

Credit Card Spend and Geolocation Data – What does it mean and how to use it?



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Sales Manager at Zartico

- Husband
- Father
- Part-time youth sports coach
- Avid Saltwater Fisherman





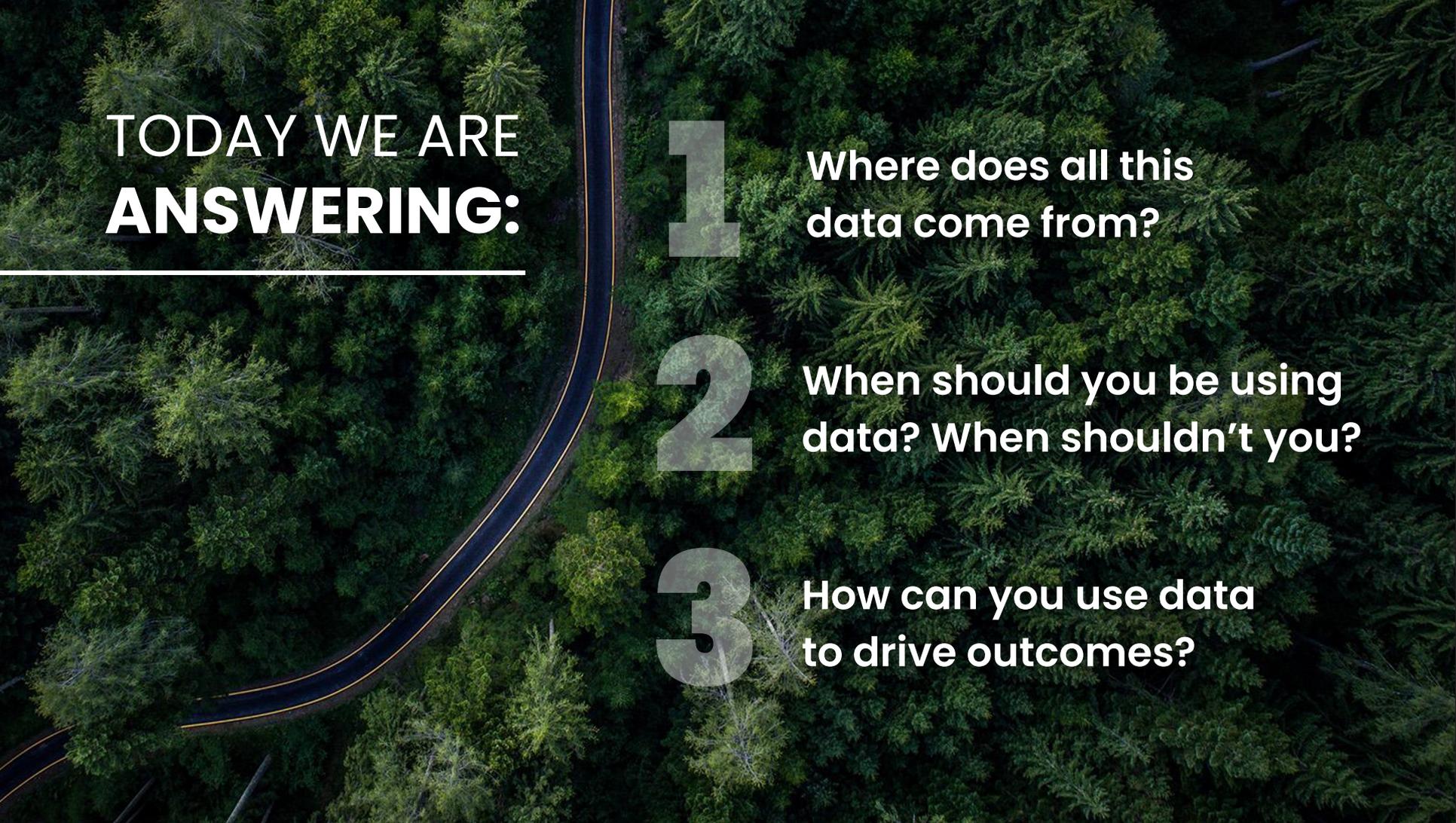




Who is



ZARTICO



**TODAY WE ARE
ANSWERING:**

1

Where does all this data come from?

2

When should you be using data? When shouldn't you?

3

How can you use data to drive outcomes?

An aerial photograph of a city at dusk, with mountains in the background. A large, semi-transparent number '1' is on the left. Overlaid on the right is a complex network of glowing blue and orange lines connecting various points, representing data flow. The text 'WHERE DOES THE DATA COME FROM?' is centered in white, bold, uppercase letters.

1

**WHERE DOES THE
DATA COME FROM?**



Geolocation & Spend Data Are Used Widely

INDUSTRIES:

Retail	Advertising
Restaurants	Government
Real Estate	Automotive
Media & Technology	Financial Services



Zartico's Licensed Data Sets

Event Data

300+
Global Event
Sources

40+ Million
Events
Worldwide

12 Month
Look Into
the Future

Spend Data

90 Million
Cards

10 Billion
Transactions
Annually

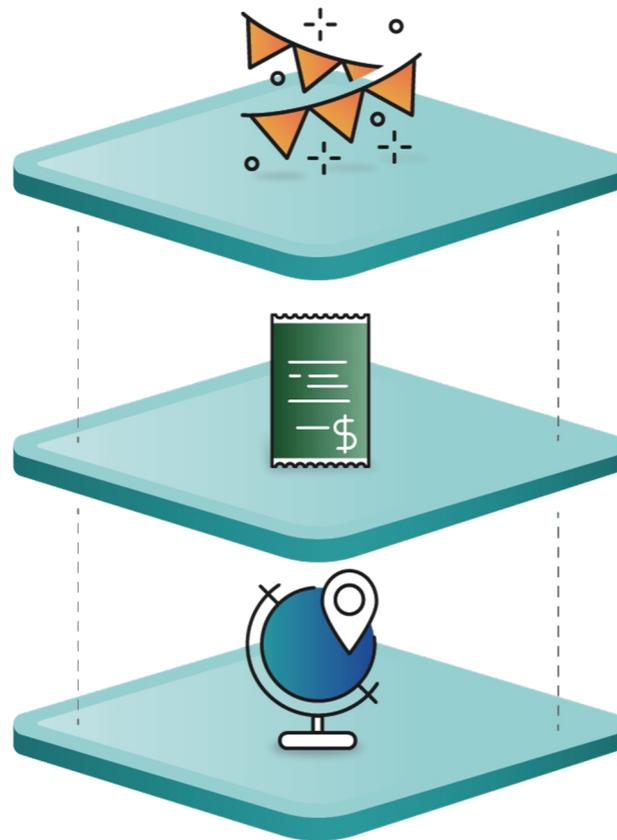
4 Brands
Credit &
Debit Cards

Geolocation Data

**19 Trillion Location
Observations:**
Largest Commercially
Available

Daily Visibility
of Both Visitors
& Residents

1.6 Billion
Global Devices
in 180+
Countries



*All data sets include historical data from **January 1, 2021***

5 Foundations of a Contemporary Destination Organization

The Five Foundations of a Contemporary Destination Organization **measure** and aim to help destinations **understand** the **true impact** of the visitor economy beyond the antiquated marketing-focused KPI.



**Demand
Generation**



**Visitor
Distribution**



**Economic
Opportunity**



Accountability



Stability

Why Zartico Exists

Economic Opportunity

**Jobs
for
Residents**



**Taxes for
Community
Services**

**Quality
& Diversity of
Amenities in the Community**

A scenic view of a beach at sunset. In the foreground, a wooden gazebo with a dark roof stands on a dune covered in tall grasses. The dune slopes down to a sandy beach. The ocean is visible in the background, with waves breaking on the shore. The sky is a mix of blue and orange, indicating the time is either sunrise or sunset. The text "Tourism Exists to Improve Resident Quality of Life" is overlaid on the right side of the image.

Tourism Exists to Improve
Resident Quality of Life

Data, Simplified

What is Big Data?



Large **amounts** of data



Collected **passively** from **digital** interactions



With great **variety** and a high rate of **velocity**

Key Features of Big Data

Volume	Variety	Velocity	Veracity	Value	Variability
Amount of data from many sources	Many types of data	Data generated very quickly	Data is volatile & needs to be checked	Data collection drives business value	Data can be used and formatted many ways
					

Examples of Big Data

Event Data

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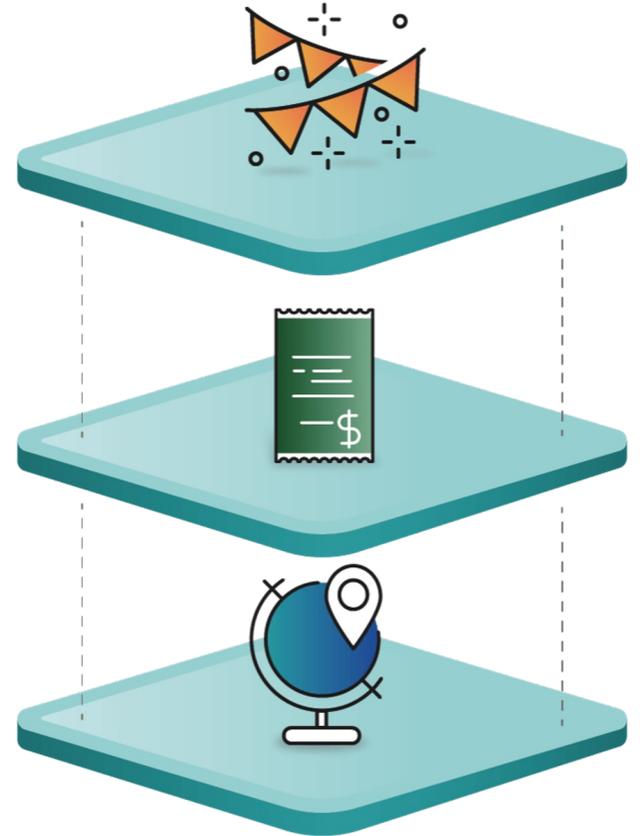
4 Brands
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Geolocation Data

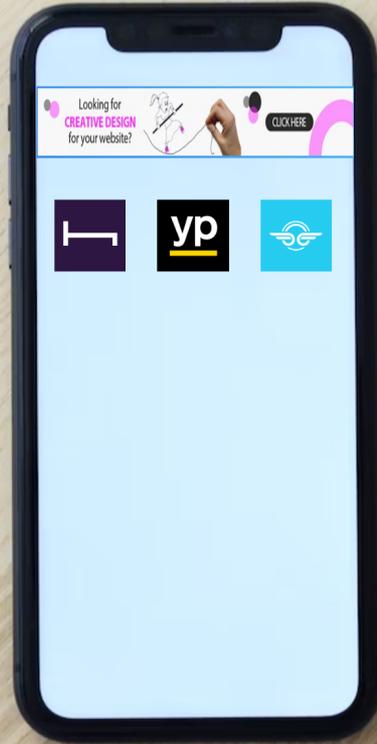
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Geolocation Data is Generated Through Apps & Ads



Sample Applications:

- Agoda
- Flightaware
- Travelocity
- Google Maps
- Restaurant Finder
- Airline & Hotel Brand Apps

Hashed Device ID:

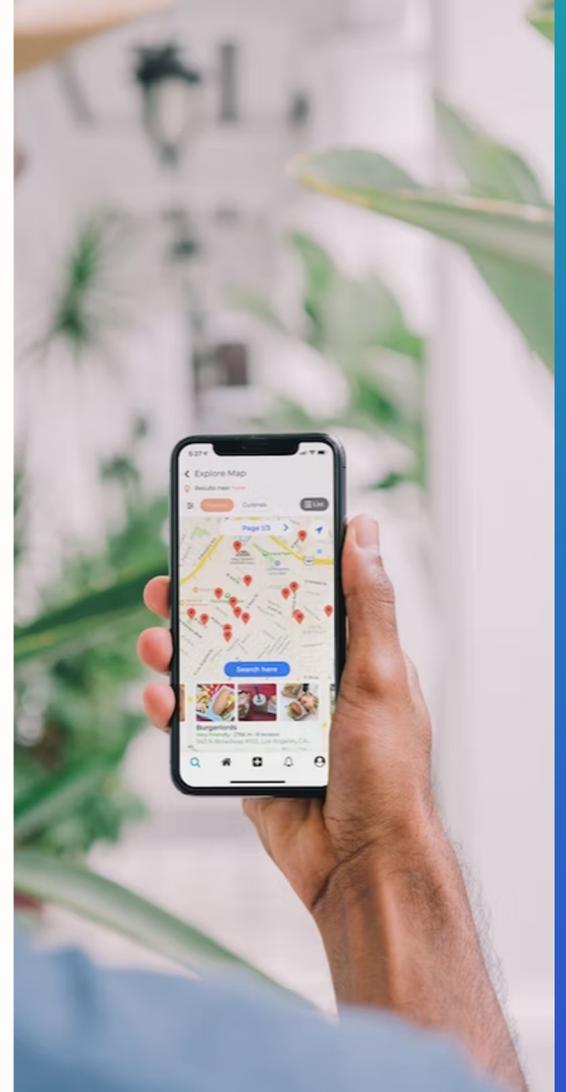
af6c048004e3bd67f983a9f35fea1b85930fxxx

These anonymous IDs can't be linked to other personally-identifiable data sets

You Control Access to Location Data Collection

1. Location Services setting on smartphone
2. App-level location services & settings
3. App downloads and ad blocking

Zartico data comes through opt-in data sources.



Credit Card Data Collection

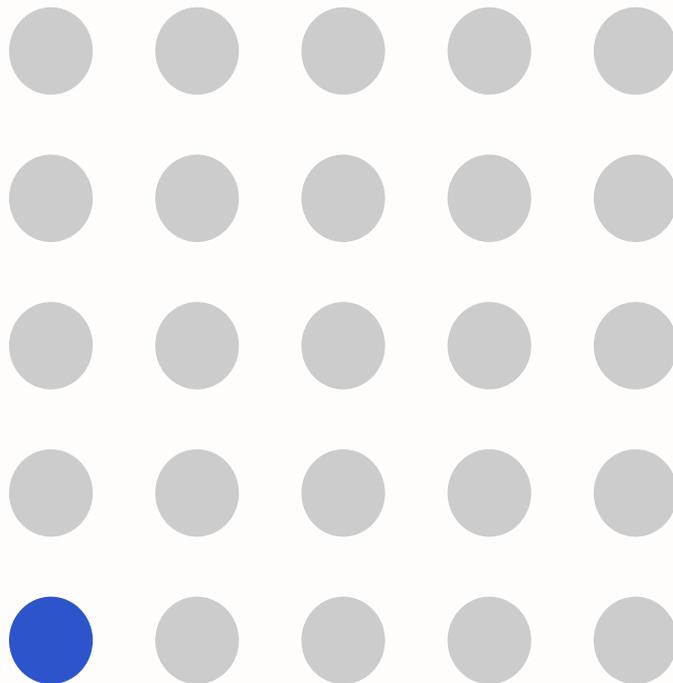
1. Merchant Category, MCC Code
2. Transaction Amount
3. Limited, self-reported demographics



Data is a Sample

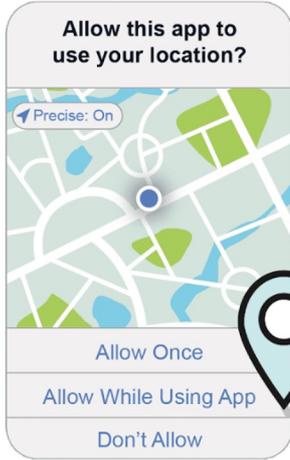
Zartico sees approximately 4% of all devices or spend in a given area. That's ~1 in 20 people to a place. We have no information on the other 19.

This still provides a representative sample for analysis that is much stronger than traditional surveys.



Normalization is Needed

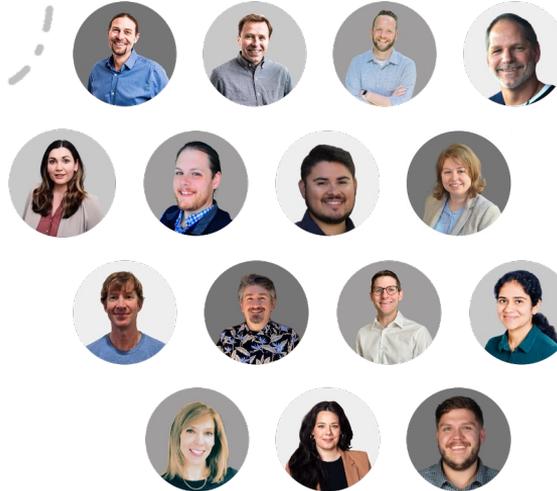
Our Geolocation Data is Different



Raw data ingested from our data partners



Normalized by our team of PhDs, GIS experts, engineers, and data scientists who ensure what you receive in ZDOS™ is accurate

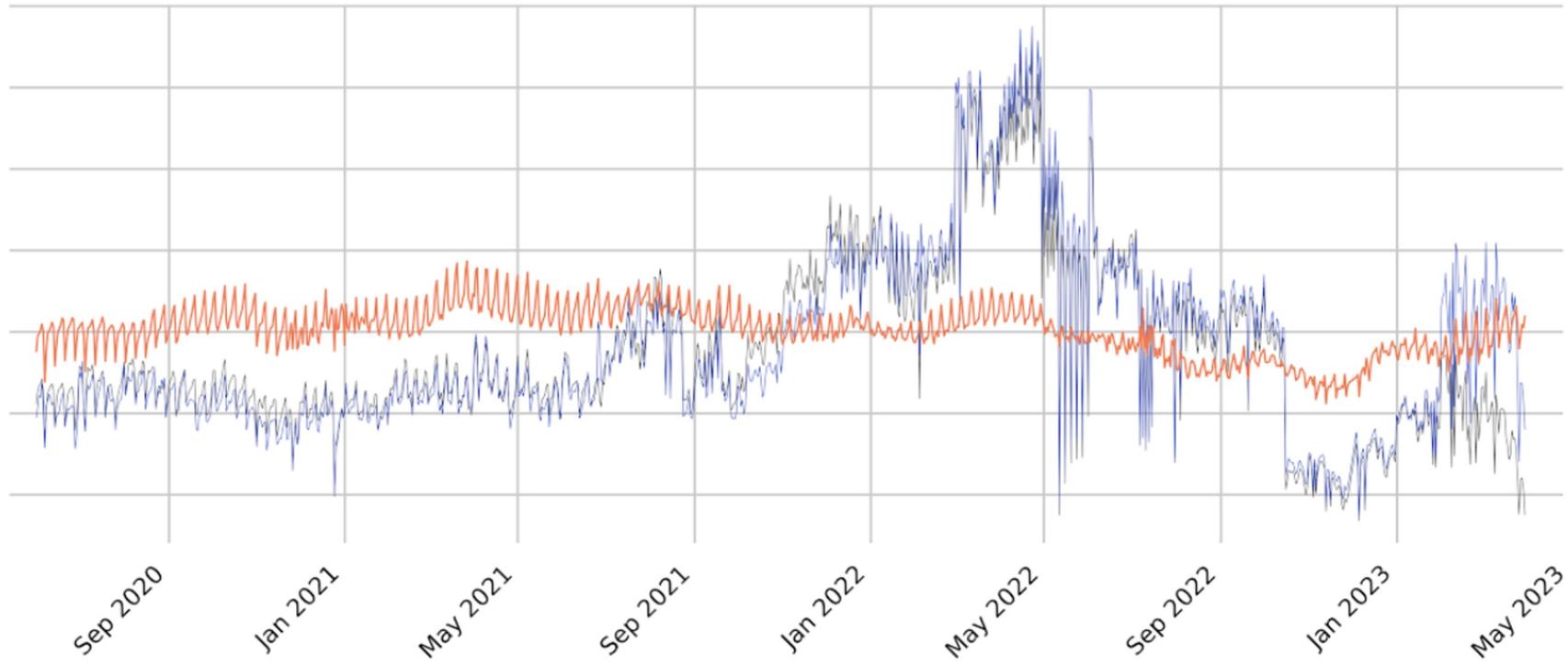


What is Normalization?

- Normalization is like a “steady-cam” or shock absorber for geolocation data.
- It is essential for increasing confidence in the data.
- Unprocessed data = more messiness



Trends in Raw vs. Normalized Data



TOOELE
ARMY DEPOT
NORTH AREA

ISLAND
STATE PARK

Hot Spot Removal

CARR FORK
WILDLIFE
MANAGEMENT
AREA

BINGHAM
CANYON MINE

ATK BACCHUS
WORKS

SAN JUAN CITY

MILCREEK

SANDY

MOUNT
OLYMPUS
WILDERNESS



What Can You Do With Data?



What Can You Learn From Location Data?

The Origin of the Device

Country / State / County / City

The Location of the Device

Point of Interest

Country / State / County / City

Category

Trip Type

Location data is really good at telling us:

- Where visitors are going
- How visitation trends have changed over time
- How different origin markets move

Location data is not good at telling us:

- Why a person is visiting
- Visitation to your local bar



What Can You Learn From Spend Data?

The Origin of the Cardholder

Country / State / County / City

Action of the Cardholder

Total Spend

Transaction Amount

Merchant Category

Credit card data is really good at telling us:

- Who is spending in Outer Banks
- What they are spending money on
- Changed in spend trends

Credit card data is not good at telling us:

- What store they are spending at
- If they are purchasing with cash or online ahead of time

Activating Data

**START WITH A
QUESTION**

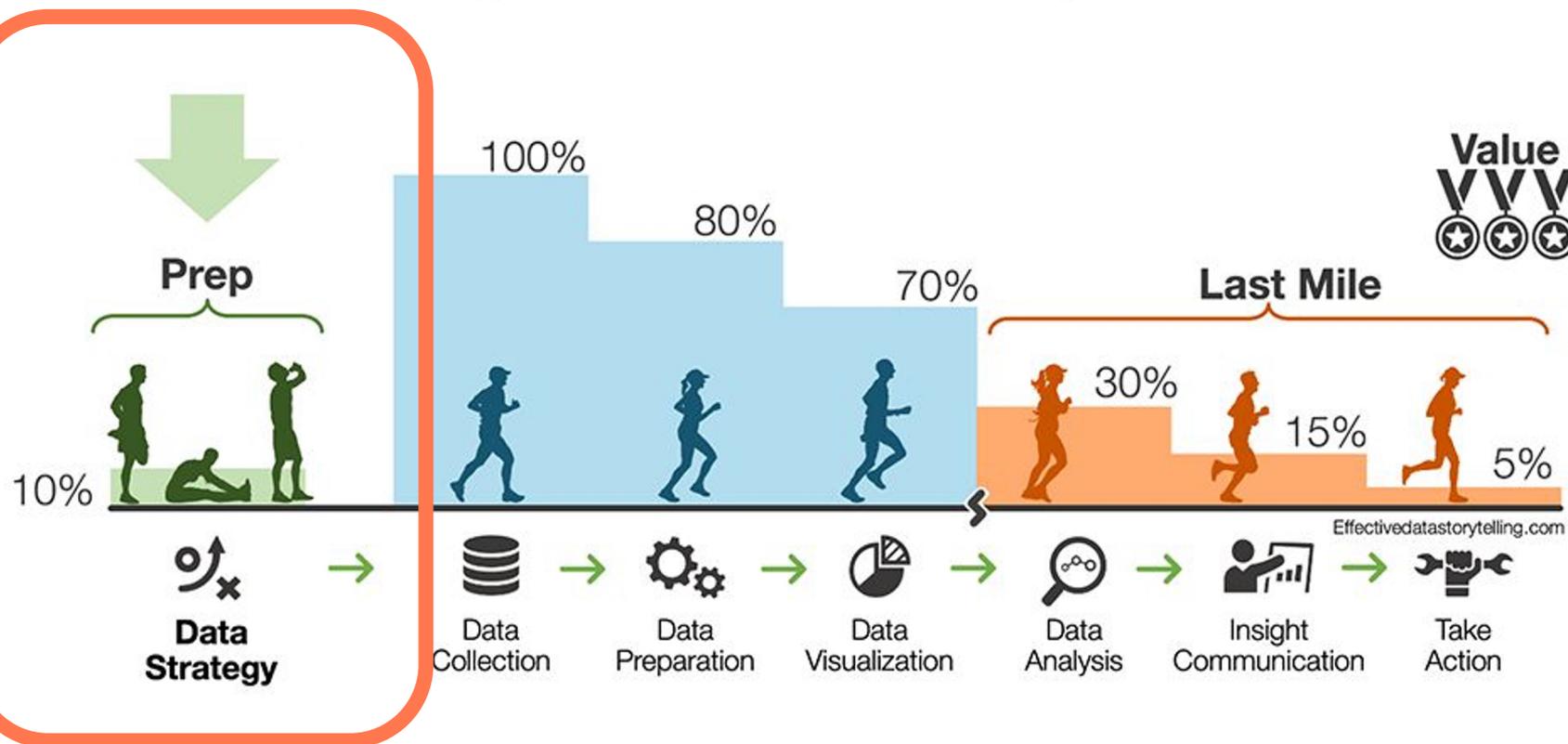


COMMON QUESTIONS

- Where are visitors coming from?
- What are the spending?
- What are they doing?
- Are they staying at my hotels?
- How are trends evolving over time?
- How are they impacting my economy?
- Should I sponsor this event?

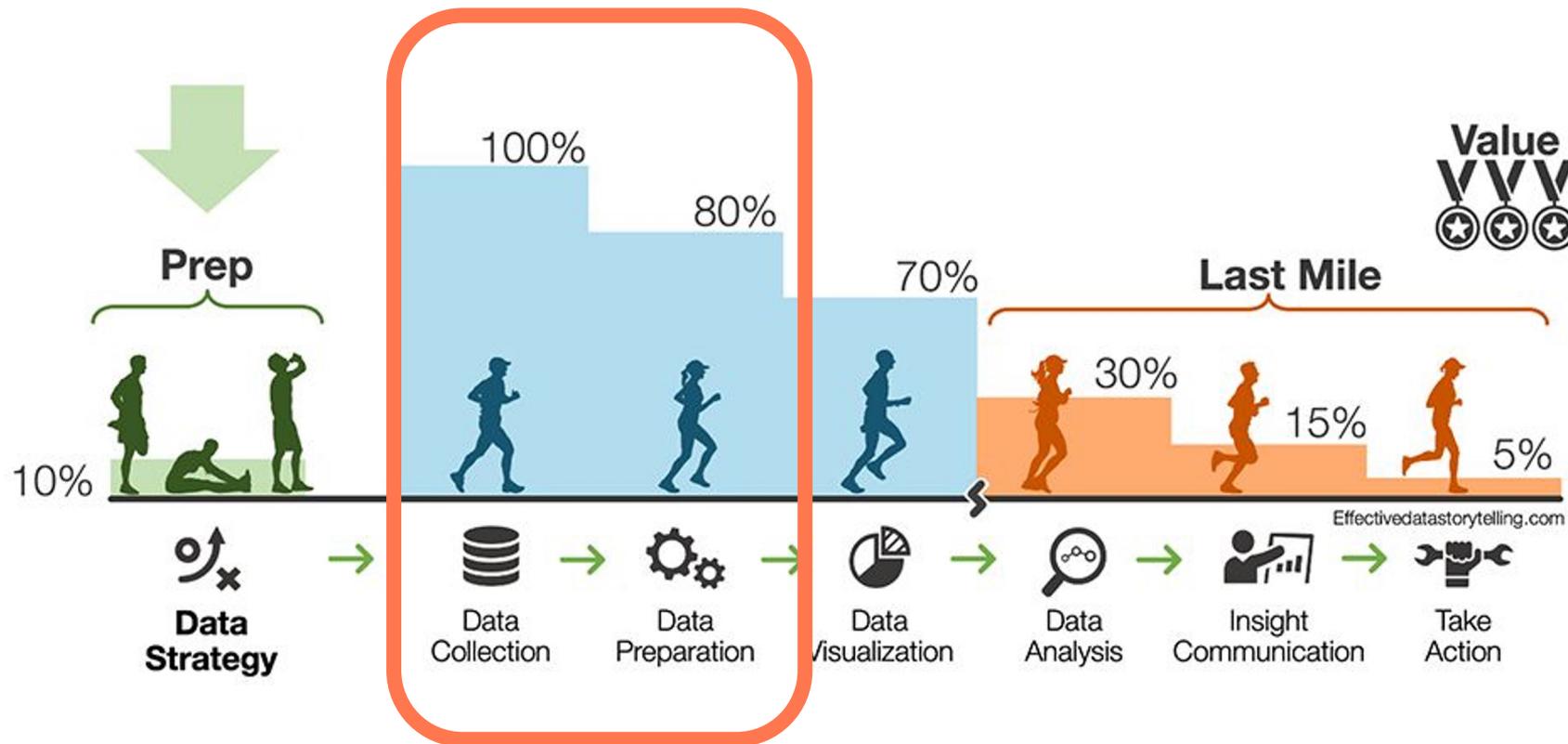
Data Strategy:

The Essential Preparation for the Analytics Marathon



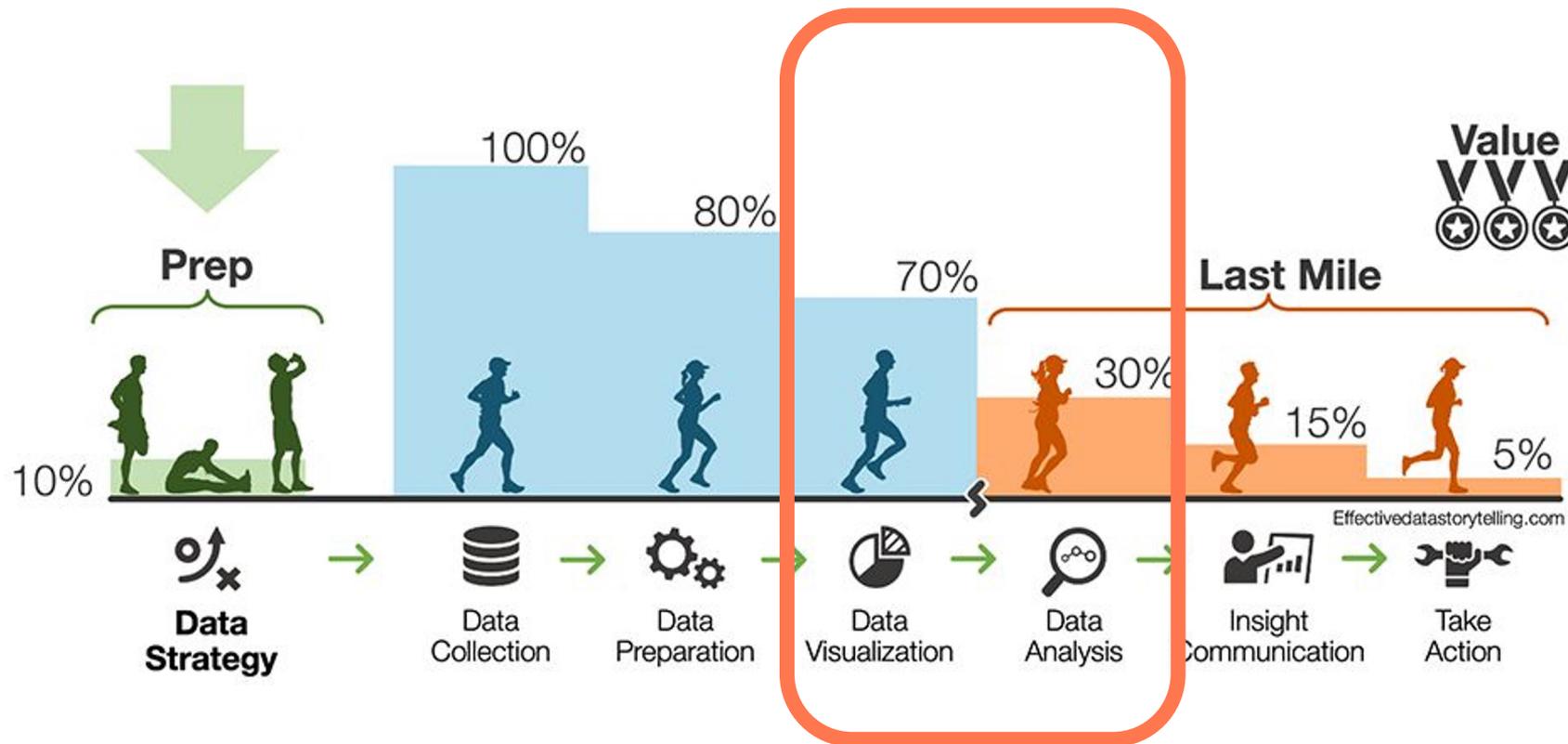
Data Strategy:

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Data Strategy:

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An aerial photograph of a coastal town, likely on a barrier island, showing a dense residential area with many houses and buildings. A long wooden pier extends from the town into the ocean. The beach is visible between the town and the water. The sky is blue with some clouds, and the sun is low on the horizon, creating a warm glow.

BEST PRACTICE:

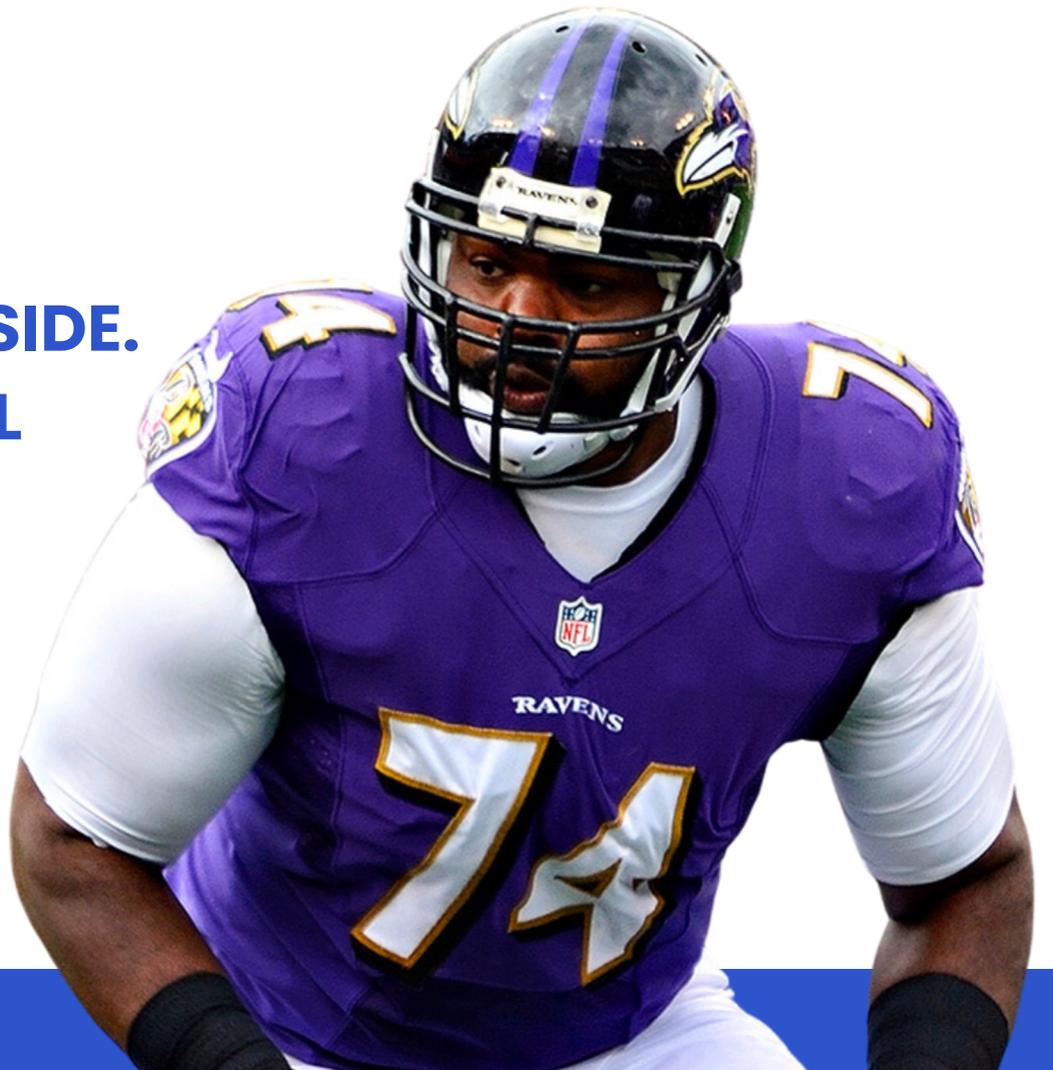
**USE THE DATA YOU
NEED, ONLY THE DATA
YOU NEED.**



**BEST PRACTICE:
WHEN POSSIBLE, USE MULTIPLE
DATA SOURCES TO TELL YOUR
STORY**

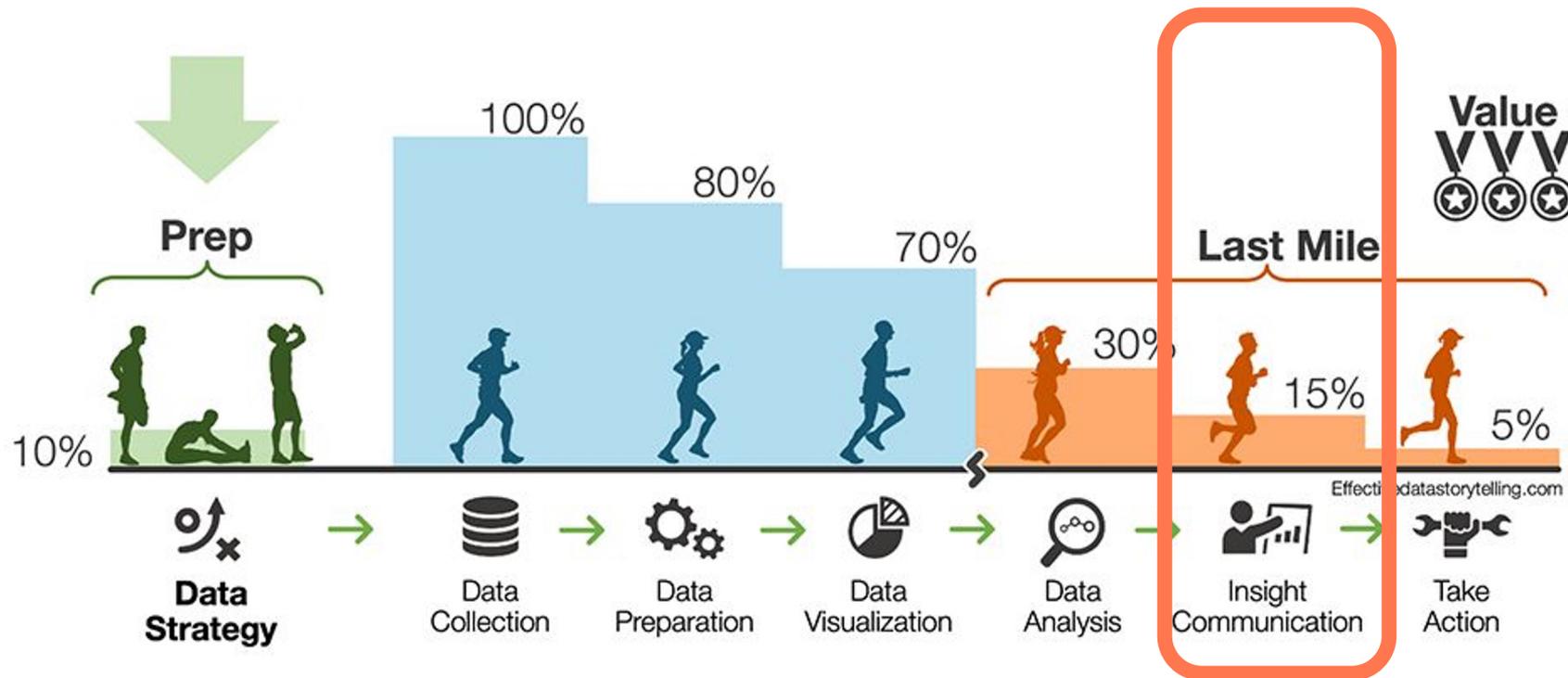
BEST PRACTICE:

**PROTECT YOUR BLINDSIDE.
NO DATA SET WILL TELL
THE ENTIRE STORY.**



Data Strategy:

The Essential Preparation for the Analytics Marathon





BEST PRACTICE:

**GIVE YOUR INSIGHTS
CONTEXT. COMPARE
OR CONTRAST THE
INSIGHTS. SHOW
WHAT CHANGED.**

Benchmarks

National

North Carolina

Beach Destinations



Differences

Year Over Year

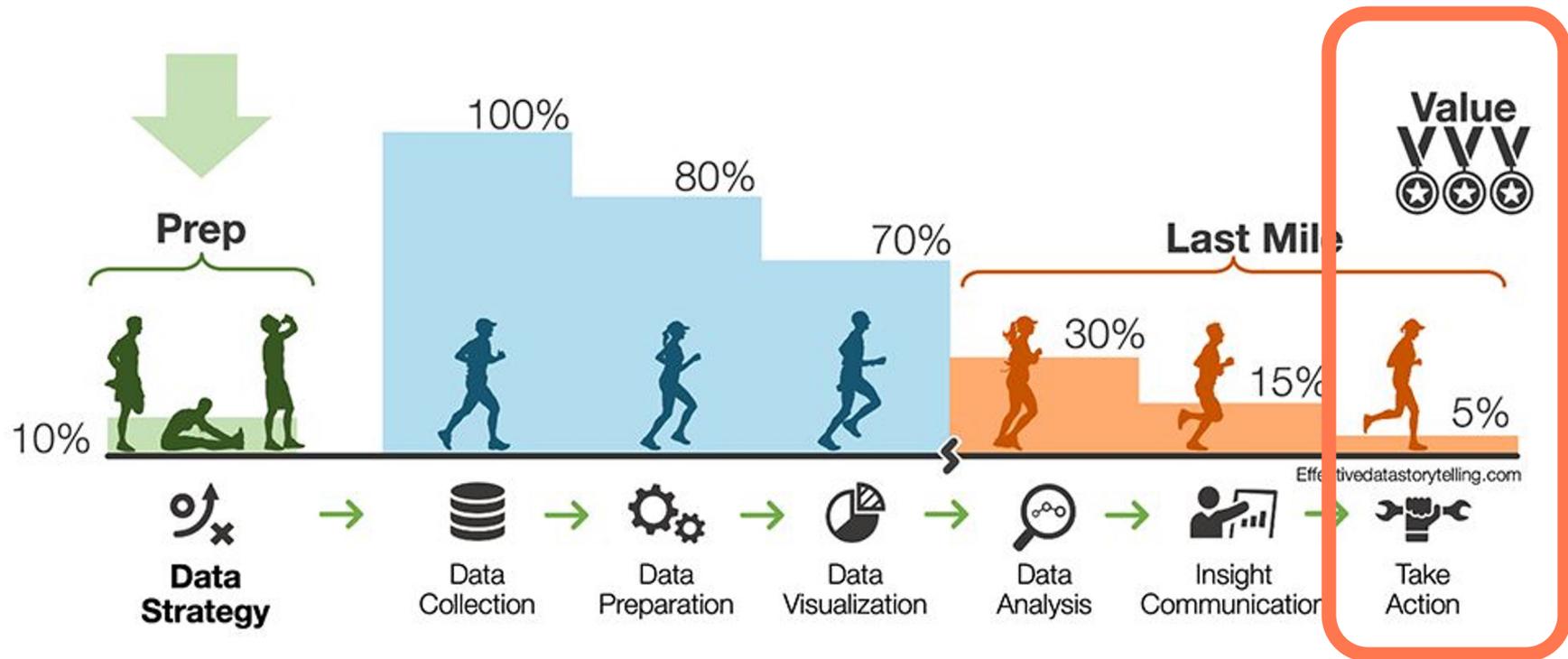
Seasonal

Visitor / Resident



Data Strategy:

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Expectation



Reality



Cottonwood Canyons, Utah



- Over 70% of the travelers are residents, not visitors
- Share of Canyon Usage by Residents has Increased by 20% since the Pandemic

WASATCH FRONT NEWS

New 'Cottonwood Connect' increases ski busses to Cottonwood Canyons

by: [Derick Fox](#)

Posted: Jan 11, 2023 / 11:12 AM MST

Updated: Jan 11, 2023 / 11:12 AM MST

A Look At Outer Banks

October 2022 – September 2023

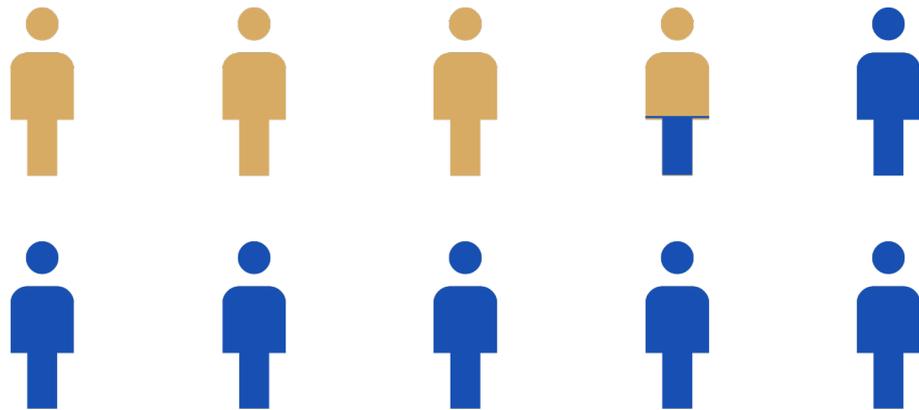


ZARTICO

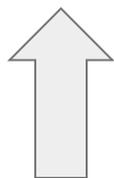
On a Daily Basis

63%

*Of Devices in Outer
Banks are **VISITORS***

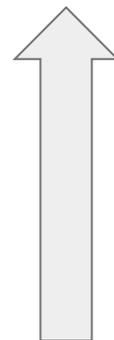


Benchmarks Give This Context



57%

Higher Than Like Destinations



450%

*Higher Than North
Carolina
Benchmark*





We See Similar Trends in Visitor Spend and Average Spend

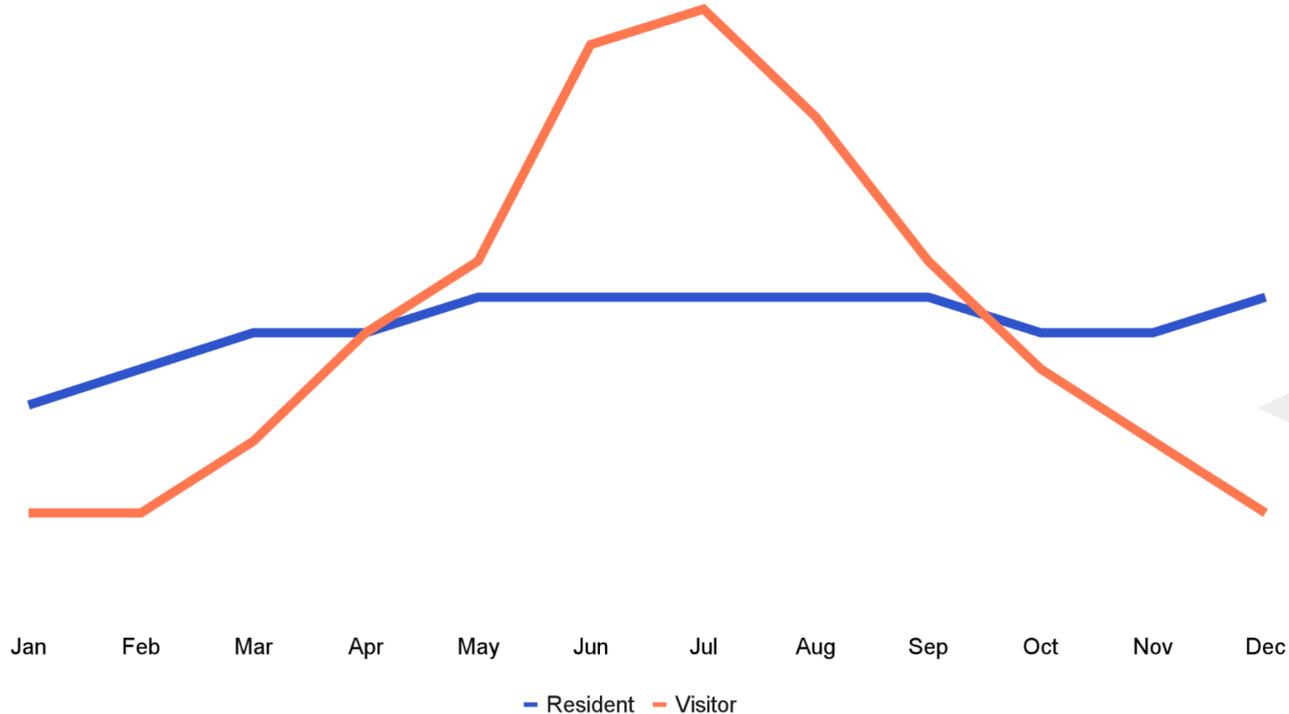
	<u>% Spend from Visitors</u>	<u>Avg. Cardholder Spend</u>
Outer Banks	43%	\$402
Like Destinations	41%	\$262
North Carolina Benchmark	22%	\$283

What Does This Mean?

Visitors make up a larger share of the Outer Banks economy and destination makeup compared to like destinations and the statewide average.

With over 40% of annual spend in Outer Banks coming from visitors - rising to over 55% during the summer months - ensuring a health and stable visitor economy is key - for both visitors and residents alike.

Visitor / Resident Spend Insights: Share of Total Spend by Season



47% of Visitor Spend occurs between June - August

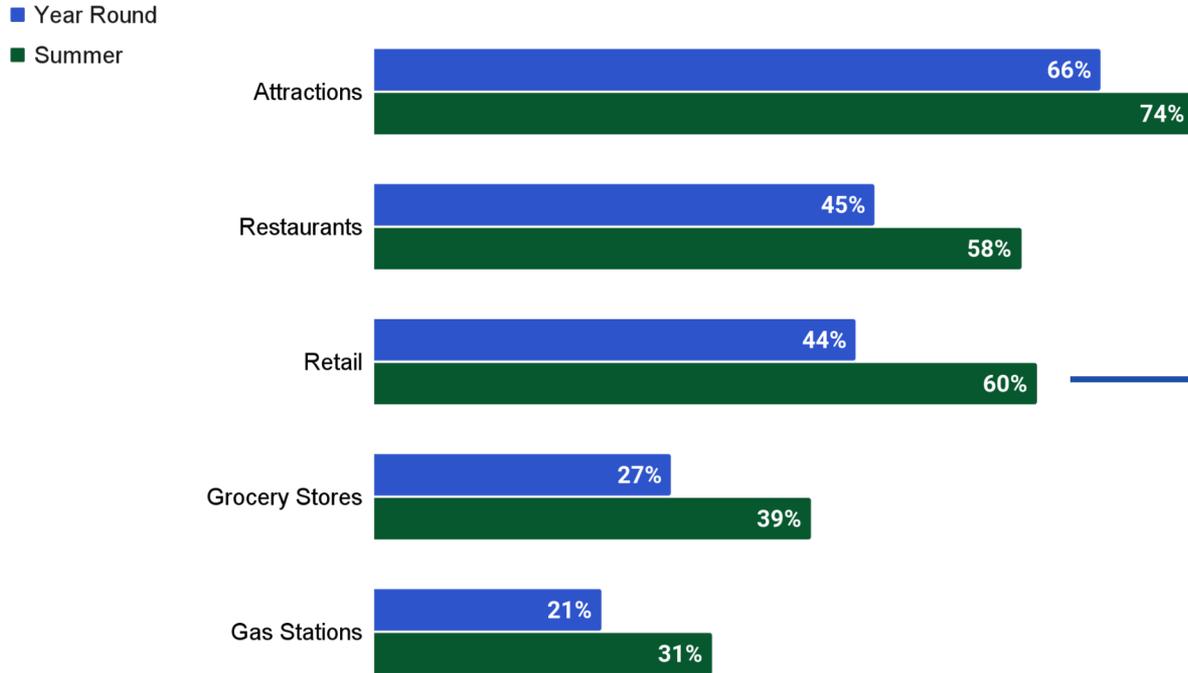
During the same time period, only 27% of Resident Spend occurs

Seasonal Origin Market Differences: Share of Overall Visitation

In-State markets
visitation peaks during
the winter months

DMA	Fall	Winter	Spring	Summer
Norfolk	16%	18%	15%	15%
Washington DC	7%	8%	4%	6%
Raleigh - Durham	7%	10%	6%	6%
Philadelphia	5%	4%	4%	4%
New York	4%	2%	1%	4%

Share of Spend From Visitors by Category: *Seasonal Differences*



Seasonal comparisons show that during the summer the visitor impact on the local economy is increased

Visitors Spend More Per Transaction than Residents

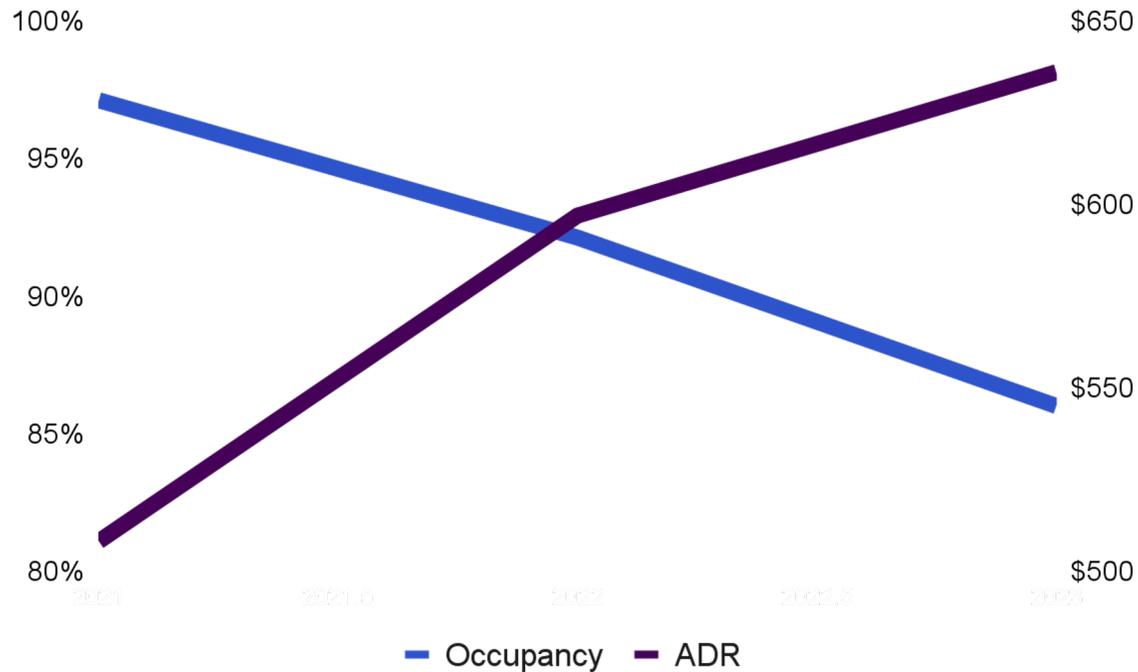
Category	Residents	Visitors
Attractions	\$44	\$56
Gas	\$30	\$34
Bars	\$45	\$54
Grocery Stores	\$53	\$59
Sit Down Restaurants	\$38	\$56
Retail	\$56	\$58

What Does This Mean?

Visitors are highly valuable to Outer Banks- not just in terms of share of spend, but also their per-transaction value.

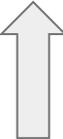
Summer may drive a majority of the revenue, but even in off-peak periods, visitors spend more on average in key sectors than visitors.

Outer Banks Lodging Trends

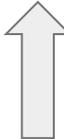


Vacation rental rates continue to increase, while occupancy rates fall. This likely means that revenue is staying close to steady - which could mask the fall in demand

Summer Average Daily Rate YoY Increases

 **32%**
Hatteras Island

 **20%**
Kitty Hawk

 **3%**
Nags Head

 **4%**
Roanoke Island

What Does This Mean?

Average daily rates have continued to climb post-covid- especially at beach and other outdoor locations. Often outpacing the decreases in ADR, this masks the decrease in demand.

It is key to monitor demand, as it gives the insight into whether interest is increasing or decreasing. Revenue and tax collections can hide demand increases and decreases.

Recap

1. Tourism exists to help increase resident quality of life
2. Data can help bring context and insights to the table to help destinations make smarter decisions
3. Location data is messy - normalization is needed
4. There are limitations to data - ideally this data should be used to understand trends
5. Start with a question - the best way to ensure you are using big data the best way possible is to determine what you want to learn and backtrack from there

Thank you!

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ZARTICO