

#### DATASCIENCESALON

NEW YORK

## HOW JELLYFISH USES EXPERIMENT TO MEASURE MEDIA INCREMENTALITY



#### Di Wu

VP of Data Science Jellyfish

## One Jellyfish

2100+ Digital Experts

12K+ Owned Freelancers network

37 International Offices

>\$1bn Managed Media

Tier 1 Platform Partnerships

50+ Global Specialisms





USA
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San Francisco
Los Angeles
Chicago
New York
Baltimore
Reston

Mexico City Mexico City Monterrey

Brazil Rio de Janeiro São Paulo UK Manchester Warrington London Reigate Brighton

**Ireland**Dublin

**Denmark** Copenhagen

Sweden Netherlands Stockholm Amsterdam

> Germany Berlin

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Paris

**Spain** Barcelona Madrid

**Italy** Milan South Africa
Durban
Johannesburg
Cape Town

**Israel** Tel Aviv

**India** Mumbai Bangalore

UAE

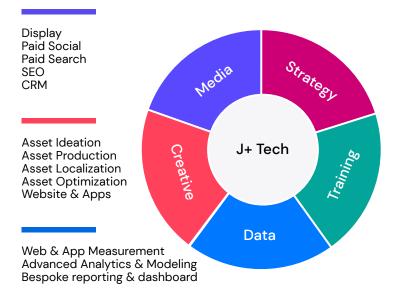
Dubai

ia Singapore mbai Singapore

> **South Korea** Seoul

**Japan** Tokyo **Australia** Melbourne Sydney

## Accessing our expertise 5 core capabilities powered by proprietary tech



Research, Strategy & Consultancy Martech Consultancy Brand Planning Market Intelligence (Research)

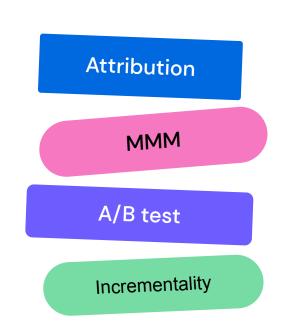
GMP GCP Cyber Security Facebook Amazon and more

Reselling (e.g. Google Marketing Platform) Proprietary J+: Jellyfish Technology Solutions Client access to our expertise is simple, via specific products or more integrated solutions that meet today's marketing challenges.

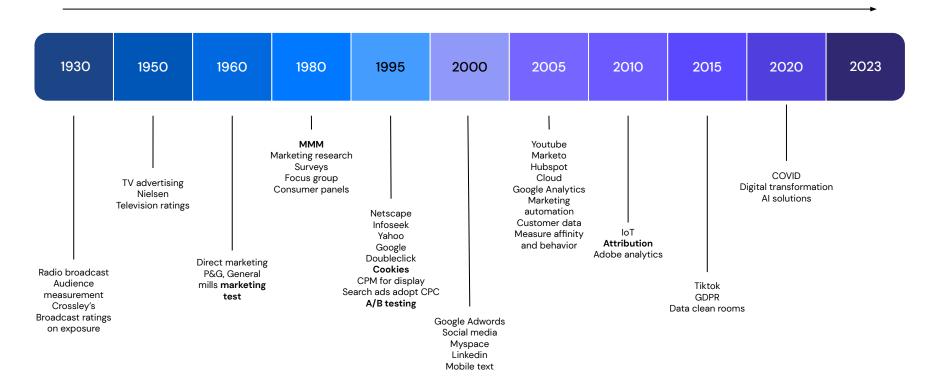
## What is measurement?

It's a process of evaluating and quantifying the impact and effectiveness of marketing initiatives and campaigns.

It involves collecting and analyzing data to assess various marketing metrics and KPIs that help determine the success of marketing efforts.



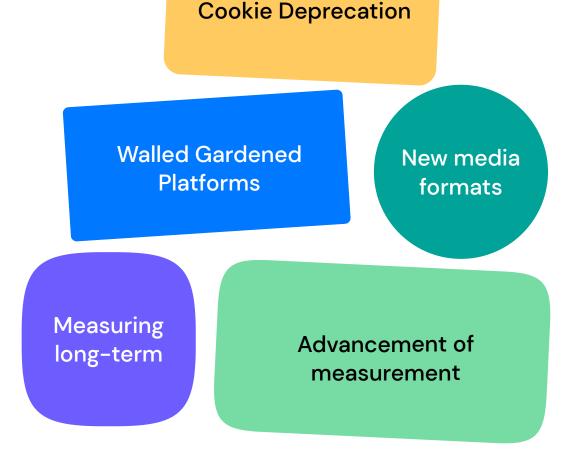
### A bit of history



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# We are in a time of change ...

What are some of the implications brought by privacy and technology?



### Different measurement solutions

#### **Diagnostic Analysis**

- MMM
- Causal Impact
- Pre/post
- Attribution

#### Optimization Experiments

- A/B test
- Opt-in/One-click experiment

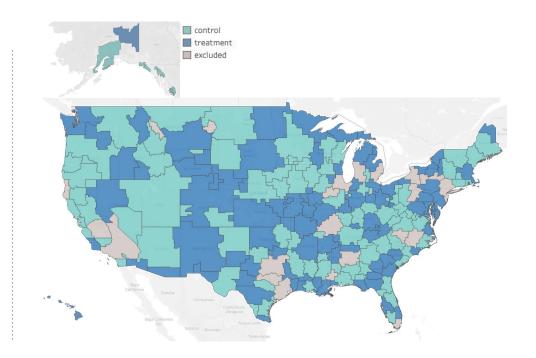
#### Incrementality

- Geo-lift
- Conversion lift
- Brand lift/search lift

\*Ease of execution includes investment required, length of test, set up/design requirements and time, and technical resources.

## Geo-lift experiment

- Geo-lift exp measures incremental returns of advertising spend.
- Geo areas are pre-defined and used as a measurement unit, rather than users in classic A/B testing
- Geo areas are matched into a test and a control group, where each group has similar sales patterns and other relevant factors.



## The process

#### **Experiment design**

- Form hypothesis
- Data collection and feasibility
- Power analysis
- Select test and control markets
- Create test plan considering all the constraints (location, time, budget)

#### Launch the test

- Set up the test in the platforms
- Performance monitoring

#### Post test analysis

- Run statistical analysis to measure lift
- Present the results with recommendations

Case Study 1 Prove the value of existing media

# Prove the incrementality of brand search

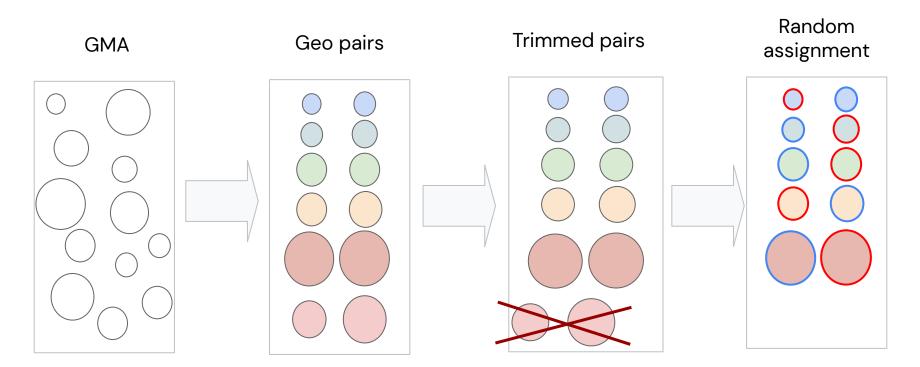
- Brand keywords are expensive.
- A well-known brand with huge brand equity.
- Is there an incremental impact on revenue by switching off brand campaigns?
- Can SEO pick up the traffic?

If the aboves are true, we can:

Make the media more efficient by optimizing budget!

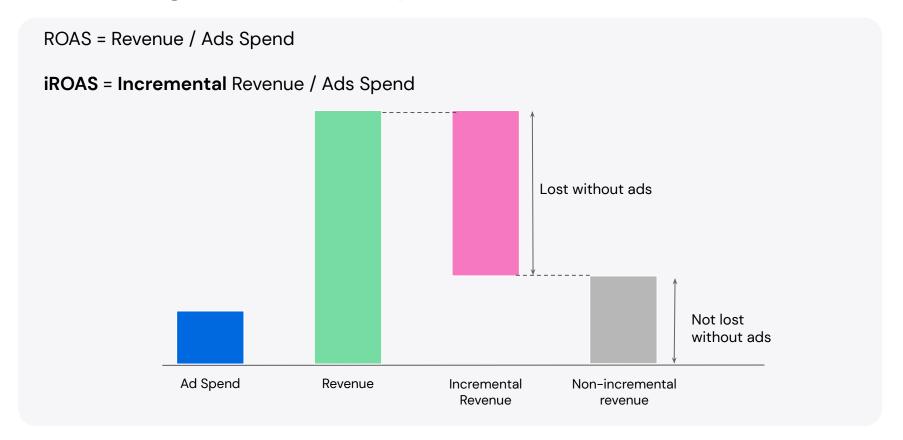


### Trimmed match



Source: Annals of Applied Statistics. 2022. Robust Causal Inference for Incremental Return on Ad Spend with Randomized Paired Geo Experiments, Chen and Au

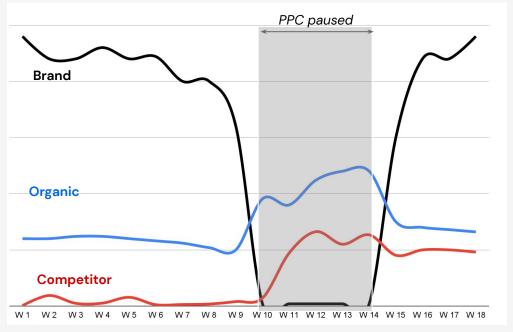
## Measuring incrementality



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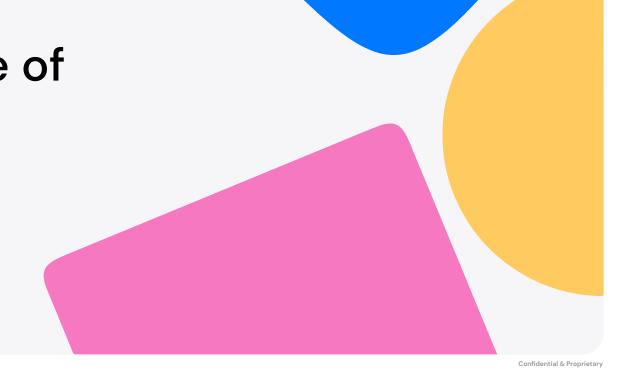
### Results

- Brand PPC results in 4.6 iROAS.
- Organic will only pick up some of the lost PPC clicks - up to 45%.
- We observe competitor traffic (from J+search) goes up as a result of missing brand PPC campaigns.



Mocked data for illustration purpose

# Case Study 2 Test the value of new media



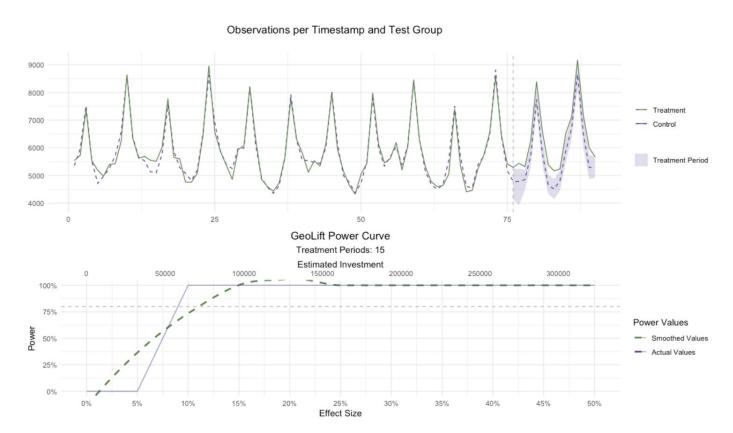
#### Prove the value of DOOH

- Marketing team is challenged with DOOH's contribution to revenue.
- Is DOOH campaign a good strategy?
- It's the very first DOOH campaign, so no previous data.
- No digital tracking between screen view and online/offline sales.





## Synthetic control



#### Results

- We found a direct impact between DOOH with offline sales.
- Screens located in shopping malls showed a 1.6 times higher return on investment (ROI) than screens located in city streets.
- Reducing the distance between the screen and the store boosted performance. Screens located within 500 meters of the store showed a positive lift on offline sales.

1.6 x

Increase in ROI for shopping mall screens

500 m

Screen located with 500 m showed a positive lift on offline sales

## Our learnings

- Set client expectations early on in the project.
- Work closely with media team on test timeline – local and national market effect.
- It can also be hard to measure several factors at once. Consider trade-off between number of cells in a Multi-Cell.
- Build trust with the client by creating a learning agenda.









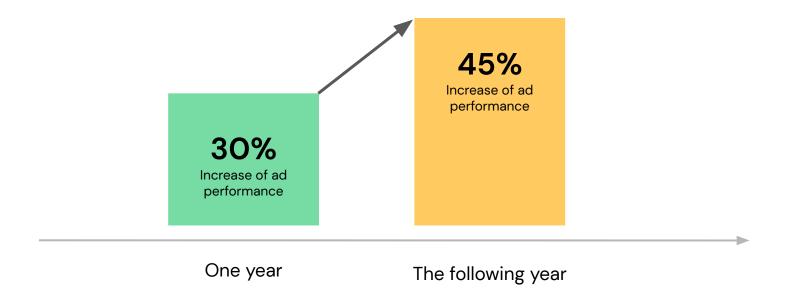






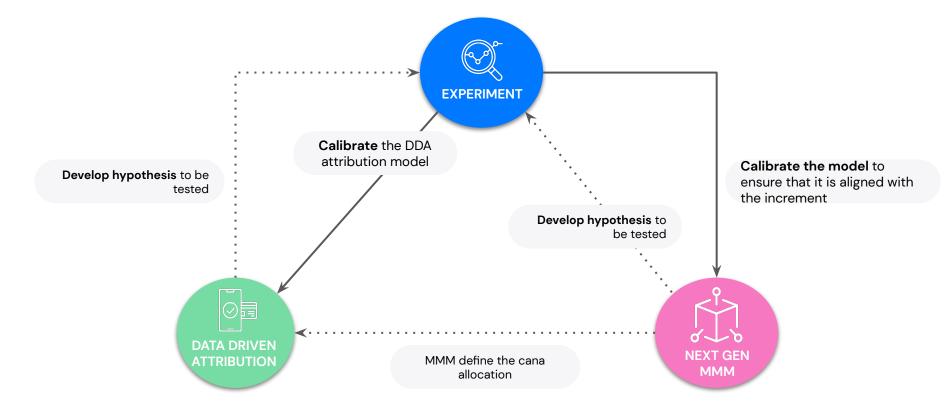
## Experiment brings long-term successes

Brands run 15 experiments compared to brands with no experiments



Source: Harvard Business Review. October 28, 2020. Marketers Underuse Ad Experiments. That's a Big Mistake. Julian Runge.

## The measurement model is a living ecosystem



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## Thank you

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