Confidential

factual

MEASUREMENT MATTERS: CLOSING THE LOOP WITH LOCATION DATA

April 10, 2018

Marina Kitgor, Senior Director of Agencies and Strategic Partnerships at Factual

Harvard Business Review



DATA

Data Scientist: The Sexiest Job of the 21st Century

by Thomas H. Davenport and D.J. Patil

FROM THE OCTOBER 2012 ISSUE

All services are subject to applicable law, regulation, and restrictions. Not all services may be available in all regions.



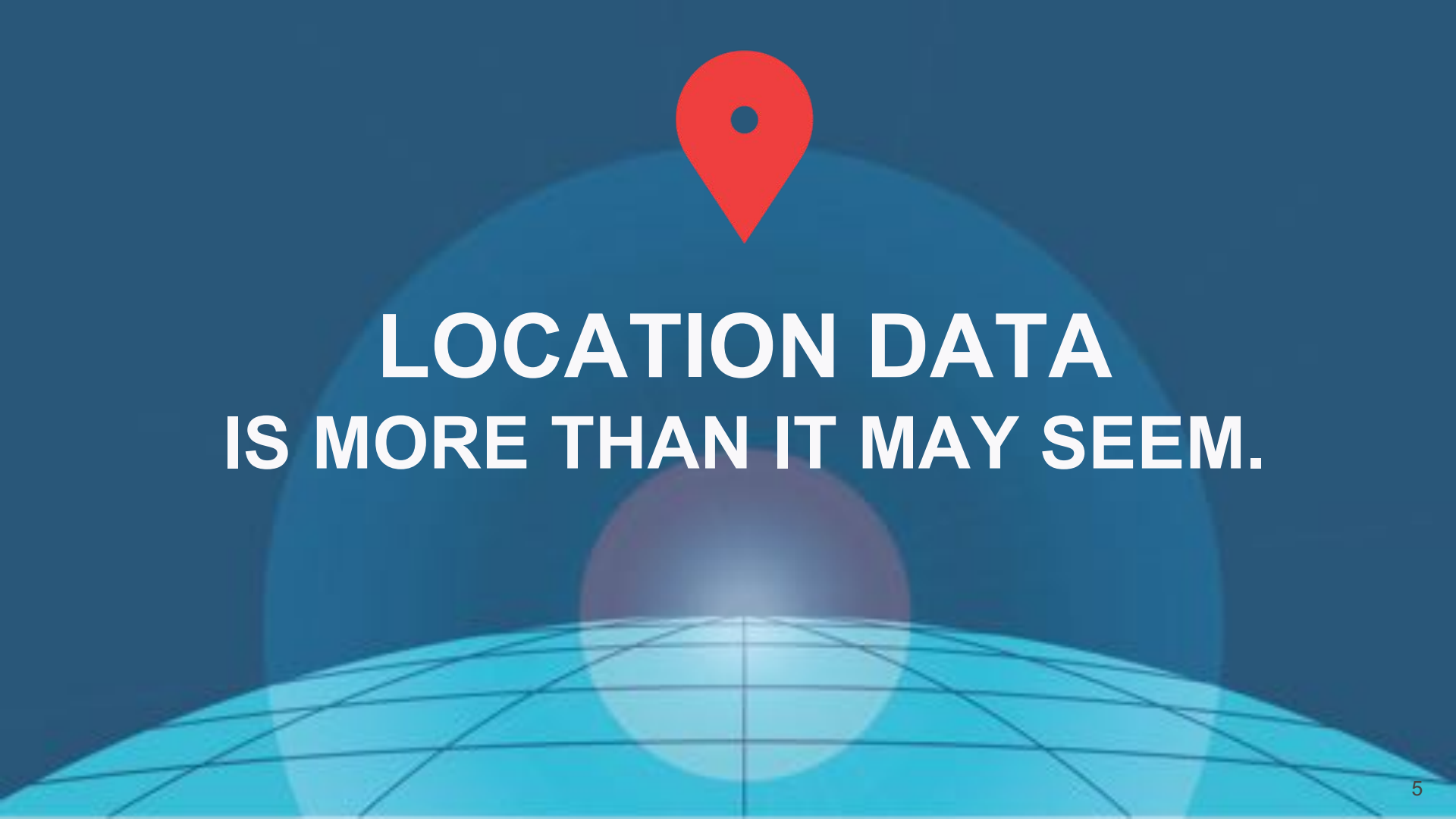
Google

Microsoft

amazon

facebook.

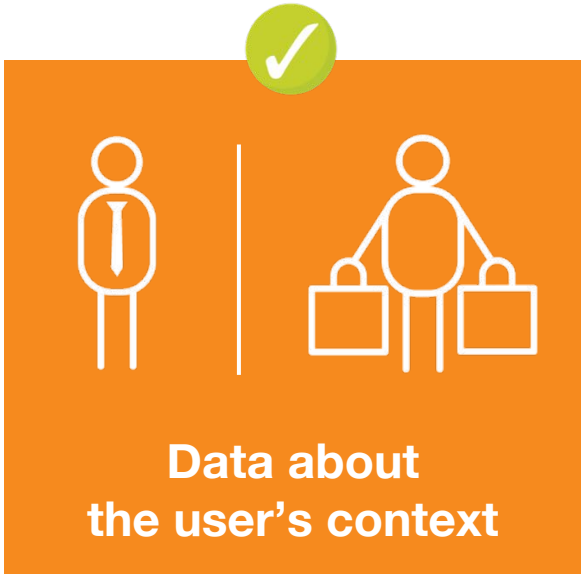

LOCATION DATA


LOCATION DATA
IS MORE THAN IT MAY SEEM.

LOCATION DATA IS MORE THAN JUST *DATA ABOUT A LOCATION*







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DATA ABOUT THE USER



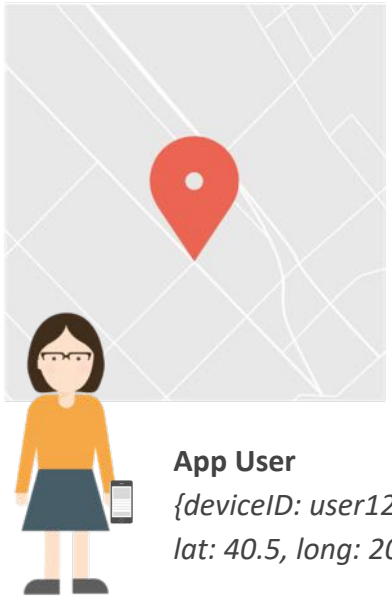
DATA ABOUT THE USER

Where they go → what they do → who they are → their needs and desires.



DATA ABOUT THE USER

Where they go → what they do → who they are → their needs and desires.



App User

{deviceID: user1234,

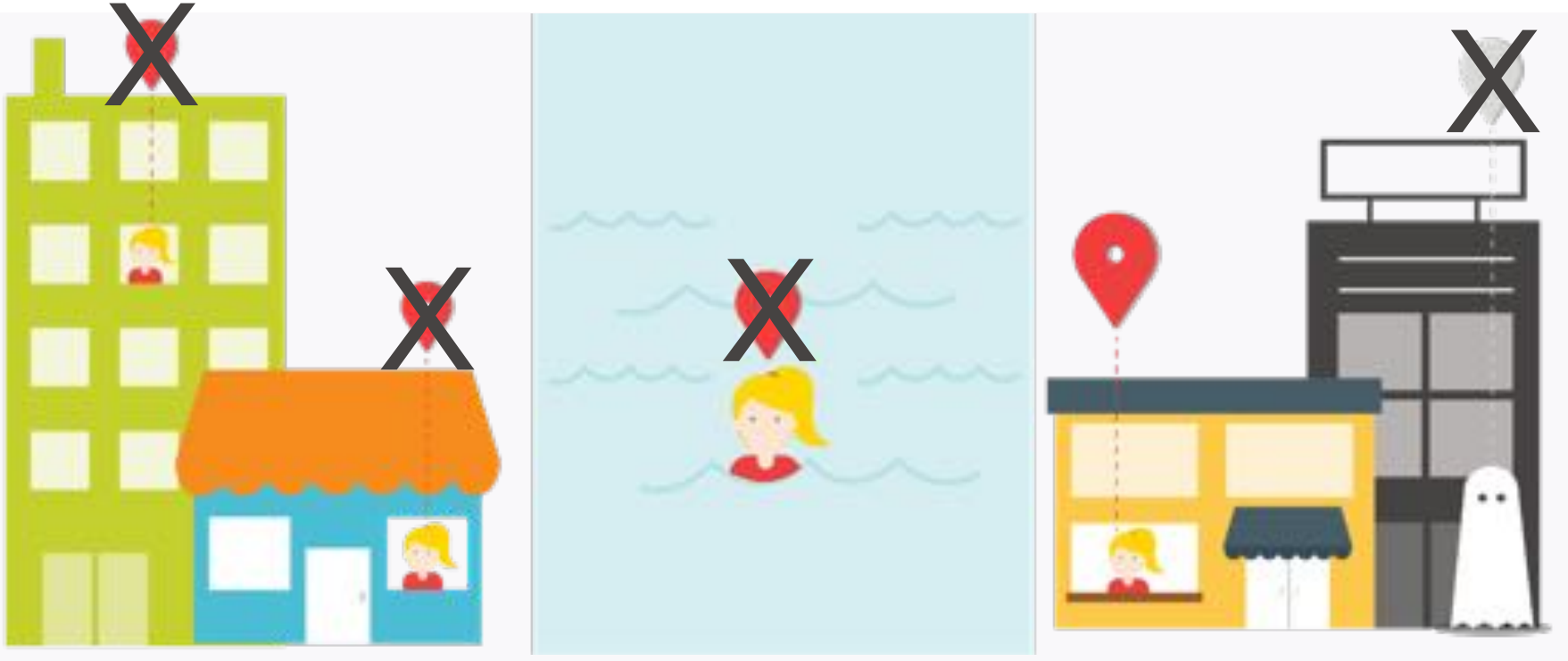
lat: 40.5, long: 20.5, ...}

RAW INPUT: LAT/LONG DATA

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

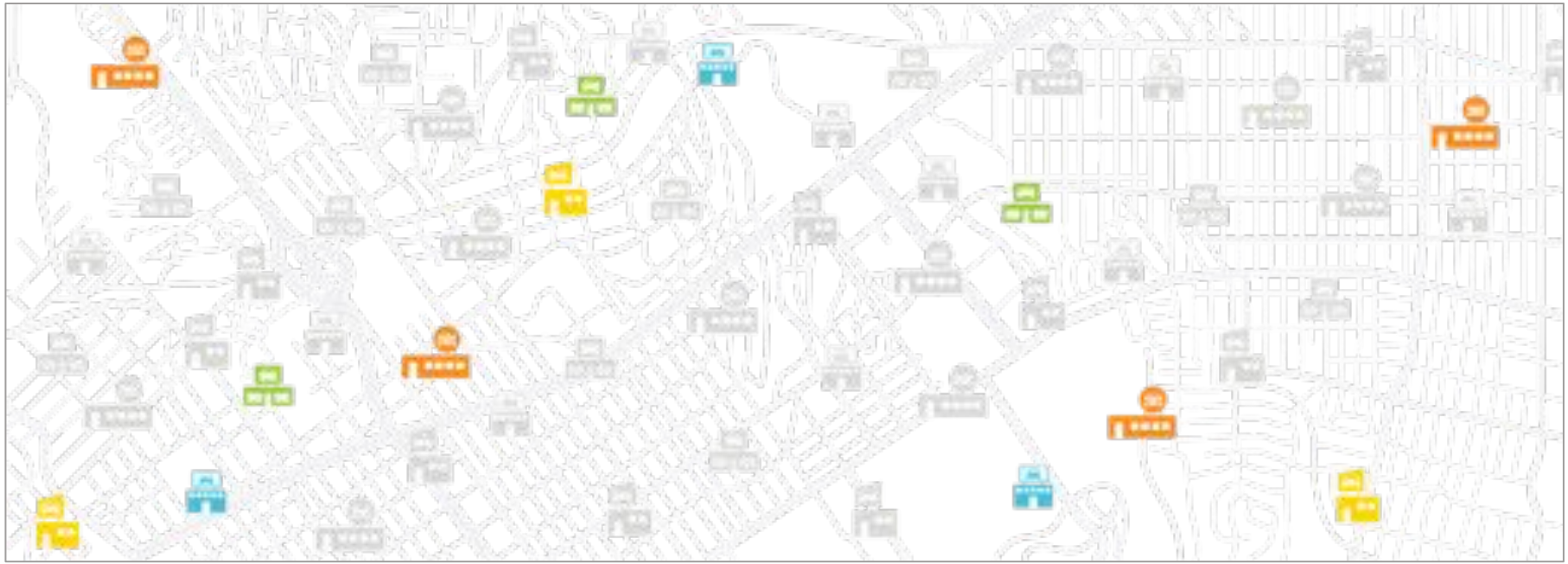
DATA ABOUT THE USER

Where they go → what they do → who they are → their needs and desires.



DATA ABOUT THE SURROUNDING WORLD

Global Places Data



CONTEXTUAL DATA ABOUT THE SURROUNDING WORLD



PERBACCO

CONTEXTUAL DATA ABOUT THE SURROUNDING WORLD



PERBACCO

STATUS
???

GEOGRAPHY
230 California Street
San Francisco, CA, 94111
Neighborhood: ???

CATEGORY
- Restaurants

POPULAR AMONG:
???

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CONTEXTUAL DATA ABOUT THE SURROUNDING WORLD



PERBACCO

STATUS
Open

GEOGRAPHY
230 California Street
San Francisco, CA, 94111
Neighborhood: Financial District

CATEGORY
- Restaurants
- Italian
- Fine Dining

POPULAR AMONG:
- Date Nighters
- Fine Dining Enthusiasts
- Affluent Consumers

PLACE ATTRIBUTES
★★★★
$$$$ (Price Range: $31-$60)
- Takes Reservations: Yes
- Attire: Dressy
- Parking: Valet, Garage, Street
- Vegetarian Options: Yes
- Alcohol: Full Bar
- Good for Kids: No

INFORMATION
Web: perbaccosf.com
Tel: (415) 955-0663
Email: umberto@perbaccosf.com
Hours: Mon-Fri: 11:30AM – 10:00PM
Sat: 5:30PM – 10:00PM

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DATA ABOUT THE USER'S CONTEXT



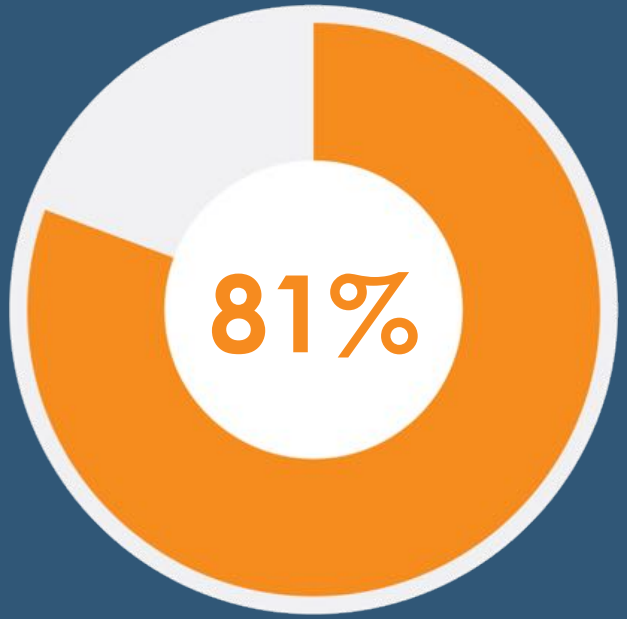
Lat/Long Data
Timestamp: 12am

PLACES DATA - BAR
Operating Hours: 12pm - 2am
Popularity: High
Located in Bar District

PLACES DATA - STORE
Operating Hours: 9am – 2pm
Popularity: Low
Located in Bar District

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LOCATION
IS MORE THAN A TARGETING TACTIC.

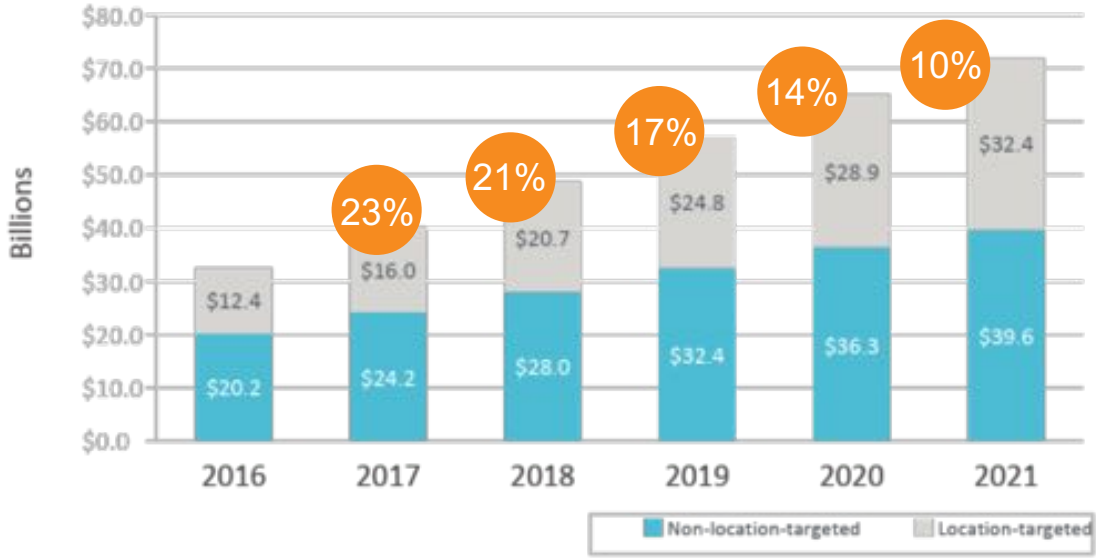


81% of marketers use location data

Source: eMarketer,- BIA/Kelsey

MARKETERS CONTINUE TO INCREASE USAGE OF LOCATION DATA FOR TARGETING

US Mobile Local Ad Spending: Location-Targeted vs. Non-Location-Targeted



120.86% Increase in 5 Years

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1) eMarketer, Location Intelligence H2 2016
2) "Touching the Infinite: A Report on the 2017 Mobile Maturity Survey.

LOCATION DATA: SO MANY USE CASES



MAKE DATA-DRIVEN DECISIONS

Enable smarter, data-driven decisions and gain deeper customer insights



MEASURE CAMPAIGN EFFECTIVENESS

Connect online campaigns to offline results for measurement and attribution



TARGET AUDIENCES

Use location, historical patterns or real-time behavior to reach customers



SEARCH & DISPLAY LOCATION DATA

Enable accurate location searches and explore surrounding areas, find specific businesses or locate an exact address on a map



LOCATION INTELLIGENCE IN MOBILE APPS

Build highly personalized engagement based on context, location, time and behavior

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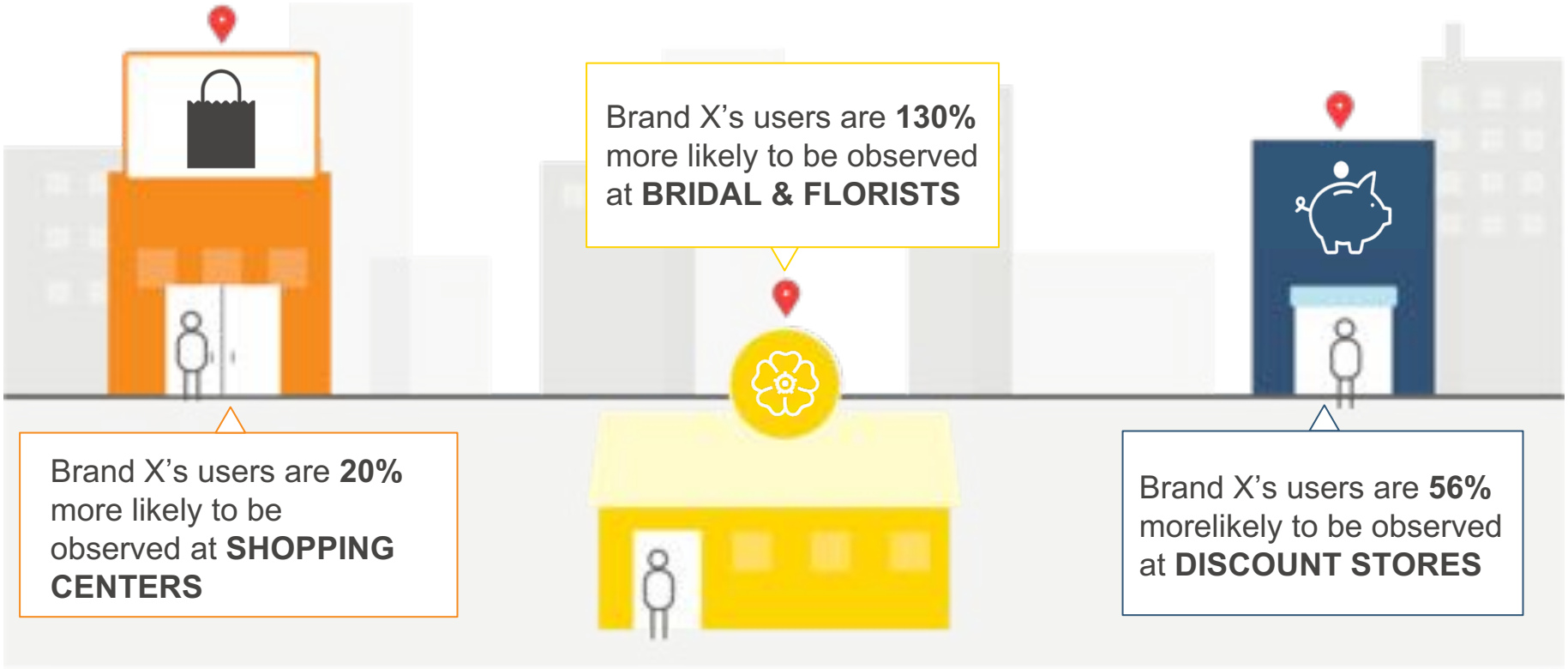
Build highly personalized engagement based on context, location, time and behavior



The way people behave in the real world can reveal more about their needs and desires than online browsing behavior alone.

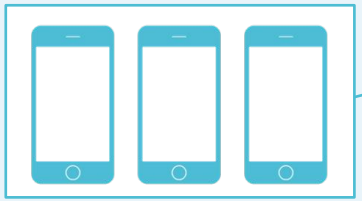
ROBUST AUDIENCE INSIGHTS

Understand how your customers move about in the real world



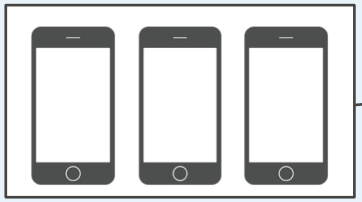
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IDENTIFYING CONSUMER INSIGHTS FROM LOCATION DATA



TARGET SET

Observed at least once at the auto dealership



BASELINE SET

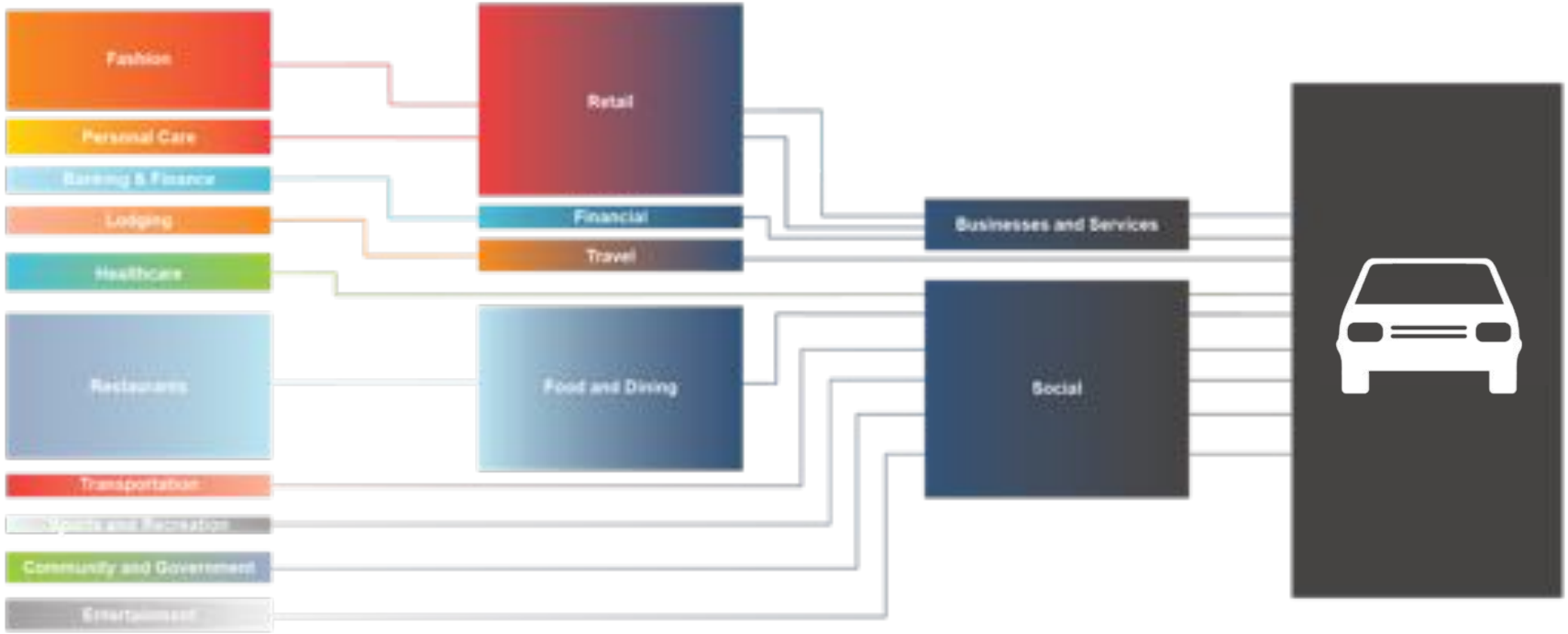
Observed at least once at ANY auto dealership



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SAMPLE BRAND SHOPPER INSIGHTS

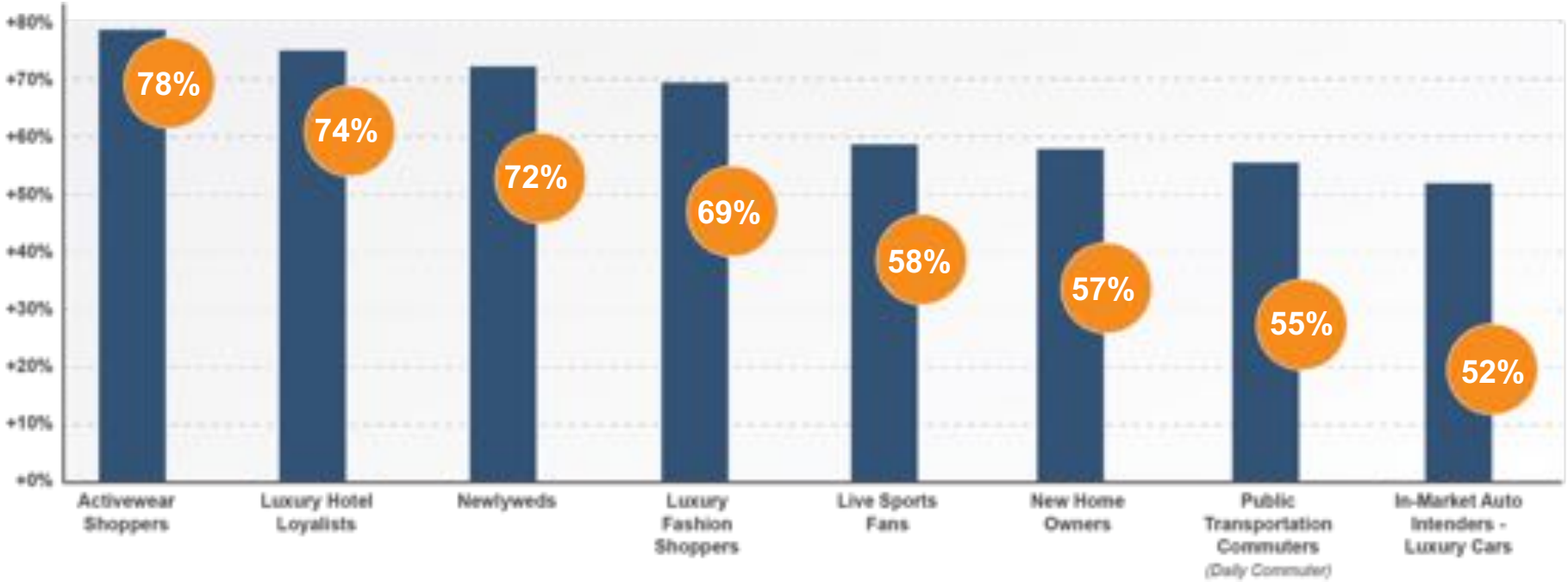
Customer Journey



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SAMPLE BRAND SHOPPER INSIGHTS

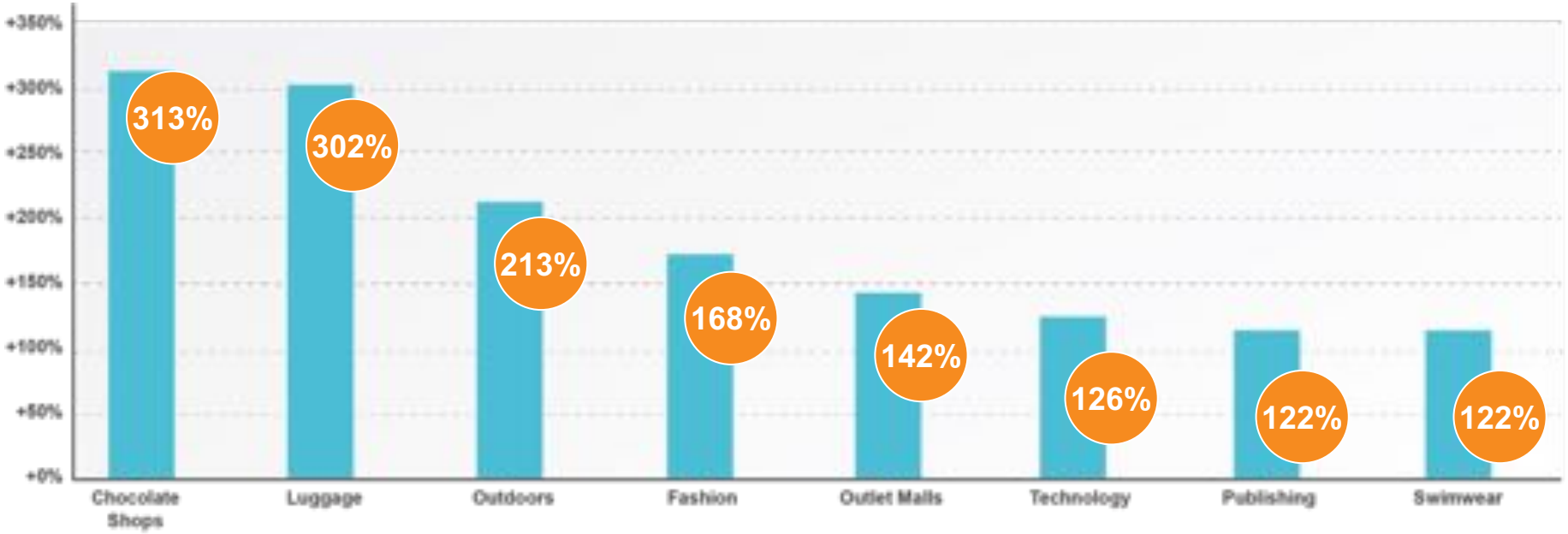
Top Behavioral Segments



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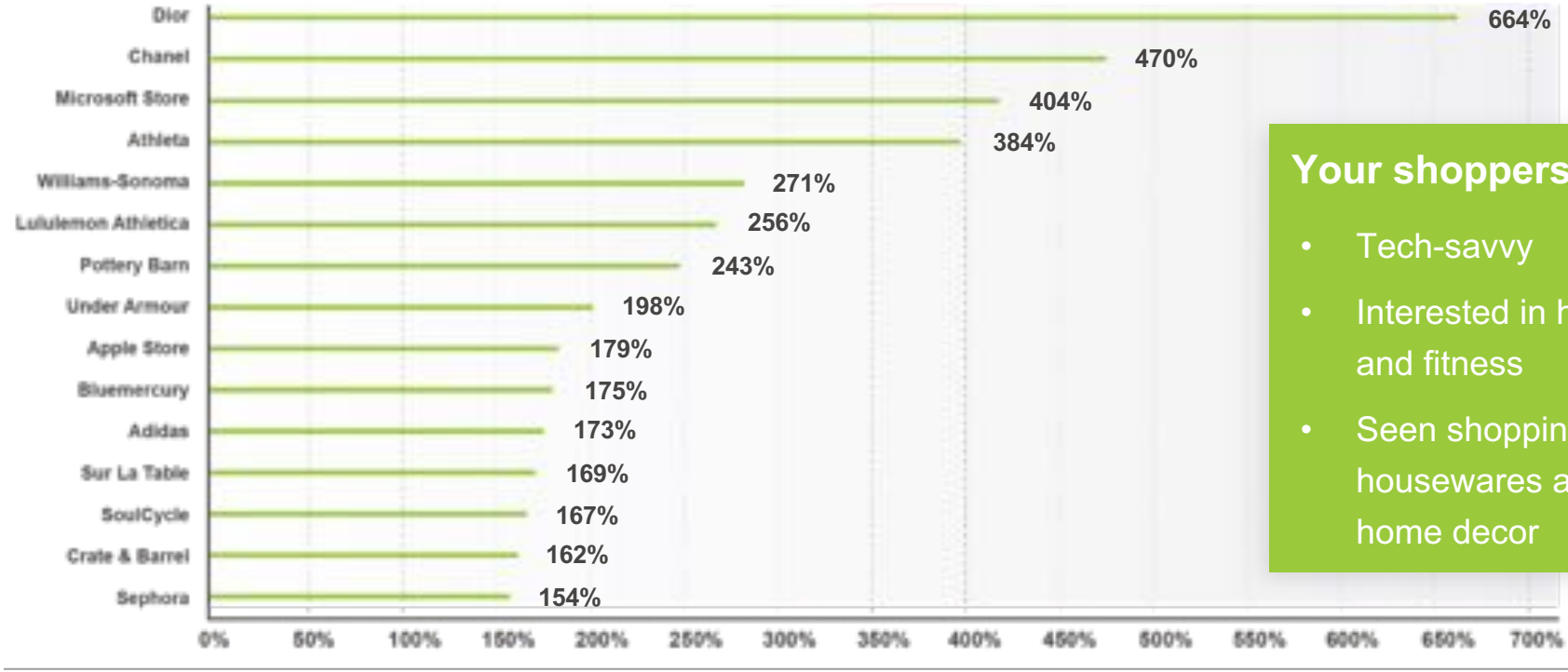
Top Related Categories of Place Visitation



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SAMPLE BRAND SHOPPER INSIGHTS

Top Related Chains



Your shoppers are:

- Tech-savvy
- Interested in health and fitness
- Seen shopping for housewares and home decor

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INSIGHTS BASED TARGETING STRATEGY

Scale while maintaining relevance with highly-customized audiences.

TECH ENTHUSIASTS
Reach consumers who are early adopters of the latest tech products



YOUNG PROFESSIONALS
Reach younger consumers observed with a high dwell time at offices during the work week



HEALTHY LIFESTYLE
Reach consumers who live an active lifestyle and care about personal fitness



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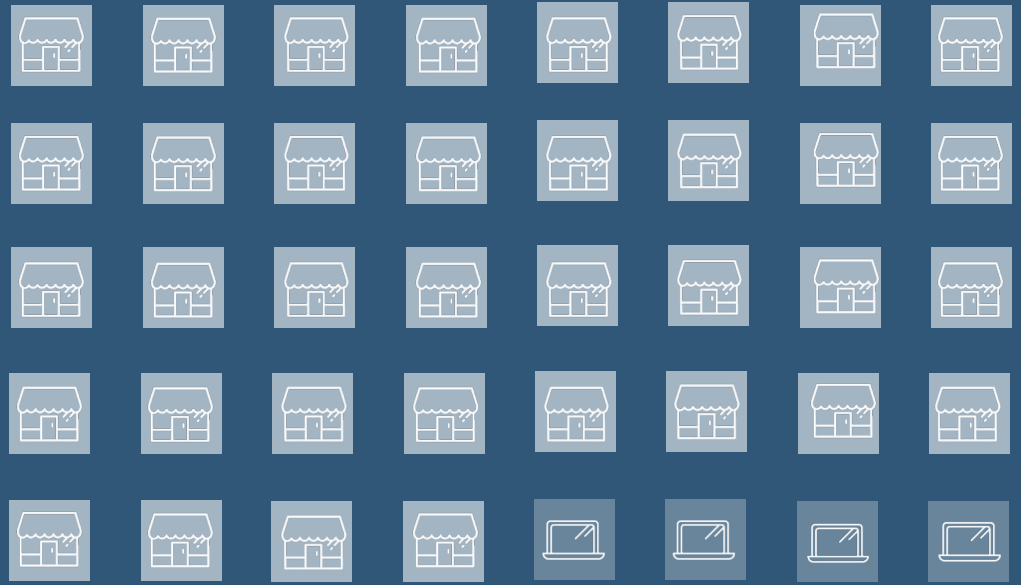
If you’re only considering online activity, you’ve got an incomplete understanding of your customers’ journey.

MOST RETAIL SALES OCCUR IN STORES

Brick and mortar sales account for over

90%

of retail sales.



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Source: U.S. Census Bureau, Q1 2016

STORES ARE PREFERRED FOR MANY GOODS

Stores remain consumers' preferred shopping channel for many goods and most services.



Which products are you more likely to shop for in brick-and-mortar stores rather than online?



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Source: Retail Dive Consumer Survey, fielded by Google Survey

STORES ARE PREFERRED BY MANY CONSUMERS

Most millennials prefer shopping in physical stores to shopping online.



53%

of Millennials make the majority of their purchases offline



58%

of younger Millennials (ages 20-23) make the majority of purchases offline

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Source: The Millennial Shopping Report, CouponFollow, Summer 2017



If you’re only considering online conversions in your performance metrics, you’re undervaluing the impact of your ad spend.

ONLINE CONVERSIONS ARE ONLY A FRACTION OF THE STORY



If your ad campaign generates

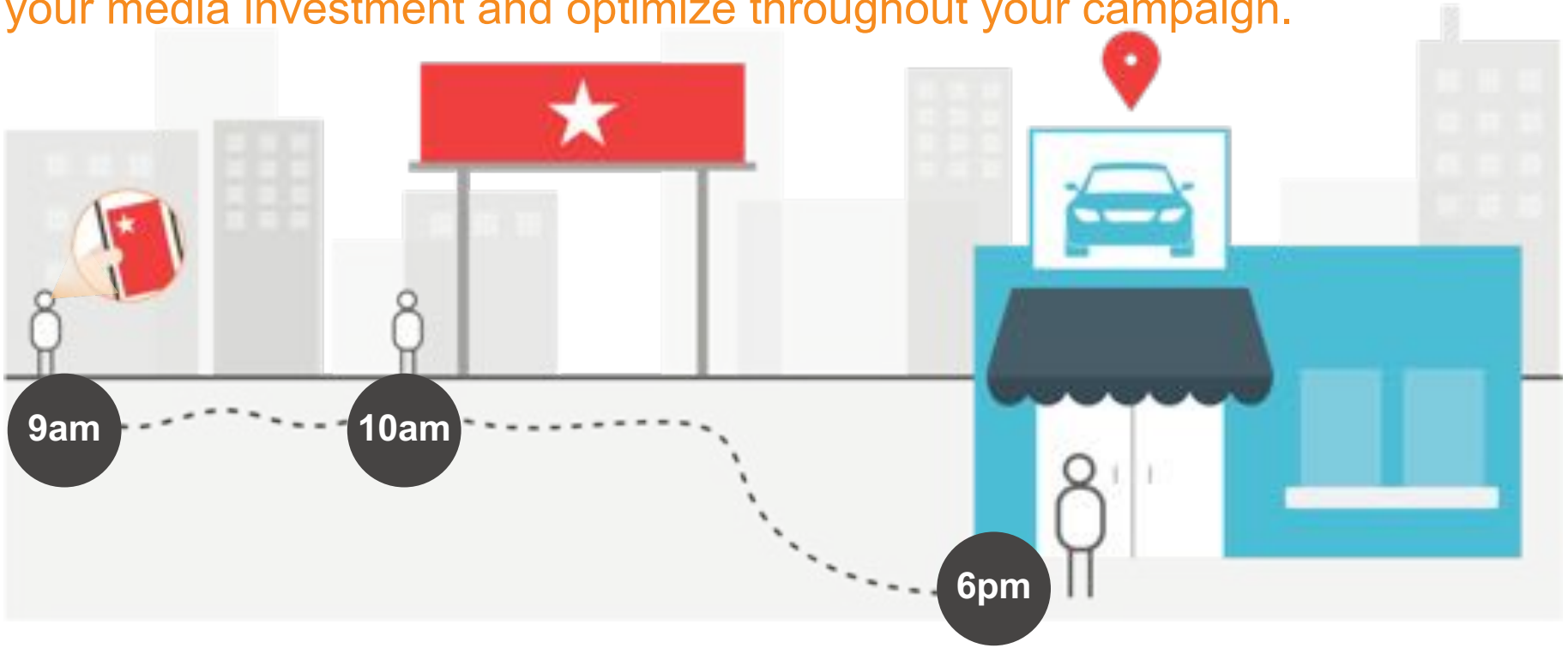
$100 in total revenue…

$84 from offline sales

$16 from online sales

CLOSED-LOOP MEASUREMENT

Tie deterministic foot traffic to each impression served to prove the value of your media investment and optimize throughout your campaign.



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AUTO BRAND ELEVATES CROSS-SCREEN MEASUREMENT STRATEGY

CHALLENGE

Looking to build a better cross-screen strategy, an auto brand needed a smarter measurement tool to evaluate their digital media efforts.

SOLUTION

The auto brand went in search of a comprehensive measurement tool that included all media types and used deterministic visitation data.

They decided to leverage Factual's **Geopulse Measurement** solution to integrate offline visitation data with online behaviors for a full-circle view of their audience.



RESULTS

HOLISTIC MEASUREMENT

The auto brand was able to measure 1:1 dealership visits driven by their cross-screen media buy.

NEW MID-FLIGHT OPTIMIZATION

Receiving data throughout the campaign allowed for insight into best performing tactics and mid-flight optimizations.

REAL-LIFE IMPACT

The improved optimizations drove over **450,000 visits** across all US dealership locations all of with occurred within 30 days of previous ad exposure.

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MAJOR DEPARTMENT STORE CLOSES THE MEASUREMENT LOOP

CHALLENGE

Amid the buzz of a busy holiday shopping season, a major department store wanted to leverage mobile to increase foot-traffic to their Cosmetics & Fragrances departments

SOLUTION

The department store built an innovative strategy across both mobile and tablet, including **Geopulse Audience** mobile segments, paired with Factual's Geopulse Measurement solution. Powered by measurement partner DoubleClick Campaign Manager, **Geopulse Measurement** provided a neutral assessment of foot traffic across the entire campaign.

RESULTS

HOLISTIC MEASUREMENT
In-store visits were measured across both mobile and tablet for a deeper understanding of performance.

28k
TOTAL VISITS

REAL WORLD IMPACT
Factual's Holiday Beauty Shopper segment had a **0.55% visit rate** driving an overall 0.14% visit rate.

0.14%
OVERALL VISIT RATE

BEHAVIORAL INSIGHTS
Shoppers are more mobile on the weekends with **38%** of conversions occurring on Friday and Saturday.

38%
VISITS ON FRI & SAT

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“The need for accuracy and precision is critical when location data is used for measurement purposes, even more than it is when location data is used for targeting.”

- eMarketer, Location Intelligence,H2 2016

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LOCATION DATA
QUALITY MATTERS.

MARKETERS (RIGHTFULLY) QUESTION THE QUALITY OF THEIR DATA

Marketer's top concerns regarding mobile location data:



40%

Concerns regarding the quality of the data



39%

Lack of transparency into data sources and methodologies

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Source: MMA Study, 2016

THE INGREDIENTS FOR QUALITY DATA FOR MEASUREMENT

USER LOCATION + PLACES DATA + ACCURATE PLACE ATTRIBUTION

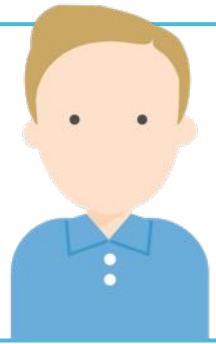


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QUESTIONS TO ASK ABOUT THE DATA

Q: What is the source of your places data? Is it licensed?

Ensure the places data used is comprehensive and continually updated to maintain accuracy. Ideally, it should be first-party data of known quality.





Q: How do you attribute a mobile device user to a place?

A user's location coordinates are often not sufficient to correctly place a user. Many factors can impact device signal accuracy, including: physical obstructions, network connectivity, app permissions, and device battery life.

QUESTIONS TO ASK

About the data informing your measurement model…

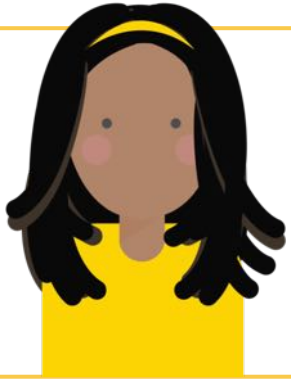


Q: How is your in-store visit data derived?

For the most accurate insights, data should be based on real world user visits, not probabilistic modeling or incentivized panels.

Q: How do you validate the user location data used to determine a visit occurred?

Mobile device location coordinates are often inaccurate or imprecise. For accurate measurement, device users' location data should be validated against rigorous criteria.



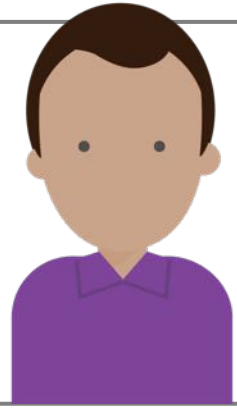
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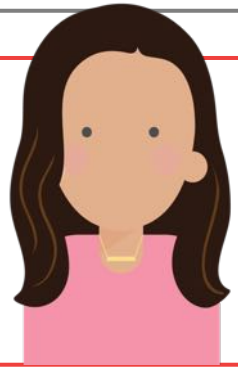
QUESTIONS TO ASK

About the data informing your measurement model...

Q: Can you measure my entire media buy across all vendors?

Data used for measurement should be neutral, and not tied to just a portion of your campaign or a single vendor. Running A/B lift tests against a small subset of your campaign can result in a “dirty” control group… so you can’t be truly confident in your results.





Q: Can you measure my media spend across all channels?

For optimal campaign analysis and optimization, you’ll want to consider all vendors… and all channels.

KEY CONSIDERATIONS WHEN SOURCING LOCATION DATA PROVIDERS



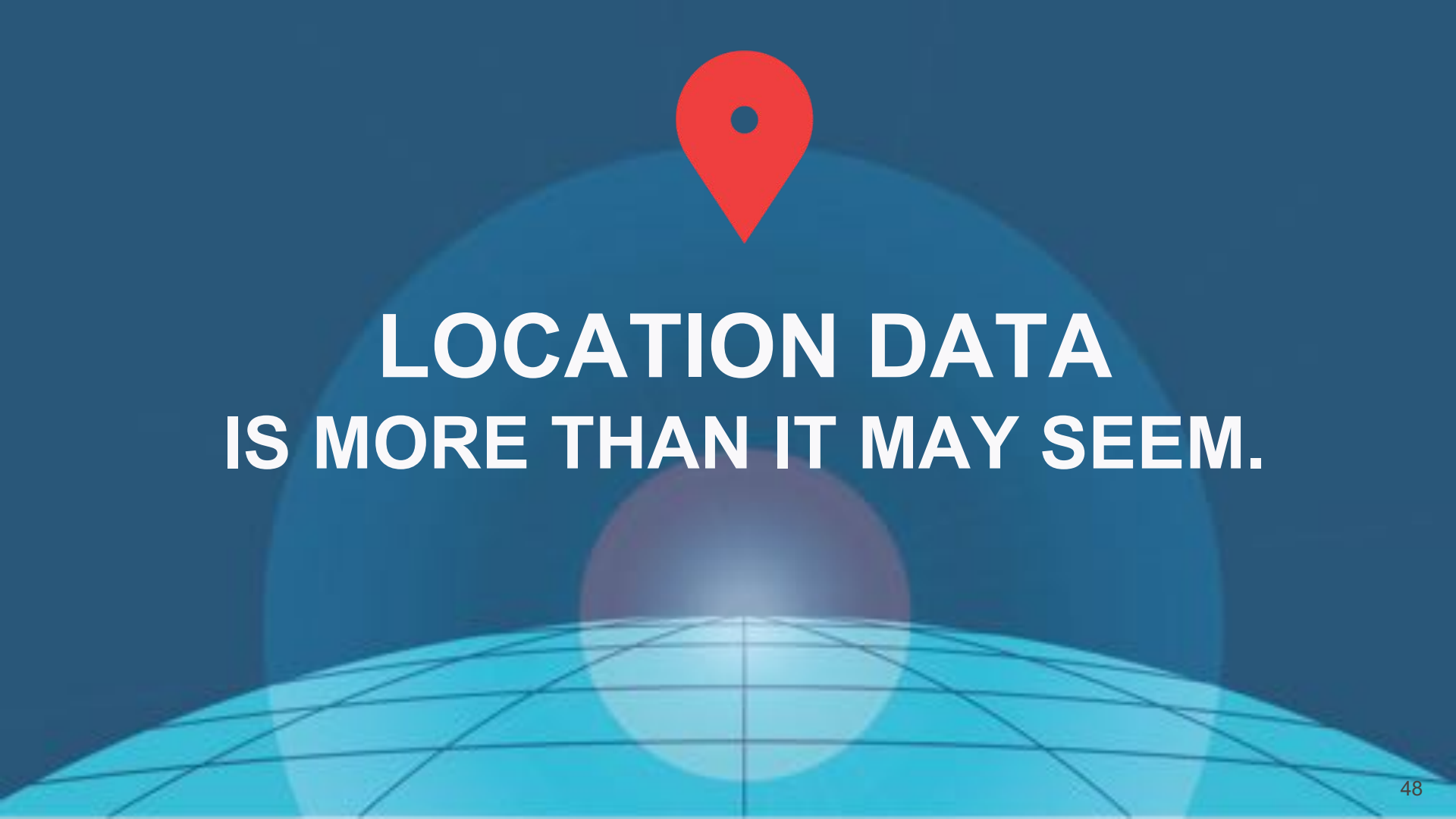






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FACTUAL IS THE MOST TRUSTED DATA ON PEOPLE AND PLACES WORLDWIDE



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Email strategy@factual.com



THANK YOU

Marina Kitgor, Senior Director of Agencies and Strategic Partnerships at Factual