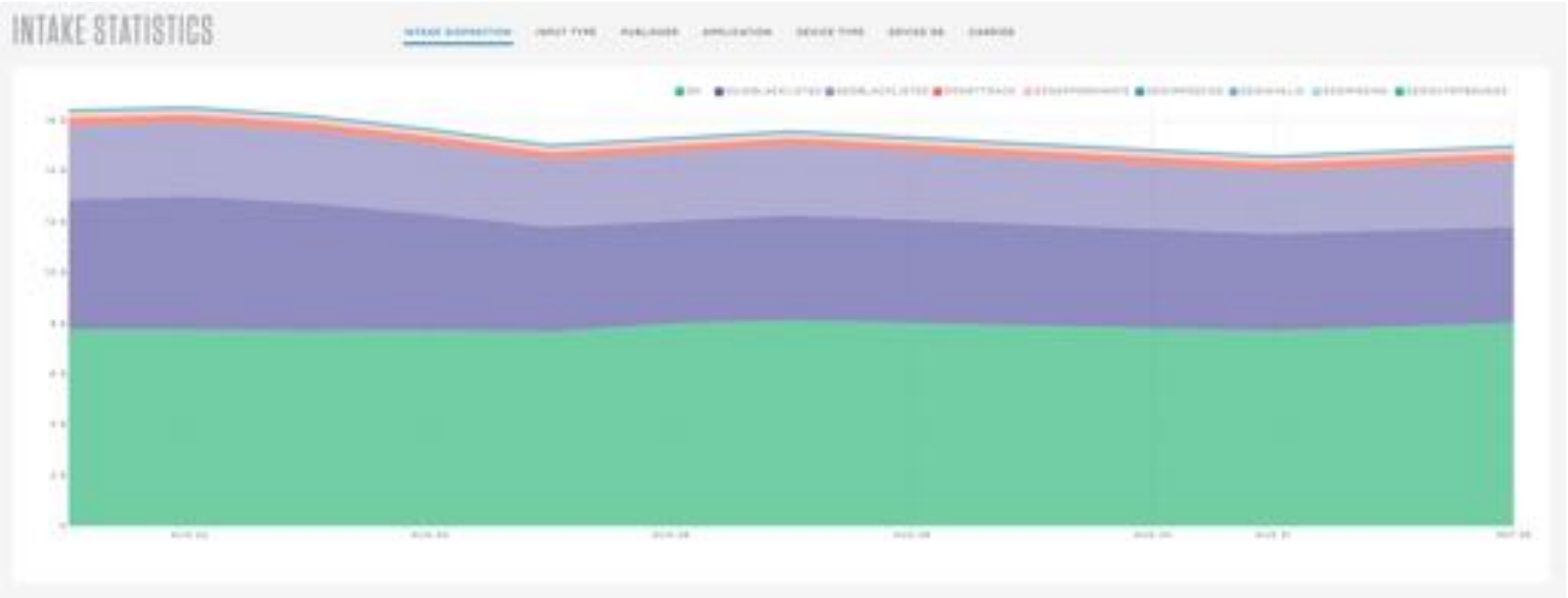


WI-FI, CELL TOWER, IP ADDRESS

Coordinates from these sources may not be accurate or sufficiently precise.

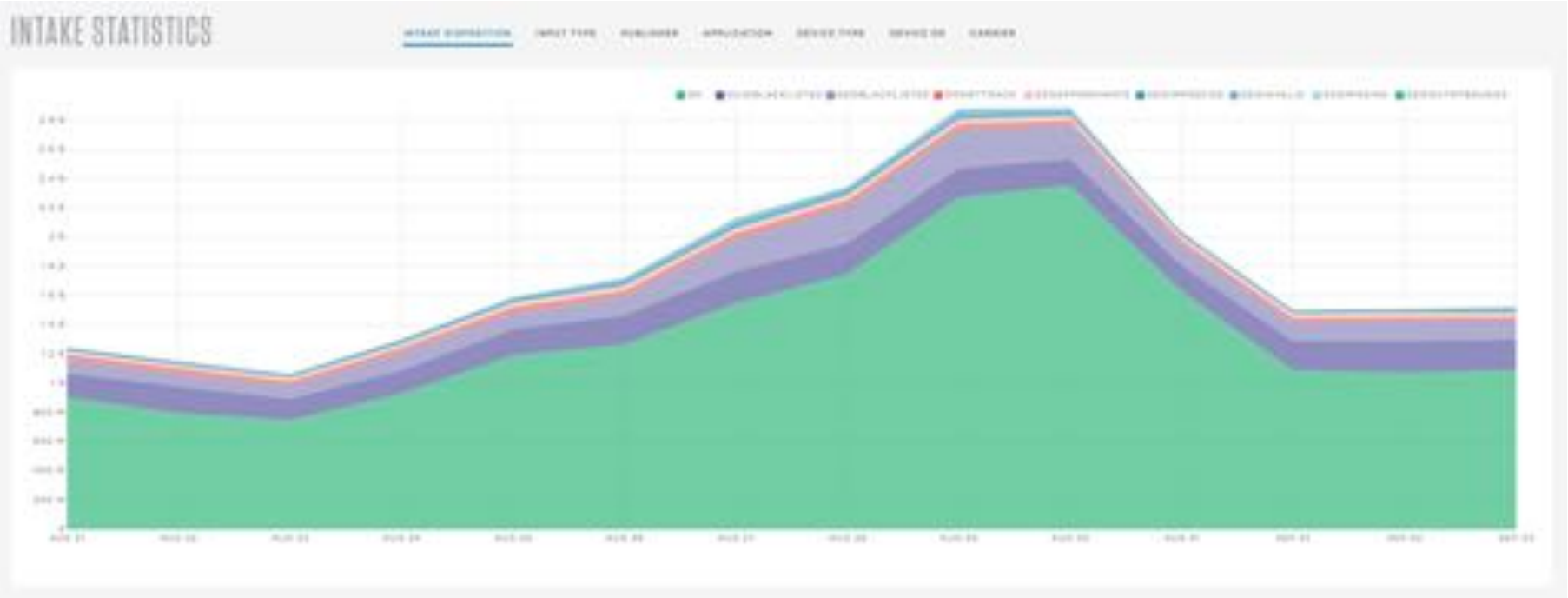
DATA QUALITY VARIES BY SOURCE

Example 1

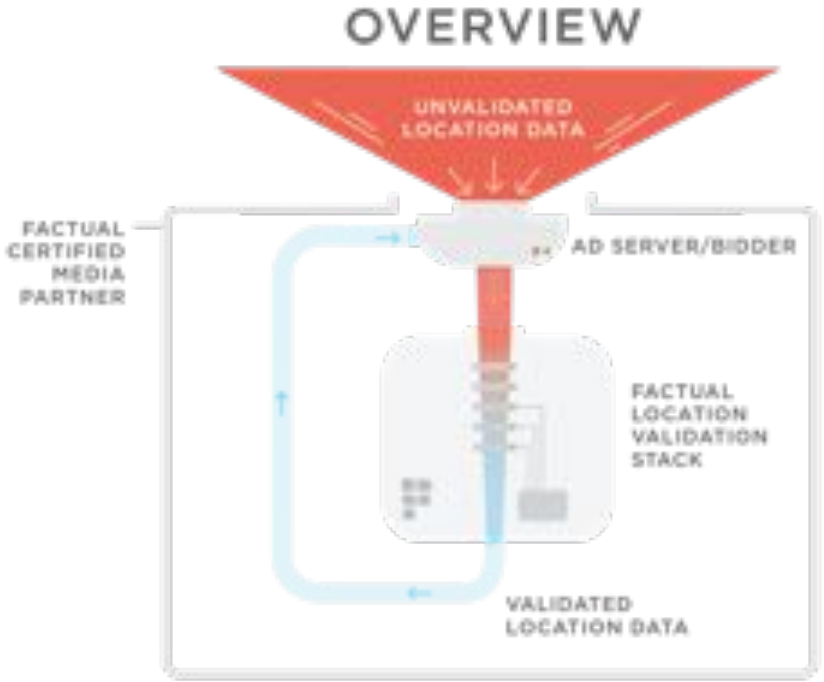


DATA QUALITY VARIES BY SOURCE

Example 2



OUR LOCATION VALIDATION STACK HELPS ENSURE YOU HAVE RELIABLE DATA



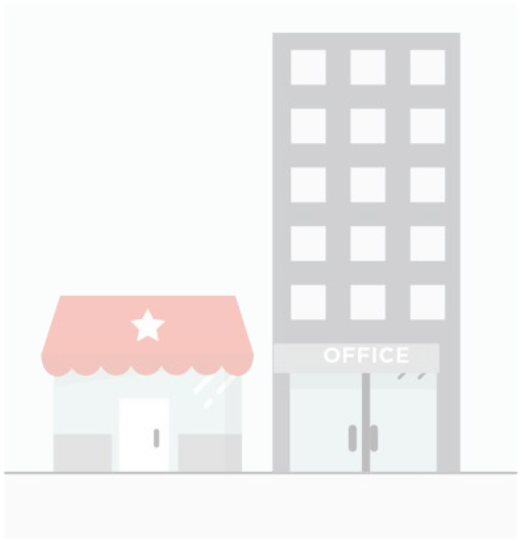
600
BILLION DATA POINTS / MONTH

500k
QUERIES/SEC

0.3
MILLISECONDS TO VALIDATE

INGREDIENTS FOR QUALITY LOCATION TARGETING

PLACES DATA QUALITY



+

LAT/LONG QUALITY

=

QUALITY TARGETING



QUALITY PLACES & LAT/LONG DATA IS NEEDED FOR QUALITY TARGETING



[1]Source: xxxxxxxxx

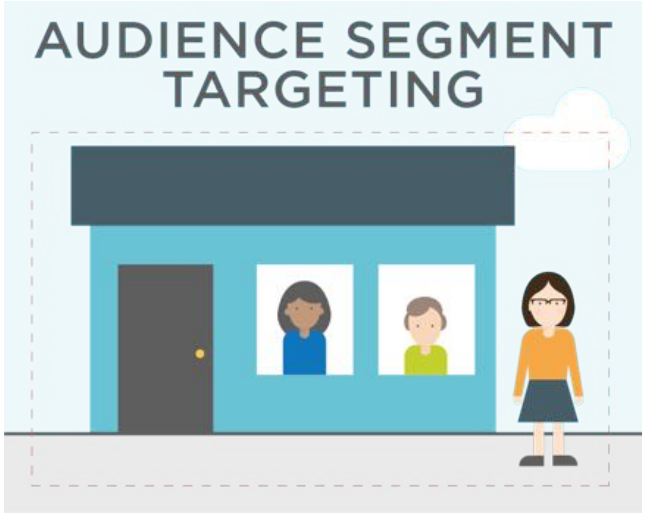
FACTUAL OFFERS TWO LOCATION BASED TARGETING SOLUTIONS



GEOPULSE PROXIMITY

Where they're located now.

E.g., Users within 100 meters of a Starbucks right now.

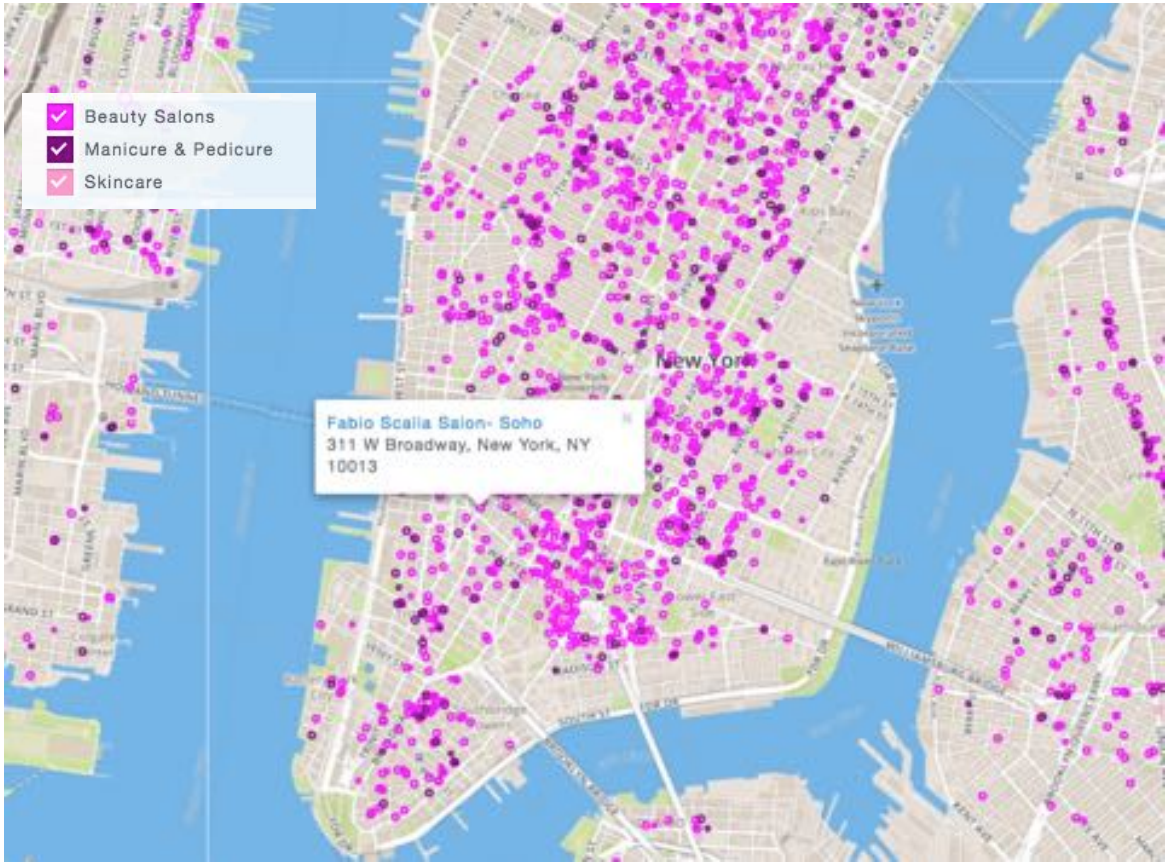


GEOPULSE AUDIENCE

Where they've been historically

E.g., Users who've been to a Starbucks.

TARGET BASED ON REAL TIME LOCATION



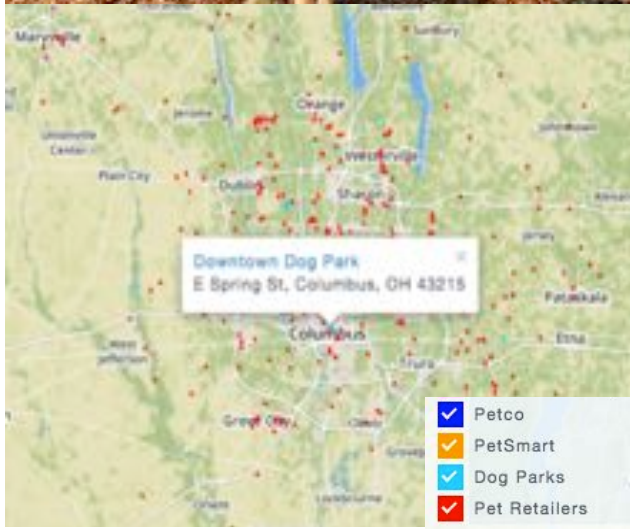
PET LOVERS

Use proximity targeting to create real time geofences to reach your target audience segment.

TARGETING SUGGESTIONS TO REACH PET LOVERS:

- Dog Parks: 1,157 location in the US.
- Pet Retailers 81,428 locations.
- Veterinary Offices: 69,128 locations.
- Animal Shelters: 6,528 locations.





USE LOCATION DATA TO CREATE AUDIENCE SEGMENTS



FACTUAL COLLEGE STUDENT

USER ID: 109824782



RAW INPUT DATA

(31.254, -98.529, 07:44 PM)	(33.739, -97.836, 11:58 AM)	(30.571, -96.292, 01:54 PM)
(31.965, -97.588, 05:08 PM)	(32.278, -95.668, 06:16 PM)	(32.151, -98.660, 10:14 PM)
(33.296, -96.132, 03:27 AM)	(33.946, -97.165, 04:54 PM)	(30.304, -97.233, 01:30 PM)
(31.160, -97.992, 02:37 PM)	(32.935, -98.346, 04:23 AM)	(33.359, -96.606, 11:07 AM)
(30.902, -98.944, 06:47 AM)	(31.558, -95.277, 07:43 PM)	(32.965, -95.901, 01:57 AM)
(32.427, -98.426, 09:31 PM)	(31.970, -95.210, 11:20 PM)	(32.376, -98.504, 02:24 PM)

LAT/LONGS MATCHED TO REAL LOCATIONS

	SESSIONS	LAT	LONG	CITY	STATE
HOME	142	30.628015	-96.332079	College Station	TX
	15	32.732846	-97.372314	Fort Worth	TX
TEXAS A&M	10	30.616667	-96.32373	College Station	TX
TACO BELL	8	30.649334	-96.341561	Bryan	TX
	7	30.563719	-96.257736	College Station	TX
	5	30.559973	-96.261421	College Station	TX
	4	30.656624	-96.343592	Bryan	TX

EVOLUTION OF LOCATION BASED AUDIENCE TARGETING

PREDEFINED AUDIENCES



- 2+ airport visits a month
- Active in areas outside home city
- Filters out visitors to airport at peak times

TAILORED LOCATION SEGMENTS



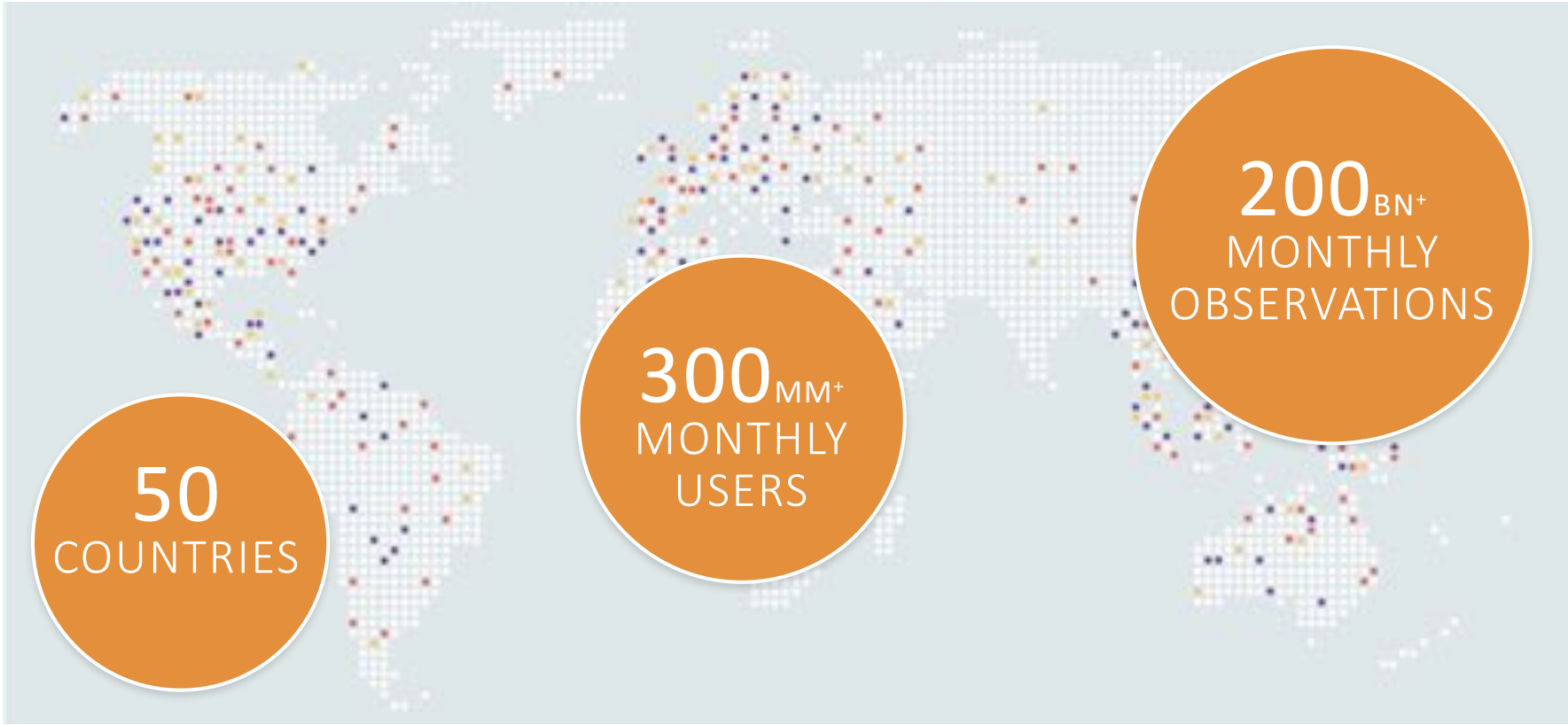
Client can define audience, using:
- Visits to specified airports
- Visits to hotel outside of home city
- Visits to business bars

HIGHLY CUSTOMIZED TARGETING



Choose from 200+ BN observations, including:
- Time of day insights
- Movement detection
- Understand patterns of behavior

FACTUAL'S OBSERVATION GRAPH

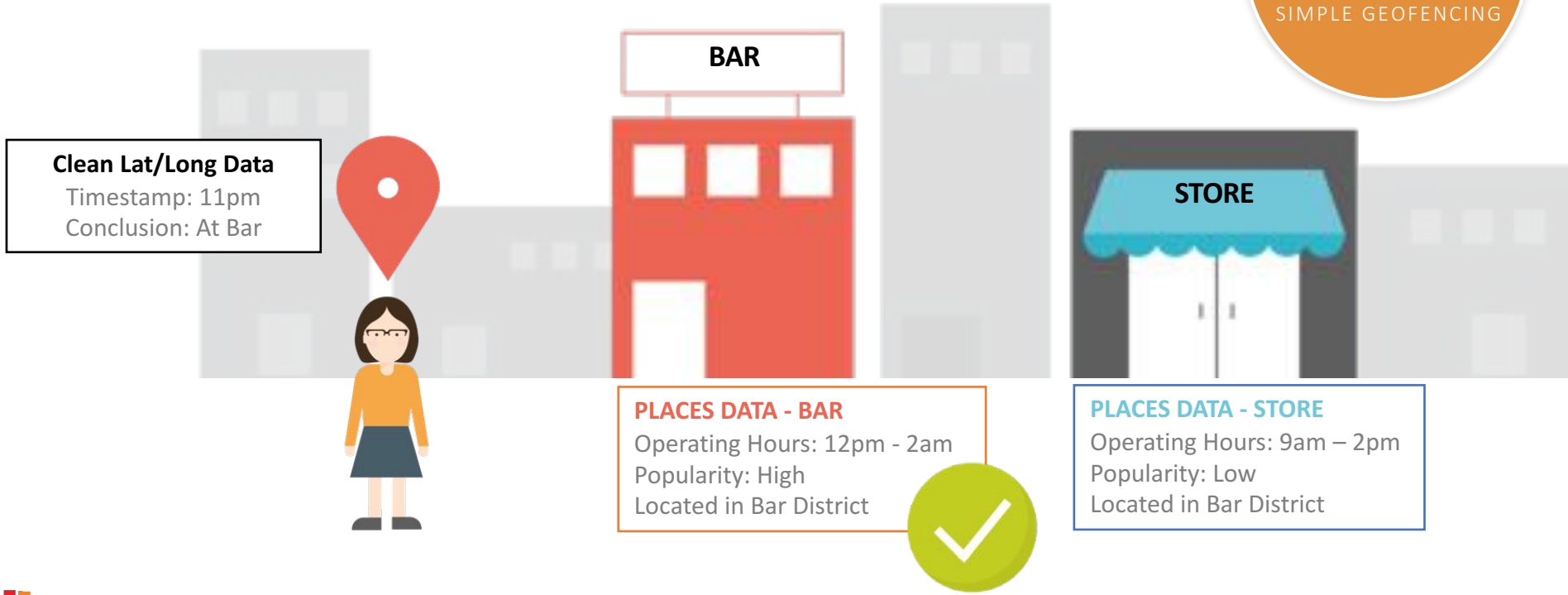


+ 2016 Factual Data Monthly numbers may vary.

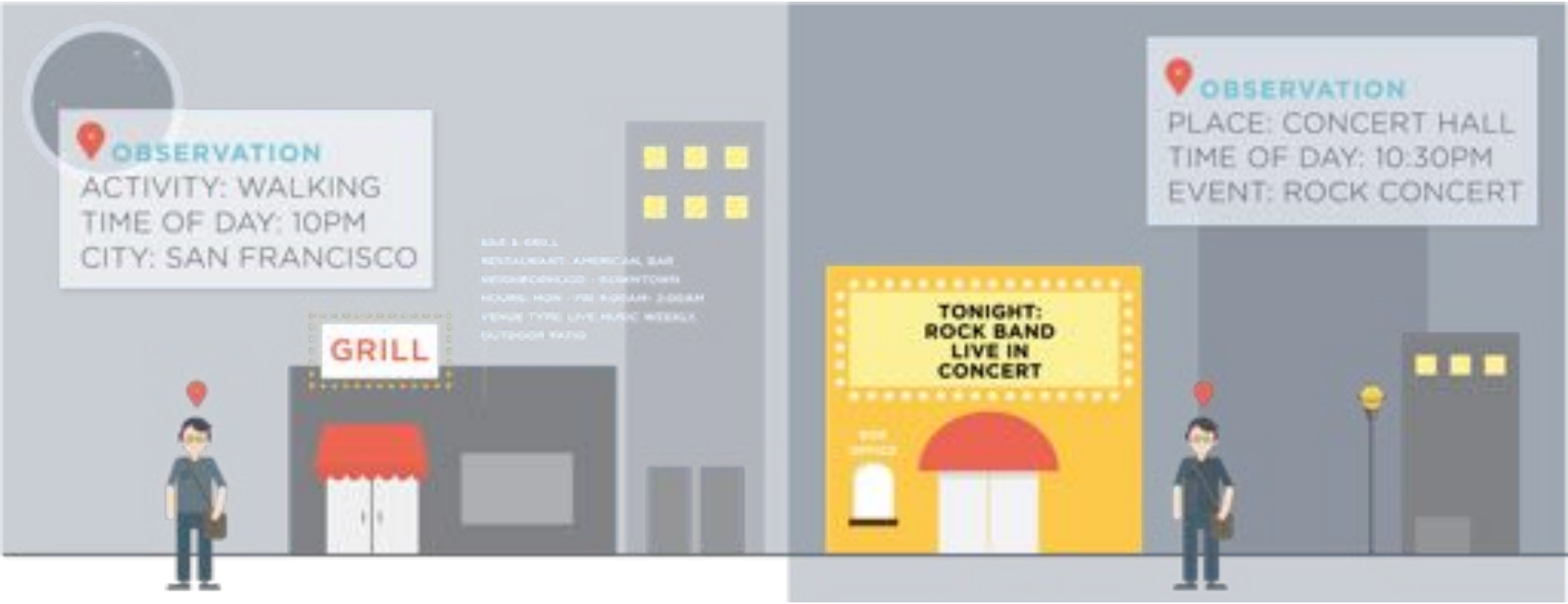
ENHANCES TARGETING

Our Place Attachment technology looks at additional signals beyond polygons to determine if a user is at a place.

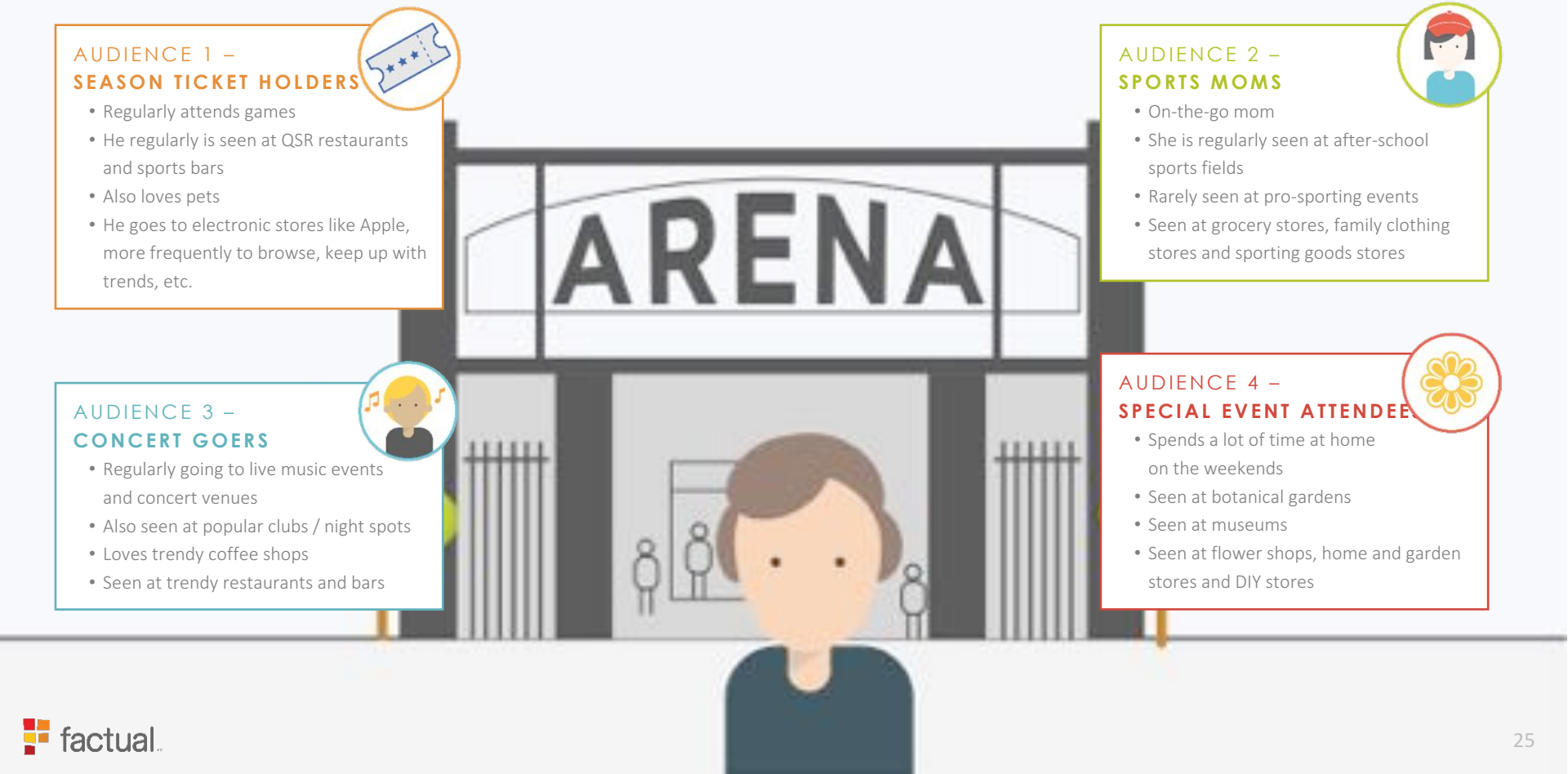
33%
MORE ACCURATE ON AVERAGE THAN SIMPLE GEOFENCING



UNDERSTAND YOUR CUSTOMERS BEHAVIOR PATTERNS



GET DEEP CONSUMER INSIGHTS



AUDIENCE 1 – SEASON TICKET HOLDERS

- Regularly attends games
- He regularly is seen at QSR restaurants and sports bars
- Also loves pets
- He goes to electronic stores like Apple, more frequently to browse, keep up with trends, etc.

AUDIENCE 2 – SPORTS MOMS

- On-the-go mom
- She is regularly seen at after-school sports fields
- Rarely seen at pro-sporting events
- Seen at grocery stores, family clothing stores and sporting goods stores

AUDIENCE 3 – CONCERT GOERS

- Regularly going to live music events and concert venues
- Also seen at popular clubs / night spots
- Loves trendy coffee shops
- Seen at trendy restaurants and bars

AUDIENCE 4 – SPECIAL EVENT ATTENDEE

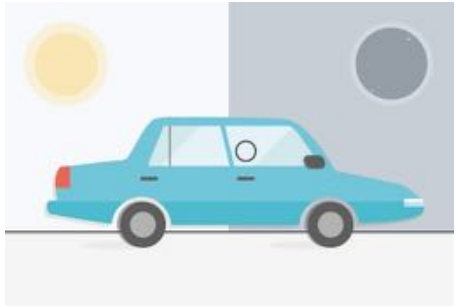
- Spends a lot of time at home on the weekends
- Seen at botanical gardens
- Seen at museums
- Seen at flower shops, home and garden stores and DIY stores

CREATE CUSTOM AUDIENCES



STORE LOYALIST

Observed to be visiting a retail store at least 3 times in the past month.



CAR COMMUTER

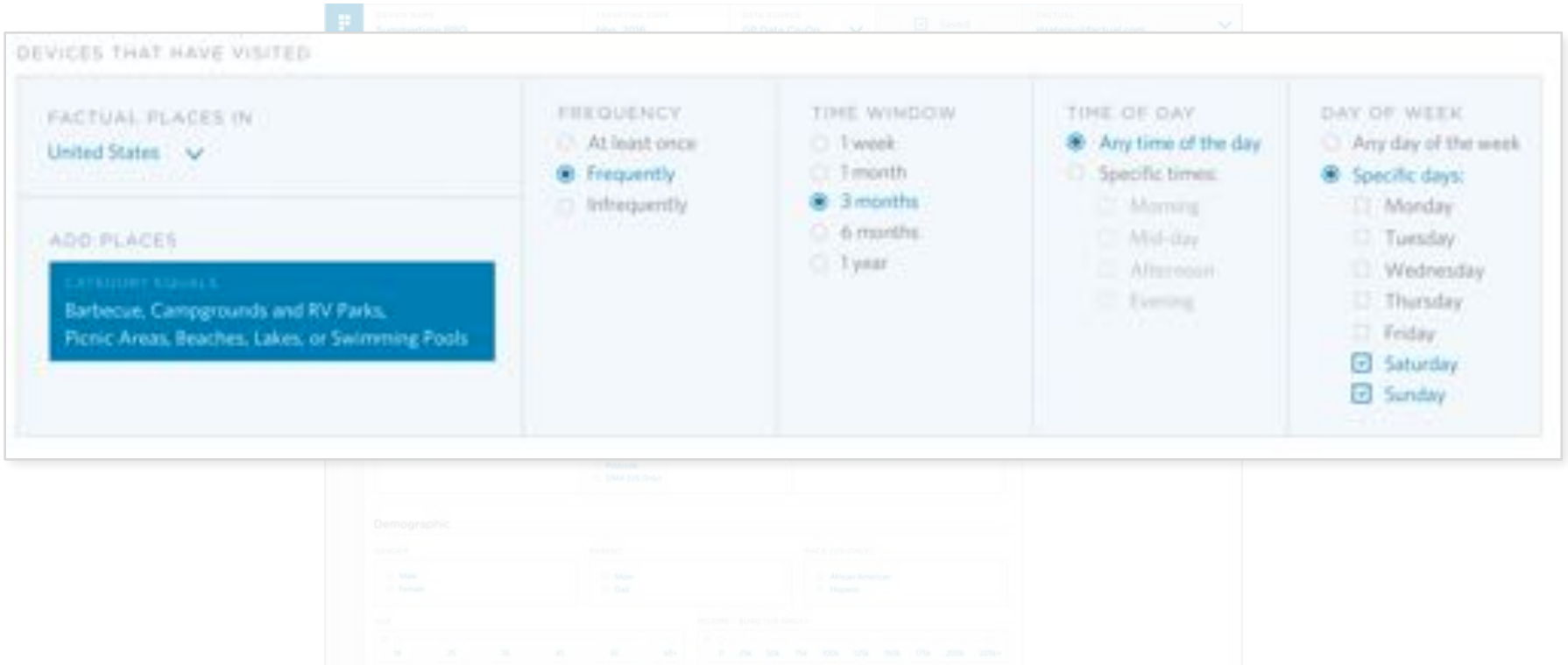
Observed to be driving during morning and evening rush hours on at least 3 weekdays.



WEEKEND PROJECT WARRIORS

Observed at home improvement stores on weekend hours when DIY-er traffic is the highest.

LEVERAGE OUR UI FOR CUSTOM AUDIENCE CREATION



XAXIS CAMPAIGN:
POPULAR FOOD CPG BRAND

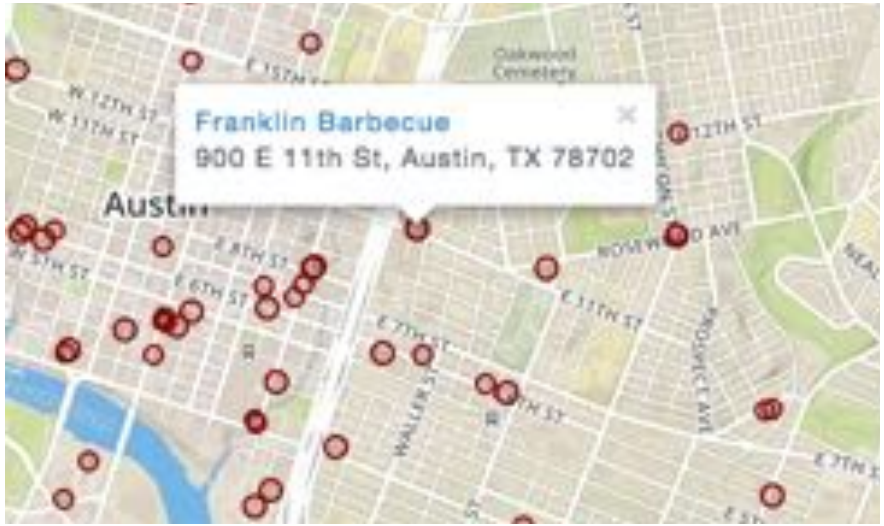


TARGET AUDIENCE: BBQ LOVERS

Goal: To reach users based on seasonal outdoor behavior

BBQ Lovers are defined as:

- Users seen at US picnic areas, campgrounds, RV parks, beaches, lakes, state parks, etc.
- Users seen at BBQ restaurants during the daytime and early evening hours on a weekend.



LIVE STRATEGY WORKSHOP

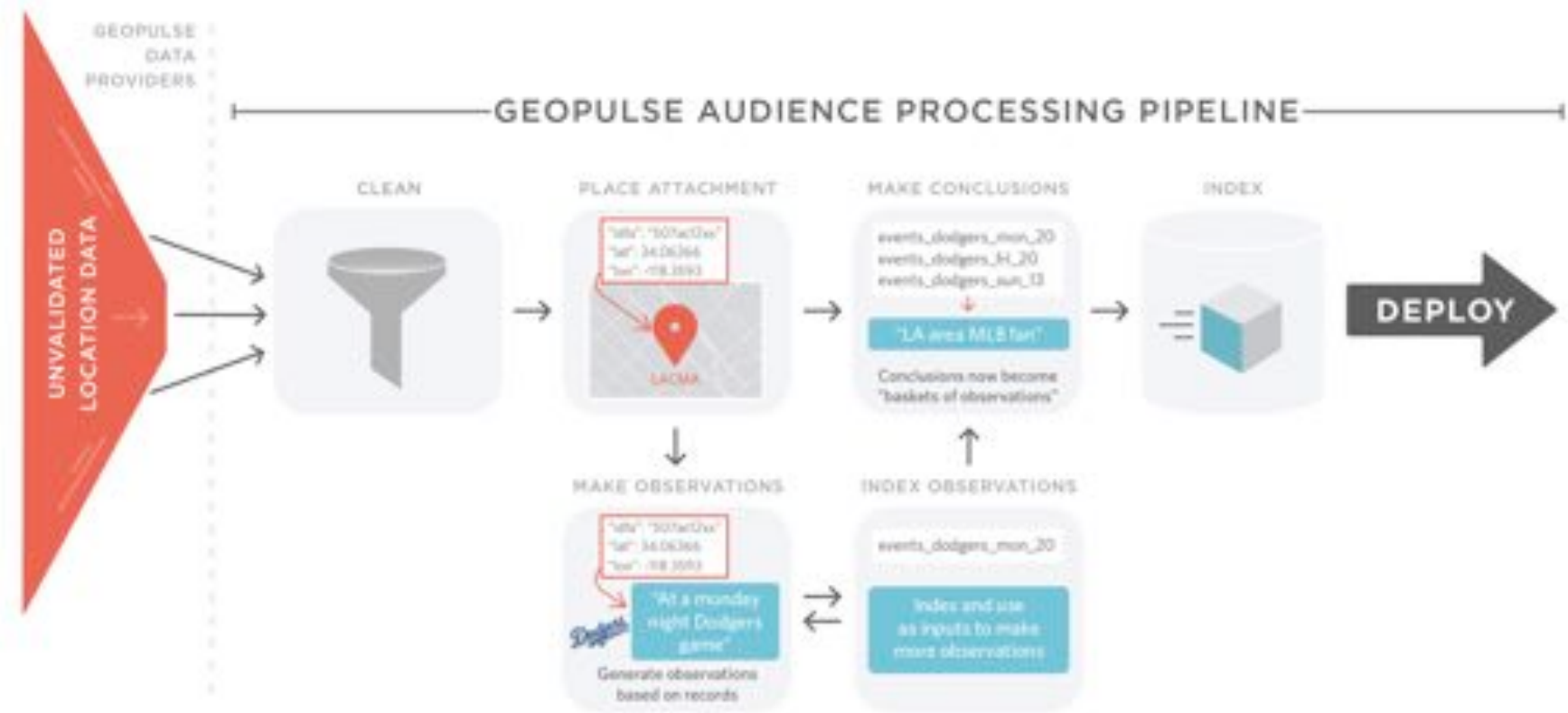
THANK YOU!



FACTUAL PARTNERS INCLUDE:



HOW IT WORKS


GEOPULSE DATA PROVIDERS
UNVALIDATED LOCATION DATA
GEOPULSE AUDIENCE PROCESSING PIPELINE
CLEAN
PLACE ATTACHMENT
MAKE CONCLUSIONS
INDEX
DEPLOY
events_dodgers_mon_20
events_dodgers_H_20
events_dodgers_sun_13
"LA area MLB fan"
Conclusions now become "baskets of observations"
LACMA
MAKE OBSERVATIONS
INDEX OBSERVATIONS
"At a monday night Dodgers game"
Generate observations based on records
events_dodgers_mon_20
Index and use as inputs to make more observations