

DIGITAL MARKETING & MEASUREMENT

IN A POST GDPR / ITP WORLD



Kevin Hartman | 24 October 2019 |  DIGITAL ANALYTICS ASSOCIATION



“

Half the money I spend on advertising is wasted; the trouble is I don't know which half.

John Wanamaker The Father of Modern Advertising (1838-1922)

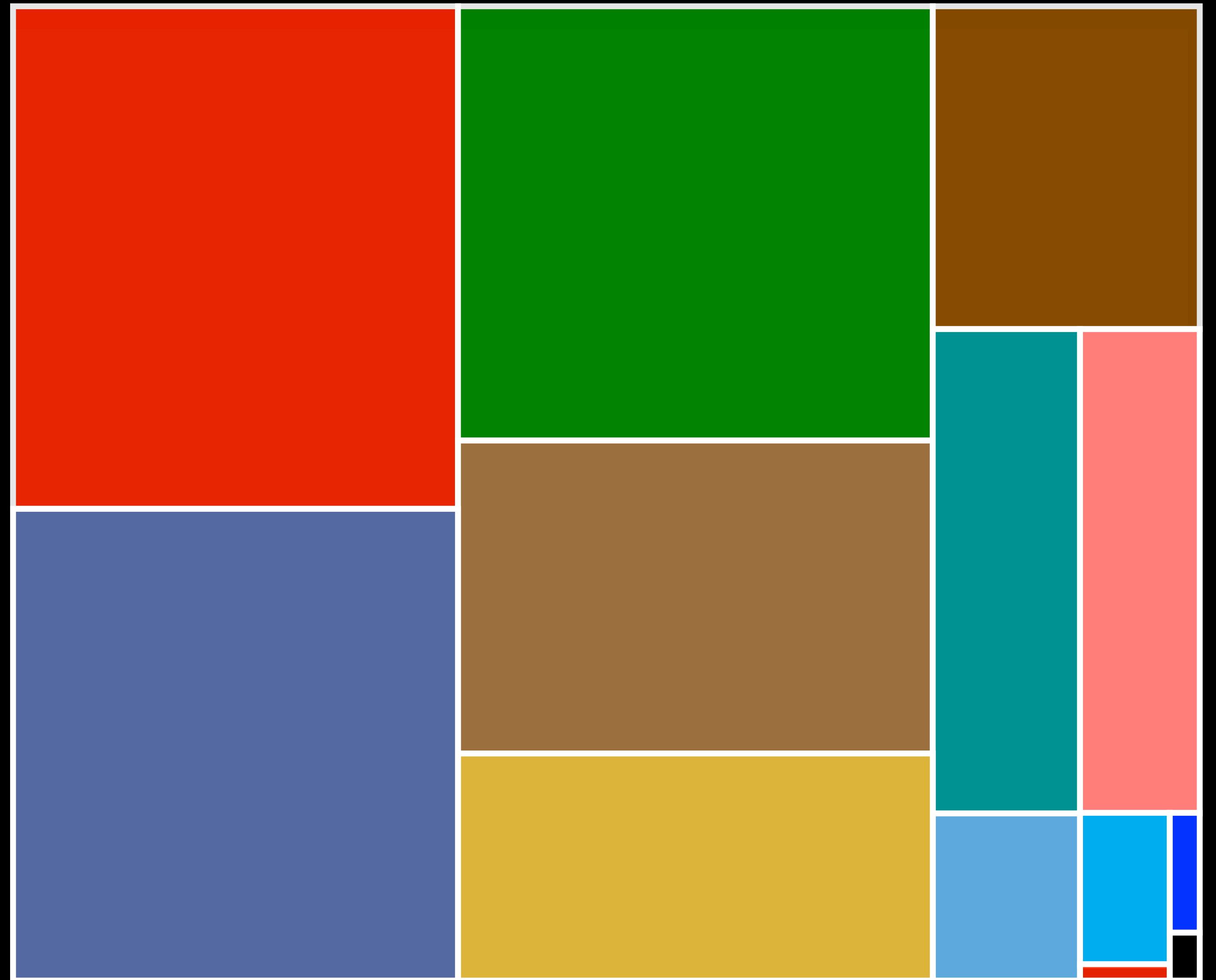




COMPARISON OF DAILY HUMAN DATA CREATION

An extraordinary amount of digital data is generated every single day by consumers. Each datapoint provides insight into who they are.

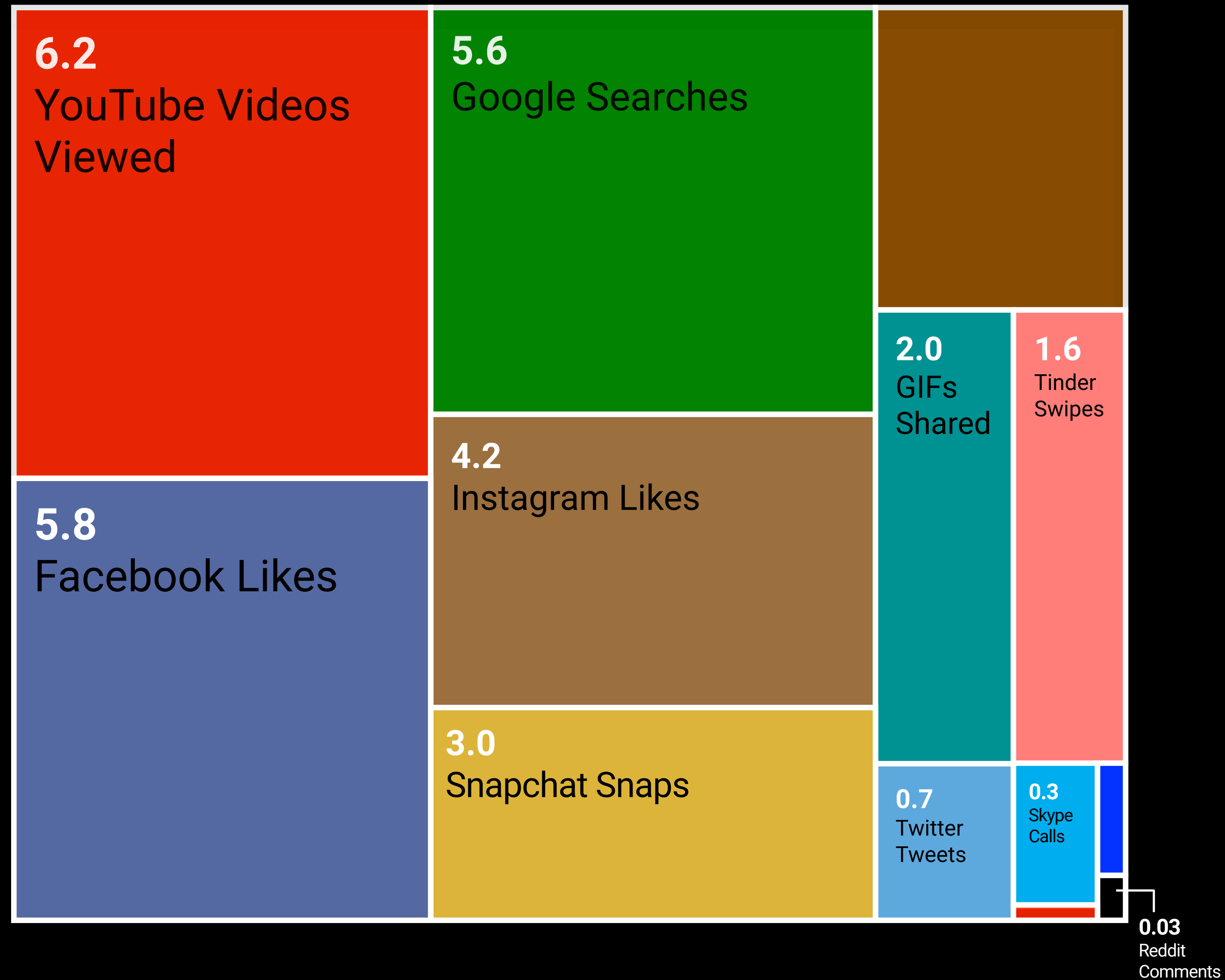
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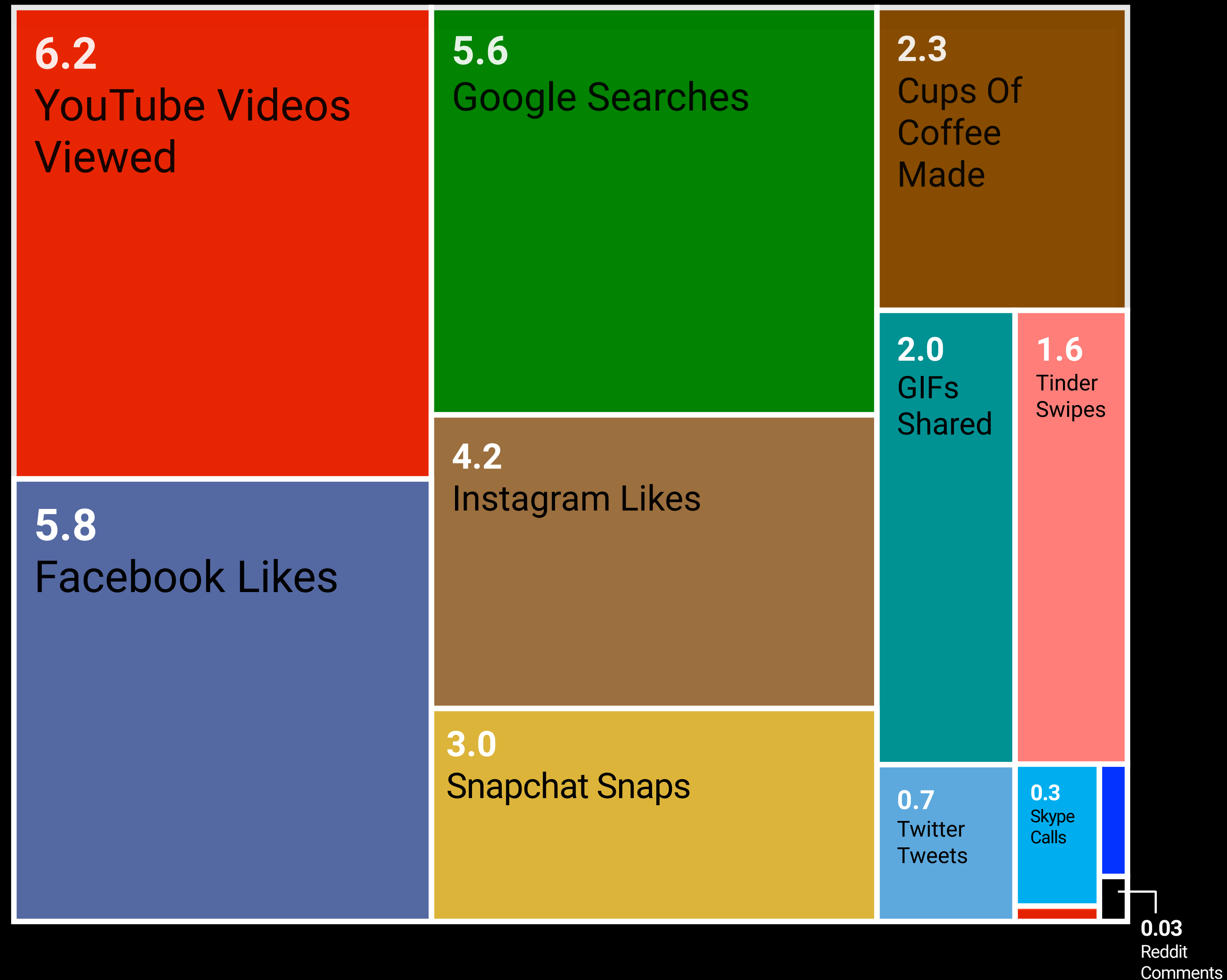
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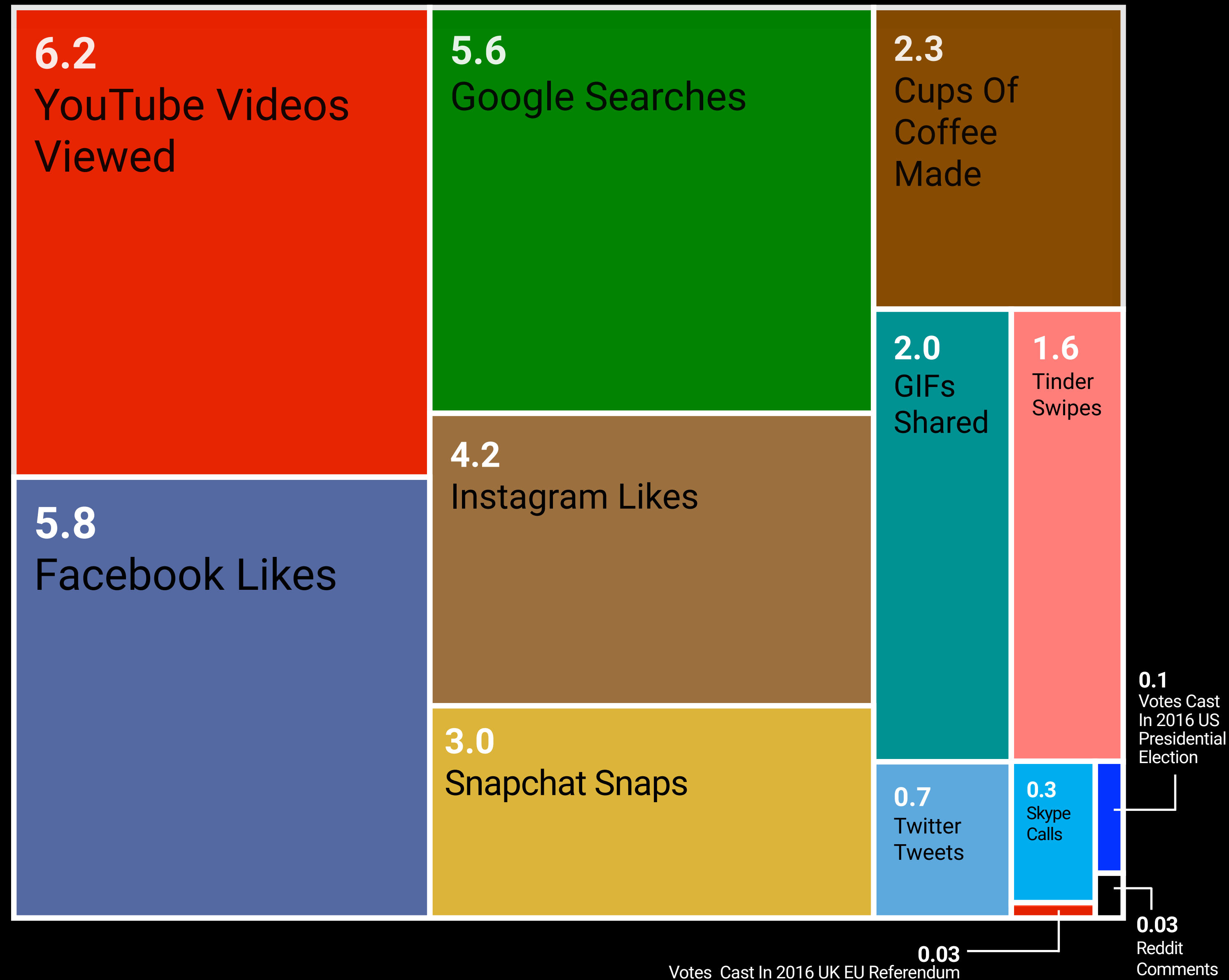
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BRINKER'S MARTECH LANDSCAPE

In August 2011, Scott Brinker of ChiefMartec charted logos providers operating in the nascent business of “marketing technology” as a way to sort out the market. There were 150 of them.

Marketing Technology Landscape

August 2011



External Promotion Customer Experience Marketing Management

by Scott Brinker @chiefmartec <http://www.chiefmartec.com>



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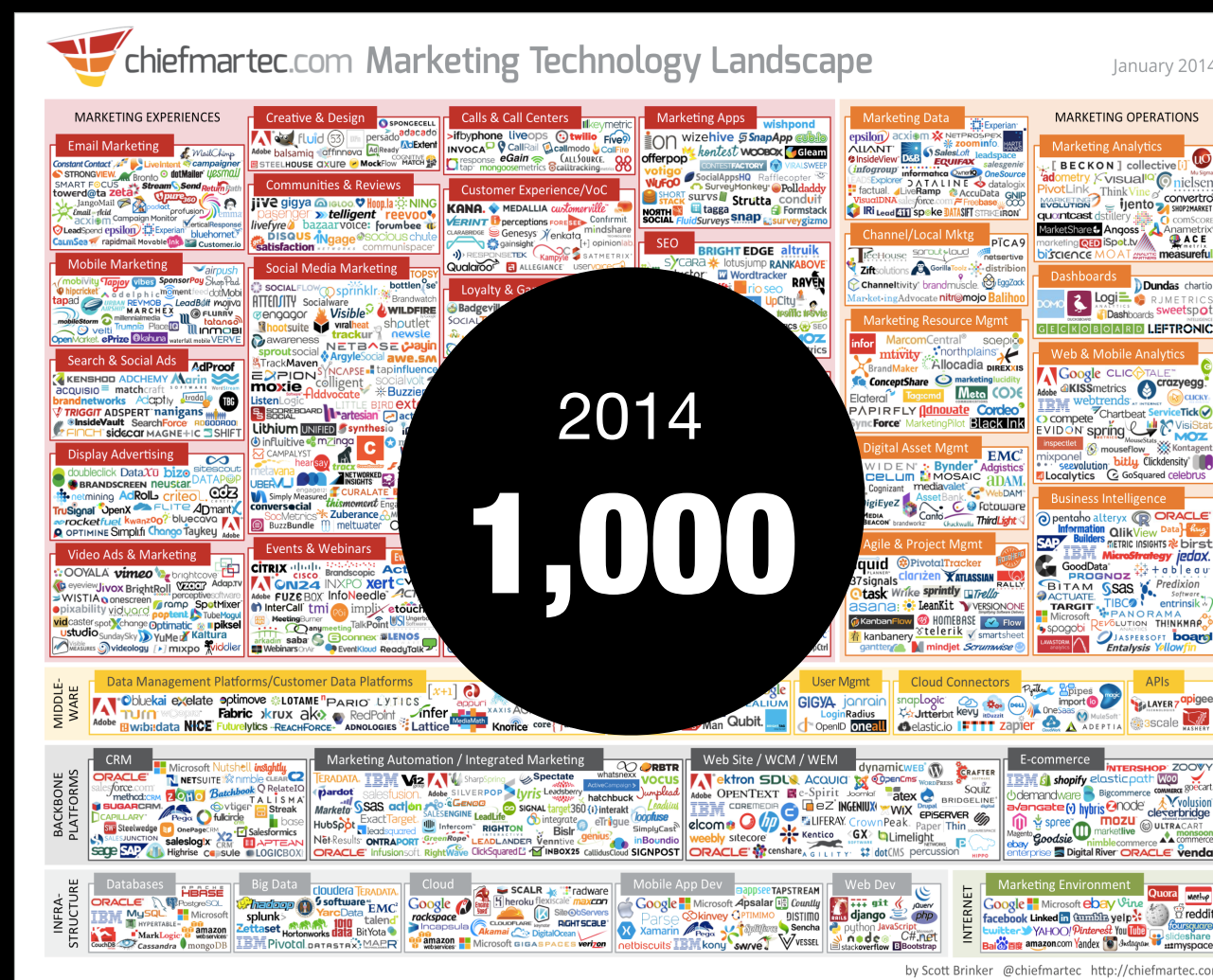
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Then 1,000 in 2014.

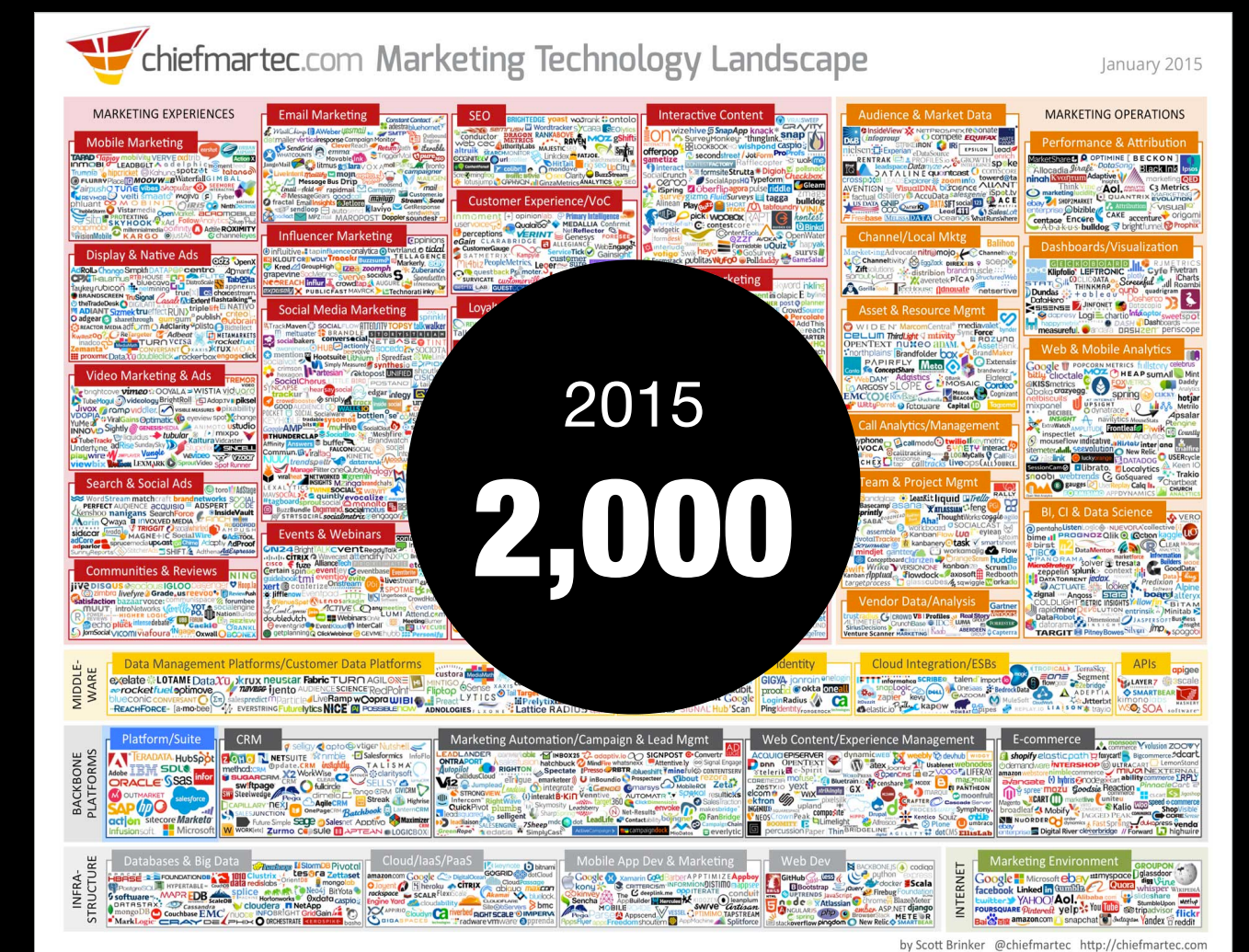


BRINKER'S MARTECH LANDSCAPE

By September 2012 when Brinker revisited his infographic, the number of firms operating in marketing technology had grown to 350.

Then 1,000 in 2014.

Three years on in 2015, that figure would swell to 2,000.



BRINKER'S MARTECH LANDSCAPE

Brinker's analysis conducted in March of 2016 revealed that an astonishing number of 3,500 firms operating in the space — almost twice the number just 14 months before.

2016
3,500



Sources: CabinetM (<http://cabinetm.com>), Capterra, G2 Crowd, Google, Growthserve, LUMA Partners, Siftify, TrustRadius, VBProfiles — see <http://chiefmartec.com/2016/03/marketing-technology-supergraphic-2016/> for details.

Created by Scott Brinker (@chiefmartec).





BRINKER'S MARTECH LANDSCAPE

In 2017, the number of companies operating in the marketing technology space has reached 5,000 growing +40% from 2016's total.



Sources: CabinetM, Capterra, G2 Crowd, Google, LUMA Partners, Siftify, TrustRadius — see <http://chiefmartec.com/2017/05/marketing-technology-landscape-supergraphic-2017/> for details.

Produced by Scott Brinker (@chiefmartec) and Anand Thaker (@anandthaker).





BRINKER'S MARTECH LANDSCAPE

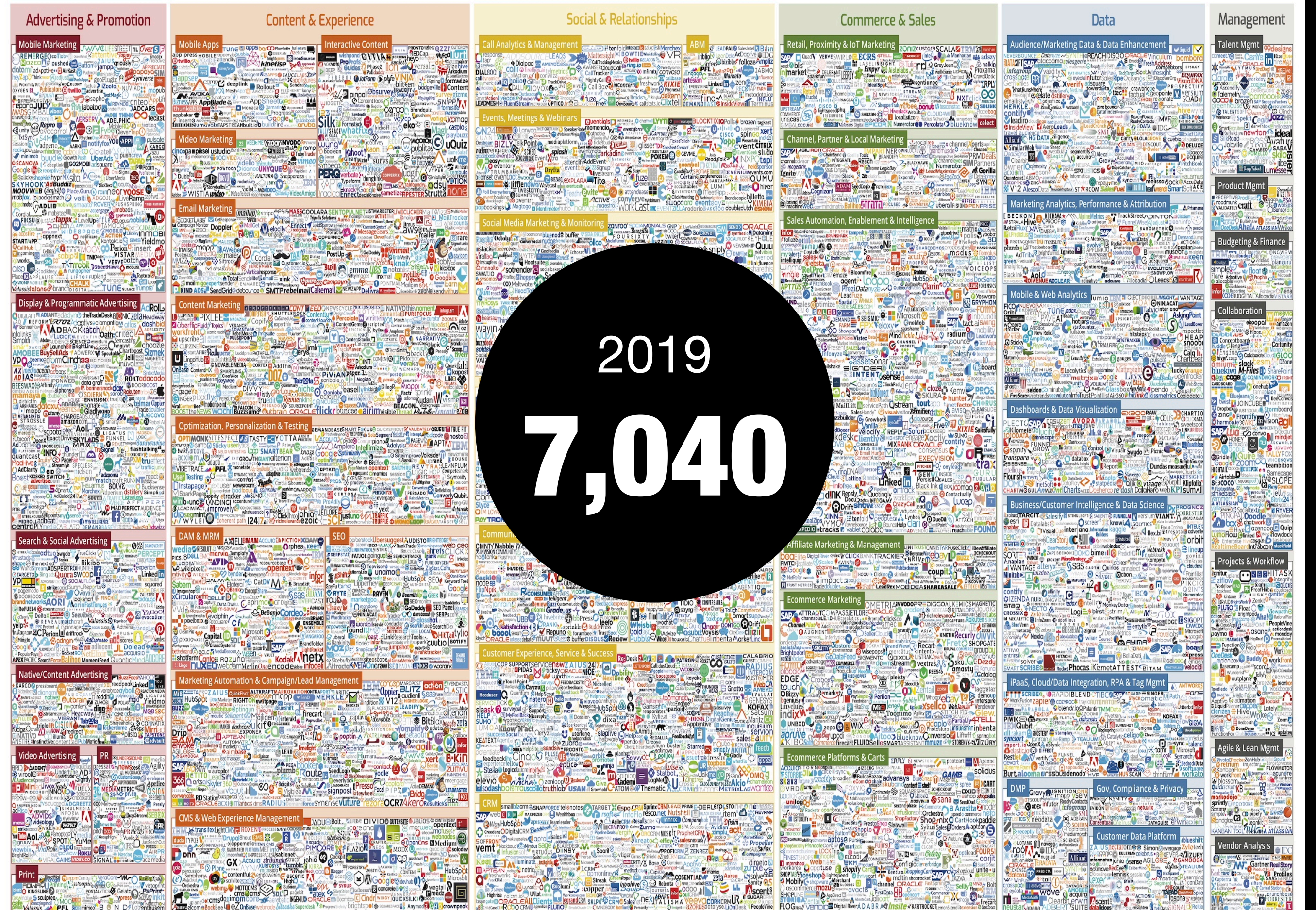
2018's graphic charts 6,829 marketing technology solutions. While that represents "only" 27% growth over last year's landscape, the percentage of growth belies the absolute scale of this space.





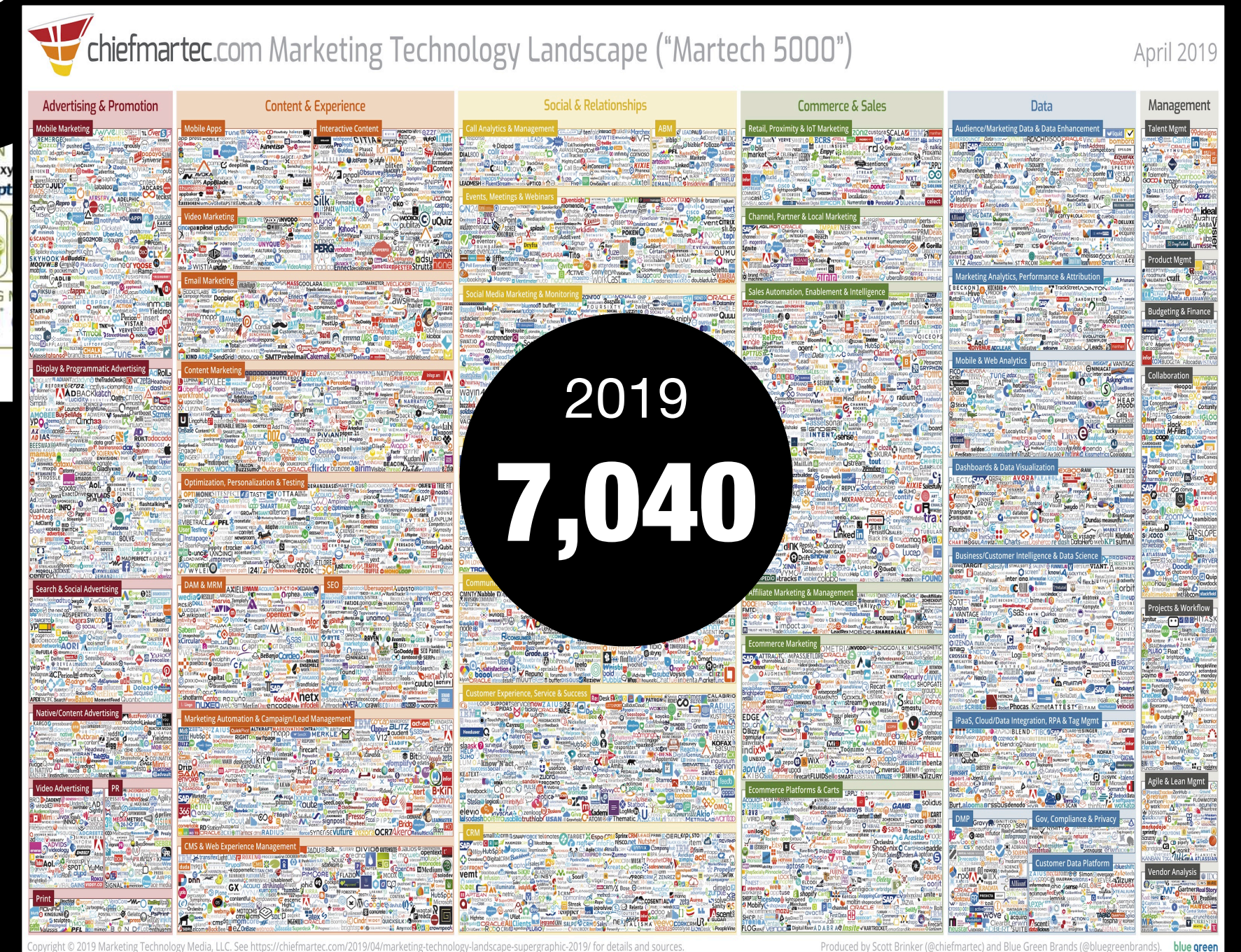
BRINKER'S MARTECH LANDSCAPE

Today in 2019, the number of companies operating in the marketing technology space has surpassed the 7,000 mark to 7,040.



BRINKER'S MARTECH LANDSCAPE

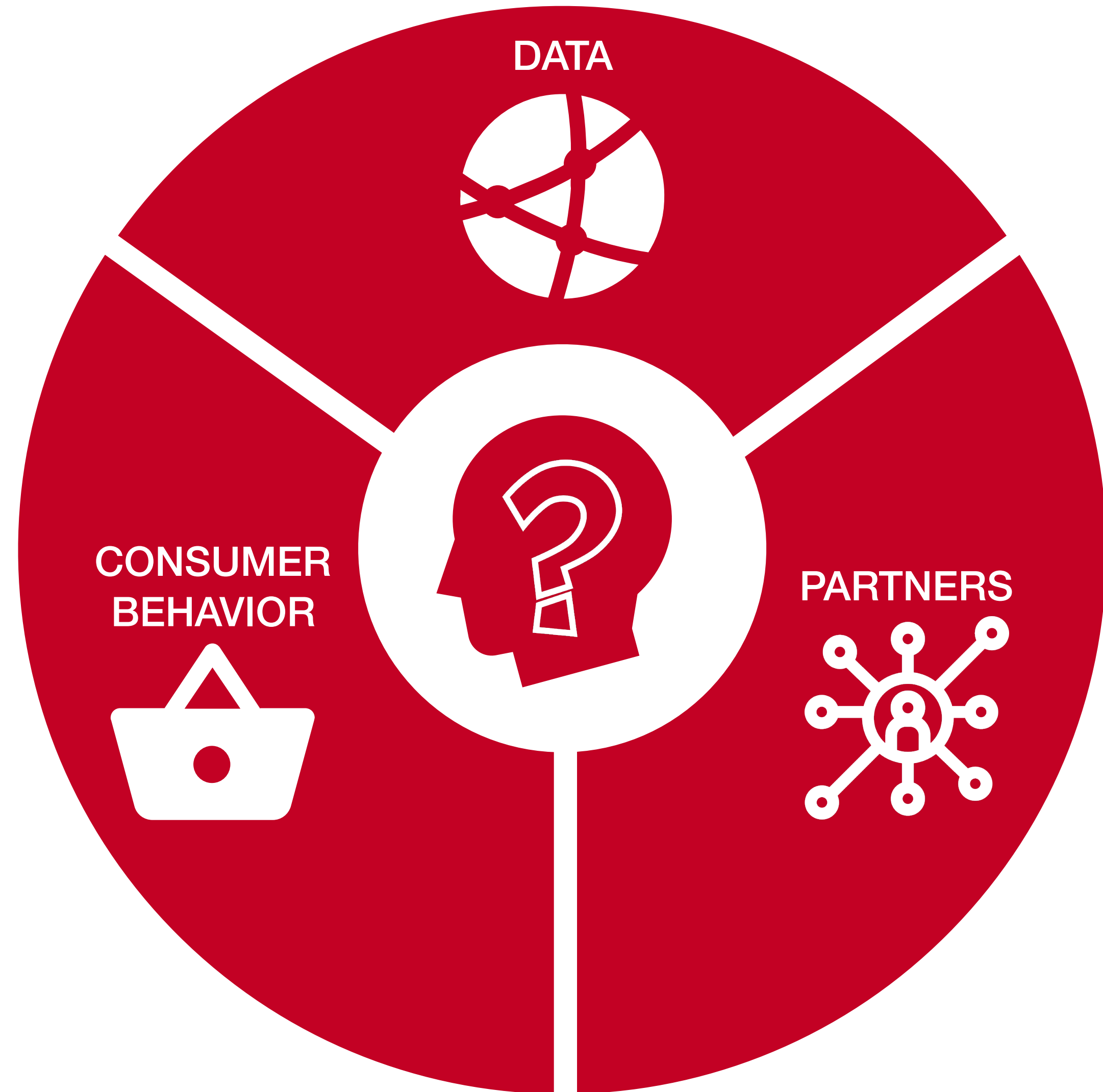
This extraordinary amount of growth in the number of firms offering services to the marketer has had the effect of opening their minds to the (nearly) unlimited power of data in their space, while also introducing a great degree of confusion as the marketer attempts to navigate this new, roiling marketplace.



THE MARKETER'S DIGITAL CONUNDRUM

The rapid pace of change in the marketer's environment leaves them reeling from forces that have re-shaped consumer behaviors, data, and partnerships.

This leaves the marketer in the uncomfortable position of at once feeling tremendously empowered and yet recklessly unable to answer questions on their mind.



MARKETER REQUIREMENTS

Beyond availability, the core requirements marketer's hold for measurement solutions include a set of attributes that range from "easily done" to much more complicated



Capability Clarity

Clear guidance upfront on what metrics, methodology, and implications clients can expect (with particular transparency on "data provenance")



Speed To Market

Launch of solutions in a timely matter and fast turnaround time for studies once placed into market

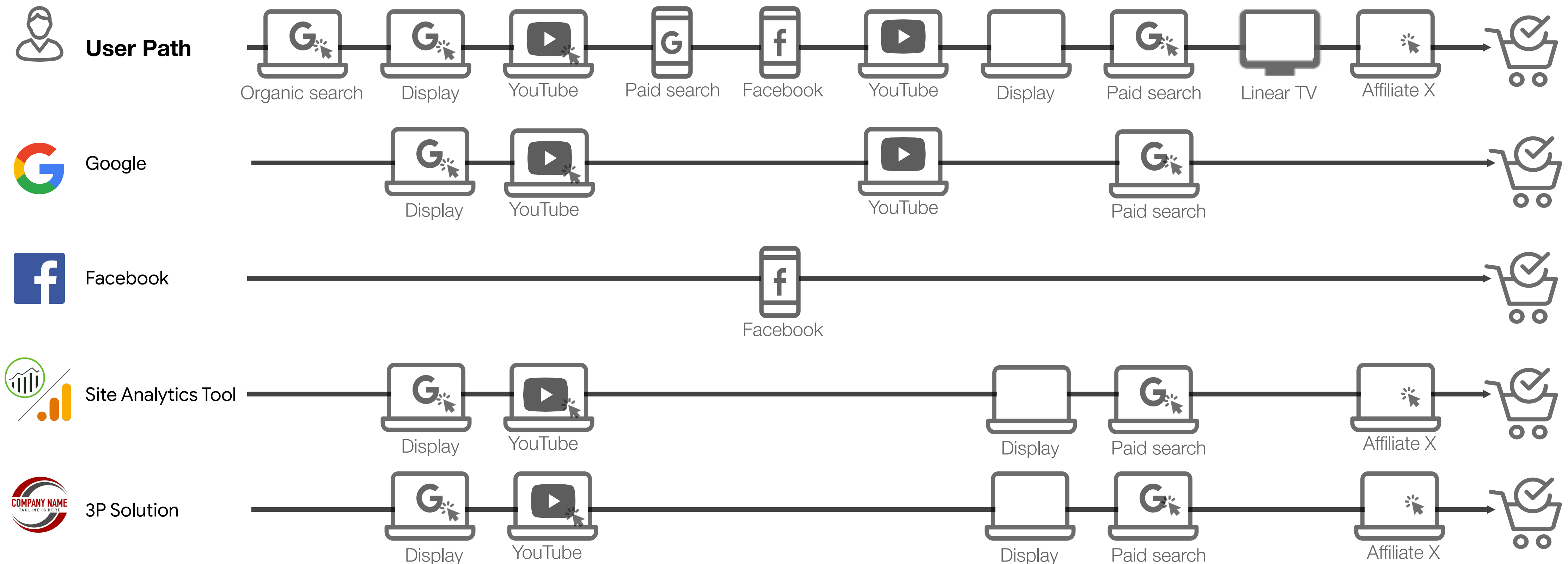


X-Platform Comparability

Ability to compare media placed with one publisher to competitors in order to facilitate effective budget allocation decisions

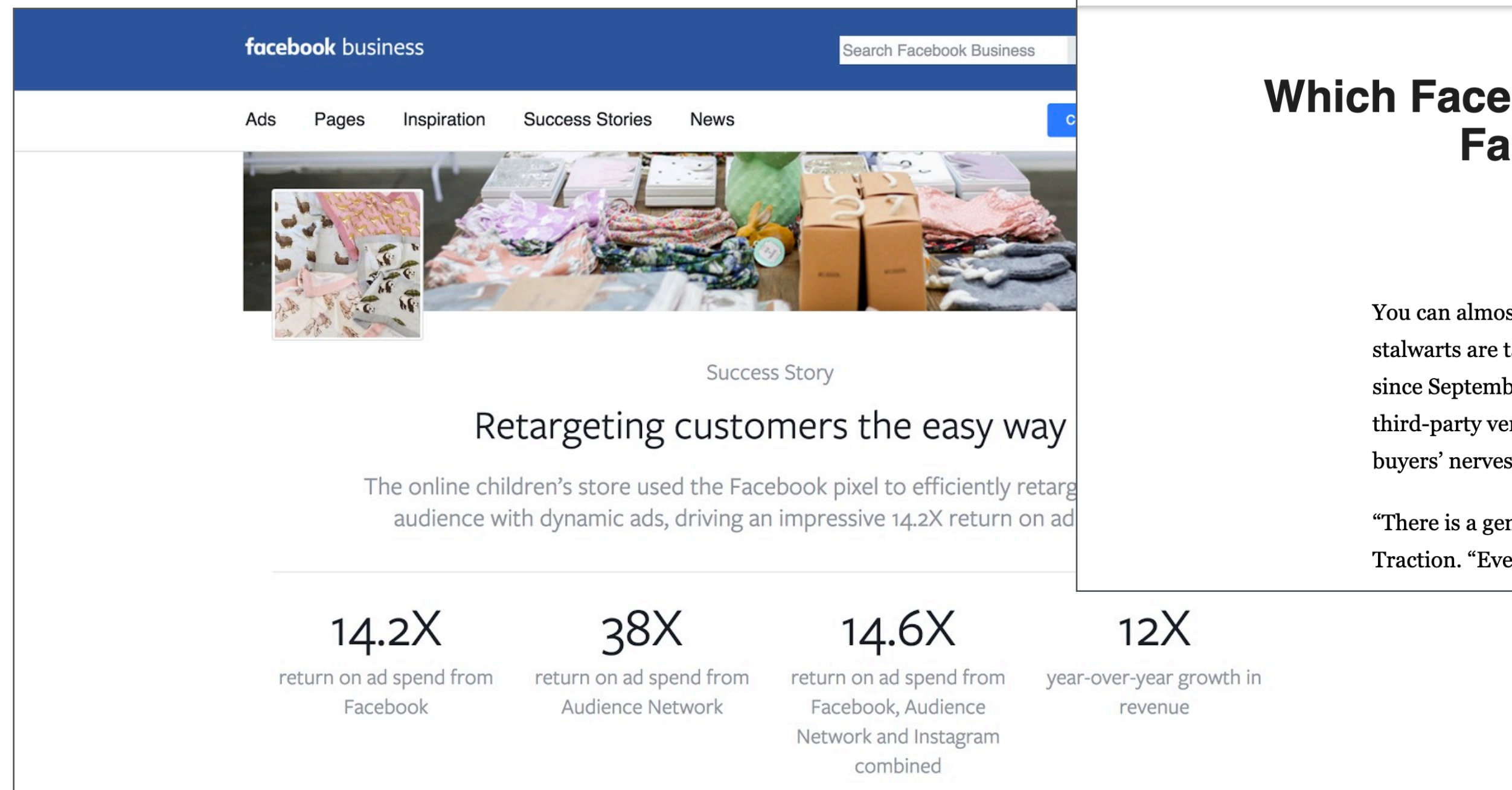
INCOMPLETE PATHS

Presently, no single digital solution measures the full journey a customer will take to evaluate brands and make an ultimate purchase



SOCIAL MEDIA RESULTS

Social media platforms are quick to claim impact for their advertising, even if the approach to measurement at times lack methodological soundness



facebook business

Search Facebook Business

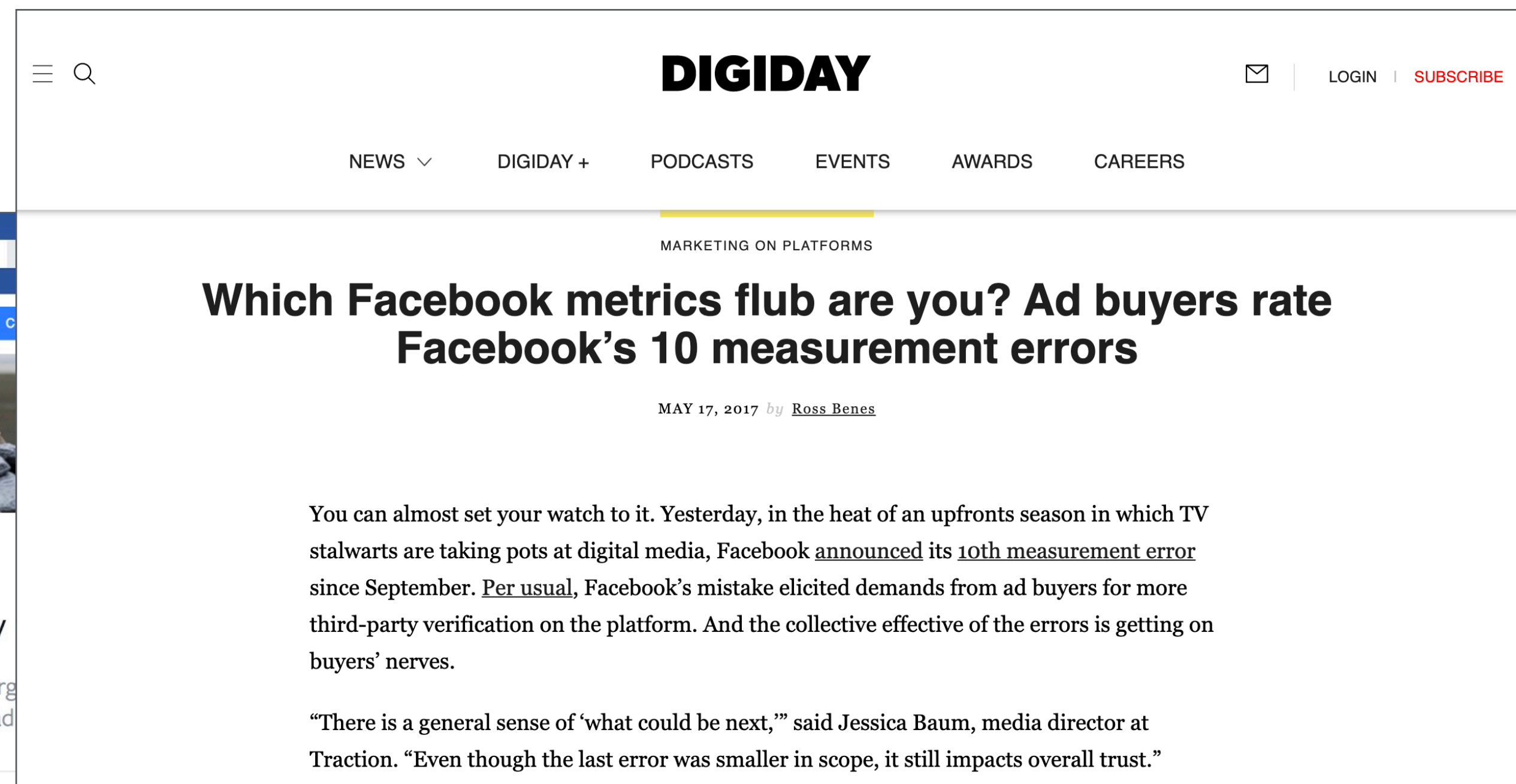
Ads Pages Inspiration Success Stories News

Success Story

Retargeting customers the easy way

The online children's store used the Facebook pixel to efficiently retarget audience with dynamic ads, driving an impressive 14.2X return on ad

14.2X	38X	14.6X	12X
return on ad spend from Facebook	return on ad spend from Audience Network	return on ad spend from Facebook, Audience Network and Instagram combined	year-over-year growth in revenue



DIGIDAY

NEWS DIGIDAY + PODCASTS EVENTS AWARDS CAREERS

MARKETING ON PLATFORMS

Which Facebook metrics flub are you? Ad buyers rate Facebook's 10 measurement errors

MAY 17, 2017 by Ross Benes

You can almost set your watch to it. Yesterday, in the heat of an upfronts season in which TV stalwarts are taking pots at digital media, Facebook announced its 10th measurement error since September. Per usual, Facebook's mistake elicited demands from ad buyers for more third-party verification on the platform. And the collective effective of the errors is getting on buyers' nerves.

"There is a general sense of 'what could be next,'" said Jessica Baum, media director at Traction. "Even though the last error was smaller in scope, it still impacts overall trust."



FACEBOOK'S "NOT TOP TEN"

Digiday profiled ten of Facebook's most significant 2017 measurement errors and asked buyers to rank the impact they felt as a result of the gaffs

1 September: Inflated video views for two years by up to +80%

2 November: Overestimated referral traffic by including clicks to advertiser's FB page

3 November: Overstated video ad completion rates by not syncing ad length properly

4 December: Undercounted iPhone traffic for Instant Articles

5 November: Inflated average time spent on Instant Articles

6 December: Miscalculated likes for Live videos by counting users multiple times

7 November: Counted organic users before content was on their screen

8 November: Counted organic users multiple times on advertiser pages

9 May: Wrongly charged advertisers for video carousel clicks

10 December: Inflated like & share counts for links posted on Facebook

DATA PRIVACY: NYT'S ANATOMY OF FAKE FACEBOOK NEWS

Loopholes in Facebook privacy allowed nefarious actors to create fake user profiles and promote political agendas.

An investigation by the NYTimes demonstrated that threat by profiling the page of someone claiming to be Melvin Redick who promoted sites linked to Russian military intelligence agency GRU.

Melvin Redick's Facebook Profile

Inconsistencies in the contents of Mr. Redick's Facebook profile suggest that the identity was fabricated.

- 1 Neither Central High School nor Indiana University of Pennsylvania has any record of Mr. Redick attending.
- 2 According to his profile, Mr. Redick was born and raised in Pennsylvania, but one image shows him seated in a restaurant in Brazil, and another shows a Brazilian-style electrical outlet in his daughter's bedroom.
- 3 Mr. Redick's posts were never of a personal nature. He shared only news articles reflecting a pro-Russian worldview.

The screenshot shows a Facebook profile for Melvin Redick. The profile picture is a man with a beard and a red headband. The cover photo is a young girl with colorful face paint and a red mushroom-shaped hat. The bio section lists: Studied at Indiana University of Pennsylvania, Went to Central High School (Philadelphia), Lives in Harrisburg, Pennsylvania, From Philadelphia, Pennsylvania, and Followed by 10 people. The posts section shows two posts: one from April 12 at 8:24am with a video titled 'WAR CRIME: US-led coalition chemical attack against civilians in Syria' and another from April 10 at 8:52am with text about Donald Trump's administration. Red circles with numbers 1, 2, and 3 are overlaid on the image to highlight specific details.



REGULATORS ARE RAISING THE BAR FOR PRIVACY

Policymakers continue to advance legislative proposals around the world, with many focused on privacy or inclusive of major privacy provisions.

Some common themes are emerging: Users should know who is collecting data about them, how that data is being used, and have the opportunity to opt out.







Privacy

matters



What happens on your iPhone, stays on your iPhone.

apple.com/privacy



TRACKING PRE-ITP

Cookies have been the dominant technology for tracking consumers online since their invention in 1994 and are used to attribute the impact of online ads on consumer purchases



User sees an ad
Google places a 3P cookie to identify the impression. This is used to carry information on the browser.



User clicks the ad
to reach an advertiser's site.
We add data to the initial 3P cookie that was dropped on the page.



User converts
The 3P cookie data is sent back to Google. Google is now able to give the ad click credit for the conversion. This is done with javascript, a piece of code on the page that can send information.

TRACKING POST-ITP

By blocking 3P cookies, Apple's ITP severely limits the ability to track consumer's movements across the internet and prevents advertisers from tying ad exposure to conversions online



User sees an ad
Google attempted to place a 3P cookie to identify the impression. The initial 3P cookie is blocked by ITP 2.0.

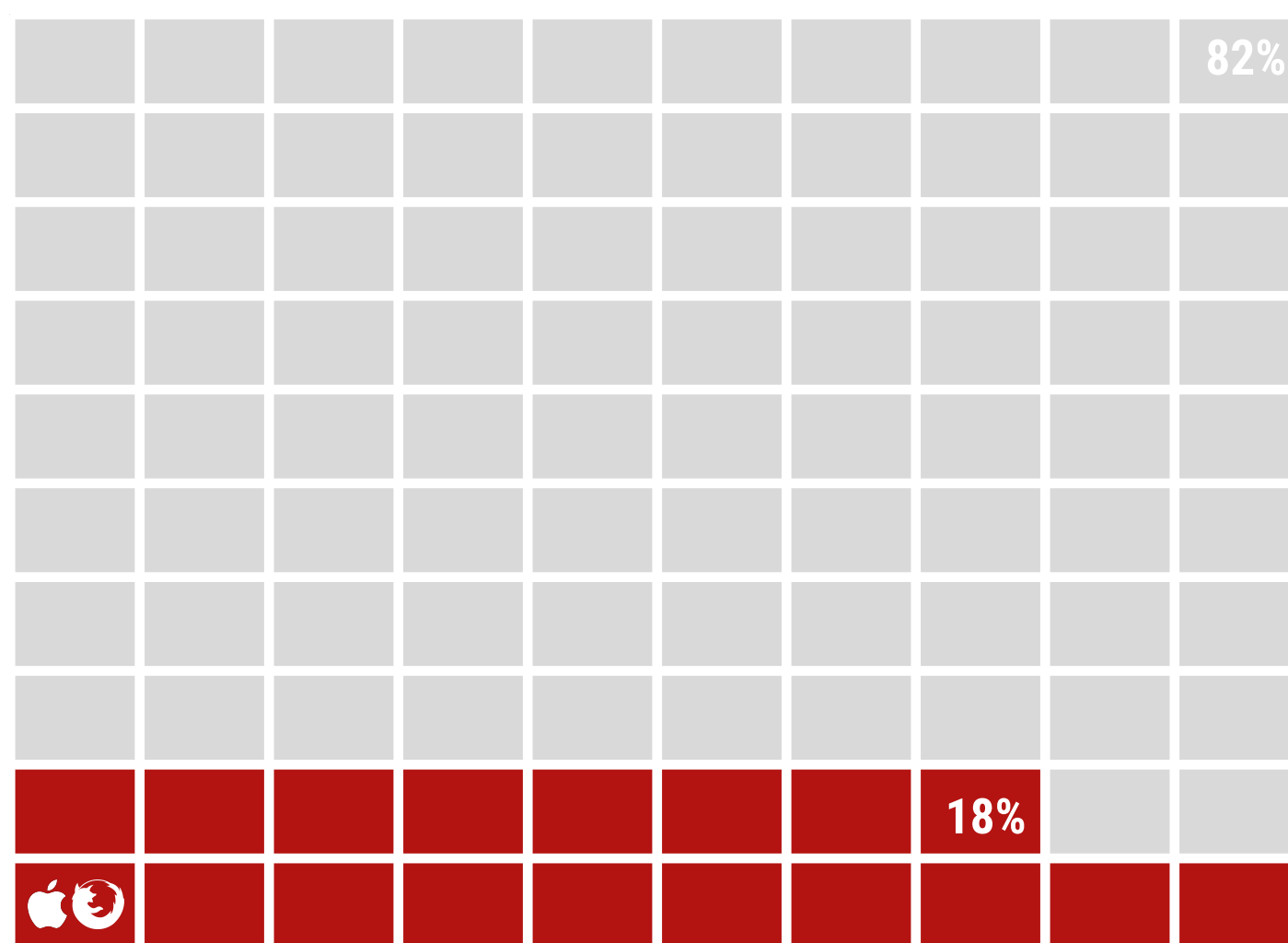
User clicks the ad
to reach an advertiser's site. The 3P cookie cannot be updated because it was already blocked.

Converts at anytime
The cookie was blocked. Therefore we cannot connect the ad click to the conversion.

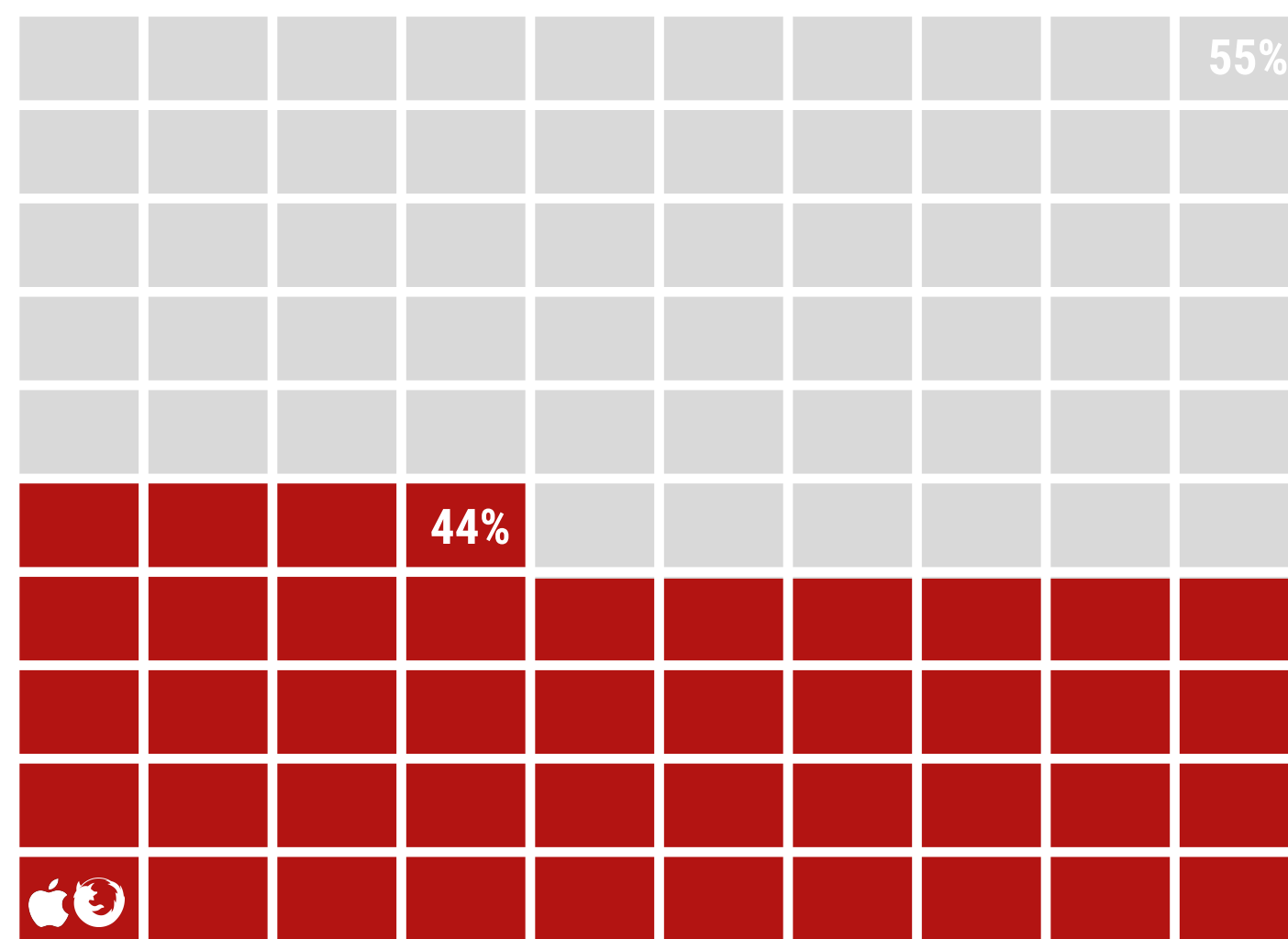
WHOM DOES ITP AFFECT?

ITP's technology impacts Safari browsers — as well as Firefox, as Mozilla moved quickly to follow Apple's lead — on mobile and desktop campaigns

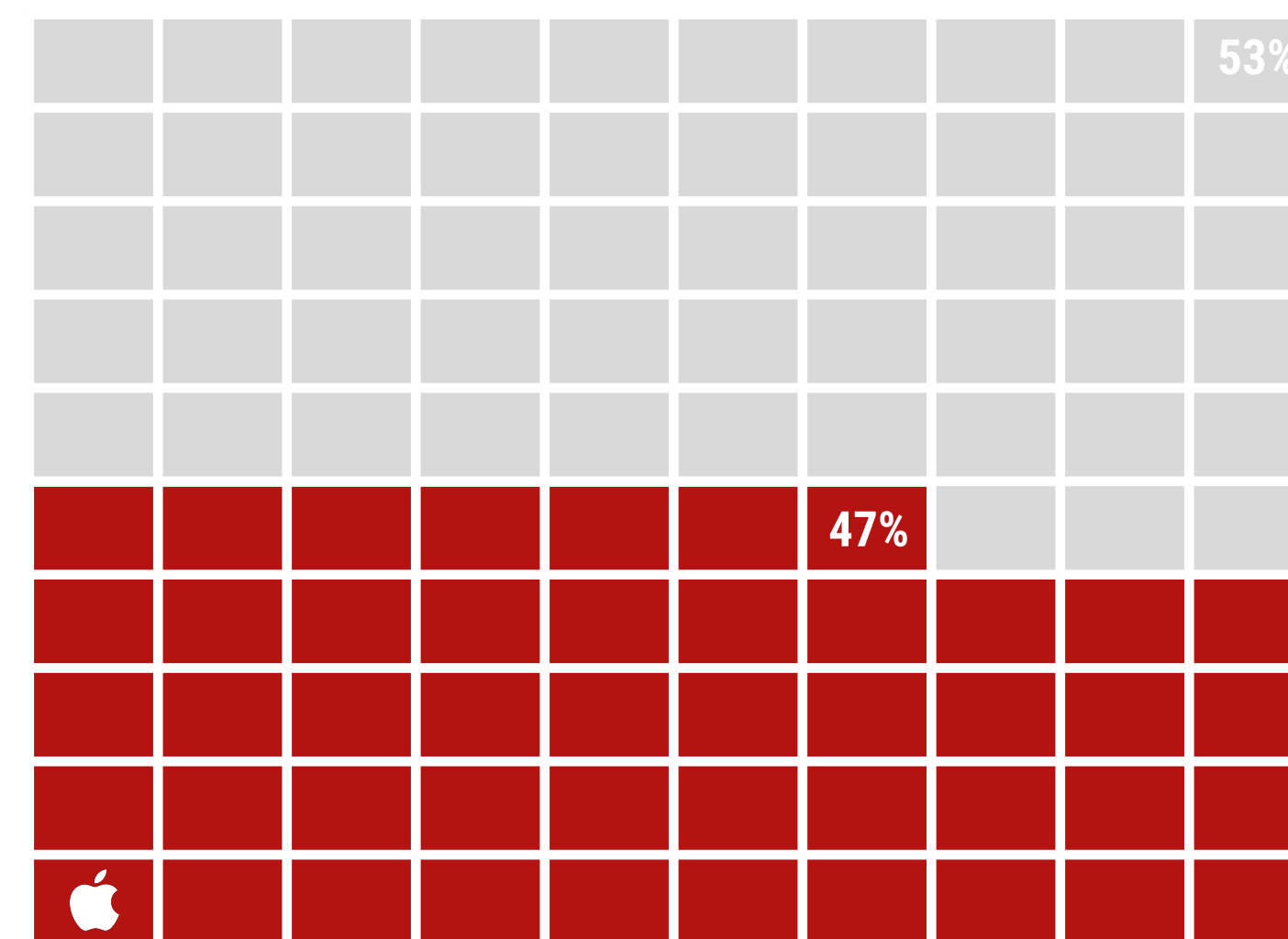
Affected Desktop Browser Share North America



Affected Mobile Browser Share North America



Affected Mobile OS Share North America



Mobile in-app campaigns are not affected by ITP since they do not rely on cookies for user tracking. Since mobile activity for most social media platforms happens in-app, those campaigns won't be significantly disrupted by the change either.

IMPACT OF ITP

The elimination of 3P cookies impacts the ability to measure consumer behavior outside owned & operated (O&O) sites and will be felt by brands in many important primary ways



DROP IN REPORTED MEDIA EFFECTIVENESS

All media will appear to be less efficient, as conversions from ITP-enabled browsers will not be included in conversion tallies.

View-through-conversions (VTC) and all measurement of passive consumer behavior outside of O&O properties will be entirely lost without 3P cookies.



REDUCED ABILITY TO TARGET CONSUMERS

Consumer targeting lists -- particularly re-marketing lists -- will drop in size as ITP-enabled consumers won't be added.

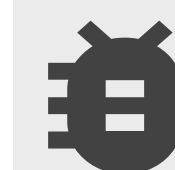
Safari or Firefox users without cookies will not be targeted by brands seeking to connect with these consumers outside of their O&O properties.



INABILITY TO OPTIMIZE AUTO-BIDDING

A lack of data from 3P cookies on ITP-enabled browsers will generate more noise in conversion reporting, preventing bidding systems from accurately optimizing to consumer behavior or implementing frequency caps.

No ITP-resistant tags means less bidding efficiency and profitability.



MORE RELIANCE ON PROBABILISTIC MODELS

To counter the loss of 3P cookie conversions, x-media attribution tools and studies will be forced to rely more heavily on probabilistic models to estimate behaviors on ITP-enabled browsers.

More reliance on probabilistic models means higher likelihood of bias and errors in these tools.

THE SINGLE-SOURCE PROBLEM

Why is a single source of truth for measurement no longer a viable solution?

MTAs promise to provide more actionable real-time insights. However, recent changes in privacy and browser tech are forcing MTAs to be more probabilistic, making it **difficult to validate findings and base decisions on MTA results.**

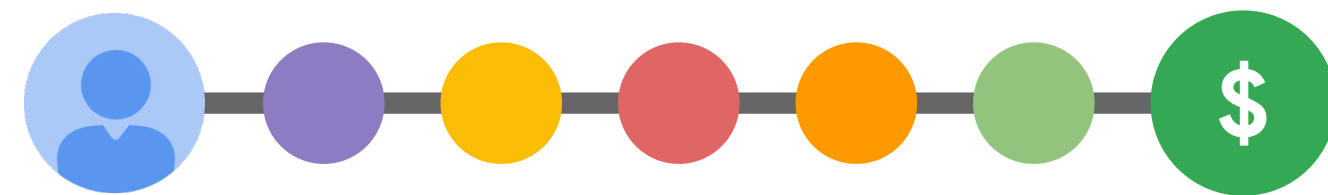
Many companies have historically relied on MMMs as a single source of truth; but MMMs can be backward looking and unable to keep pace with the rapidly changing environment, leading to **companies wanting an alternate source of truth.**

As a result of the above, mature measurement companies are finding continuous testing (used to validate hypothesis for changes in strategy/budget) **as a way to triangulate, validate and implement findings.**

APPROACH TO X-MEDIA BUDGETING

Best-in-class businesses are increasingly using a three-pronged approach to measuring media impact across channels

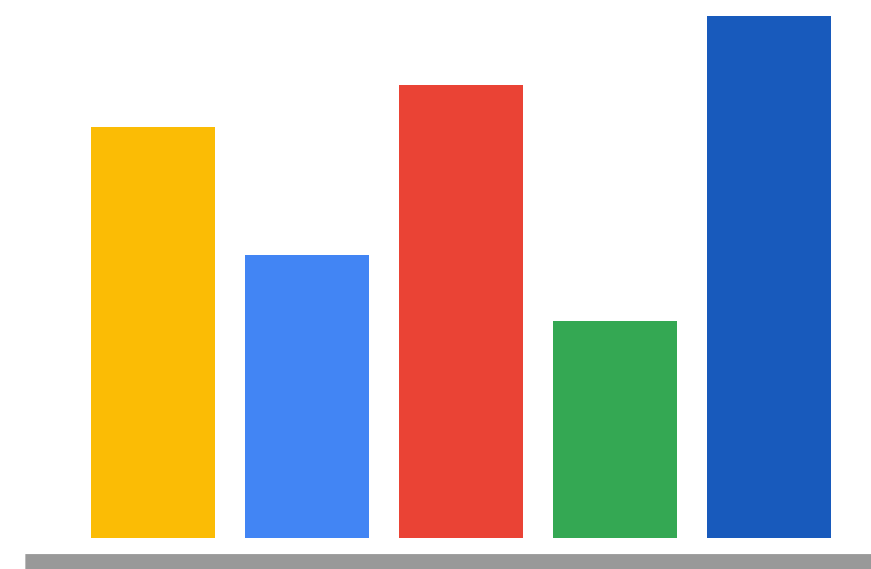
Attribution Modeling



Ongoing valuation to **measure the relative impact of specific digital media on consumer behaviors**

Daily/real-time

Media Mix Modeling



Periodic analysis to **measure the effectiveness (ROI) of each media type (offline & digital)**

Quarterly (but can be monthly)

Incrementality Tests



On-demand test to **measure the incremental impact of a specific campaign or tactic**

As needed

5 Game-Changing Facts that Prove the Value of Multi-Touch Attribution

FACT #1	FACT #2	FACT #3	FACT #4	FACT #5
25% in missed opportunity costs	Channels undervalued by as much as 215%	50% of spend wasted on the wrong audience	Channel performance fluctuations as high as 590%	38% of spend wasted on non-performing tactics

5 Game-Changing Facts

Nielsen Visual IQ understands that using multi-touch attribution to understand the ROI of every dollar spent at each part of the journey has never been more critical. We set out to prove the value of multi-touch attribution.

We analyzed 109 anonymized B2C client data sets made up of \$2.8 billion in media spend and over 256 billion impressions over a 6-month period (from January 1 to June 30, 2018). The companies included in the analysis include a wide range of B2C brands in the automotive, retail, financial services, healthcare, telecommunications and other industries.

We found five game-changing facts that show the direct impact of multi-touch attribution on the bottom

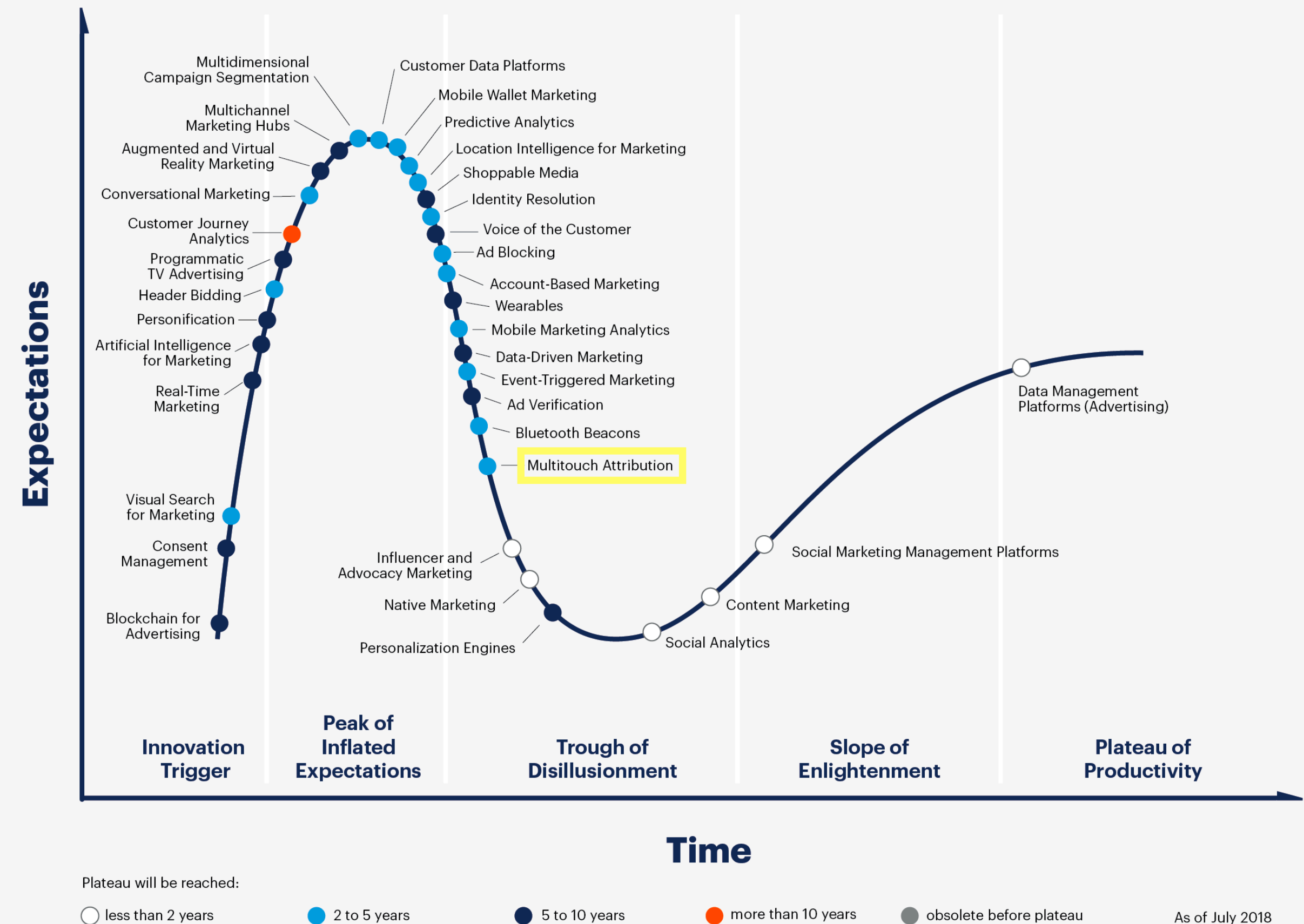


GARTNER HYPE CYCLE REVEALS TOUGH ROAD AHEAD FOR MTA

The 2019 Gartner Hype Cycle reports that MTAs are yet a few years away from the climb they face toward living up to their considerable hype.

Doubtless the recent changes to the digital tagging infrastructure and the regulatory response to privacy concerns affect Gartner's perspective on MTA.

Gartner Hype Cycle for Digital Marketing and Advertising



TYPES OF MTA SOLUTIONS

Advertisers can utilize attribution solutions on each of its media platforms to help optimize investment while “marketing attribution” tools promise cross-platform measurement

Single Channel Attribution



Challenges	Lack of cross-platform view	Bias toward own solution
	X-platform data discrepancies	Inconsistent methodologies

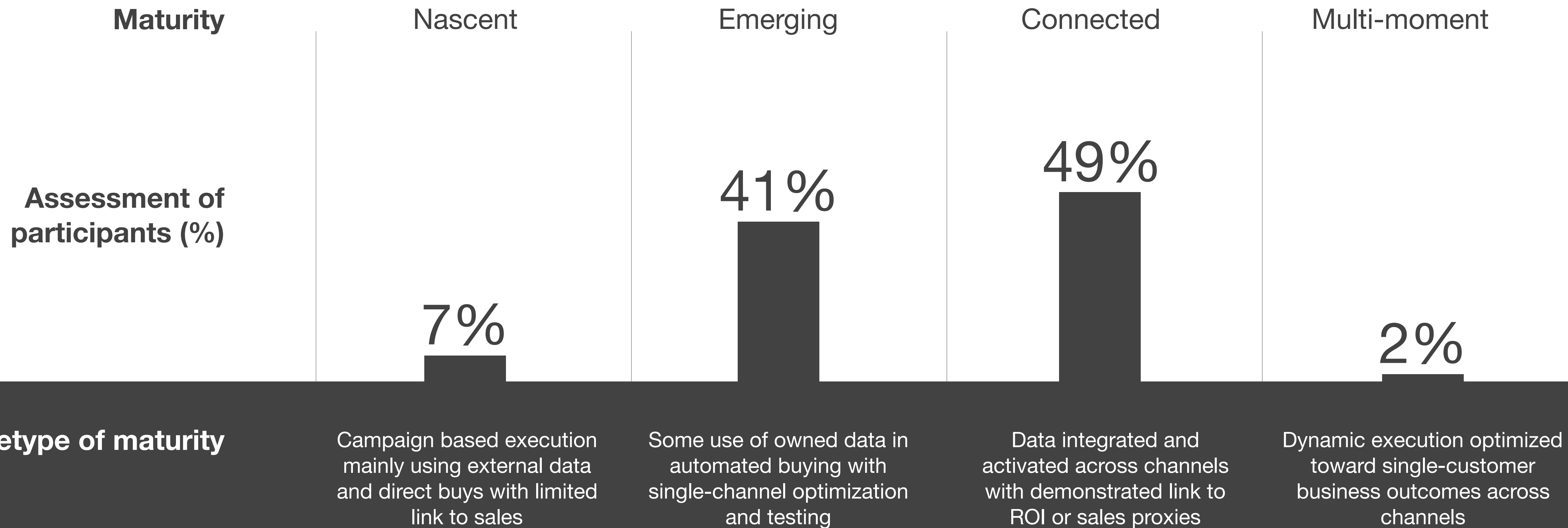
Marketing Attribution



Challenges	ITP-impacted data access	Reliance on probabilistic models
	Limited access to platform data	Lack of platform understanding

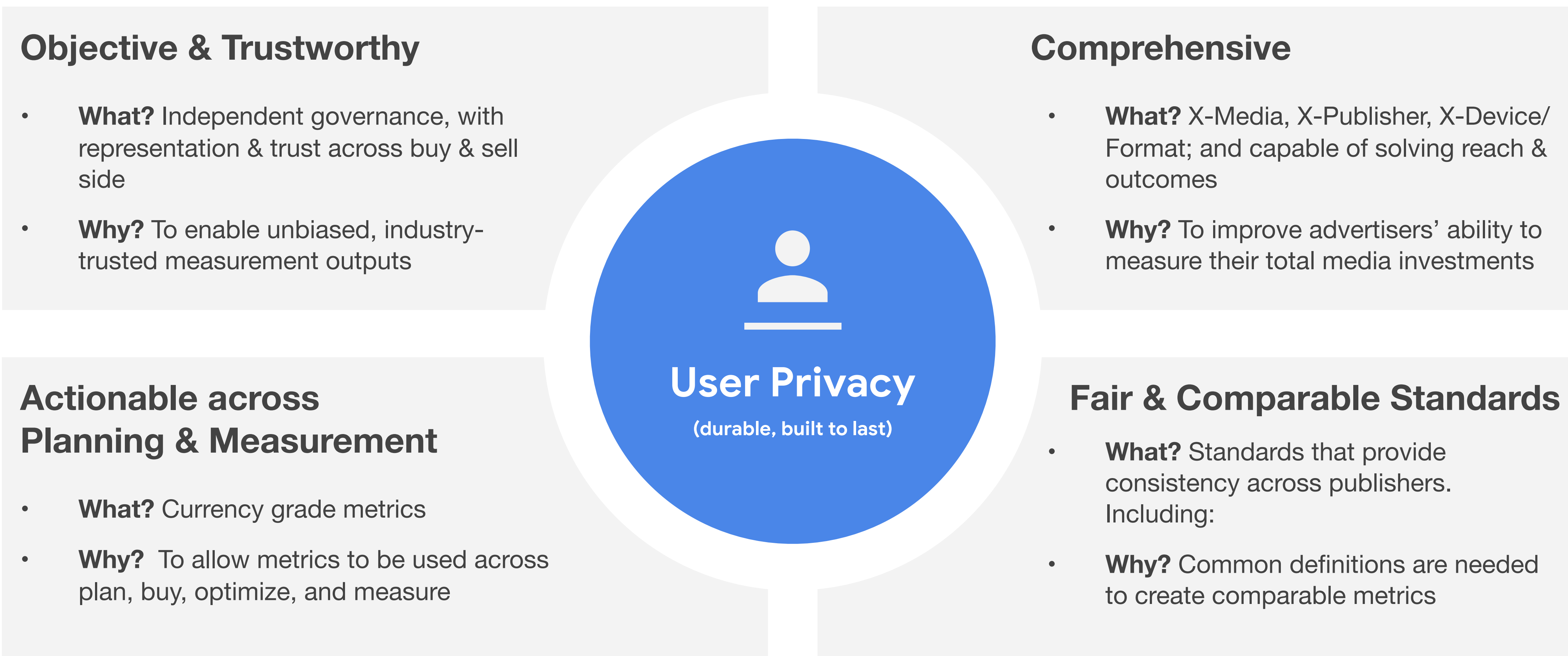
MATURITY ASSESSED

Although the push for greater data capabilities is on each C-level executive's mind, an exclusive group of brands are realizing the full potential of data-driven marketing strategies today



MATURITY ASSESSED

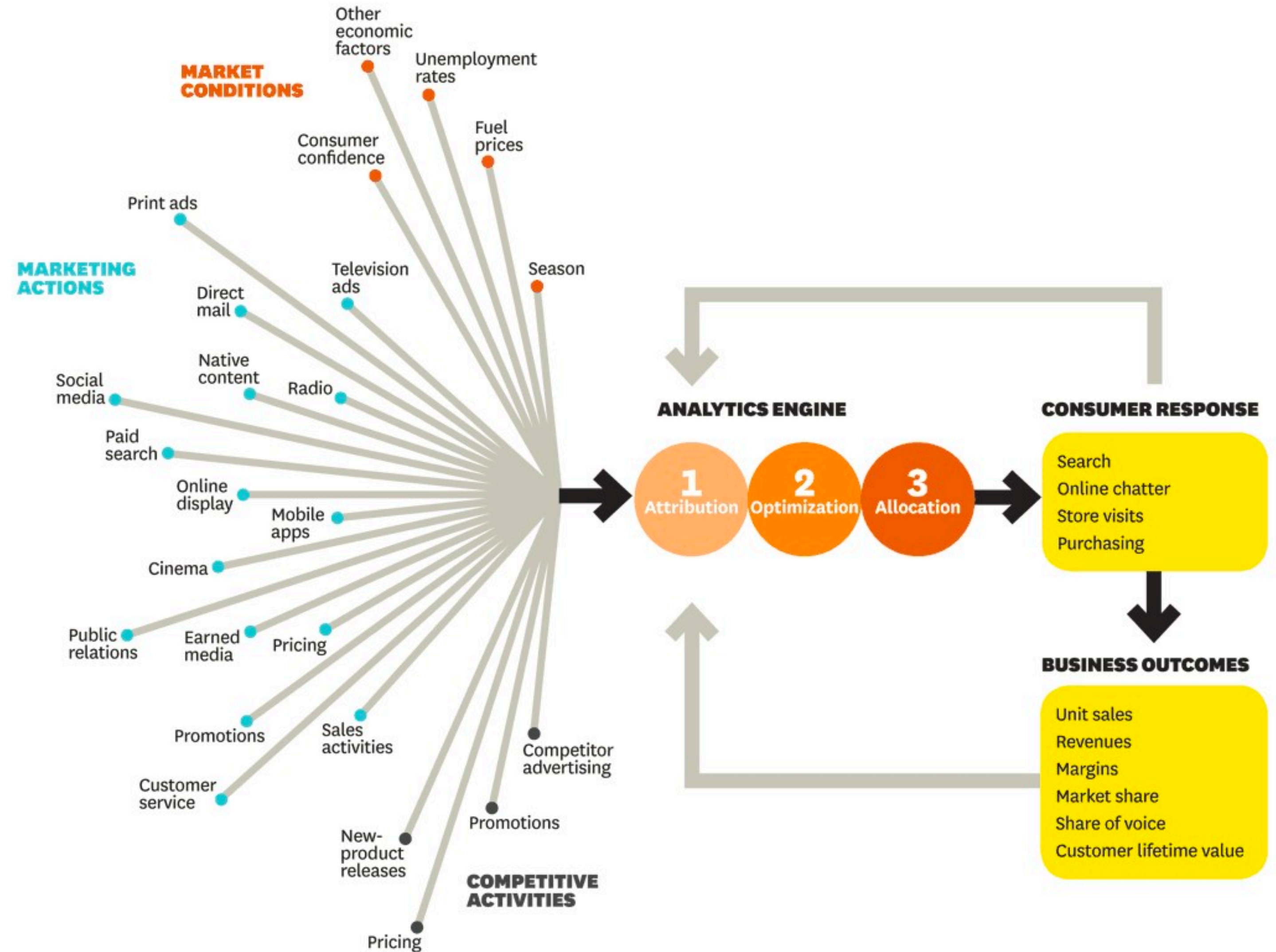
A privacy-safe Open Measurement solution that can provide cross-platform comparability based on these key principles but will require significant investment and resources to build



THE MMM CHALLENGE

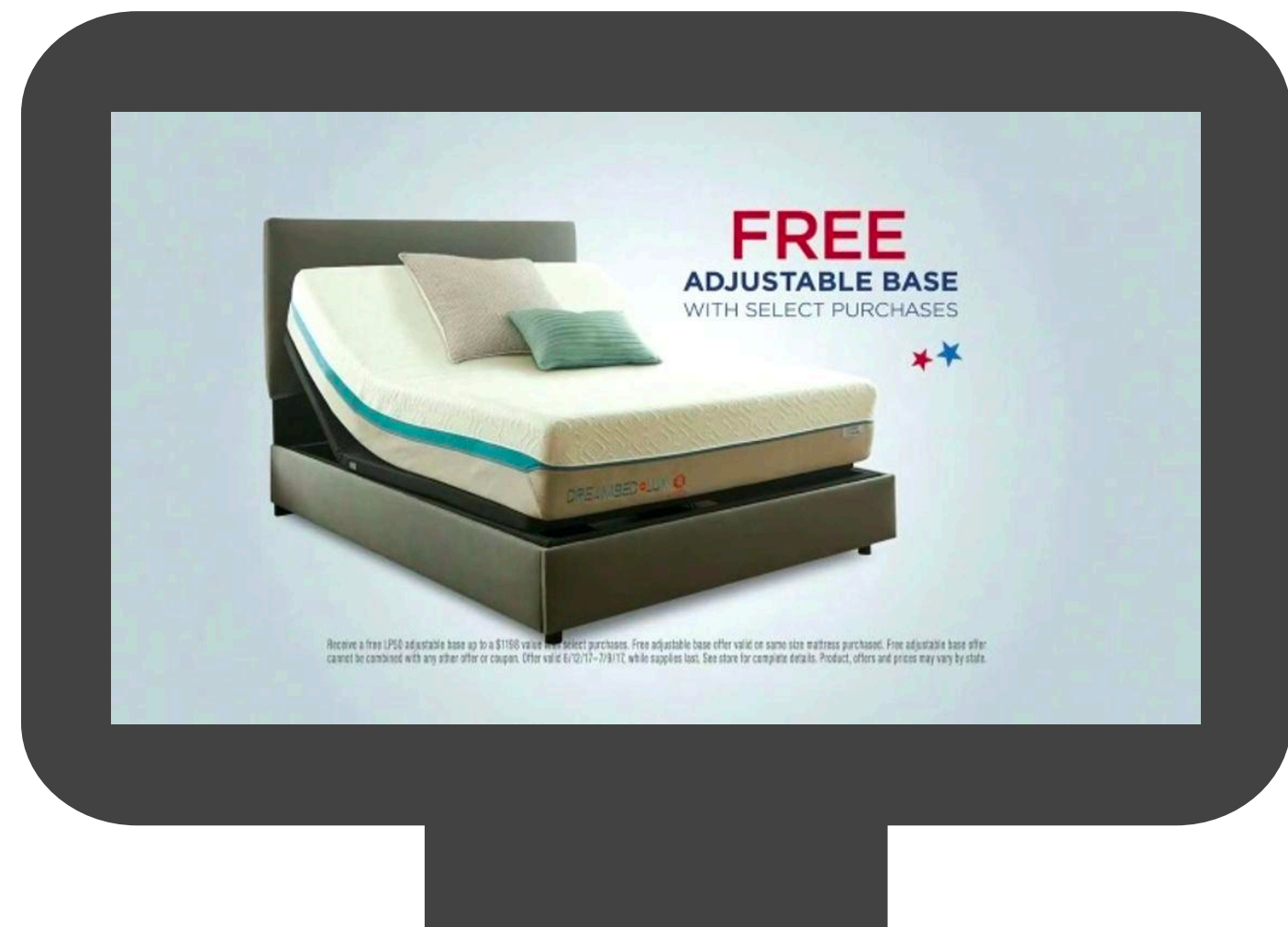
Brands often have a basic perception of the effectiveness of their media mix but rarely do they have a coherent overall view.

Media Mix Modeling attempts to determine how media spend has impacted performance-driven KPIs by isolating the vast number of factors that can influence consumer behavior.



IMPRESSIONS VS INTENT

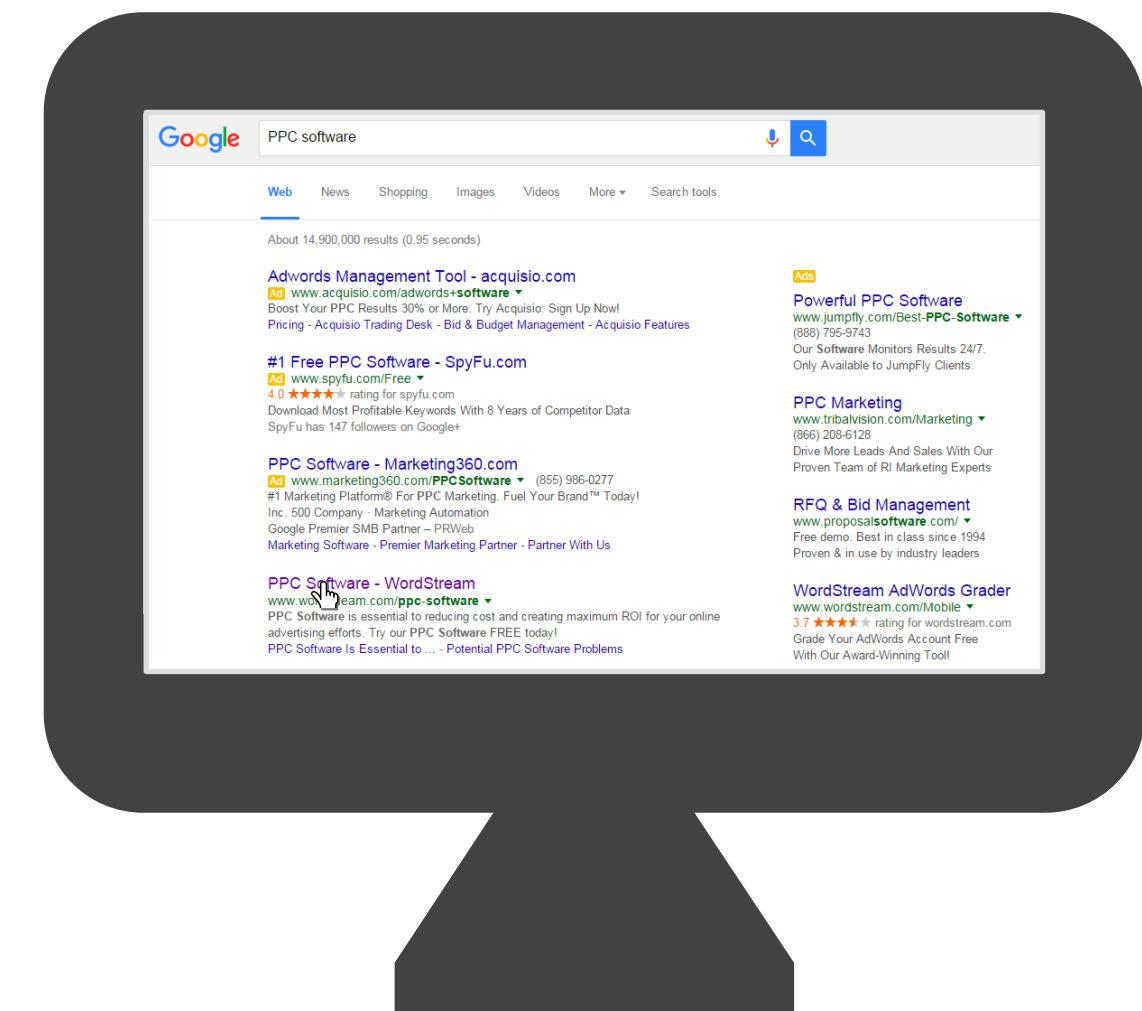
MMMs struggle with the nuances of search advertising as they attempt to evaluate all channels of consumer connection through a consistent currency (e.g., impressions)



Television



Out Of Home



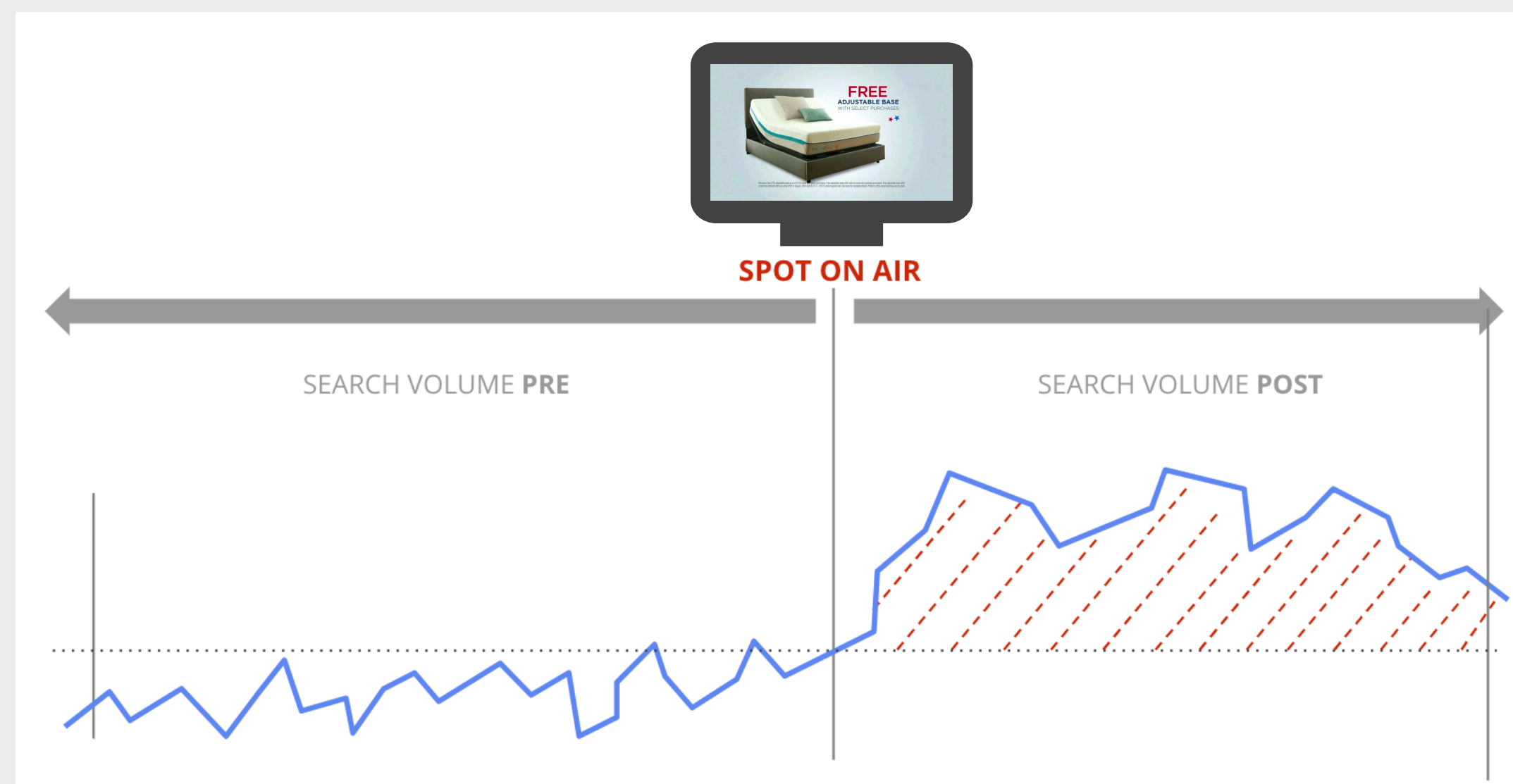
Digital?

TV:SEARCH RELATIONSHIP

MMMs largely fail to factor into their analysis the complementary dynamic of television viewing and sales-driving consumer search behavior

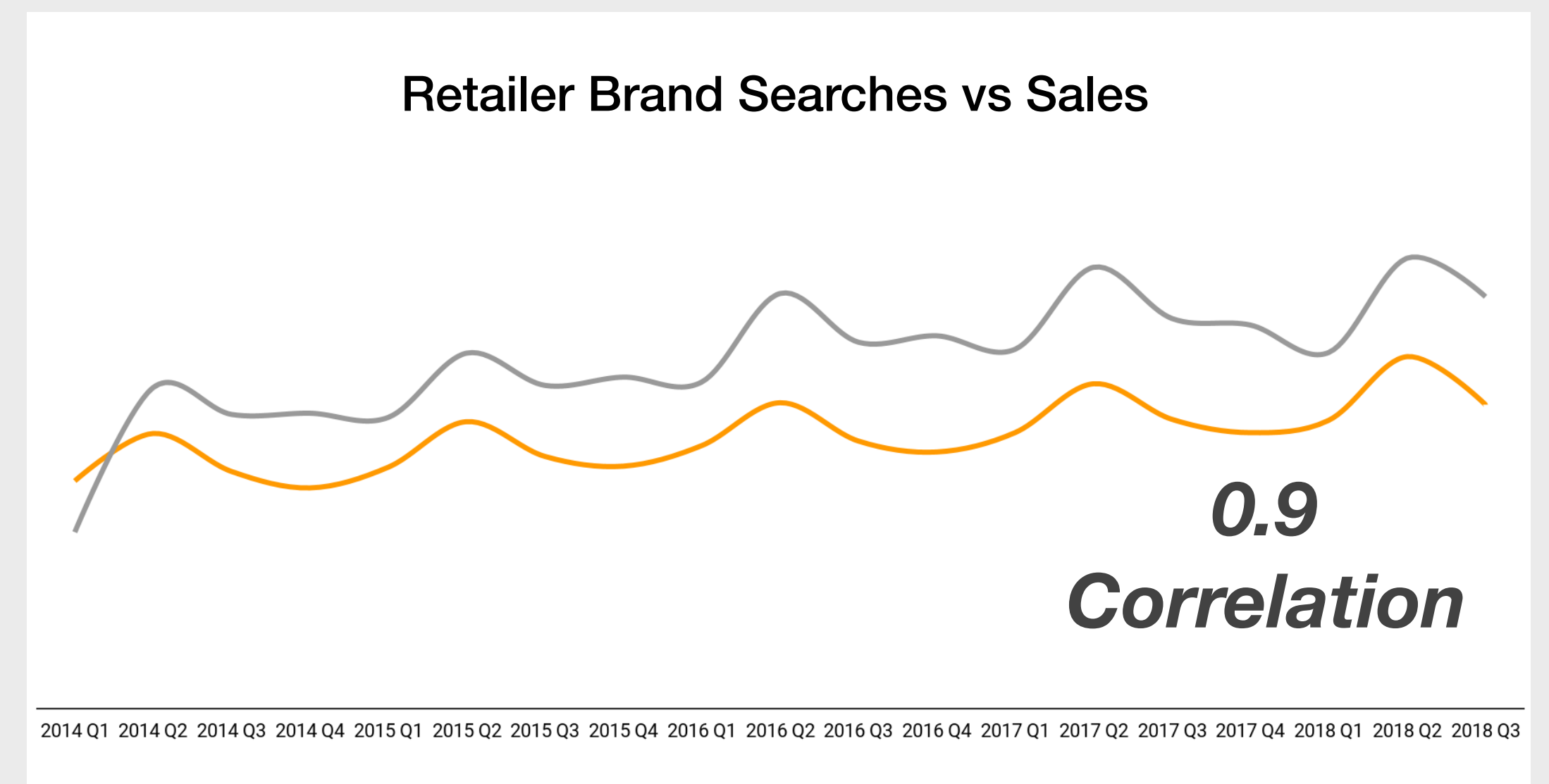
TV response on search is immediate

We look at the uplift after advertiser's spot airs against live TV viewing only



Why is TV:search relationship important?

Across industries and product categories search is positively and strongly correlated to sales



Note: Illustrative anonymous advertiser data

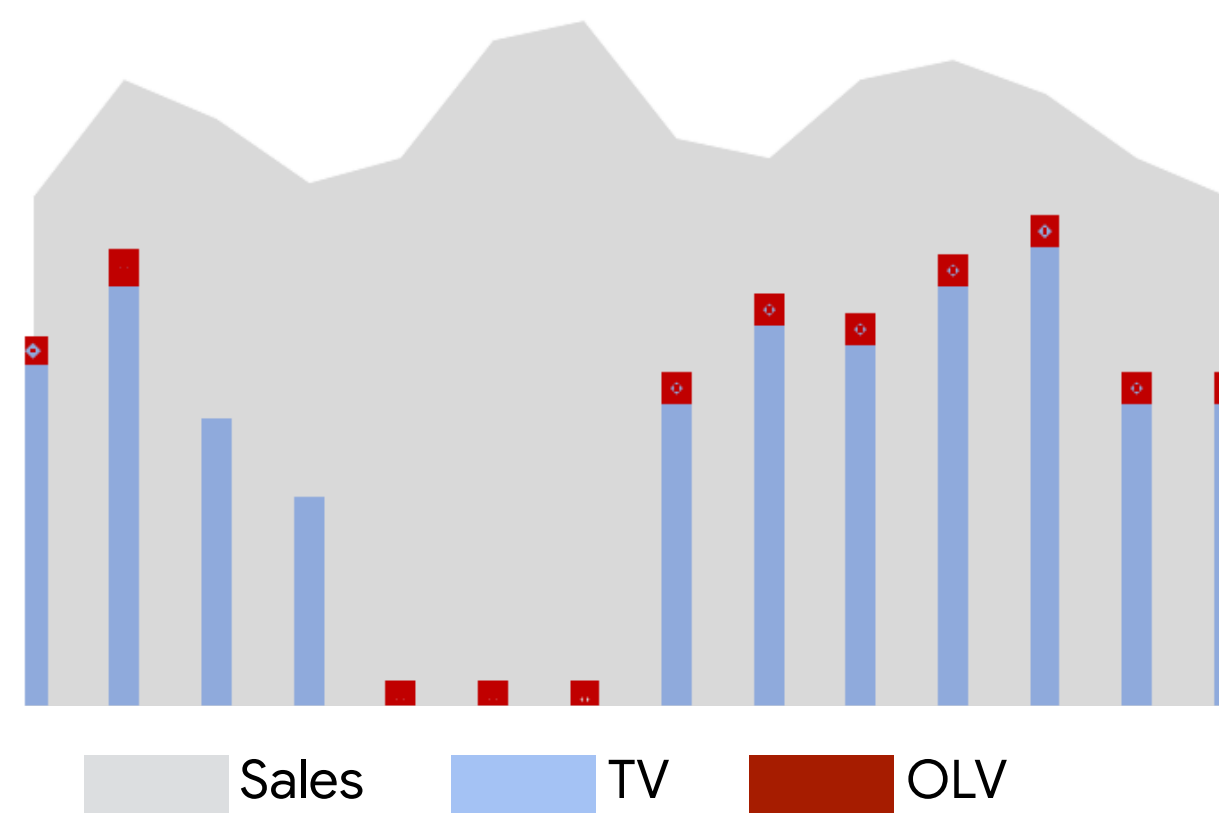


TV VS OLV

MMM's limitations in the evaluation of online video (OLV) become apparent as issues related scale, timing, and variation are introduced

Scale

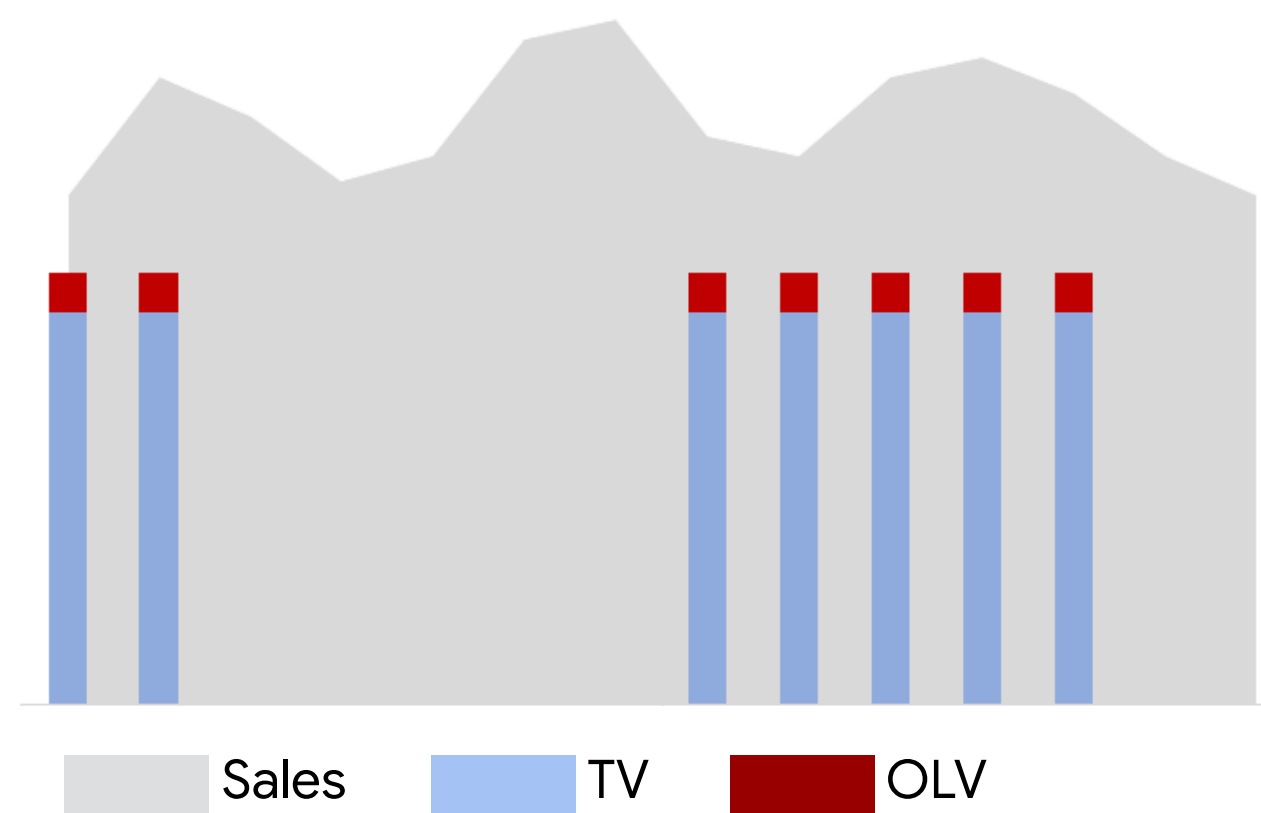
Weekly Spend on TV & OLV



TV budgets often 10-100X that of OLV, making it much harder to drive overall lift comparatively

Timing

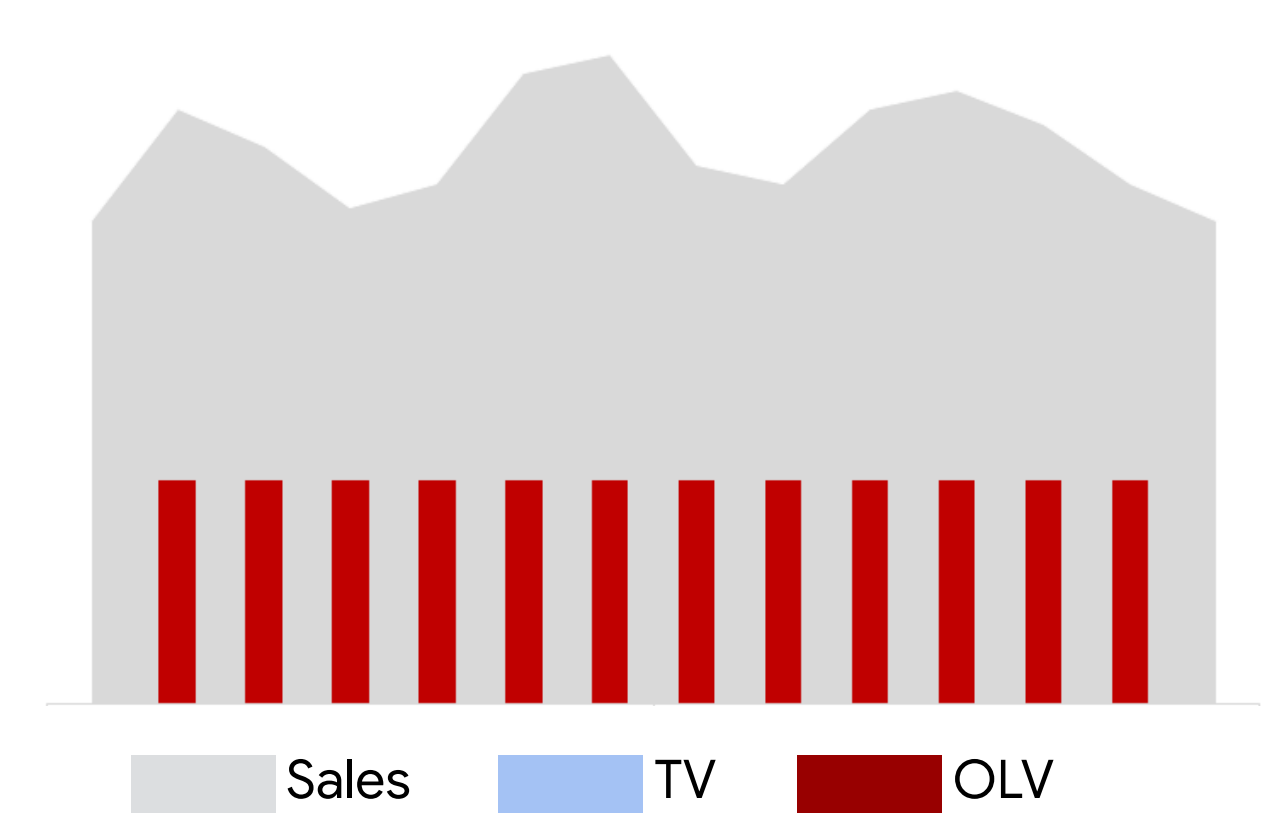
Weekly Spend on TV & OLV



Advertisers flight TV & OLV together so discerning lift becomes extremely complex

Variation

Weekly Spend on TV & OLV



Delivery algorithms attempt to pace evenly as models require variation to detect lift in sales

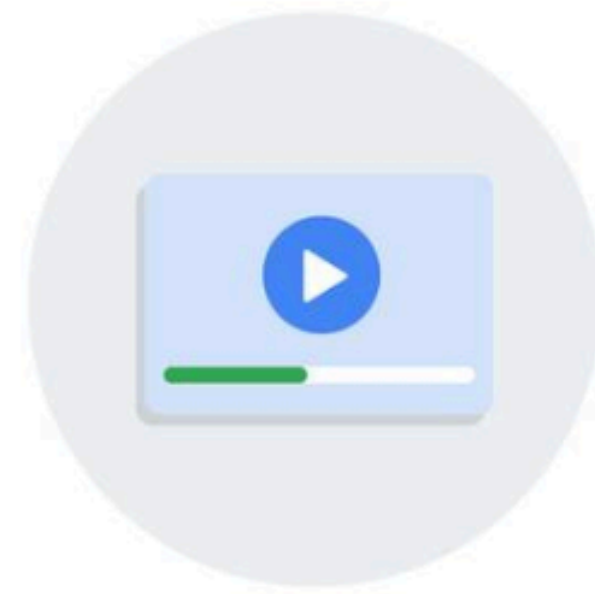
MODERNIZING MMM

Most of the time, MMMs are not set up to provide actionable insights when it comes to digital but simple steps can be taken to provide fair and accurate views into digital's true impact



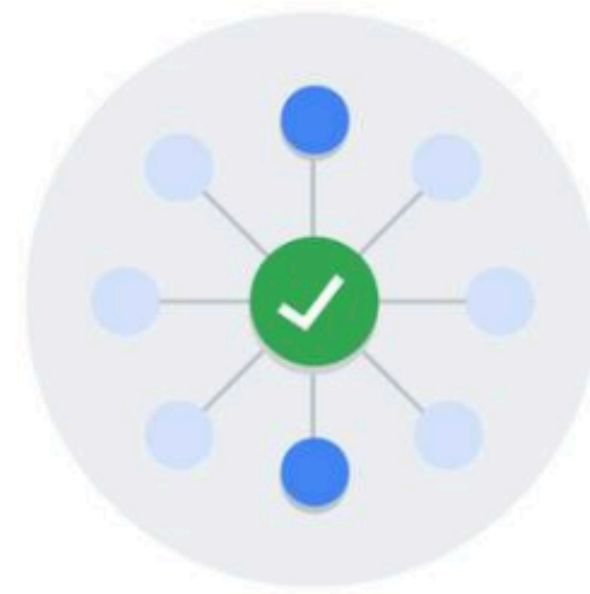
1

Evaluate your media by geography and market.



2

Differentiate video platforms.



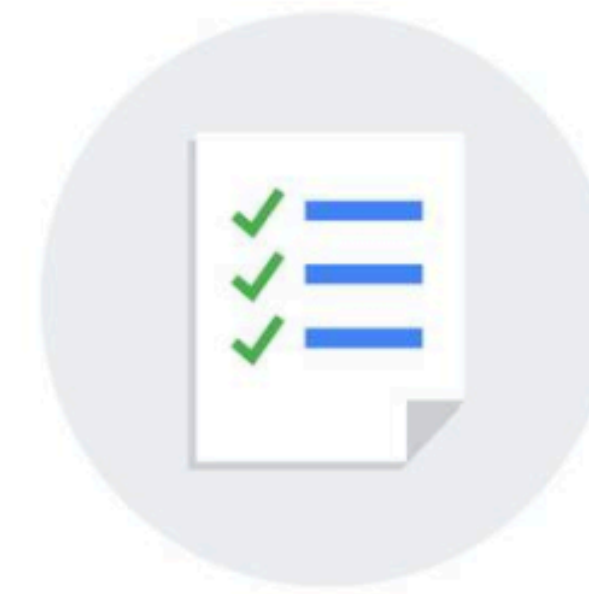
3

Consider the various elements of your media plan.



4

Validate what you learn through experiments.

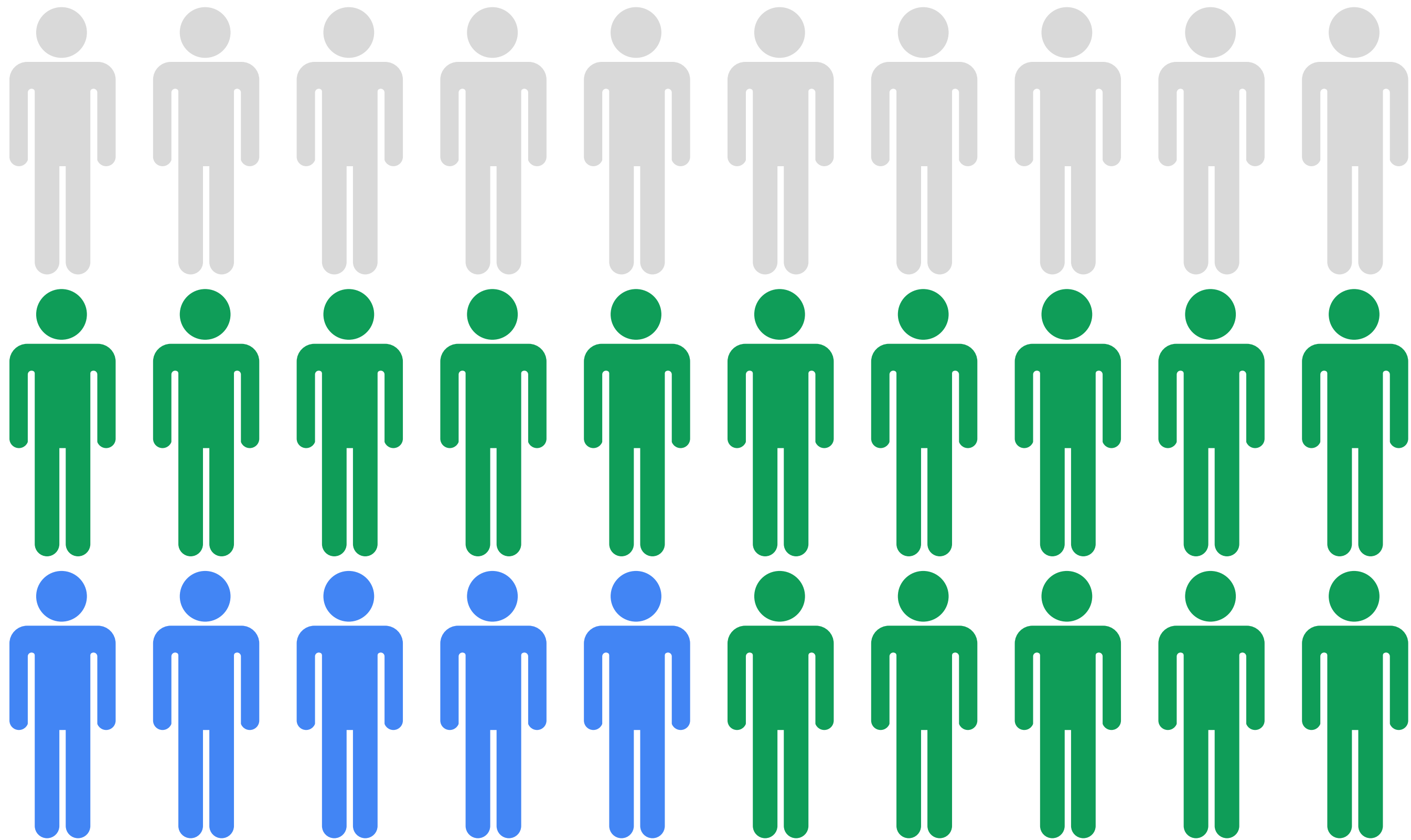


5

Test your creative tactics.

INCREMENTALITY TESTING

At its core, measuring lift seeks to isolate the impact an action (e.g., an ad) had on consumer behaviors — which can be online (easier to measure) or offline (harder to measure) behaviors



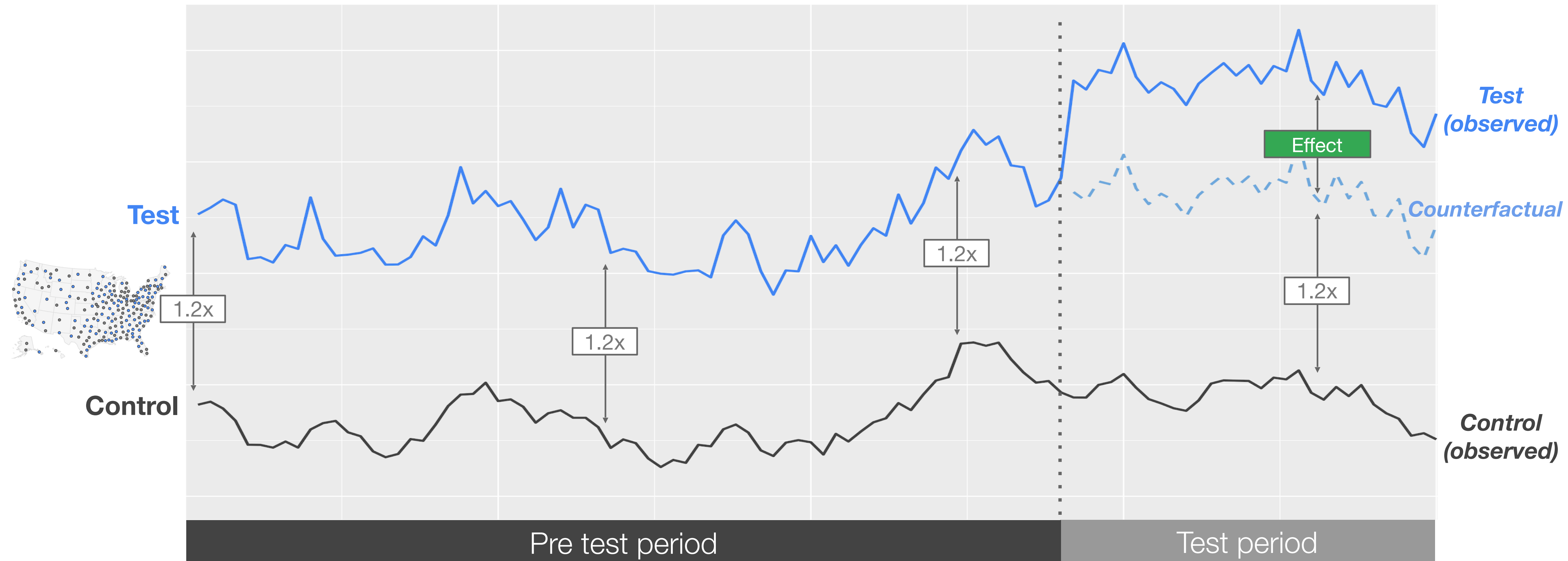
Did the intervention (e.g. the ad campaign) itself compel a customer to take an action ...

or

... did the consumer experience the intervention, but they were already going to act regardless?

INCREMENTALITY TEST DESIGN

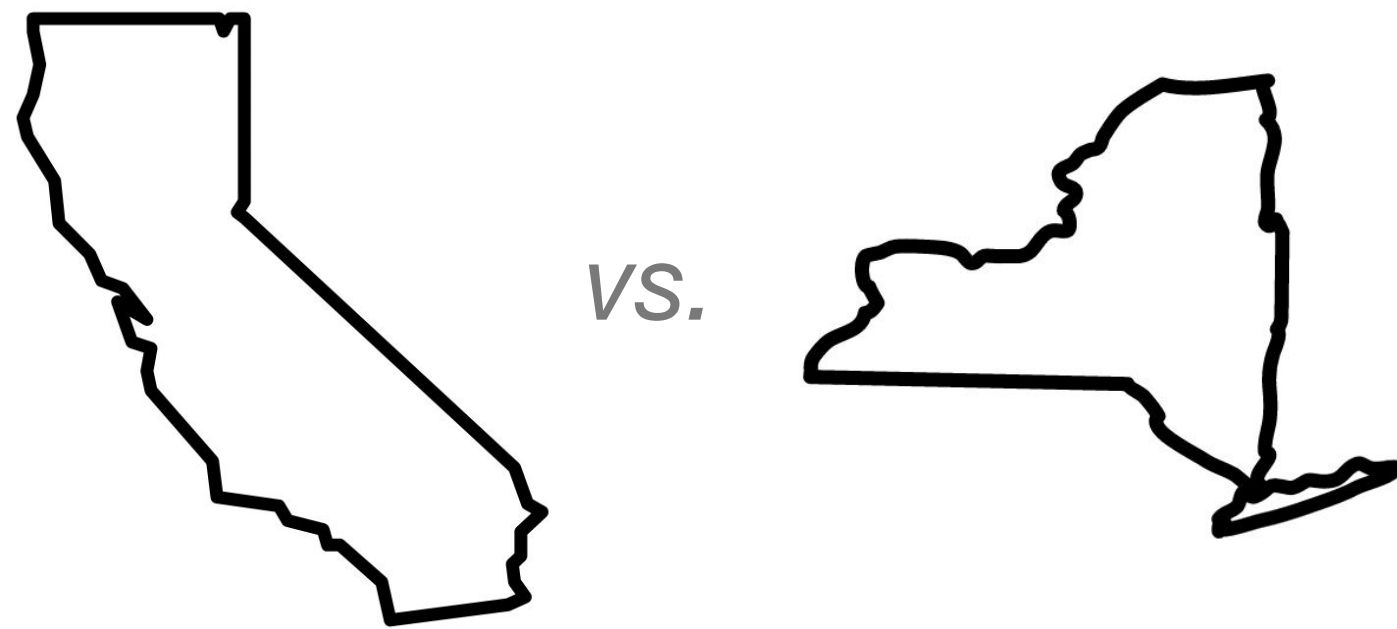
Measurement using traditional Test & Control designs demonstrate impact by comparing observed results to those you would expect if the intervention had not happened



TYPICAL DESIGN ERRORS

Sometimes tests are poorly designed — due to time constraints, organizational pressure, or cost considerations — and results are invalidated before the test even starts

Point-geo

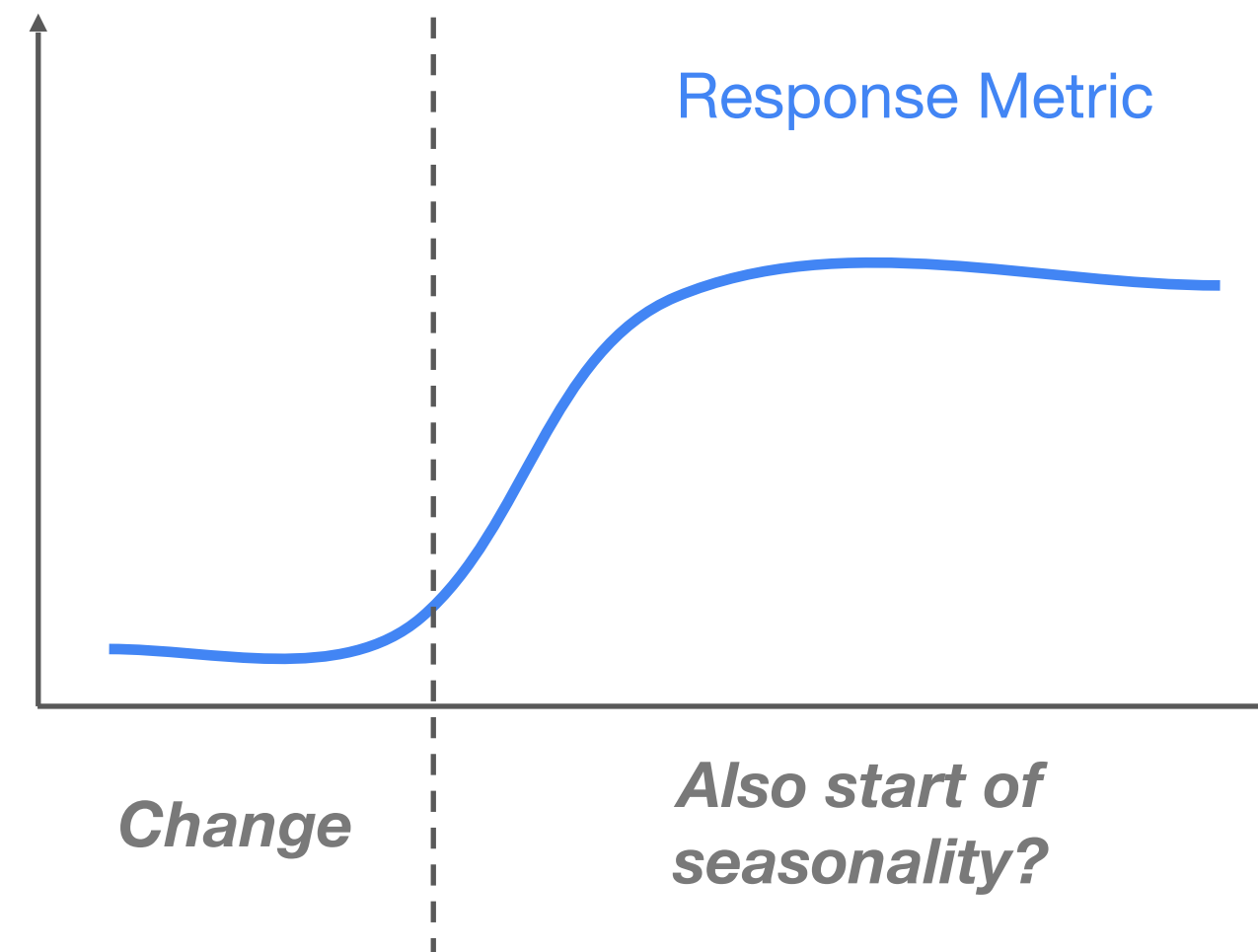


Chose a handful of cities or states to be included in test & control groups

Fraught with selection bias. How were specific geos chosen to be included in the test?

Even if regions are similar across many features there may be fundamental yet unknown differences that may skew results (error terms).

Pre/post (pulse)



Impossible to tell if changes in response metric are due to ad intervention or seasonality.

Neglects any “ramp up” or conversion time lag effects of running campaign.

PSA (substitute ad)



Use A/B testing platform to measure uplift between PSA ad and ad under test

PSA ads are unlikely to win same set of auctions and serving will potentially be skewed towards a different audience.

Measured differences in conversion behavior may be more driven by the different mix of user types than by the effect of the advertisement.



Ben Jones

creative director / google

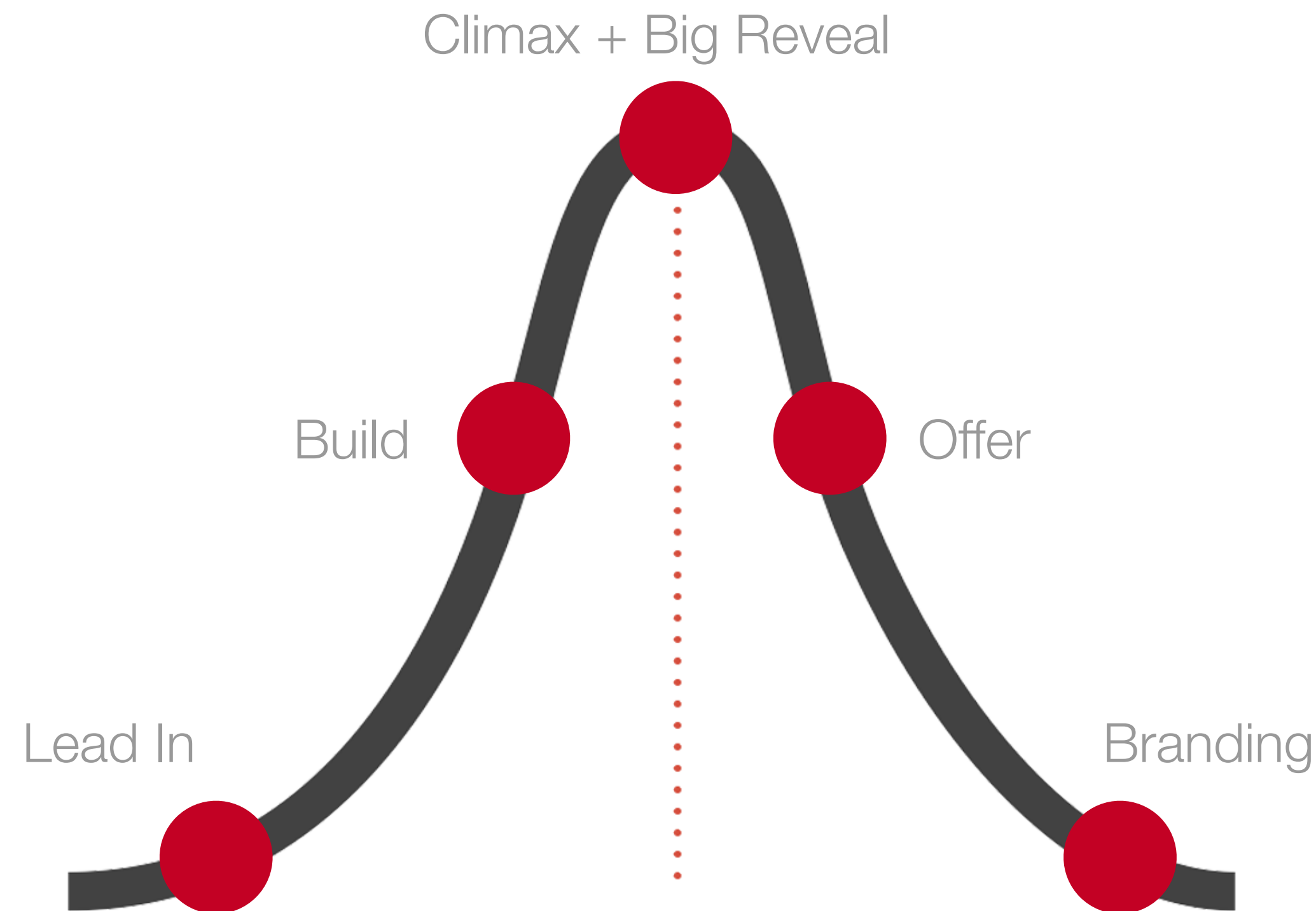
Unskippable Labs



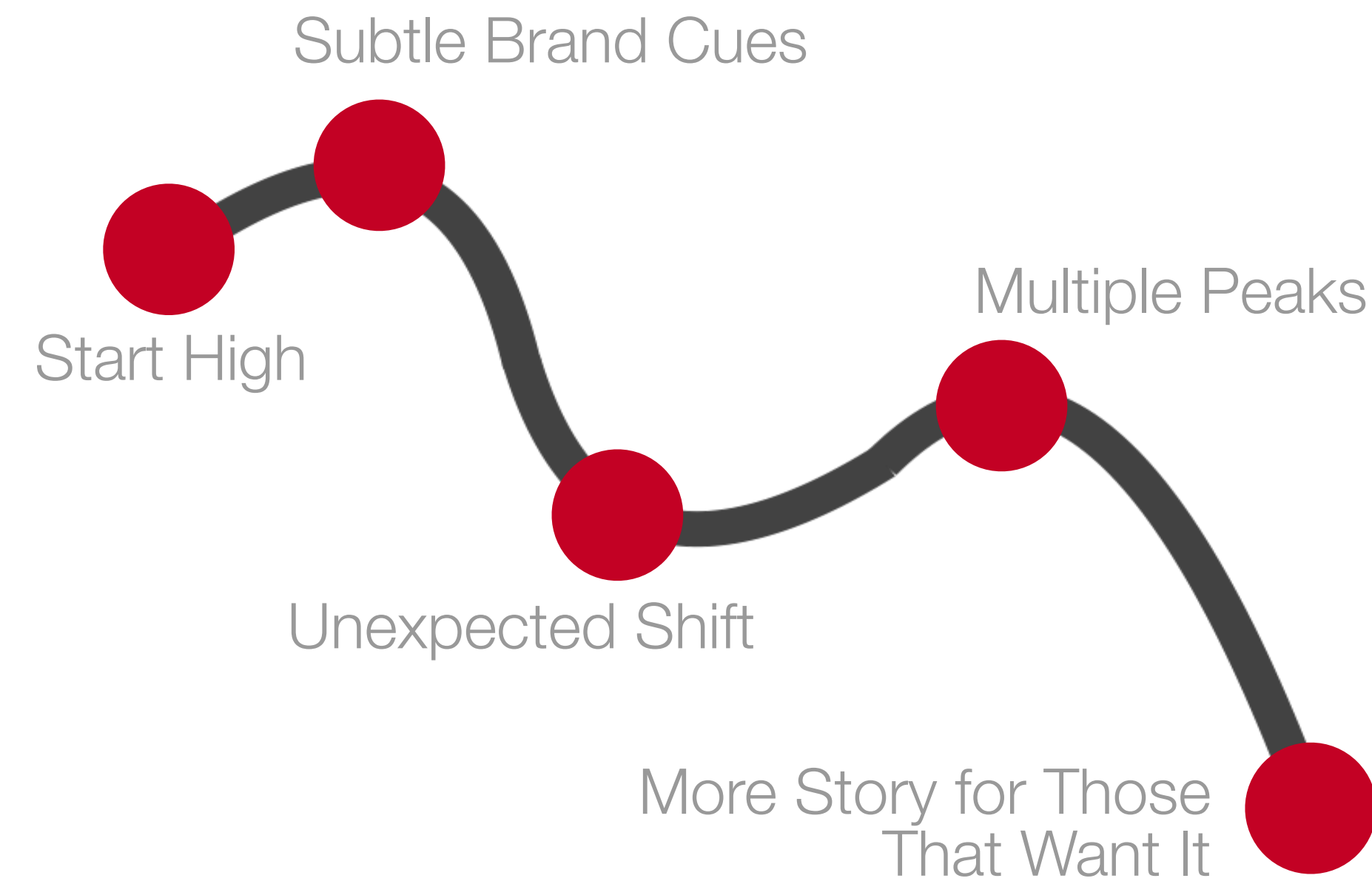
STORY ARC STRATEGY

An important finding from Google's Unskippable Ads is that the path of the traditional story arc is being replaced by an emerging arc that better fits consumer attention span

Traditional Story Arc

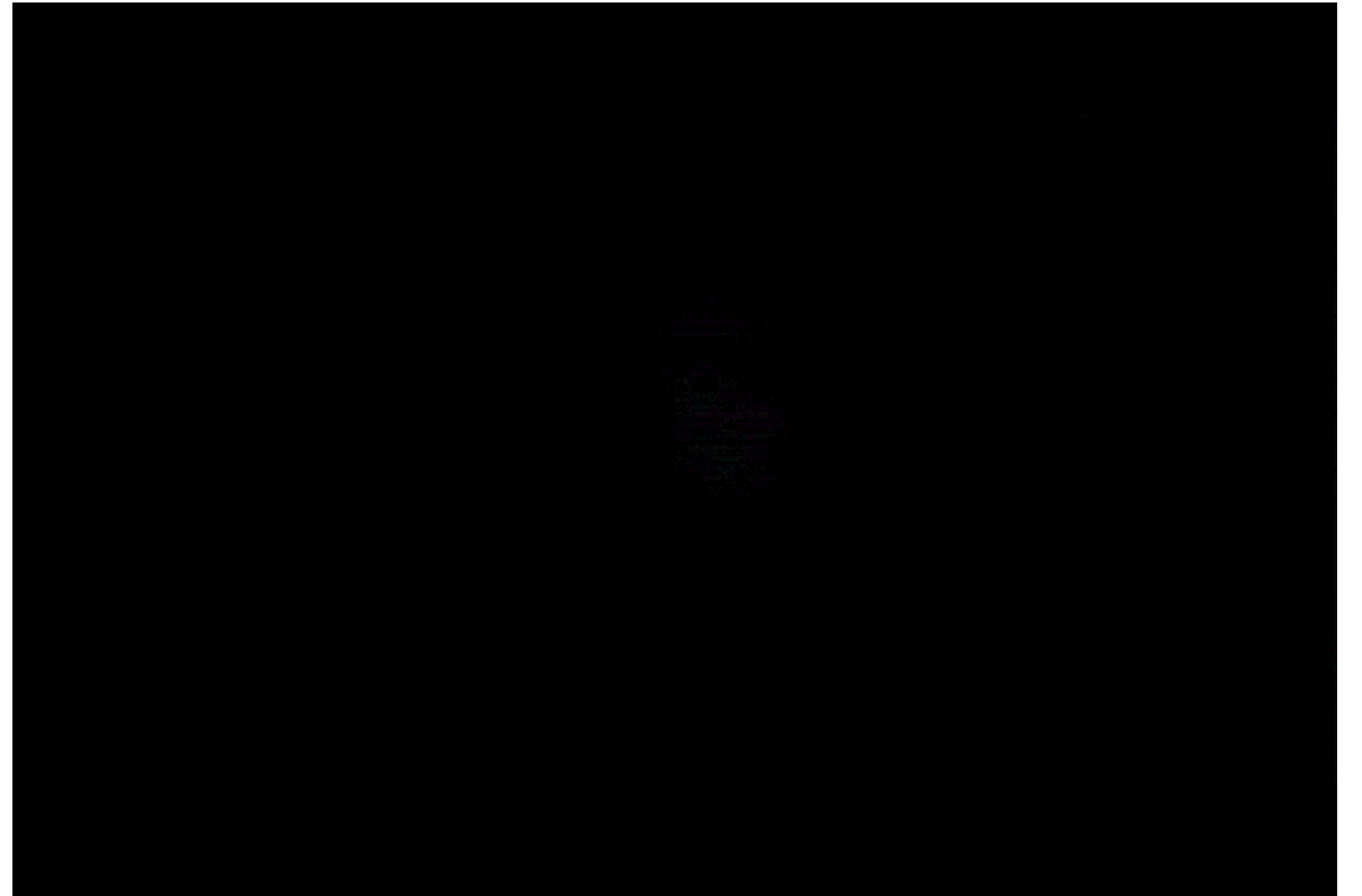


Emerging Story Arc





VS



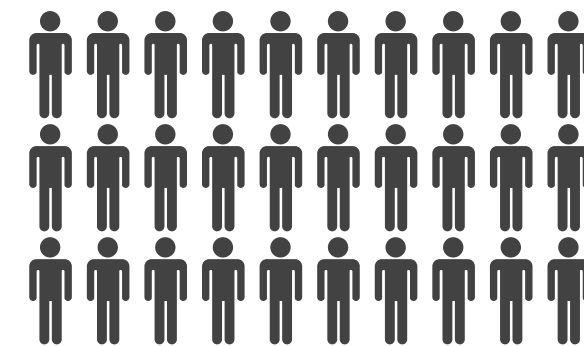
TESTING VIDEO ONLINE

Online video tests use real working media that is already making an impact with extraordinary efficiency, speed, and cost-effectiveness



Real Ad Environment

Frictionless user experience where tests are run in the same environment as ad campaigns



Representative

OLV enormous scale allows for a representative and authentic audience and sample size



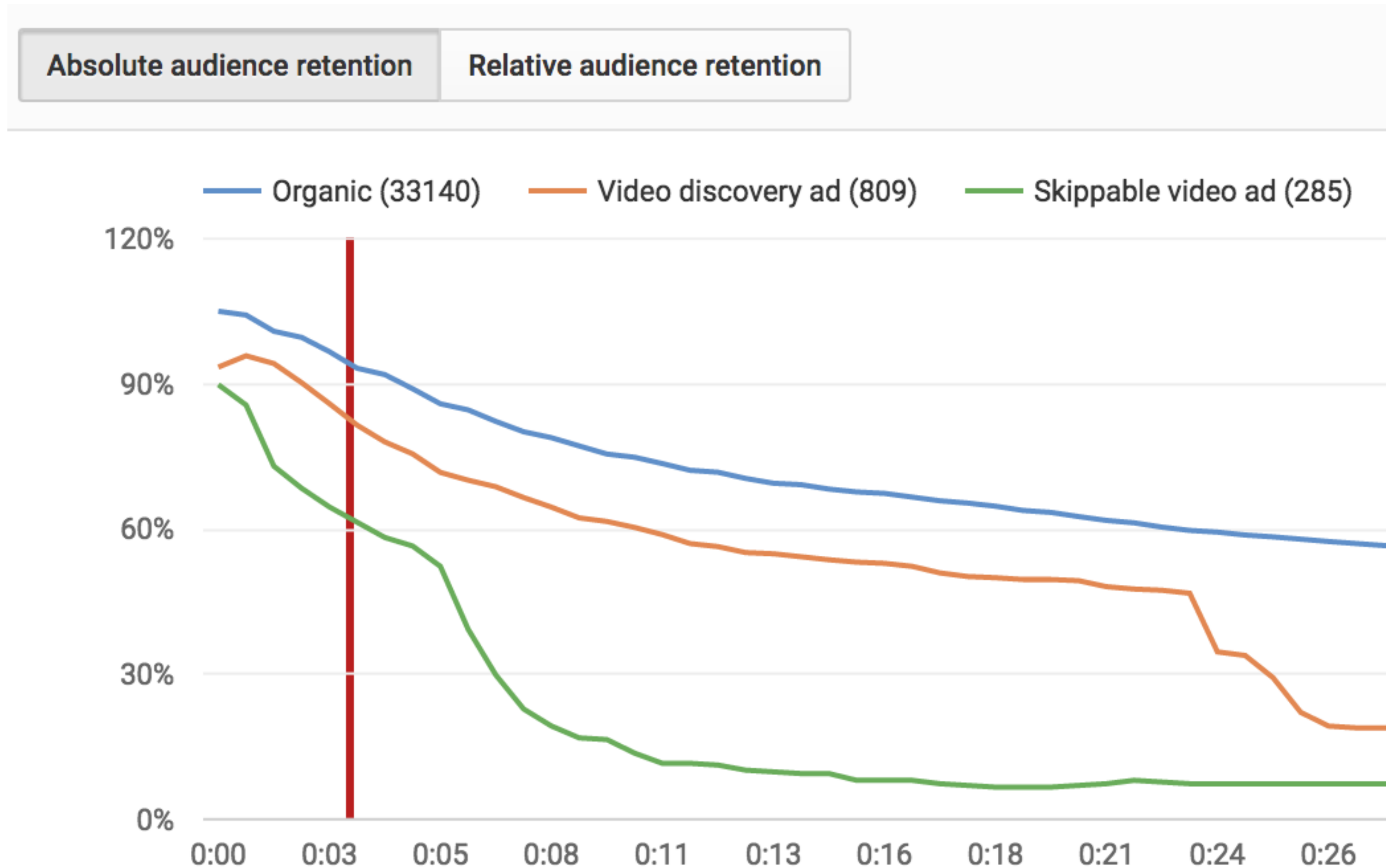
Cost Effective

Video Experiments and measurement are typically free of charge (only cost is campaign dollars = working media)

RETENTION CURVES REVEAL ENGAGEMENT

Retention curves track the number of viewers at each second of an online video. These data help determine where viewers drop and what turns them off.

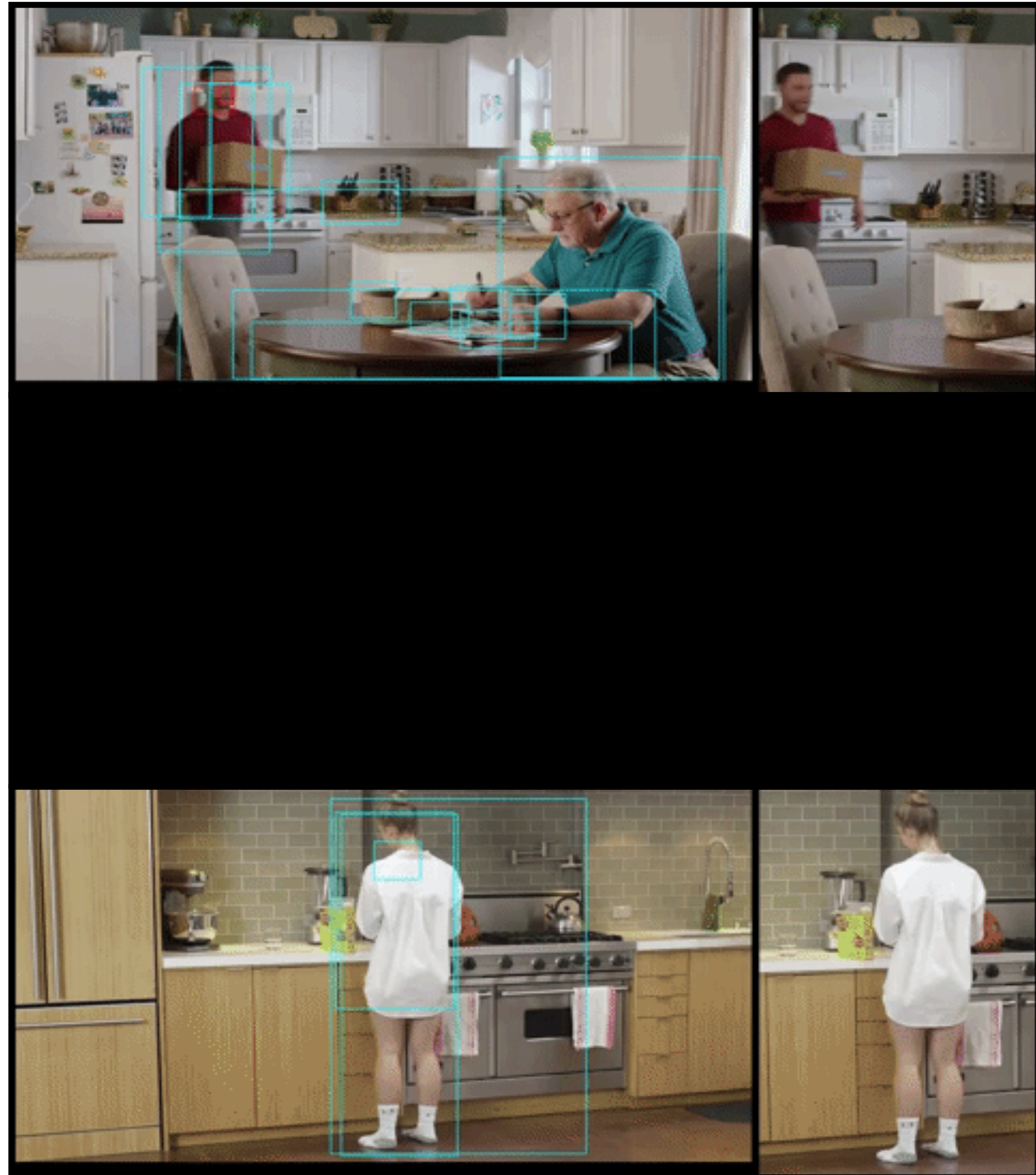
Brands can test different versions of creative to see what works best for their brand and against each audience they reach.



MACHINE LEARNING AS A CREATIVE OPTIMIZER

Machine Learning is being used in the creative process to identify attributes that positively impact video completion rates.

Creative assets are expensive to build & deploy, and understanding what works can be elusive. ML can identify on-screen elements that increase engagement and KPIs without disrupting the story.



5-
35%

of ROI is from Targeting

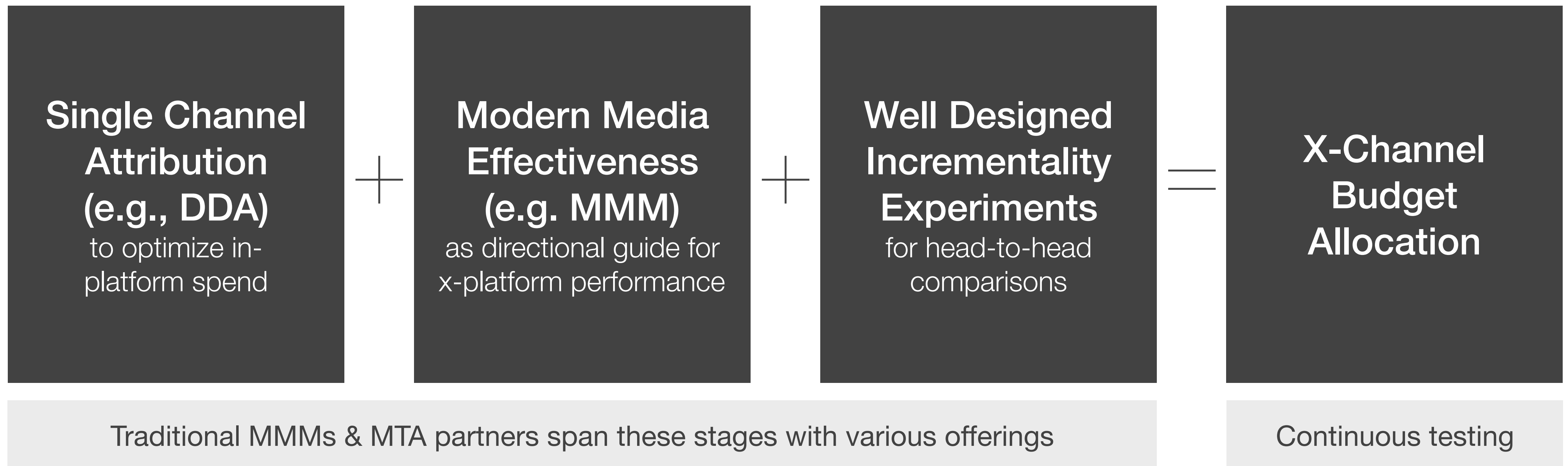
vs

50-
80%

of ROI is from **Creative**

OUR RECOMMENDATION

Our recommendation is to enhance your cross channel budget allocation with signals from multiple sources to help account for potential blind spots



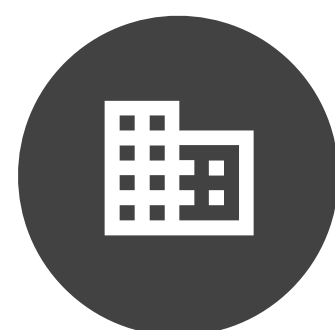
CLOSING THOUGHTS

Marketers should hold several critical objectives for measurement in a post GDPR / ITP world



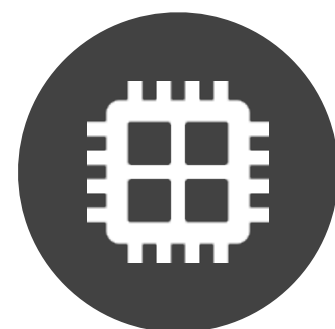
Measure *cross-everything*

Measure **cross-channel, cross-platform, cross-device, and cross-media** while protecting user data



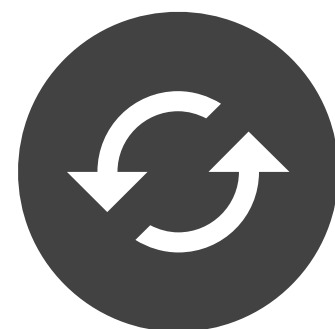
Prove business impact

Focus on **metrics that show a direct impact on business outcomes** versus intermediate metrics



Harness ML & automation

Rely on machine learning and automation to achieve **personalization experiences at scale**



Embrace a tester mentality

Pursue questions in a continuous manner with tools that are **simpler & better integrated** to deal with growing complexity

THANK YOU.



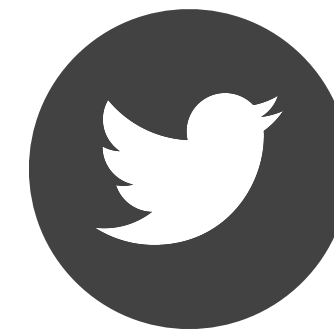
KEVIN HARTMAN



kevinhartman@google.com



linkedin.com/in/kevinhartman1



@kevinhartman