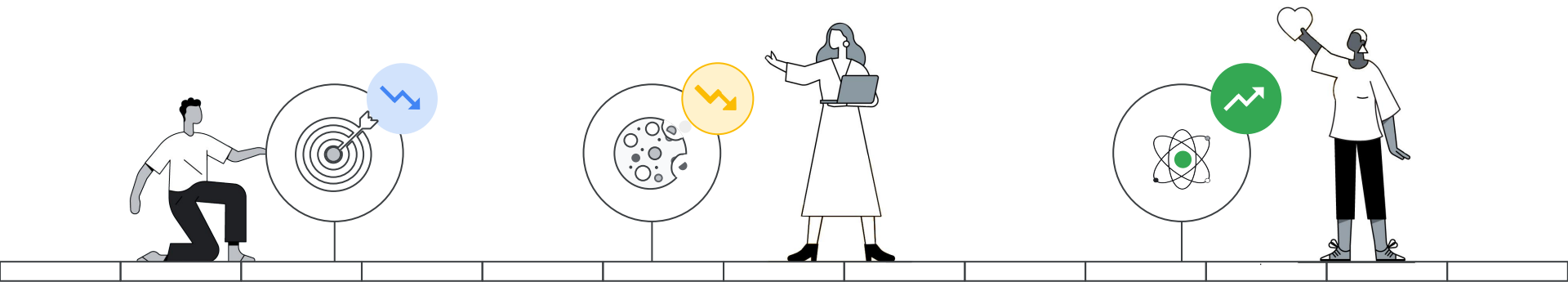# Incrementality experiments for Search unfolded

Ana Carreira Vidal
RPL Media Effectiveness EMEA

Google

Economic uncertainty is increasing the pressure to prove the value of marketing investments

Privacy regulations and tech changes are driving restrictions in user-level tracking

Marketers and industry are exploring **new ways to prove the ROI** of marketing investments
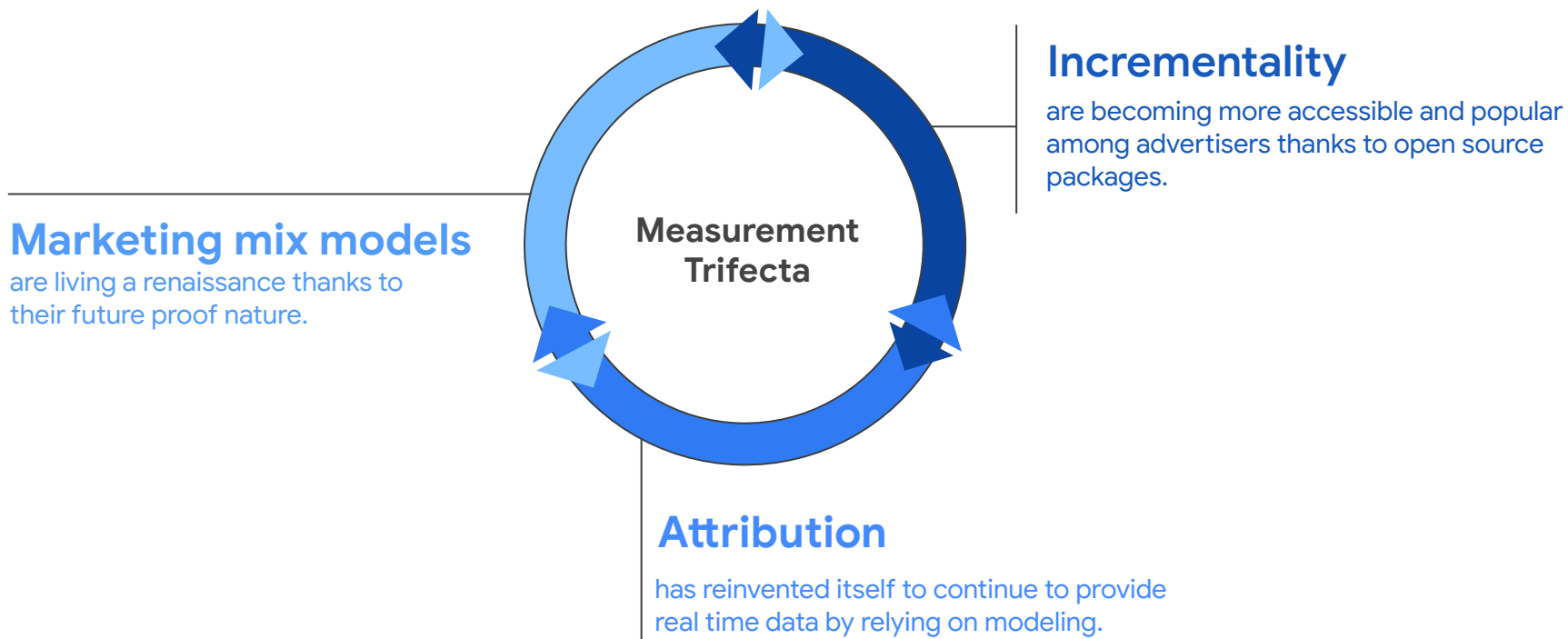
Google

What is the full impact of my media investments?

Prove

How can I best **optimize** my media investments?

Improve

Google

Measurement Trifecta

Incrementality
are becoming more accessible and popular among advertisers thanks to open source packages.

Marketing mix models
are living a renaissance thanks to their future proof nature.

Attribution
has reinvented itself to continue to provide real time data by relying on modeling.
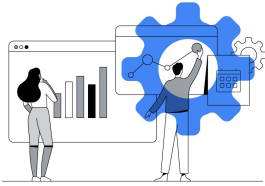
Google

No tool has all the answers anymore, you will need a combined approach that leverages their strengths and covers each other gaps

Google

Optimize at channel
and campaign level
with
Attribution

Prove the channel
value with
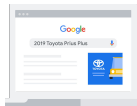**Incrementality**

Plan cross-channel
budgets with
MMM

Google

Let's get on the same page with incrementality

Google

Total baseline sales

Sales linked to media investments

Google

Attribution

Incrementality

MMM

Incremental sales　　　Baseline sales

Google
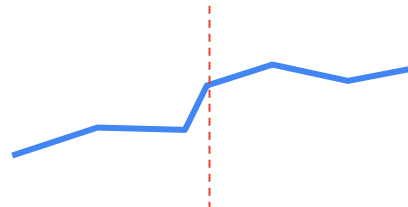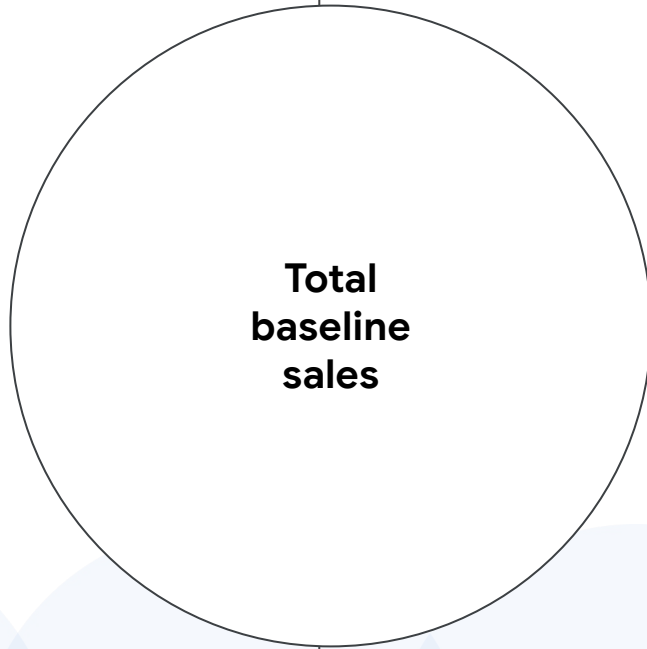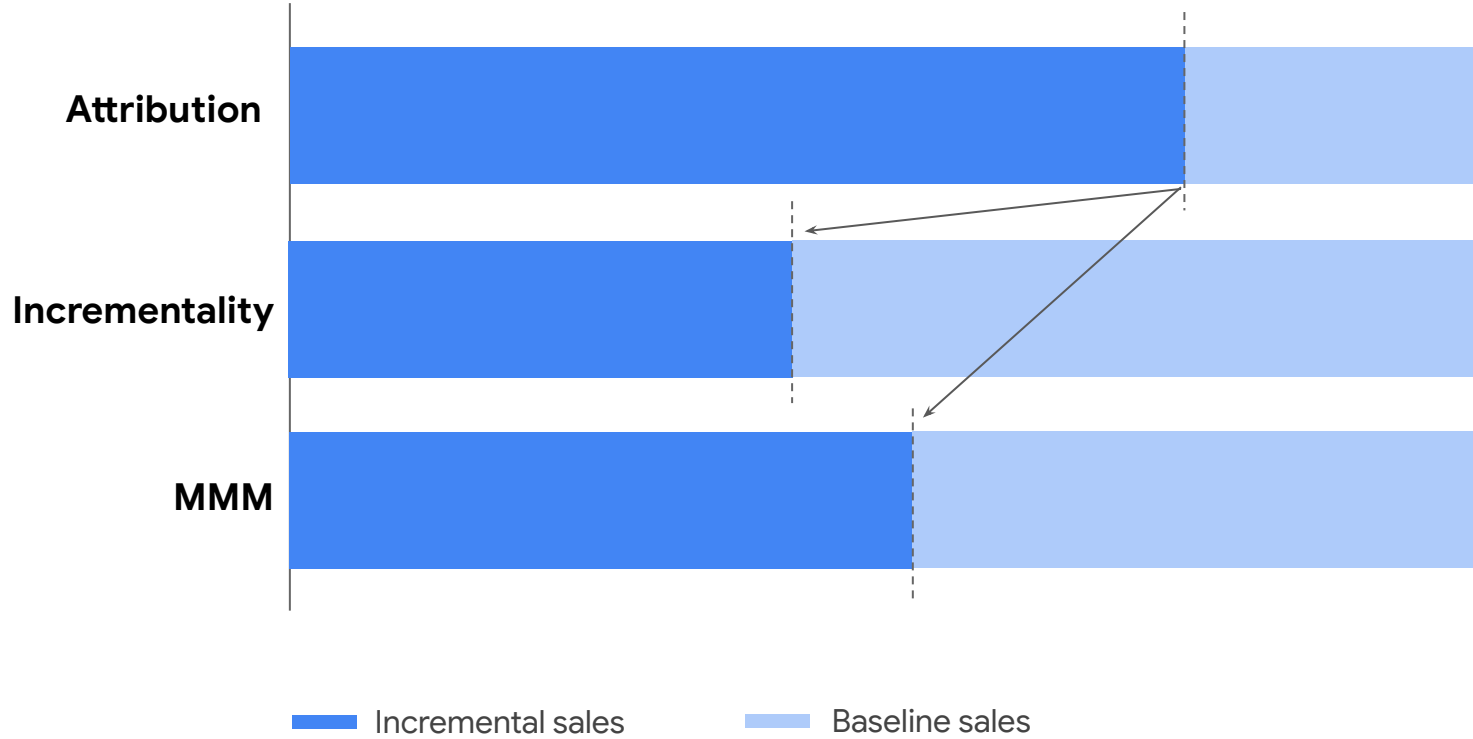
How can you run incrementality experiments for Search

Google
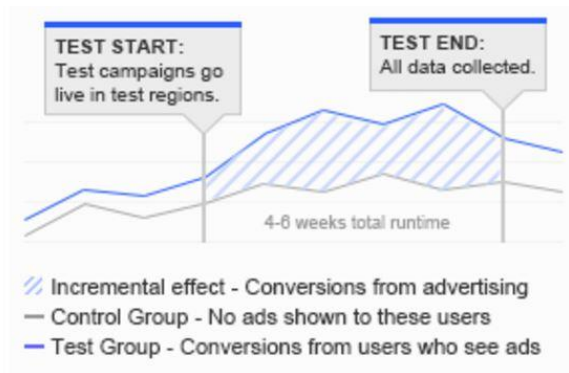
Geo experiments

By separating countries into treatment and control we can attribute any uplift in success metrics between the groups exclusively to the advertising spend (see shaded blue regions in graphic).

Google

Geo Experiment methodologies

Time Based Regression

Open source code

Estimates the iROAS by predicting counterfactuals

Trimmed Match

Open source code

No modeling, directly compares the observed iROAS1 within each pair and trims poorly-matched geos. Most robust against outliers.

Google

Proprietary + Confidential

Trimmed Match is our most-advanced methodology

Match geos into pairs based on size and rank according to similarity score based on pretest training period

Use pretest evaluation period to measure detectability and filter out poorly matched geos to improve the precision of the experiment.

Randomizes geos into treatment and control and makes sure that both groups are balanced.

Geo Pairing

Filter pairs to improve precision

Random assignment

Google

Use cases for incrementality experiments for Search

Google

1

Goal: Better planning

Run an incrementality experiments for all your key channels, including Search, to enrich the picture from your attribution outputs (no MMM)

→ Great fit!

Google

1

Example

Step 1. Run experiments to create an informed iROAS per strategy type

	April ROAS Attribution	April iROAS Geo Experiment
Search	$5	$3.5
Channel 1	$5.5	$3
Channel 2	$8	$12

Google

Example

Step 1. Run experiments to create an informed iROAS per strategy type

Step 2. Calculate calibration multiplier

	April ROAS Attribution	April iROAS Geo Experiment
Search	$5	$3.5
Channel 1	$5.5	$3
Channel 2	$8	$12

Calibration Multiplier	
0.7	= 3.5 ÷ 5
0.54	= 3 ÷ 5.5
1.5	= 12 ÷ 8

Calibration Multiplier = **Incremental Impact** ÷ **Attributed Impact**

Google

1

Example

Step 1. Run experiments to create an informed iROAS per strategy type

	April ROAS Attribution	April iROAS Geo Experiment
Search	$5	$3.5
Channel 1	$5.5	$3
Channel 2	$8	$12

Step 2. Calculate calibration multiplier

Calibration Multiplier	
0.7	= 3.5 ÷ 5
0.54	= 3 ÷ 5.5
1.5	= 12 ÷ 8

Step 3. Use multiplier to evaluate periods between experiments

iROAS Goal	Q2 ROAS Attribution	Q2 Estimated iROAS
$3	**$4.5**	**$3.1**
$3	**$5**	**$2.7**
$8	**$7.5**	**$11.25**

Calibration Multiplier = **Incremental Impact** ÷ **Attributed Impact**

Google

Example

Step 1. Run experiments to create an informed iROAS per strategy type

Step 2. Calculate calibration multiplier

Step 3. Use multiplier to evaluate periods between experiments

	April ROAS Attribution	April iROAS Geo Experiment
Search	$5	$3.5
Channel 1	$5.5	$3
Channel 2	$8	$12

Calibration Multiplier	
0.7	= 3.5 ÷ 5
0.54	= 3 ÷ 5.5
1.5	= 12 ÷ 8

iROAS Goal	Q2 ROAS Attribution	Q2 Estimated iROAS
$3	**$4.5**	**$3.1**
$3	**$5**	**$2.7**
$8	**$7.5**	**$11.25**

Calibration Multiplier = **Incremental Impact** ÷ **Attributed Impact**

Google

1

Important considerations:

- If you test Search alone you won't know if that incremental lift is good or bad.

- You need to test incrementality for every channel and / or have guidelines on what to do with missing data.

- You need to have a incrementality based KPIs set already (either from previous experiments, MMM, or heuristics aligned with business goals).

- Include guardrails for drastic discrepancies.

Google

2

Goal: Optimization

Use the results from the incrementality experiments to adjust bidding targets

→ **Caution**

2

Example

Step 1: Compare efficiency target to in-platform & Experiment results

	ROAS **Attribution**	iROAS **Geo Experiment**
Search	$7.5 ROAS	$5.25 iROAS

2

Example

Step 1: Compare efficiency target to in-platform & Experiment results

Step 2: Calculate multiplier

	ROAS Attribution	iROAS Geo Experiment	Calibration multiplier
Search	$7.5 ROAS	$5.25 iROAS	0.7 =5.25 ÷ 7.5

Google

2

Example

Step 1: Compare efficiency target to in-platform & Experiment results

	ROAS Attribution	iROAS Geo Experiment
Search	$7.5 ROAS	$5.25 iROAS

Step 2: Calculate multiplier

Calibration multiplier
0.7 *=5.25 ÷ 7.5*

Step 3: Adjust bids

Original tROAS In Platform (Google Ads)	New tROAS In Platform (Google Ads)
$7.5 tROAS	$10.7 tROAS *=$7.5 / 0.7*

Adjusted bids ▬ **Platform target** ÷ **Calibration multiplier**

2

Why should you be cautious?

- We don't know how changing bids will affect performance.

- When budget uncapped, changing bids might prevent you from reaching volume goals. Balance efficiency and volume.

- Adjust in small increments.

- Use only when combined with an overview of the incrementality driven by the overall portfolio. Is Search delivering more or less incrementality than expected compared with other channels?

Google

3

Goal: Optimization

Understand which campaigns / tactics within Search are more incremental (e.g. brand vs generic)

→ **Caution:** Geo experiments are great at providing rigorous results but they require big volumes of data. This means that experiment designs with several experimental cells or for smaller slices of a channel are unlikely to yield feasible designs.

4

Goal: Optimization

You want to understand what is the baseline incrementality for your Search campaigns today and test whether it improves over time

→ **Good fit when combined with a test and learn agenda:** In this case, the comparison point will be the previous test you have run. This setup will allow you to track that the optimization changes you are making are driving more incremental sales instead of driving more conversions that would have happened anyway. Optimizations that are likely to increase incrementality are switching to DDA based bidding and VBB.

Google

Last remarks

Google

Useful resources to get started

Skillshop

[Understanding incrementality experiments](#)

Think with Google

[A media effectiveness guide for CMOs (and CFOs)](#)

[A Time-Based Regression Matched Markets Approach for Designing Geo Experiments](#)

[Trimmed Match Geo Experiments](#)

Google

Incrementality experiments for Search are…

Best at measuring the sales that were directly caused by exposure to the ad

Likely going to show less incremental sales than attributed sales, and that's ok

A great tool for planning budgets when used in all channels

A good optimization tool when used consistently over time within a test & learn agenda