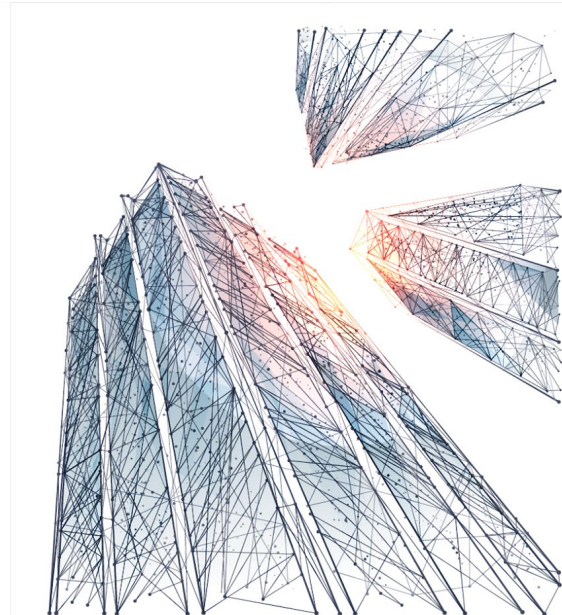
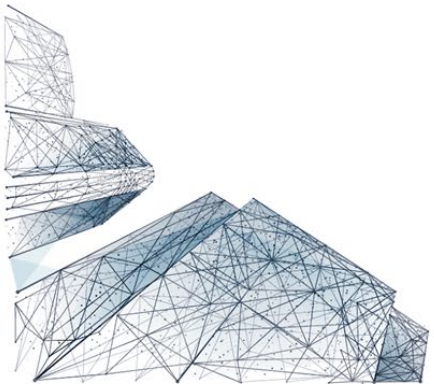


WELCOME TO AIM 2022



APARTMENT INNOVATION &
MARKETING CONFERENCE

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by RentCafe®



WELCOME TO AIM 2022



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Popsicles Cause Sunburns



Data Fallacies
to Avoid

1

Correlation is
Not Causation

2

Garbage In
Garbage Out

3

What You See is
NOT What You Get

4

Averages Are
Misleading

5

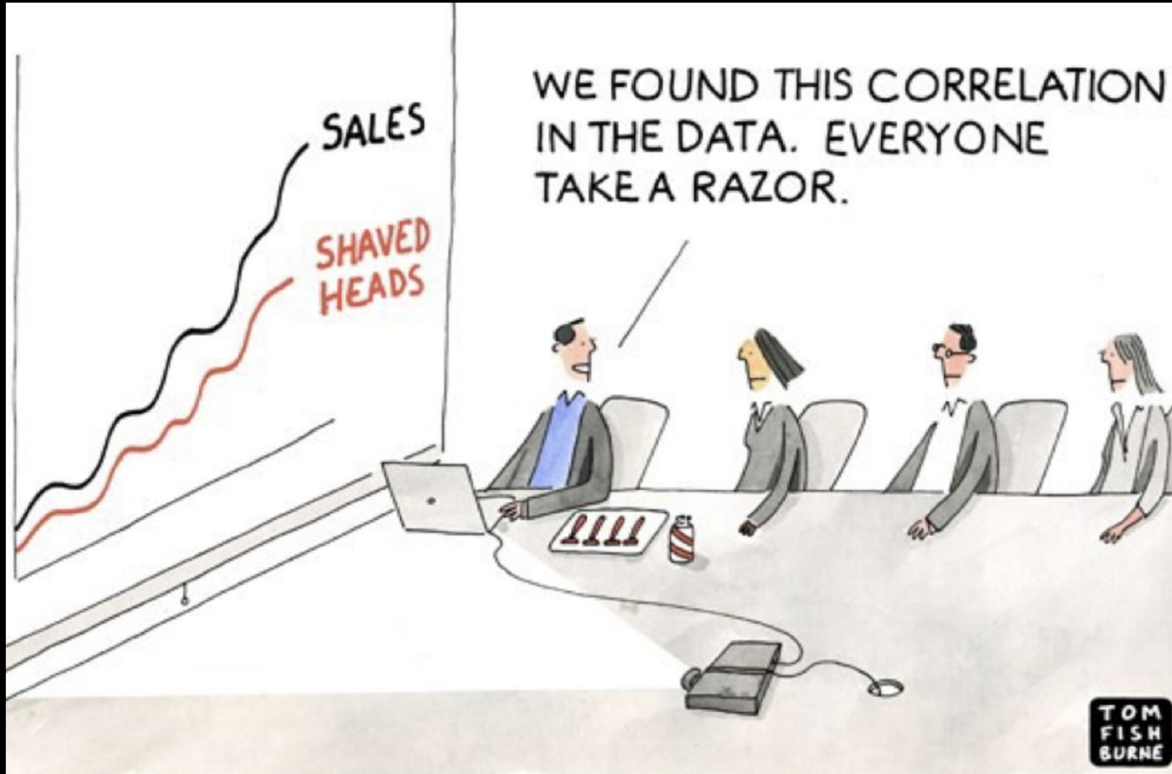
Know What You Are
Measuring

6

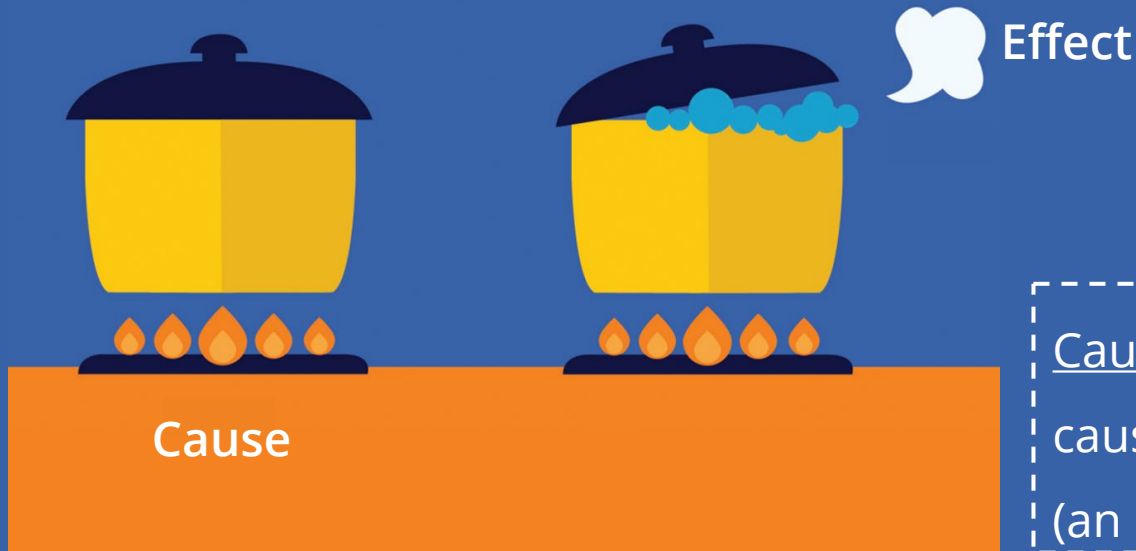
Beware of
Untested AI



Correlation is not Causation

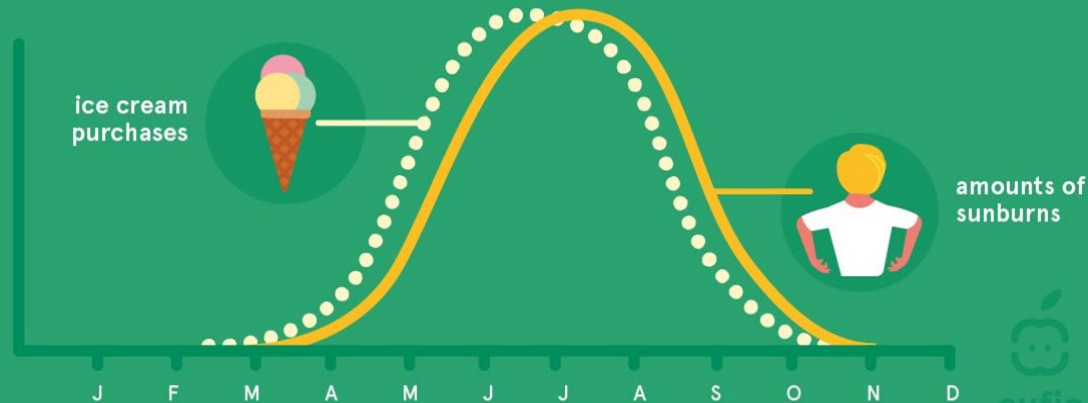


Correlation vs. Causation



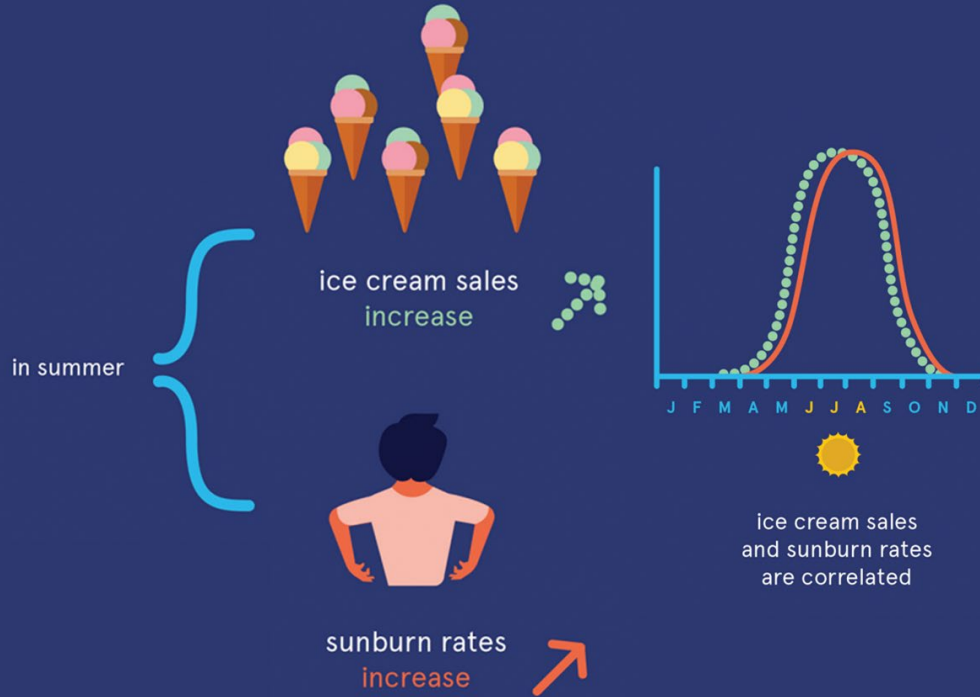
Causation: When one thing causes another thing to happen (an effect).

Popsicles Cause Sunburns

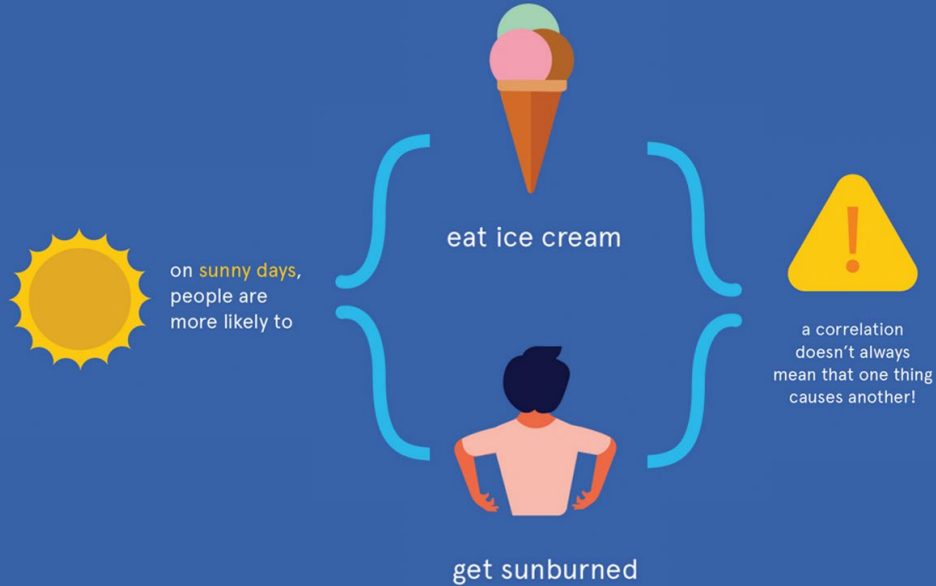


Correlation: when two or more things appear to be related

Popsicles Cause Sunburns



Popsicles Cause Sunburns

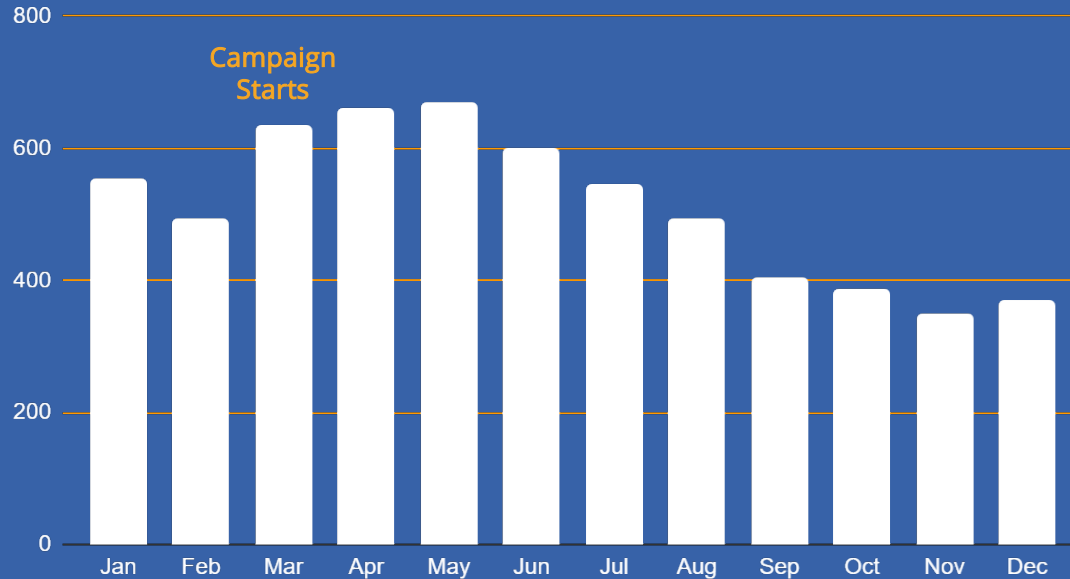


Correlation doesn't always mean
causation

Correlation vs. Causation



2021 Leads Generated



Be Smart

Correlation is not Causation

- Ask: "Are you really showing me a cause-effect or just a correlation?"
- Introduce hypothesis testing, and understand if there is any underlying factor.
- Control other variables, and run A/B tests



Data Fallacy #2

Garbage In, Garbage Out



Data

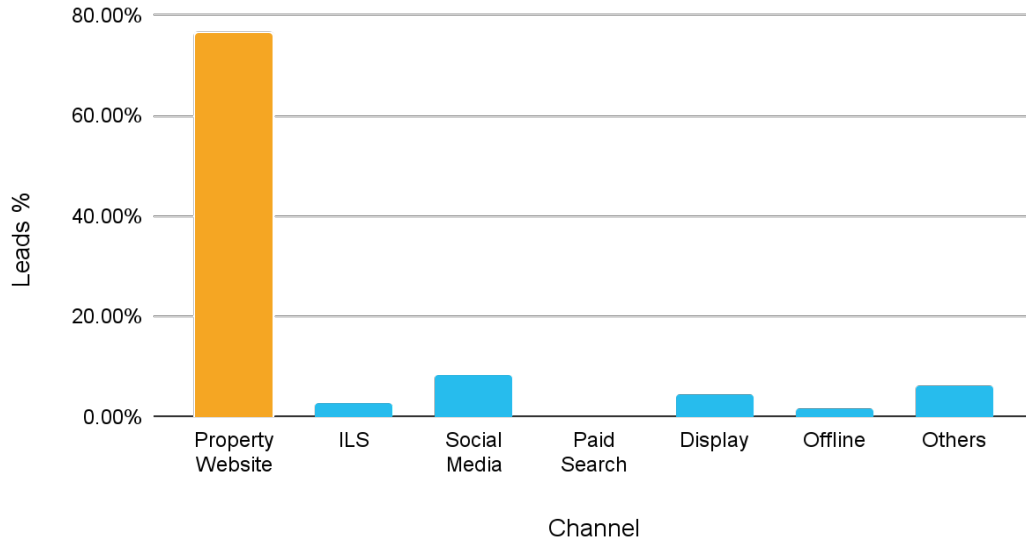


Model



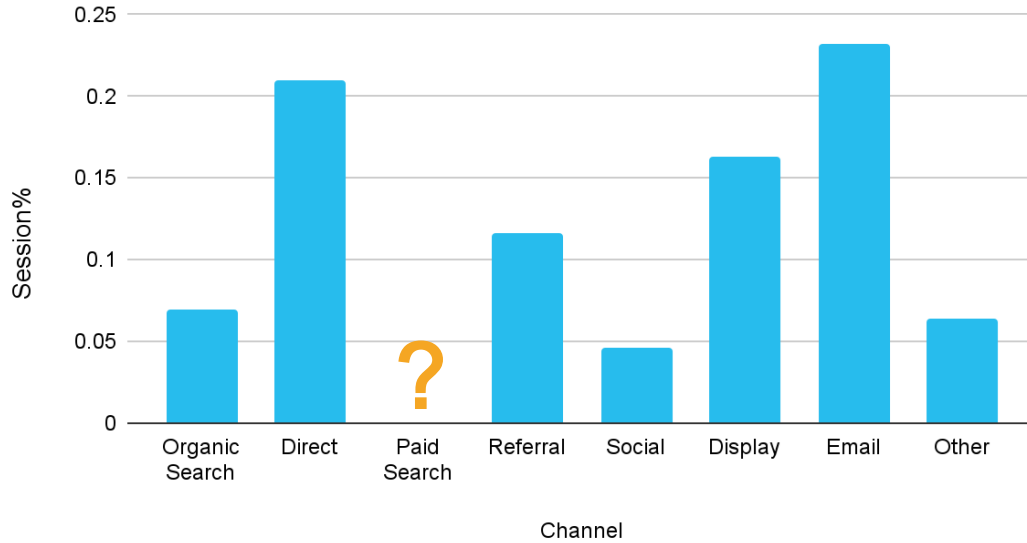
Result

Leads% by Channel



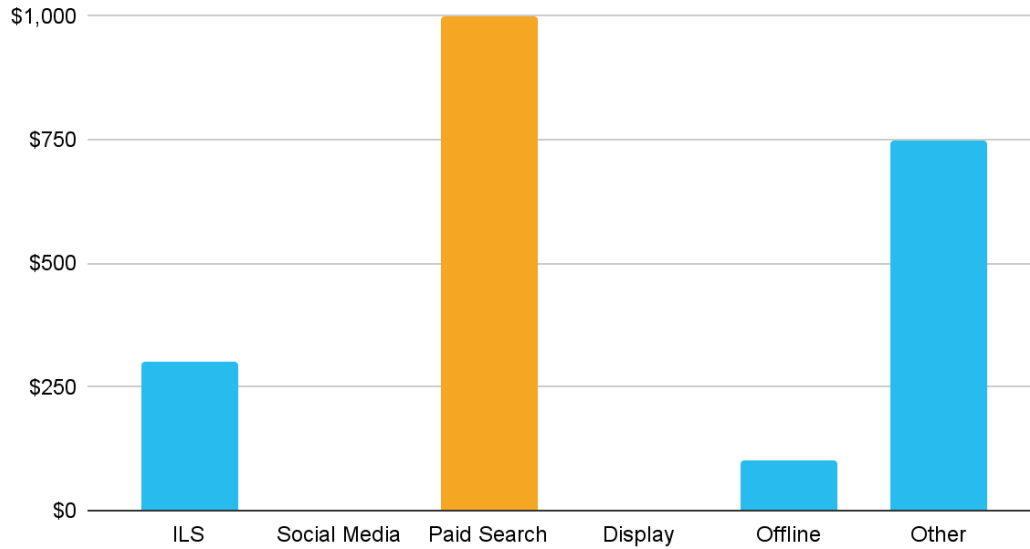
70% of leads from "Property Website"

Session% by Channel



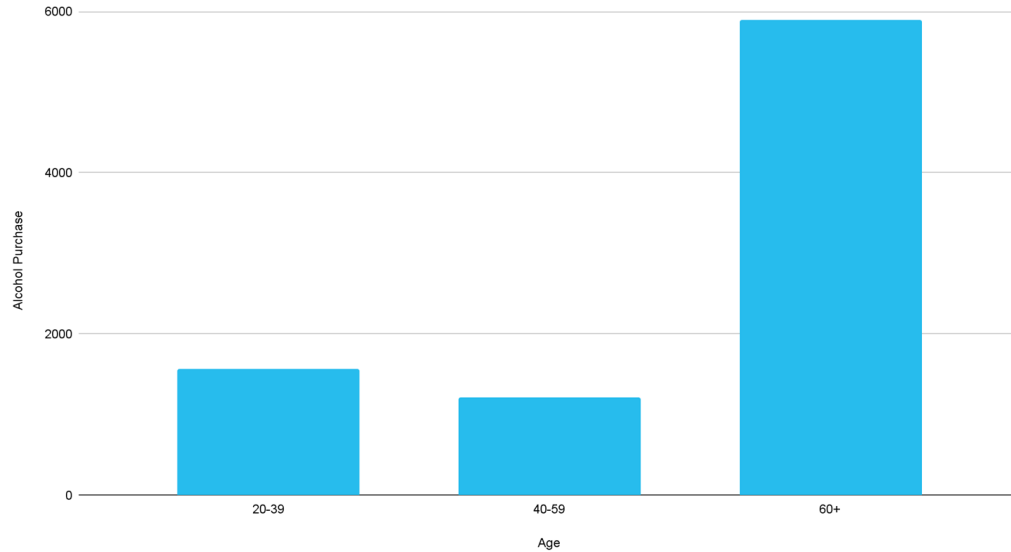
0% of Sessions from "Paid Search"

Spend by Channel



But "Paid Search" has the most spend.

Alcohol Purchase vs. Age



1/1/1111 In order to save time, the staff at the local wine store checkout counter keys in 1/1/1111 as the customer's birthday.

Be Smart

Garbage In, Garbage Out



- Ask: "Am I seeing any anomalies?"
 - Intuitive discrepancies
 - Variances in "adjacent" datasets (spend and sessions should be similar)
 - Blind Spots
- Standardize Data Collection
 - Train staff on importance of accurate data
 - Create best practices for standardizations

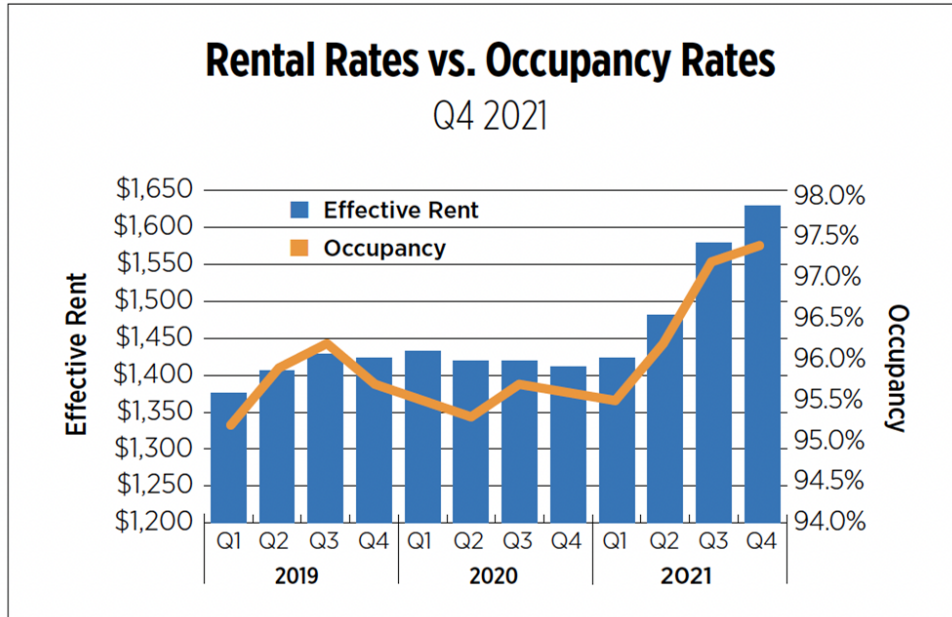
Data Fallacy #3

What you see is NOT what you get



(English, 2022)





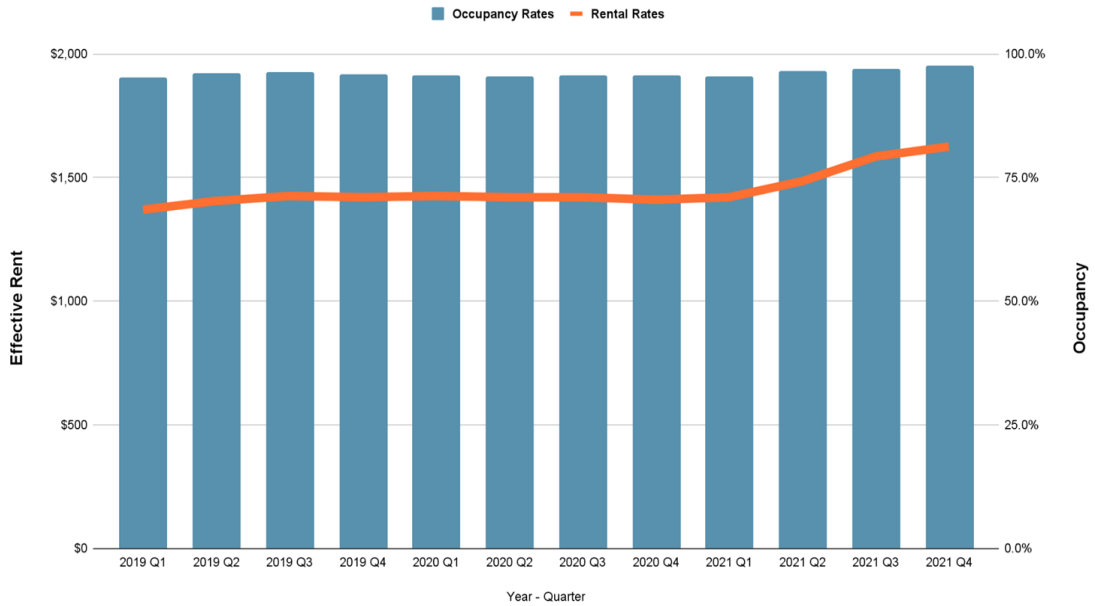
Source: RealPage

National Apartment Association

Oh, the drama!

Where's the 0 on the Y-axis?

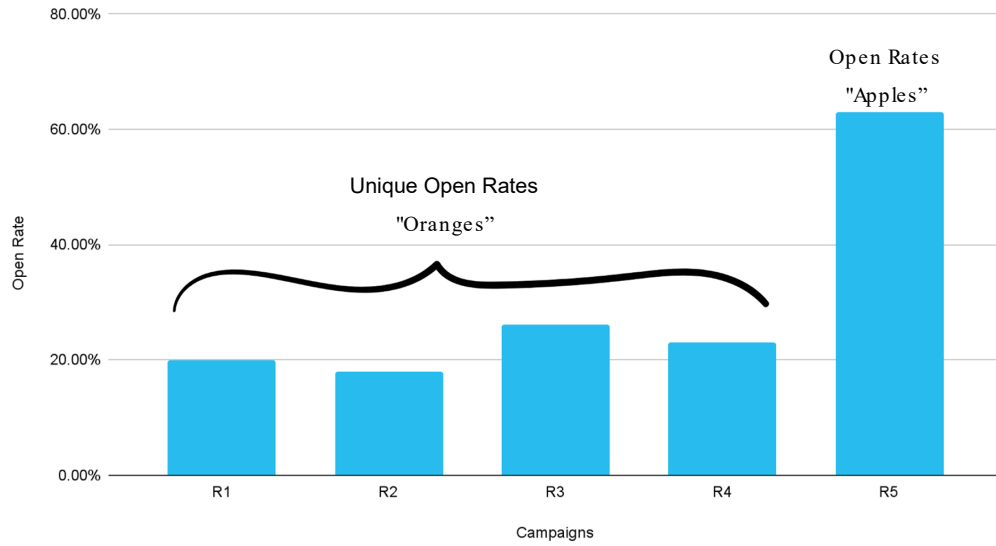
Rental Rates vs. Occupancy Rates Q4 2021



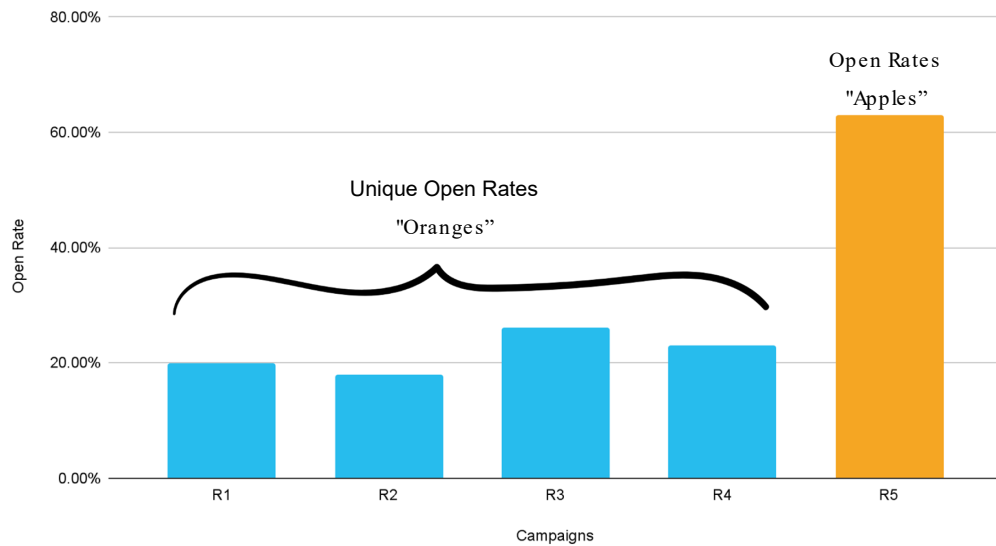
Oh, the drama!

Not so dramatic right?

Open Rates by Region



Open Rates by Region

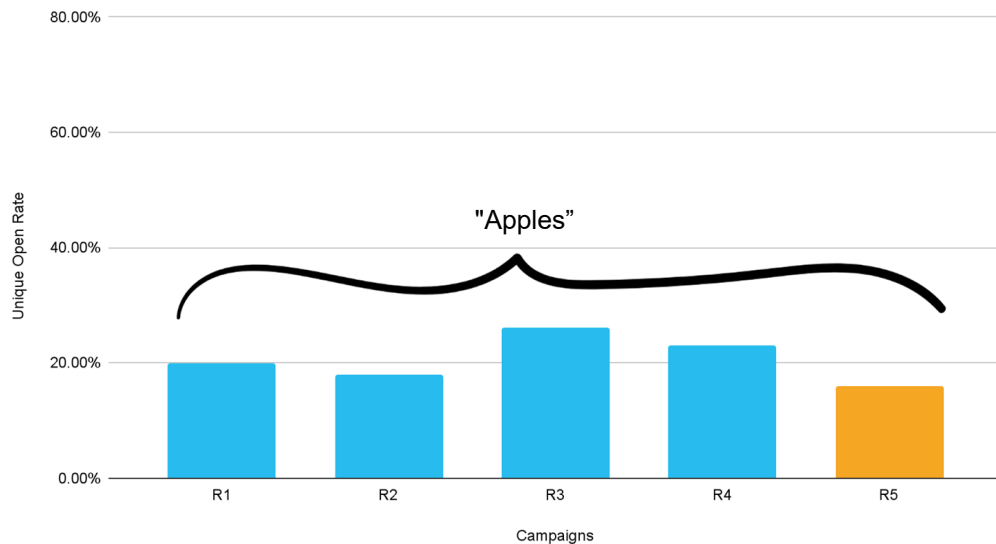


Apples vs Oranges

Let's emulate Region#5 subject lines



UNIQUE Open Rates by Region



Apples vs Oranges

Now, should we emulate R5 subject lines?



What you see is not what you get

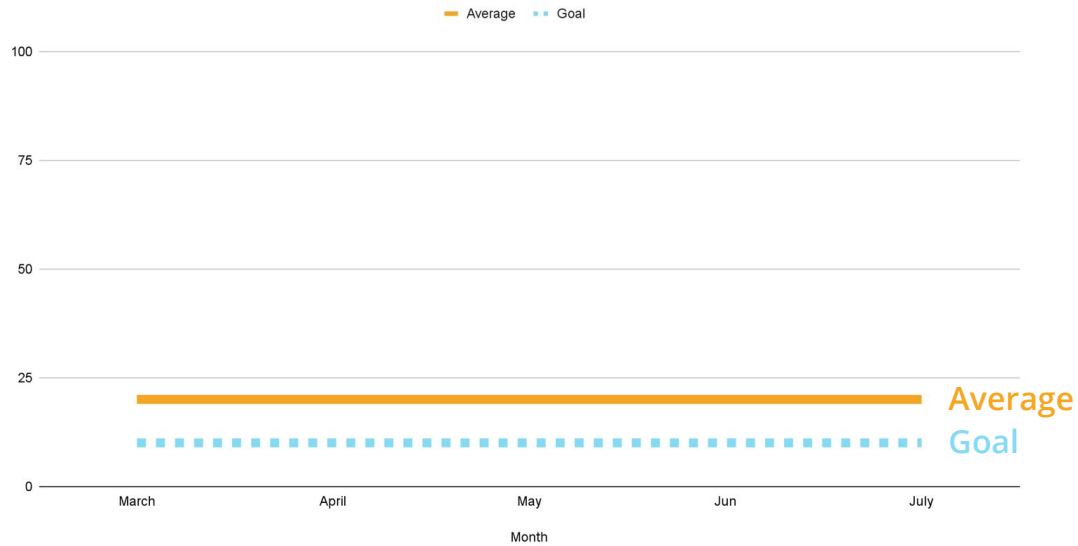


- Ask “Can you define the Metrics?”
 - How's it measured?
 - Are there any ambiguities?
 - What's included? What's excluded?
- Ask: "Is a pretty graph distracting me from a good visual argument?"
 - Remove the visual clutter
 - Now, look again.

Average is Misleading



Monthly Social Media Posts (average)

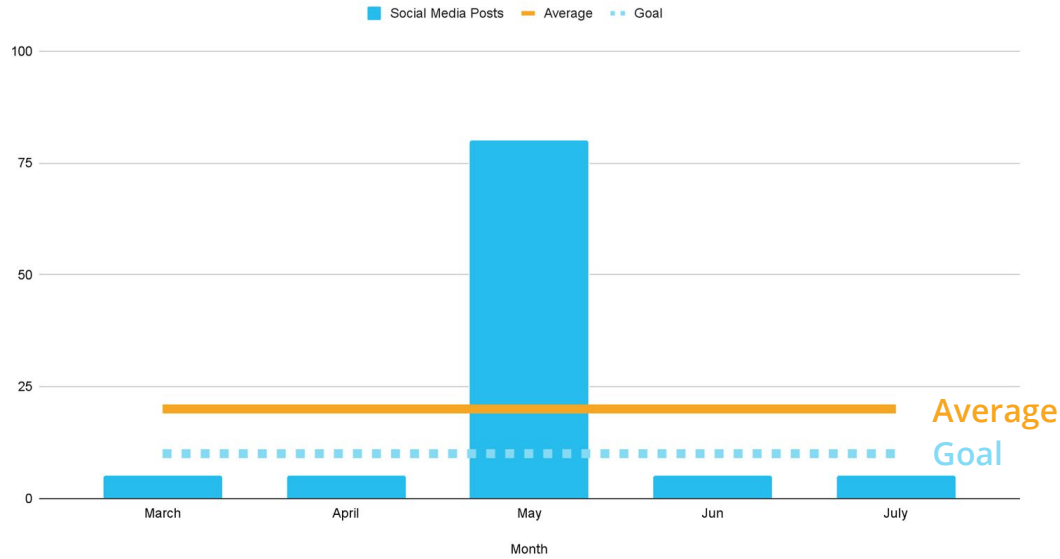


Average vs Goal

Yay! Goal Surpassed



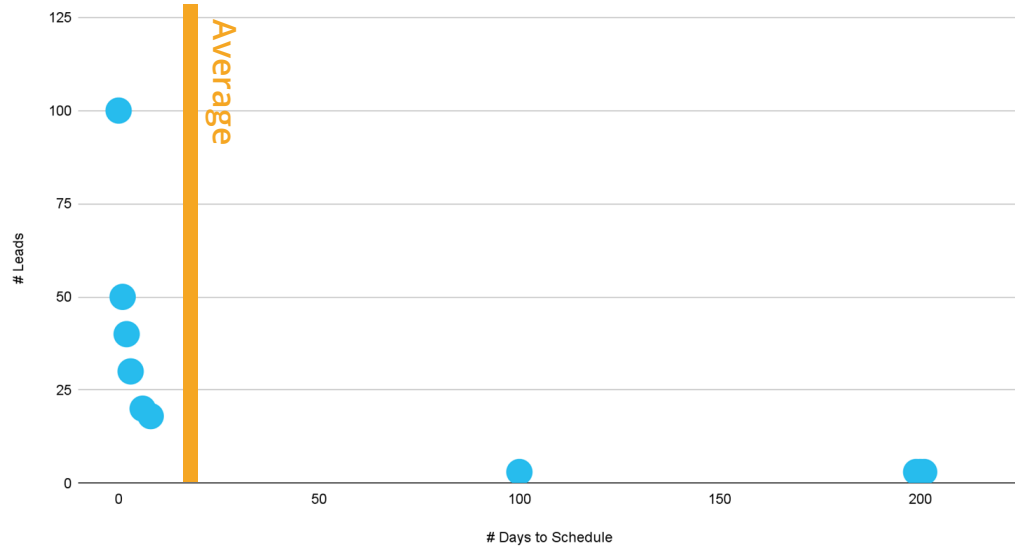
Monthly Social Media Posts (Actual Distribution)



Average vs Goal

Goal not achieved in 4 out of 5 months

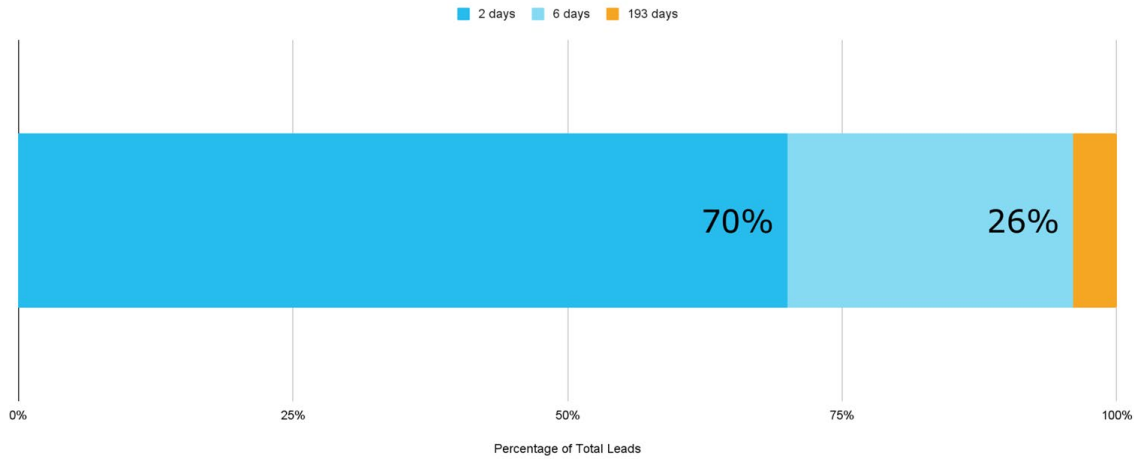
Leads who scheduled in # days



Misleading

Average # of Days to Schedule a Tour = 16 Days

PERCENTILE of leads who scheduled in 2 days, 3-6 days, 7+ days



Reality

96% of tours are scheduled in 6 days

Be Smart

Average is Misleading



- Ask: "Show me the data underlying the average?"
- Look for
 - Spikes
 - Outliers
 - Rapidly falling or rising curves

References



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