

Measurement

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Table of Contents

1. General

1. Reach and Frequency
2. Media Mix Modeling
3. Evaluating the Effect of Brand Media on Direct Response Media
4. Measuring TV Performance with ROAS
5. Definitions
6. Commonly Asked Measurement Questions
7. FAQs: Optimal Frequency

2. Attribution Methodologies

1. The Importance of Incrementality in TV
2. Tatari Attribution Models
3. Tatari View-Through Attribution
4. FAQs: Tatari View-Through Attribution

3. Linear TV Measurement

1. Video: Understanding Linear TV Measurement
2. Negative Lift: Why It's Important for Accurate Measurement
3. How Do We Track Conversions for Linear TV?
4. FAQs: Linear Impressions

4. Streaming Measurement

1. Effectively Tagging UTM Parameters for Streaming TV Campaigns (For Websites)
2. A look under the hood: Click-throughs from streaming do not drive sales (and related measurement algorithm improvements)
3. App Event Metrics from Streaming TV in Your Dashboard
4. OTT Measurement - How Does it Differ From TV?
5. Audience Dimension in Reports

5. DragFactor

1. Video: DragFactor Enables Next-Day Measurement
2. DragFactor Enables Next-Day Measurement
3. FAQs: DragFactor

Reach and Frequency

Written by Caitlin Mermelstein | Last published at: June 28, 2024

Overview

Many performance marketers turn to TV advertising to find new audiences and drive brand awareness at scale. Reach and frequency metrics are helpful in measuring high-scale brand campaigns and are useful when comparing performance across other digital marketing channels.

What are reach and frequency?

Reach is the number of households (on linear) or devices (on streaming) who were delivered an ad impression, and frequency is the number of times the ad impression was delivered. For example, if two households were delivered an ad, reach would equal 2. If one household was delivered the ad two times and another household 3 times the frequency would equal 2.5.

How they're measured

Reach and frequency are measured using IP-level data from 20M+ devices on linear TV and 100% consensus on streaming, giving you more precise results than traditional methods such as Nielsen surveys which account for only 40k households across the U.S.

How to view reach and frequency

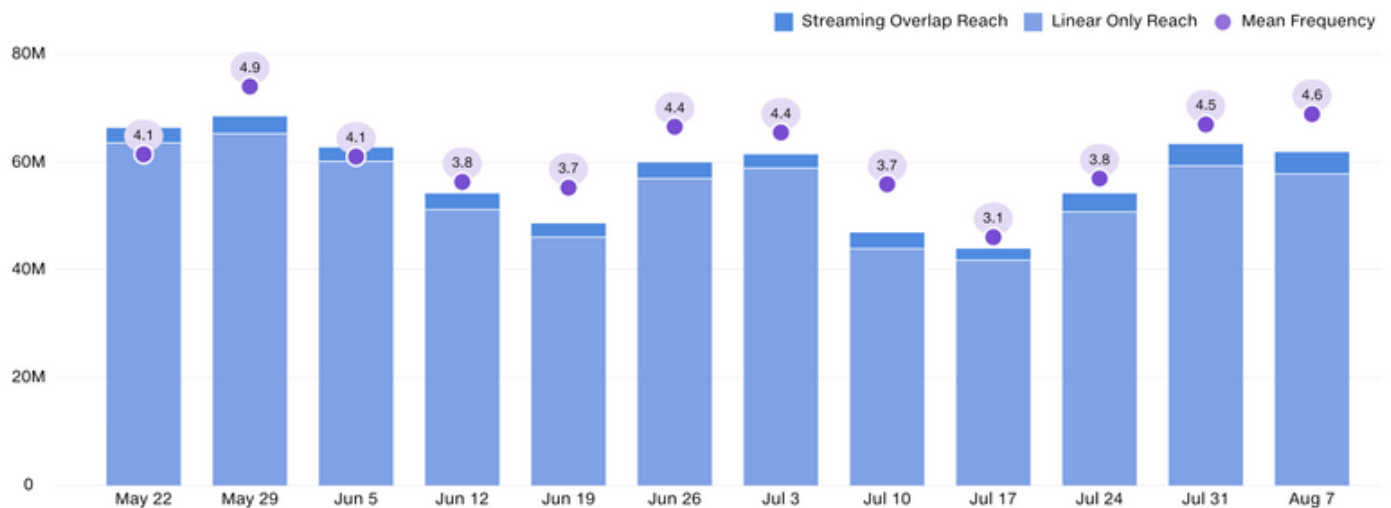
Weekly and monthly reach and mean frequency metrics are available for linear and streaming TV campaigns in the Tatari platform on your Overview and Audience Dashboards.

Overview Dashboard

Linear

Reach & Frequency

Week Month All Networks

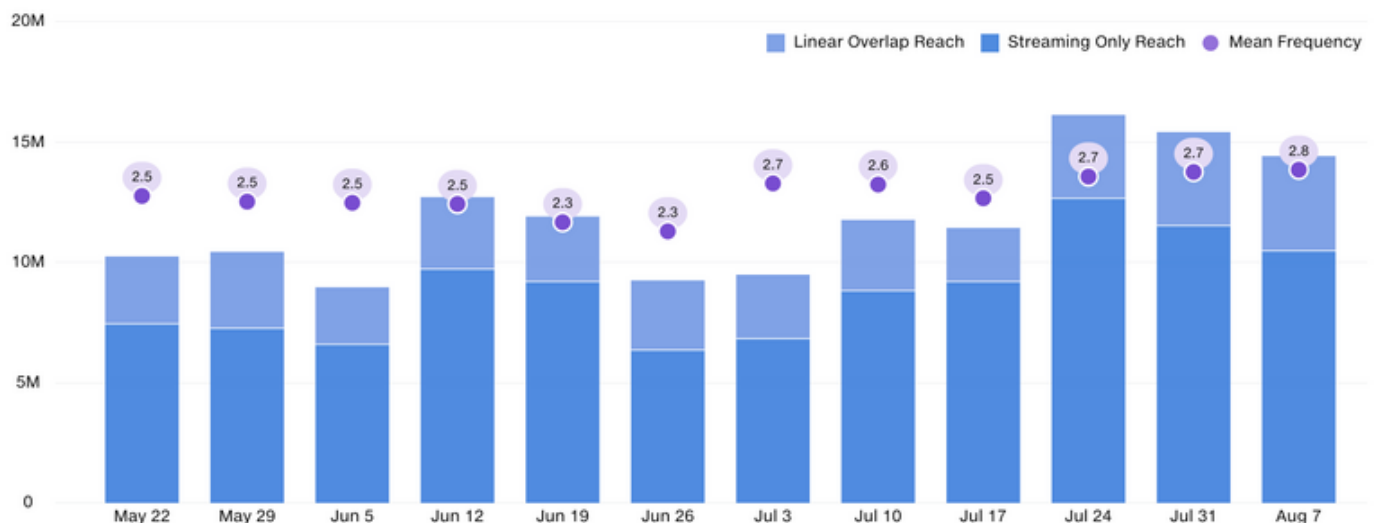


- The full bars above show the total linear reach.
- The medium blue bars show the number of households who were shown your ad(s) on linear TV only.
- The dark blue bars show the number of households who were shown your ad(s) on both linear AND streaming. (There are households who were shown the ads on just streaming and not on linear; you can find these metrics on the streaming Reach and Frequency chart.)
- All reach overlap data has been backfilled 6 months from the end of December 2021. Any data prior to the backfill (e.g. total reach for February 2021) will appear as a light blue bar.

Streaming

Reach & Frequency

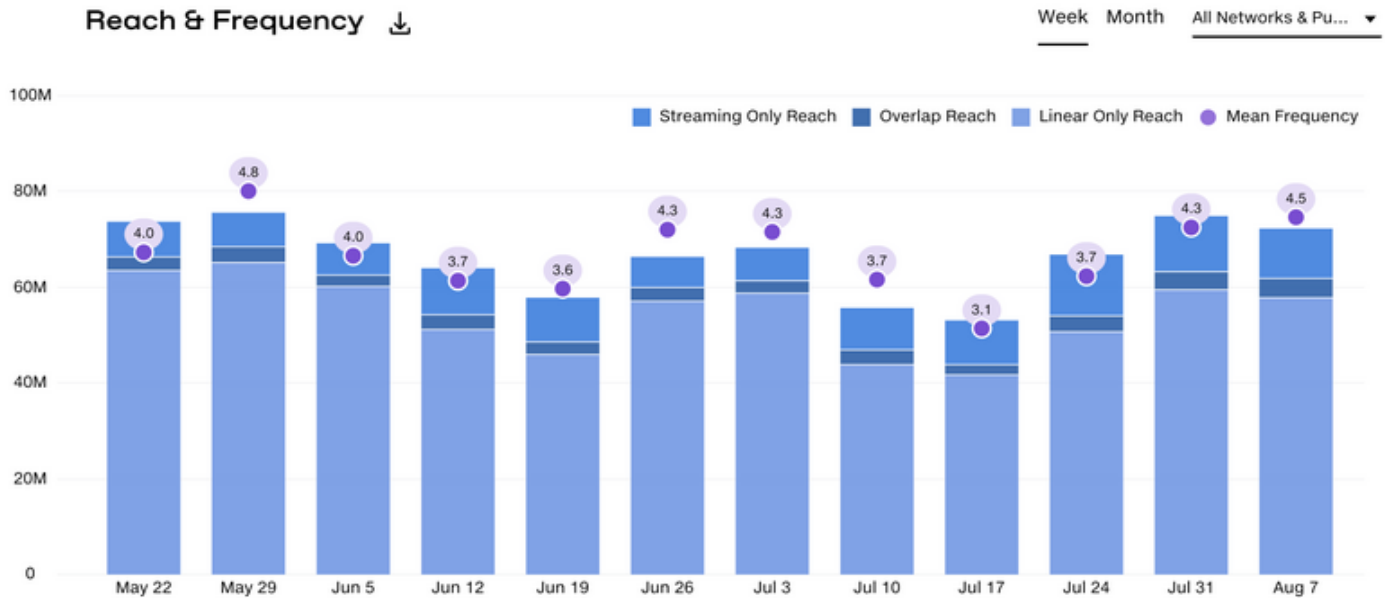
Week Month All Publishers



- The full bars above show the total streaming reach.
- The dark blue bars show the number of devices that were shown your ad(s) on streaming TV only.

- The medium blue bars show the number of devices that were shown your ad(s) on both streaming AND linear. (There are devices that were shown the ads on just linear and not on streaming TV; you can find these metrics on the linear Reach and Frequency chart.)
- All reach overlap data has been backfilled 6 months from the end of December 2021. Any data prior to the backfill (e.g. total reach for February 2021) will appear as a light blue bar.

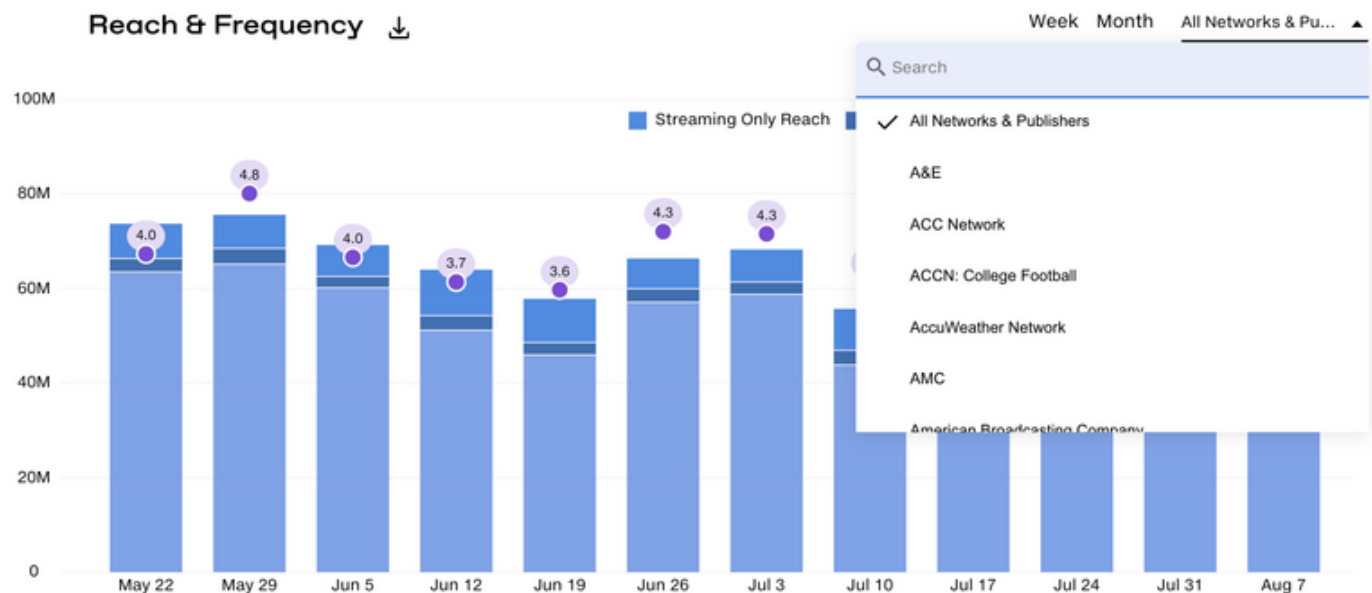
Combined



- The full bars above show all reach across both linear and streaming TV.
- The medium blue bars show the number of devices that were shown your ad(s) on streaming TV only.
- The light blue bars show the number of households who were shown your ad(s) on linear TV only.
- The dark blue bands show the number of households and devices who were shown your ad(s) on both linear and streaming.
- If you are trying to reach new audiences, you'll want to see a small dark blue (reach overlap) band on this chart. If the dark blue band is large, you might consider testing on new networks or streaming platforms to find new audiences.
- All reach overlap data has been backfilled 6 months from the end of December 2021. Any data prior to the backfill (e.g. total reach for February 2021) will show as null.

Reach and frequency by publisher or network

Here you can select to see reach and frequency metrics by a specific network or publisher.



If you don't see a network or publisher listed, it could be because:

- Some networks or publishers may have insufficient or sparse data.
- You need to adjust the date range in your dashboard, as we only show the networks or publishers during the timeframe in which your ads aired.

Note: When selecting specific networks or publishers, you won't be able to see the overlap in reach for any reach and frequency charts.

Audience Dashboard

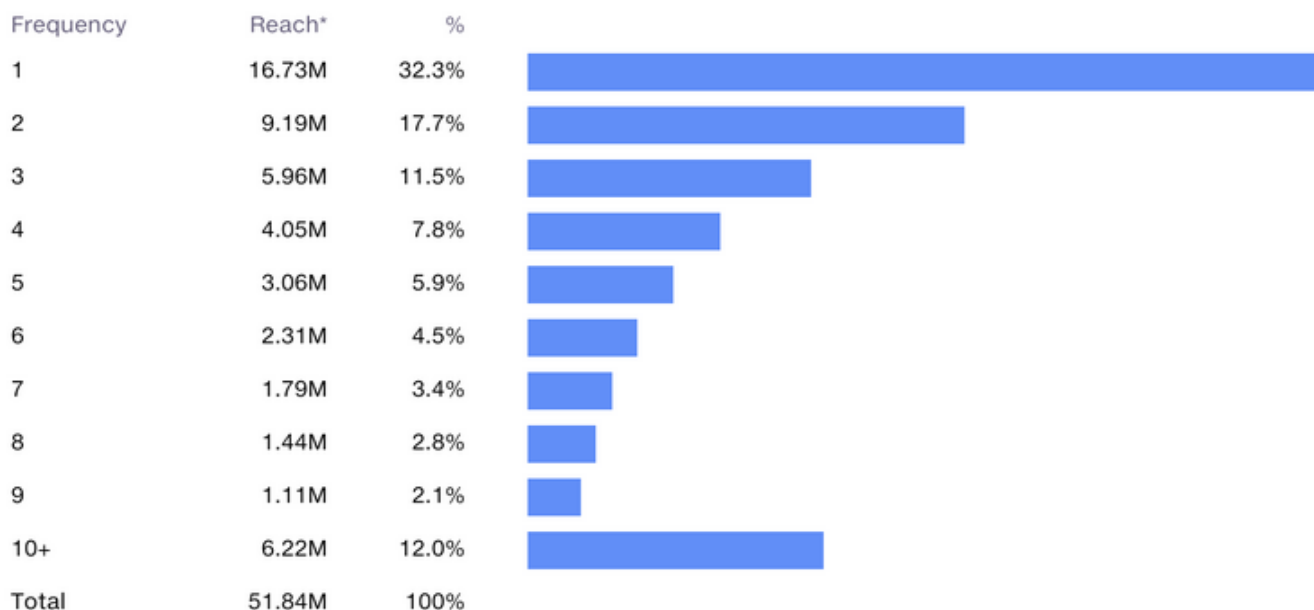
Note: Since we only provide data on areas we have high confidence, if your reach is below 10,000 you will not be able to see data in the chart.

Frequency Histogram

Use this chart to make optimization decisions such as increasing or decreasing the number of times an ad is shown to reach your optimal frequency range.

Frequency Distribution

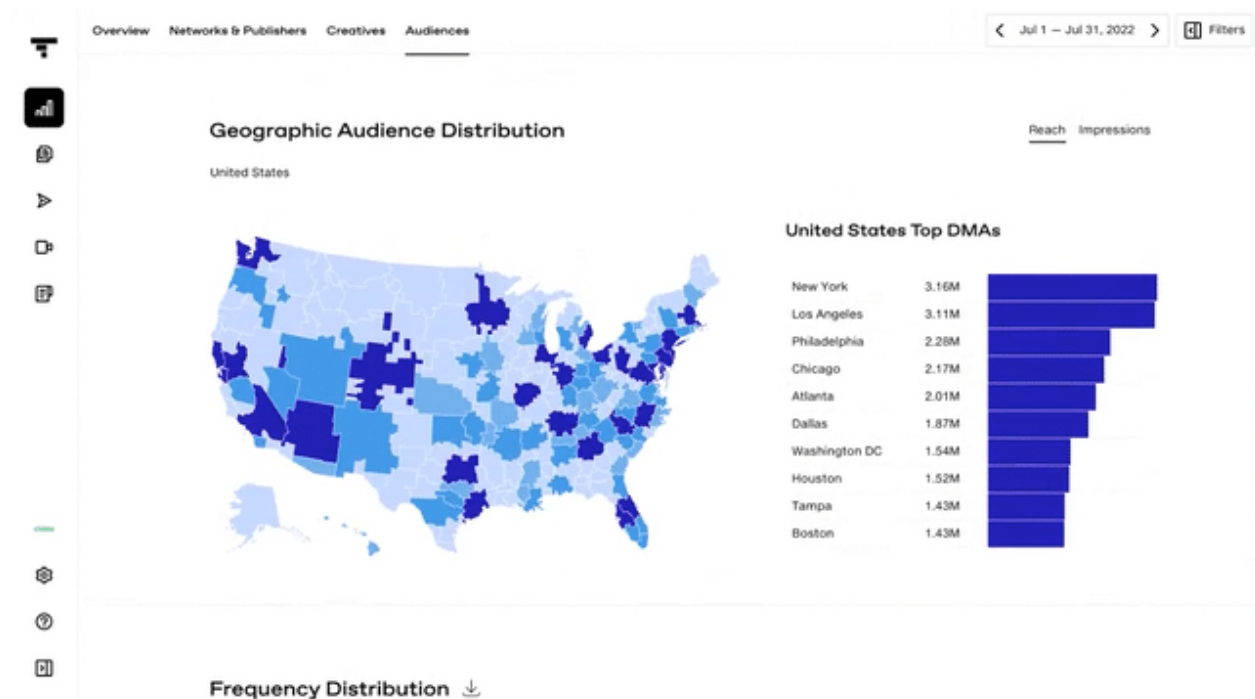
Mon, Aug 1 — Wed, Aug 31, 2022



*Reach values may differ slightly from other sources due to minor scaling variances

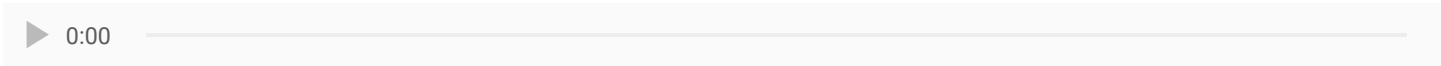
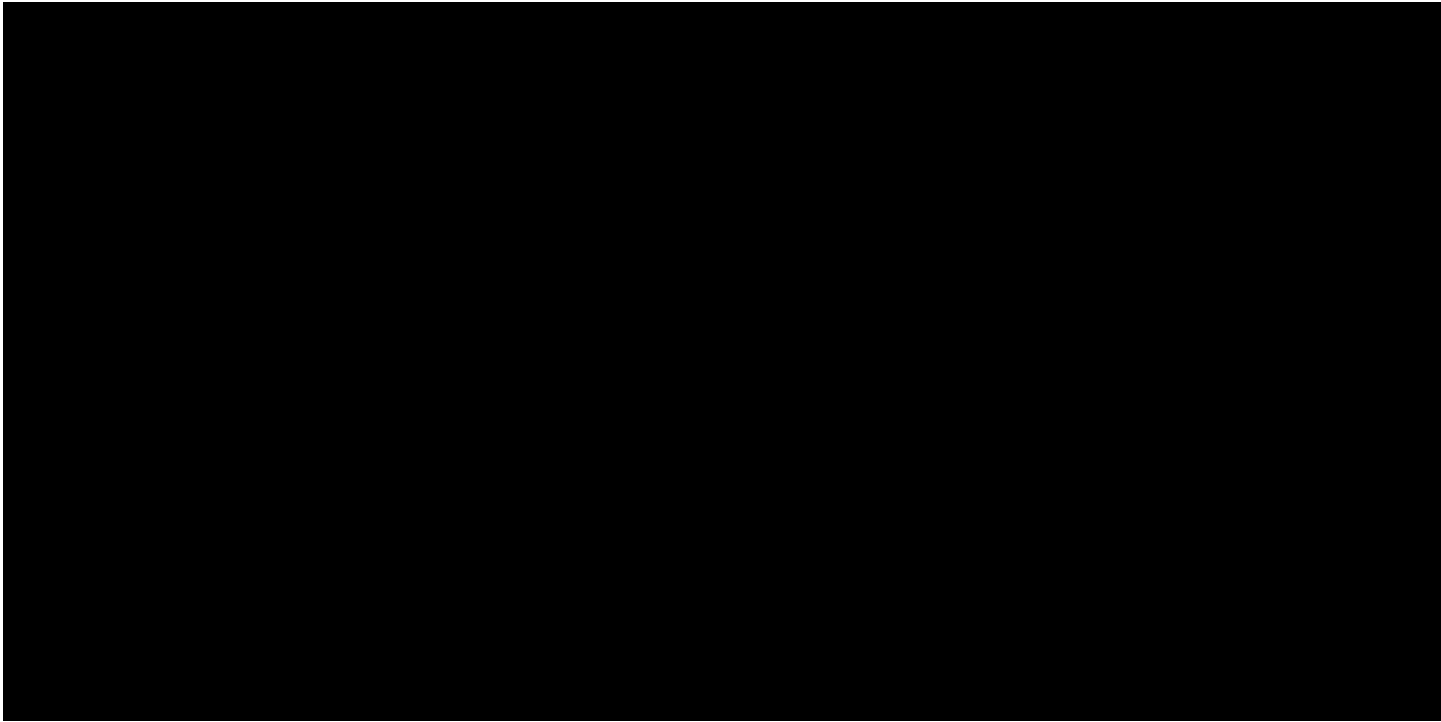
Geographic Audience Distribution

View and understand ad performance and reach based on DMA regions.



How to use Reach and Frequency Explainer Video

Watch our short video to learn more:



Media Mix Modeling

Written by Caitlin Mermelstein | Last published at: June 28, 2024

Background

What is Media Mix Modeling (MMM)?

Media Mix Modeling is a top-down attribution method used to assess the profitability of your marketing channels, helping you understand the effectiveness of spend across channels so you can better allocate your advertising budget.

Bottoms up approaches may misattribute the incremental effect of marketing spend on a given channel due to cannibalization (i.e. users who would have come anyway and are attributed to the wrong channel) and/or IP matching problems (i.e. users watch ads across multiple devices and are double-counted). By looking at the data from a higher level, MMM analyses avoid these pitfalls and give you a strategic view of marketing activities.

Who benefits from MMM analysis?

MMM analysis is valuable for advertisers who are spending significantly across both offline and online channels as it becomes more difficult to isolate the incremental impact on a specific channel.

How does MMM help advertisers?

MMM results can be used to both interpret the past impact—and predict the future impact—of marketing spend on sales. In data-rich settings, these estimated effects can help provide directional suggestions towards more optimal marketing budgets and identification of inefficient channels. Additionally, the estimated effects can be used to corroborate or refute ROAS or CPx attributions from internal multi-touch attribution methodologies.

How is this model constructed?

Generally, MMMs employ statistical methods on aggregated historical data at the daily or weekly level to estimate the relationship between the incremental effect of advertising budget on sales (or other revenue-tied metrics).

What are the results of the model?

The main results of the model include the isolated incremental effects by spend channel as well as potential effects of interaction between channels. The isolated incremental effects can be extracted and interpreted as ROAS or CPx, depending on your metric(s) of interest. Estimated interaction effects can be used to show conditional relationships between spend channels (i.e. given a change in one channel what changes should be expected due to spending on another channel?).

What are the requirements to getting started with an MMM?

Tatari offers media mix modeling for our clients who usually have at least six months (one year preferred) worth of TV campaign data however this is evaluated on a case-by-case basis. Reach out to your Client Services Manager to discuss if MMM is a good option for you.

Getting Started

To start an MMM analysis, follow the steps below.

1. Make a copy of [this file template](#).
2. Add in all required data (see the requirements below). Note: The template includes dummy data to give you an idea of how to format it. Please overwrite this with your data.
3. Once it's filled in, send it to your Client Service Manager for review. If everything looks ok, we'll provide a report within the next two weeks.

Data to send Tatari

Please include the following data for at least the past year (2+ years is preferred for better analysis) across all marketing channels.

- **Total sales per day**
- **Daily spend per marketing channel.** Include only major spending channels. If you do not see a channel here, please add it as a column at the end of the file template.
 - AdWords Brand Search
 - AdWords NonBrand Search
 - Other NonBrand Paid Search (e.g. Bing)
 - Other Brand Paid Search (e.g. Bing)
 - Facebook-Prospecting
 - Facebook-Retargeting
 - Pinterest-Retargeting
 - Pinterest-Prospecting
 - GDN (Google Display Network)-Prospecting
 - GDN-Retargeting
 - Affiliate Marketing
 - Clicks from Email Campaigns
 - Other Major Marketing Sources
- **Daily revenue and/or sales data** (Optional, but preferred)
Sales count (and optionally, Total Revenue \$) by the same marketing channel with daily breakouts.
- **Visitors, mid-funnel, and lower-funnel data** (Optional, but preferred if you are interested in seeing other metrics aside from sales)
Split by marketing channel and daily breakouts. You may choose to incorporate additional tabs into the template (copying the format of `acquisitions_by_day` and `acquisitions_by_channel_day` tab in the CSV template) to reflect visitors, trials, or other metrics that would be of interest to you.

- **Other events that may affect sales patterns** (Optional)

For example daily promotion, sale, and price adjustment periods, inventory constraints, and competitive forces.

FAQ

Can we send weekly spend instead of daily spend?

Weekly data is ok for use in an MMM analysis. Ultimately, more granular data could lead to more nuanced insights. Likewise, you may receive results aggregated at the weekly level after sending daily data due to delayed response and seasonalities.

Evaluating the Effect of Brand Media on Direct Response Media

Written by Caitlin Mermelstein | Last published at: September 28, 2022

Overview:

Tatari measures the effect of media in two buckets – cost per visitor (CPV) and cost per acquisition (CPA). Typically, Direct Response campaigns rely on effective media to drive an efficient CPV and CPA. DR buys often tend to be many spots at preemptible rates, in essence, a bid, where the cost of a unit is low enough to achieve efficiency. Brand buys on the other hand often have the goal of creating mass awareness, and therefore rely on purchasing higher reaching, more expensive networks or specific programming having a higher cache, which may not have an immediate impact on CPV conversion rates or CPA.

When a Direct Response and Brand Media campaign run in tandem, we can expect the reach that the Brand campaign achieves to have a positive effect on the efficiency of the Direct Response campaign. While CPA and CPV may not immediately decrease for the Brand Media campaign, we can expect both performance indicators to steadily improve for the Direct Response campaign over time as the Brand media will impact down funnel performance. Essentially, the Brand Media campaign will have a halo effect on the Direct Response media and will create an efficient and holistic down funnel marketing strategy.

How can we measure this increased conversion rate from the Brand Media spots on Direct Response spots?

It is difficult to isolate the effect of the Brand Media spots on the Direct Response spots as it will be one of many factors that contribute to the decrease in CPA and CPV and there can be substantial noise that impacts the precision of that impact. Tatari is building brand evaluation tools that can help identify the impact of brand but these are in the development stage.

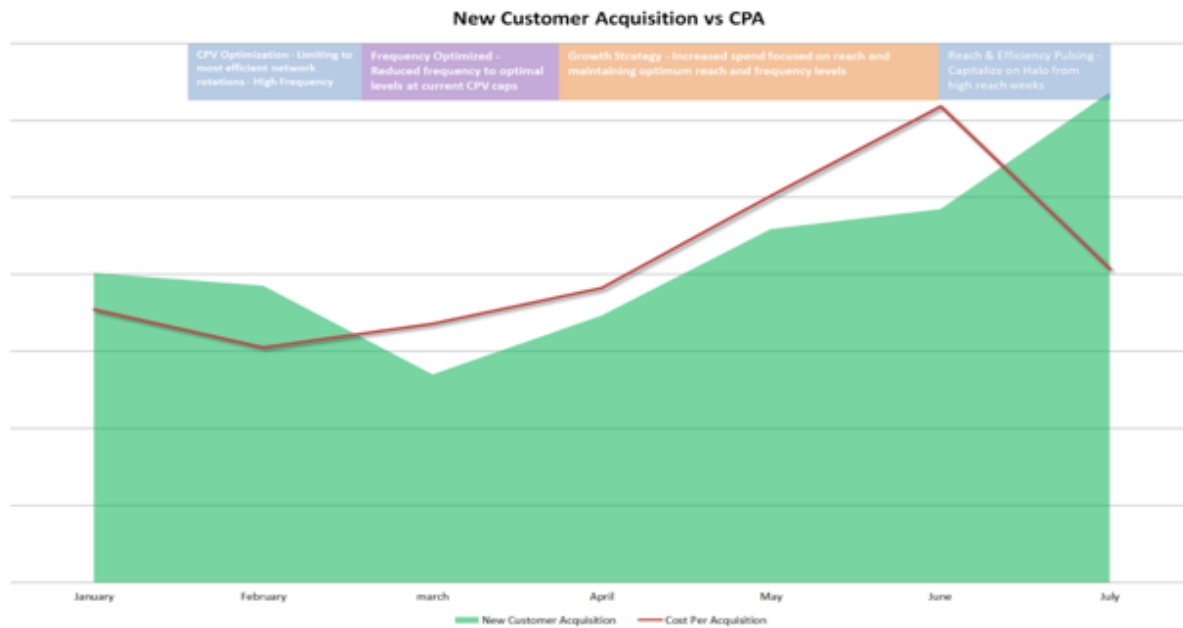
What threshold of spend allows for statistical significance?

Statistical significance is achieved by having one of two factors:

1. A large enough sample size to measure from and
2. A large enough delta between baseline and lift. In order to achieve the first factor a spend of over \$250,000 generally achieves a large enough pool of spots aired to achieve statistical significance. That said, should there not be a large enough delta between the baseline and lift metrics, the results will still not likely be statistically significant at a level (>85%) that would allow for a definitive conclusion that the media being evaluated drove this lift.

Case Study:

Client X utilized a pulsing strategy for reach and efficiency in order to drive new customer acquisition.



- **January and February:** CPV Optimization – limiting to most efficient network rotations (high frequency)
- **March:** Frequency Optimized – reduced frequency to optimal levels at current CPV caps
- **April through June:** Growth Strategy – increased spend focused on reach and maintaining optimum reach and frequency levels
- **June through July:** Reach and Efficiency Pulsing – capitalize on halo from high reach weeks

Throughout the high reach months (April through June), New Customer Acquisition began to grow in proportion to CPA; this is because while high reaching networks are more expensive, therefore raising the CPA, they also provide a medium to get Client X's messaging in front of the largest possible audience.

During the Reach and Efficiency pulsing months (June through July), the halo effect of the high reach networks coupled with the lower price point efficiency networks help drive CPA down while New Customer Acquisition begins to grow.

In this case study, we can see that the high reaching weeks (Brand) positively affect the efficiency weeks (DR), leading to a holistic media strategy where CPA declines and New Customer Acquisition grows.

Measuring TV Performance with ROAS

Written by Caitlin Mermelstein | Last published at: June 28, 2024

What is ROAS?

Many brands look to ROAS (Return on Ad Spend) as a source of truth for media strategy. ROAS measures the amount of revenue generated from every dollar spent on advertising. It helps guide spending and gives you an apples-to-apples comparison across marketing channels.

How is ROAS calculated?

ROAS is the amount of total revenue divided by total spend.

- Total revenue = Total attributable conversions x average revenue of all conversions
- Total spend = Sum of spot (linear) or impression (streaming) costs within a selected date range

Note: The conversion event is determined by the values you pass to us through Tatari Tag Manager (e.g. purchase, subscription, etc.).

As a simple example, if you spend \$10,000 on linear TV ad spots or streaming impressions, and your business generates \$20,000 in revenue, your ROAS will be 2. So for every dollar spent, your return would be \$2.

How do I view ROAS?

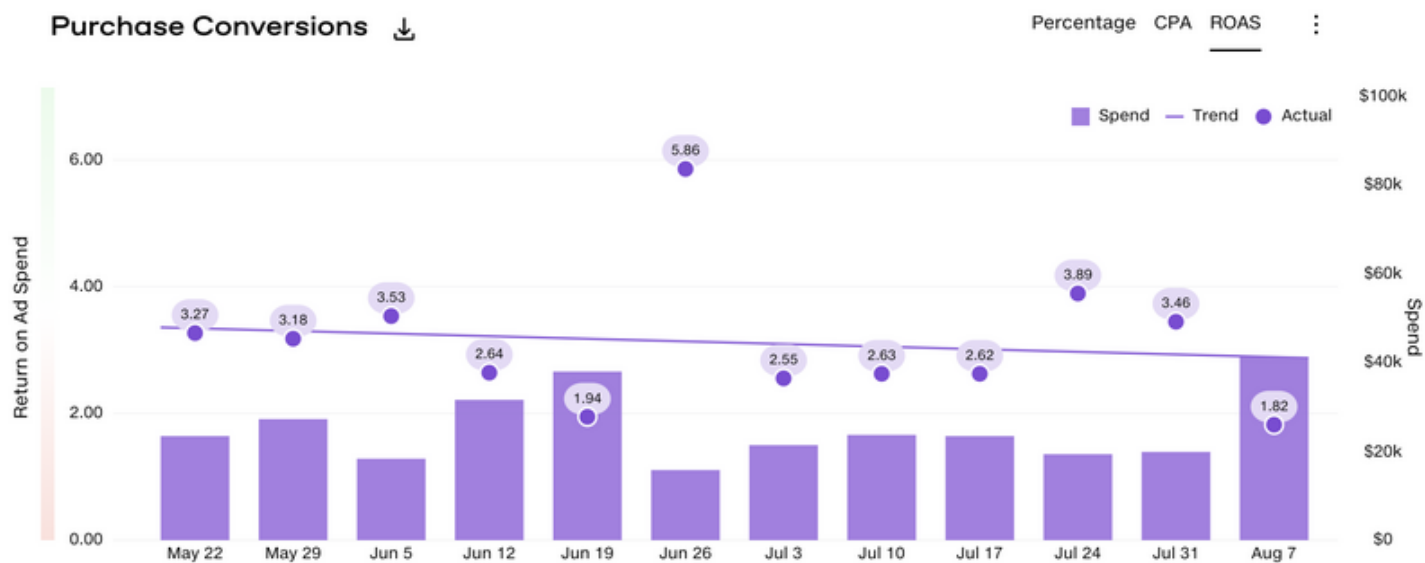
You can view ROAS metrics if you're passing revenue data to us through Tatari Tag Manager.

Note: ROAS metrics are only available for brands with websites (not apps) at this time.

If you don't yet pass revenue data to us or are subscription-based and aren't passing LTV, please [start here](#).

If you currently pass revenue data to us, you can view aggregated ROAS metrics in your Tatari dashboard on the conversions chart, starting from the first day you began sending us revenue data.

If you're sending revenue data but don't see your ROAS metrics, you may not have enough data yet (i.e. you recently started with Tatari), or there is an issue with how you send us revenue data. Please reach out to your Client Services Manager for more info.



Key features:

- **Reporting view:** Viewable on a weekly basis for the date range selected in your Tatari dashboard.
- **Performance Metric:** ROAS is shown by one of your dashboard's performance metric filters. If you have multiple metrics, you can toggle between them.

Lift (2)	Cost Per (2)	Performance Rate
Response Rate		
<input type="checkbox"/> Unique Visitor		
<input type="checkbox"/> GA unique visitor		
Conversion Rate		
<input type="checkbox"/> Purchase		
<input type="checkbox"/> Sign Up Email		
<input type="checkbox"/> Purchase		
<input type="checkbox"/> Sign Up Email		
Spend Calculations ^		
<input checked="" type="checkbox"/> ROAS		
<input type="checkbox"/> AOV		
<input type="checkbox"/> Revenue		

- **Attribution method:** ROAS from linear TV is shown as incremental attribution (not view-through). In other words, this is revenue generated directly as a result of your TV advertising and not other marketing channels. ROAS from streaming is shown as both view-through and incremental attribution.

Understanding Results

Needless to say, a higher ROAS is always better. Your exact ROAS target will depend on many factors (read more at the bottom of [this article](#)) and there are a few other considerations below.

The Halo Effect of TV

TV is an effective performance channel, but its performance doesn't solely translate into direct conversions. TV ads also have a "halo effect" i.e. boosting traffic (and thereby ROAS) in other digital and social channels beyond a brand's point of sale. To understand the comprehensive return on a TV impression, look to see if ROAS has increased after a TV ad campaign on other channels (e.g. Facebook or SEM). If Halo is strong, ROAS in digital may double, supporting a lower ROAS on TV (possibly below 1) and vice versa.

Factor LTV Models into ROAS

The revenue generated from a TV commercial often stretches well beyond the (first) purchase. For example, for subscription-based companies, customers are most likely to continue returning. As many marketers are well-aware, ROAS is more accurate when it incorporates LTV models as opposed to immediate or short-term revenue. In TV, as in other channels, looking at revenue in isolation obscures the real value of the ad in acquiring valuable customers. If you're a subscription-based brand, please ensure you're [sending LTV](#) through Tatari Tag Manager.

Definitions

Written by Caitlin Mermelstein | Last published at: December 20, 2022

Some common terms you'll routinely come across in the dashboard, or in everyday discussions with your CSM.

Lift: Unique Visitors above the baseline

Baseline: The number of visitors or installs that would occur without TV advertisement at that time. This is our pseudo-control sample that we are subtracting out to find incremental lift.

Immediate Lift: The immediate increase in a client's KPI (Installs or Visitors) above the baseline within 5 minutes of a spot's airing.

DragFactor: Tatari deploys a DragFactor to translate "immediate lift" into "total ad lift". We use smart TV data to track who sees a TV ad and when they see it. The DragFactor is then calculated by seeing how many people responded to the ad in the immediate lift window of 5 minutes, vs how many responded over 30 days. Tatari uses 2.2 as a default DragFactor (1.2 delayed visitors per every 1 immediate) as this is the lowest we have seen from any client historically.

Conversion Rate: Tatari tracks the total TV-window traffic through the funnel after airing, and applies a conversion window to this entire cohort. From here, we assign TV credit based on the percentage of incremental traffic from TV.

Response Rate: The percentage of viewers who responded to the ad.

Shadow Lift: If two spots run within the same conversion window, Tatari uses historical data to determine where to attribute response.,

Efficiency: Lift per \$100 of spend.

Adjusted Efficiency: To measure creative performance in the dashboard, Tatari uses a debiased form of the efficiency metric. Thus, a creative will not suffer in terms of adjusted efficiency if it airs on a poor performing network.

Relative Performance: Relative Performance is used to track the performance of both creatives and networks.

- For creatives, relative performance tracks a particular creative's performance relative to what would be your "median" creative performance. "0" demonstrates your median, thus a positive value indicates a high performer while a negative indicates a lower performer.
- For networks, relative performance tracks a particular network's performance relative to what would be your "median" network performance. "0" demonstrates your median, thus a positive value

indicates a high performer while a negative indicates a lower performer.

Savings (Dashboard Metric): Demonstrates the amount of money the Media Buyer saved by shaving rates during the inventory bidding process.

Streaming Definitions:

Conversions - Incremental: tracks conversions by all incremental responders (including both immediate TV responders and delayed TV responders)

CPA - Incremental: Looks at Total Spend over Net Conversions

Conversion Rate- Incremental: Total Conversion over Total Lift

Lift - 1 Day view through: this methodology counts all users who have viewed an ad and arrive to the website within a 1 day time period.:

CPV - 1 Day view Through: Total Spend over view through lift

Conversions - 30 Day view through: Measured as anyone who sees the ad and starts their session after the ad airing but within 1 day and convert within that session within 30 days

CPA - 30 Day view through: Total spend over view through conversions

Commonly Asked Measurement Questions

Written by Caitlin Mermelstein | Last published at: February 15, 2023

1. What are "deadzones"?

A deadzone is a time interval that is set to avoid errors in attribution. The deadzone is set owing to anomalies in visitor and/or install data where the lift-over-baseline analysis would result in too much or too little lift, such as a website outage or traffic that should be filtered out but can't.

For example, many companies experience artificial midnight Google Analytics spikes owing to Google's methodologies. Additionally, some companies implement untagged email or text campaigns that result in traffic being bumped up for a span of time that do not reflect a visit from someone who saw a TV ad. When this happens, Tatari sets a deadzone, and spots within the deadzone do not get assessed according to standard estimations. Instead, the spot lift is imputed based on historical expectations.

2. What's the reasoning behind the 5-minute window for measuring immediate lift Does that window start when the commercial starts or ends?

Because a shorter time period guarantees better signal-to-noise ratio (lift after 5 minutes are much smaller compared to the first 5 minutes, so small that they are usually embedded in our baseline), and that time period is long enough to capture a sizable portion of the noticeable lift. The window starts once the commercial starts.

3. How is the immediate-lift cohort selected for computing the conversion rate after 28 days?

Each immediate-lift cohort is evaluated and tracked individually across 28 days. The results you see in the dash/CPA report are cumulative.

We follow the visitors who go the site within 5 minutes of TV airings and see if these visitors converted it or not within 28 days after their initial site visit.

4. What is the reasoning behind the 2.2x factor in the drag lift?

As a final step, we compute a DragFactor. Since our approach as outlined above only focused on immediate lift, we need to also account for those users who responded in a delayed fashion. Those responding outside of the attribution window are accounted for with a multiplication factor. The premise is that the total response will be proportional to the immediate response. This total factor, or DragFactor, is computed using closed-loop analysis and is estimated for new clients with a conservative factor.

It is important to note that this baseline-lift approach inherently handles multi-touch attribution, because we are looking at truly incremental traffic. Our baseline is effectively our pseudo-control sample that we

are subtracting out. Other marketing channels, like Google Adwords or Facebook, do not do this. They will over-attribute traffic, as many of those who clicked on their campaigns would have arrived at the site anyway.

5. How do you handle cases where an ad plays on two different channels at the same time?

For this, we leverage additional information to determine how to allocate the total lift we've identified amongst the overlapping spots. In general, we use impressions/spend information (the larger the audience size of the spot the greater percentage of lift gets assigned to the spot). We adjust this with other factors like temporal distance to account for differences in timing between spot airings and historical network performance.

6. What raw data can we get to do our own analysis with?

You can download your raw spot data by clicking the download icon next to the 'Spend and Visitors' chart in the dashboard, or ingest data from our [S3 buckets](#).

7. What does the "visitors" metric represent?

Since UV (visitor) data comes from Google Analytics, it is in sessions. Google Analytics defines sessions with an inactivity window of 30 minutes. If a person last visited the site at 10:29 a.m., and came to the site again at 11:00 a.m. on the same day, this will be counted as two sessions.

8. Is there tracking in place to consider if a visitor comes back at a later date and purchases? Would that mean they generate a new visit when they come back?

The first requirement for a sale to be tied to a spot requires the user to revisit the site every 7 days post-initial visit.

The second is a 28-day window to work back from to potentially attribute a sale. Using the timeout window described above, we work backwards to attribute sales up to 28 days after the initial session timestamp identified in the prior step.

9. When will my upper and lower-funnel event metrics populate in my Tatari dashboard?

Upper-funnel event tracking (e.g. CPV, CPI)

Results can be found in your Tatari dashboard the day after airing. Exceptions for next-day results include non-Kantar-tracked networks. These are manually uploaded by the Tatari operations team through post-log ingestion when post-logs are made available. This typically occurs mid-week the following week after airing.

Lower-funnel event tracking (e.g. CPA, CAC)

Results can be found in your dashboard or [CPA Report](#) 4-6 weeks into your campaign. From this point, results are available the next day similar to upper-funnel results. This is because conversion windows take time to mature and require enough data and spend (typically \$250k+) to achieve statistical significance.

10. Why do some spots not have impression data?

While final impression numbers come into us from a third-party on a lag (~2 weeks), a number of spots may not have actual impressions available. This happens because our third-party source does not track those impressions, or because they are experiencing a longer delay in getting that data finalized. Typically, untracked impressions may be due to the purchasing of spots from a smaller network, syndication, or a local coverup. [Learn more about impressions.](#)

FAQs: Optimal Frequency

Written by Jaycee Spies | Last published at: February 15, 2023

1. How is 'optimal' defined?

Optimal is based on the net funnel efficiency (NFE), which takes response rate and multiplies it by conversion rate. This means in some cases an ad could be driving very high response and lower conversions, or lower response but higher conversions, and both can be considered efficient and therefore optimal.

2. Why is it a range and not an actual optimal number?

A single optimal number can be misleading and a bit unreliable. You can imagine a case where we say the optimal frequency is 3 because it has a NFE of .8 for example, but a frequency of 4 could be .78 and therefore more or less the same, or it could be .1 and see a big drop off. Having a range allows us to better account for different shapes in the efficiency curve and not mislead people into unnecessarily strict behaviors that might not benefit them.

3. How much data is used to calculate optimal frequency range?

For a week's optimal frequency range we are using 6 months of data, for a month or quarter we are using longer time periods up to a year's worth of data. The optimal calculation needs enough impressions to give a reliable number.

4. What different cuts of data have the optimal frequency range available?

Optimal frequency is available for the preset date ranges for linear and streaming, using the primary response metric (visitors vs installs) and the primary performance metric. Media strategy and other performance metrics are not currently supported and will not show an optimal range.

5. How often does the optimal frequency range get refreshed?

Today, the range has been calculated once using data from September 2021 to September 2022 and does not automatically refresh as new data comes in. Optimal frequency range will refresh once a quarter.

6. Why is my optimal range so wide?

If you have a lot of conversions you may end up with a pretty flat net efficiency curve, meaning there isn't a ton of difference from one frequency to the next in terms of efficiency. This can be interpreted as success at a lot of different frequencies, so it isn't something you need to spend a lot of time optimizing against.

7. If I am new client when will I see an optimal range?

New clients will not see an optimal frequency range for the first three months, and possibly longer depending on the level of spend. The calculation needs sufficient impressions to establish an optimal range so the time depends on how long it takes to build up that number of impressions.

8. What if I am experiencing an issue with optimal frequency or have questions?

Please reach out to your Tatari team.

The Importance of Incrementality in TV

Tatari CEO Philip Inghelbrecht shares his thoughts on incrementality in TV measurement.

Written by Caitlin Mermelstein | Last published at: September 28, 2022

Savvy marketers operate across channels to reach current and potential customers. While search and social media – Facebook, in particular – are still the most popular, TV advertisers can be found on just about any platform, including radio, direct mail and out of home.

This is partly fueled by the drive for growth, but also from the fact that most advertising platforms have become easier to access and measure than ever before. For example, the entry point for a direct mail campaign used to be \$50,000, but a direct mail company like NY-based Share Local Media will do the same – and more – for as little as \$4,000.

Omnichannel strategies, however, have created a gap in TV measurement, and it's akin to the issue of digital's last-click attribution. A user may see three mobile ads before finally clicking through on a Google search result, but Google ultimately gets all the credit for the purchase.

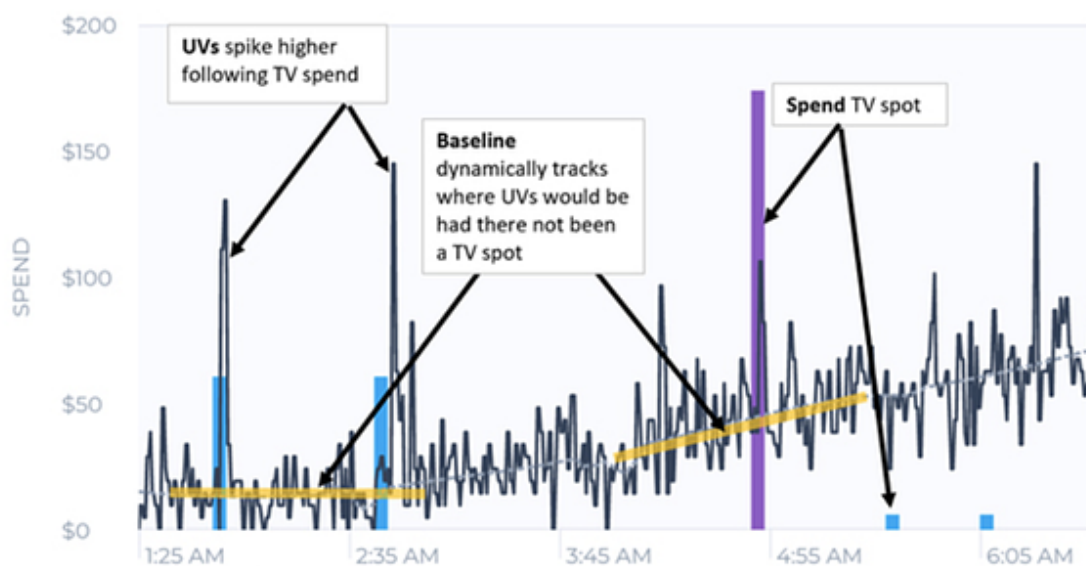
Translating this to TV, someone may have heard a radio ad for a product three times, but the single airing of the TV ad gets the credit for winning over the customer. This stems from the fact that most traditional agencies will still default to the baseline-plus-lift model of measuring TV's efficacy: Any unexplained traffic above the baseline is attributed to TV, and not the three radio airings in this particular example.

This flawed argument gave birth to companies focused on multitouch attribution and media-mix modeling. These approaches in measurement (and planning) are complex and have largely failed to remove the ambiguity marketers are yearning for. One solution would be to focus on incrementality.

What does incrementality mean for TV advertisers?

Incrementality is achieved by measuring campaigns in a way that separates net new visitors, buyers or installers, from the users that would have already visited, purchased or downloaded even if they hadn't seen the ad.

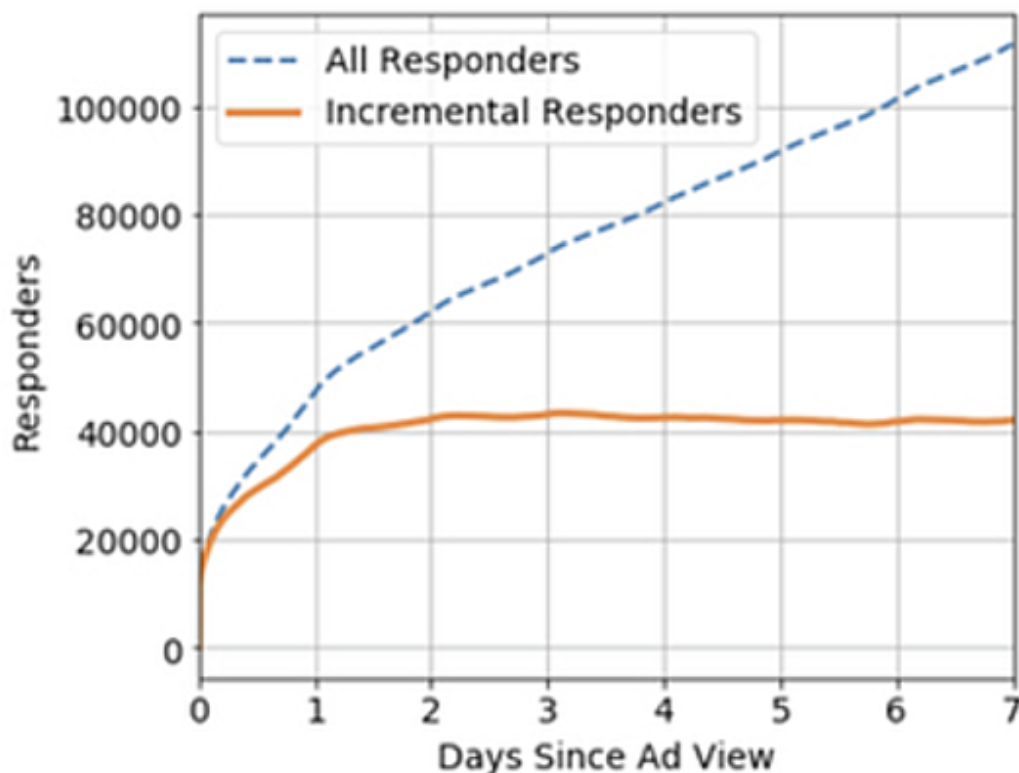
For most people in the TV industry, incrementality is achieved by filtering out known (and large) digital traffic sources from the baseline – non-branded search or Facebook, for example. This is largely insufficient, regardless of whether it relates to streaming or linear TV; the correct handling requires dynamic baselining and control groups, both of which are illustrated below.



Rather than calculating lift from a fixed baseline, a dynamic baseline is continuously recalculated to account for simple, short-term changes such as an uptick in morning traffic, which itself could be organic, but is also caused by other paid sources, such as morning radio. As such, airings later in the day (the purple bar) only get credit for lift that would otherwise not have been achieved. They are measured incrementally.

When it comes to streaming TV, people are mostly watching on demand, and ads tend to be less spiky in nature compared to linear TV. In such a case, IP-level data can be used to measure the response. This is best demonstrated in the chart below: For each IP address where the impression is delivered, the IP address should be checked for subsequent visits to the advertiser's site (Y-axis) over time (X-axis).

Maturity Curve



So what's a better method for measuring incrementality?

Establishing incrementality is achieved with control groups. The two groups are similar, but one sees a spot and the other does not. The difference in response between the two groups measures incrementality.

If brands do not control for incrementality, the measurement of responders will include those who would have visited or purchased, even without seeing that particular TV spot (the blue line, indicating a view-through metric). By subtracting a control group of people that were watching TV on the same day, same time and similar programming, the true incremental effect of TV can be measured (orange line in the previous chart).

Marketing professionals have moved away from last-click to multitouch attribution, but it's still far from perfect. The TV industry owes it to its constituents to evolve and enforce incrementality as the standard. There are understandable reasons many would hesitate to do so because it isn't easy, requires complex data computation, and it will likely make campaign performance look far less impressive than it might otherwise. Then again, it's well known that the good things in life never come easy.

Additional resources:

- [Continuous measurement of incrementality \(one-pager\)](#)
- [View-through vs. incrementality \(video\)](#)

Tatari Attribution Models

Written by Caitlin Mermelstein | Last published at: April 02, 2024

Tatari reports make use of two attribution models: incremental and view-through. Many marketers, and TV measurement companies in particular, use view-through metrics to measure advertising response. At Tatari, we give you the option to choose this metric to make apples-to-apples comparisons (especially through a [multi-touch attribution vendor](#)), but we believe incremental measurement is the most precise metric for understanding the impact of ad performance ([covered in adexchanger](#)) from streaming TV. You may find that view-through results look better, but our incrementality method separates net new visitors from users who have already visited, purchased, or downloaded without having seen the TV ad.

Incremental attribution

Incremental attribution is Tatari's attribution model specifically designed to measure an ad's impact. It is a probabilistic model that looks at aggregate user behavior and as such cannot be used to attribute specific user events.

Learn more about how we measure incrementality on [linear](#) and [streaming](#) TV.

View-through attribution

View-through attribution is predominantly IP-based attribution and is based on how most web advertising measures attribution (Facebook ads, Google Adwords, etc).

In order for a conversion event to be counted under the view-through model, it must occur on the same IPv4 address as the initial install or pageview.

[Learn more](#) about the difference between view-through and incrementality.

Tatari view-through attribution

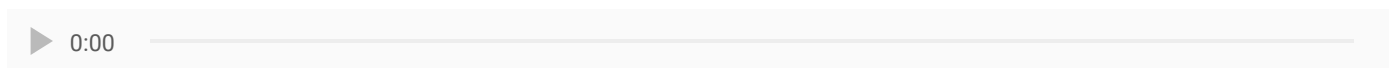
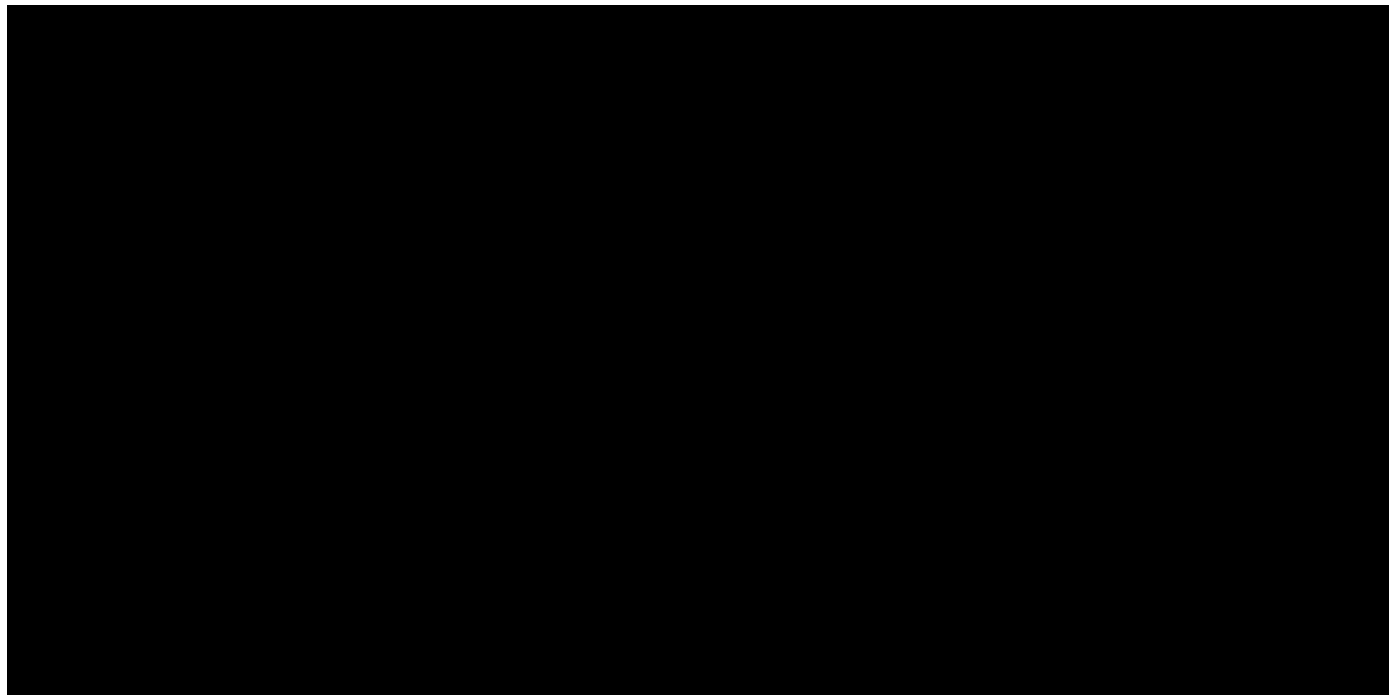
Tatari view-through attribution adds more intelligence to the view-through methodology. Our Data Science team designed Tatari view-through using advanced device graph data. This methodology isolates true 1-to-1 household relationships and only attributes to impressions of the highest confidence to ensure precise attribution.

[Learn more](#) about Tatari view-through.

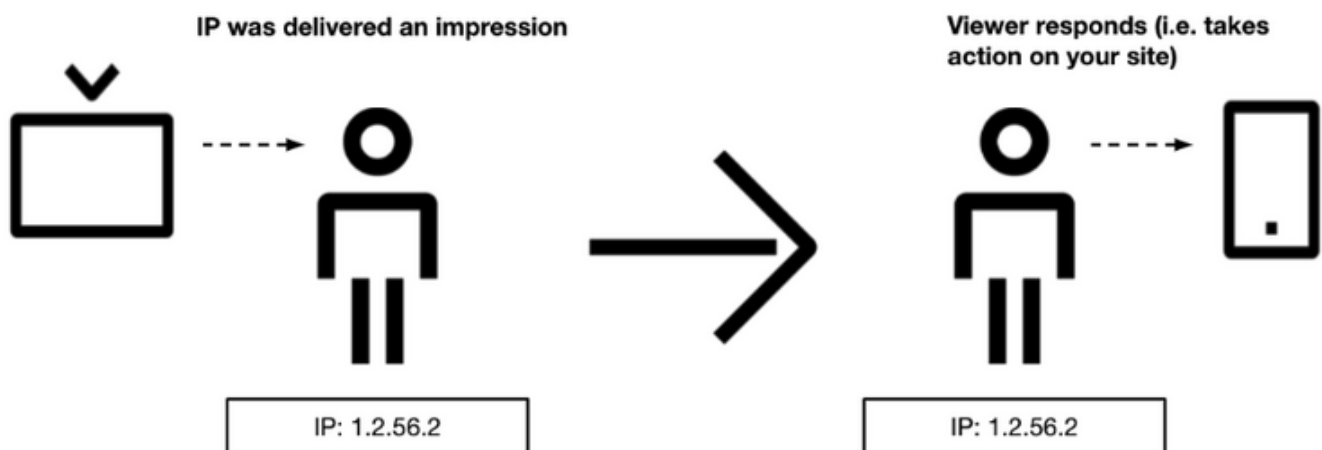
Tatari View-Through Attribution

Written by Caitlin Mermelstein | Last published at: June 04, 2024

Watch our video to learn more



What is view-through attribution? View-through is a measurement methodology where we match the IP address of an impression to the IP address of the response over a specified period.



Using this methodology, your streaming TV campaign receives credit if the responding IP was delivered an impression, regardless of whether the user was influenced by ads on other digital channels. For this reason, view-through is considered a more generous approach to attribution, especially when compared to Tatari's [incremental methodology](#). Our incremental method only gives credit to those who responded to your streaming TV ad, and not from other marketing sources.

At Tatari, we offer two view-through attribution methodologies: digital view-through and Tatari view-through.

Digital view-through

Digital view-through is the method that we just shared with you – it's constructed similarly to the digital marketing industry, allowing you to compare Streaming TV results with other digital channels in an apples-to-apples manner.

Tatari view-through approach

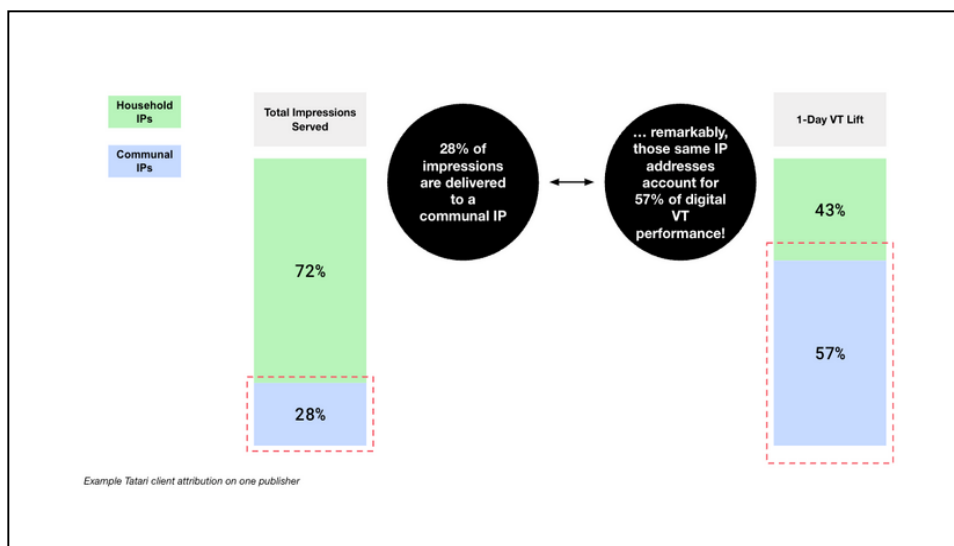
Tatari view-through attribution adds more intelligence to the methodology. Our Data Science team designed Tatari View-Through using advanced device graph data. Unlike standard industry device graphs, Tatari's solution distinguishes between household and communal IPs, ensuring precise attribution.

Impressions can be delivered to two types of IP addresses:

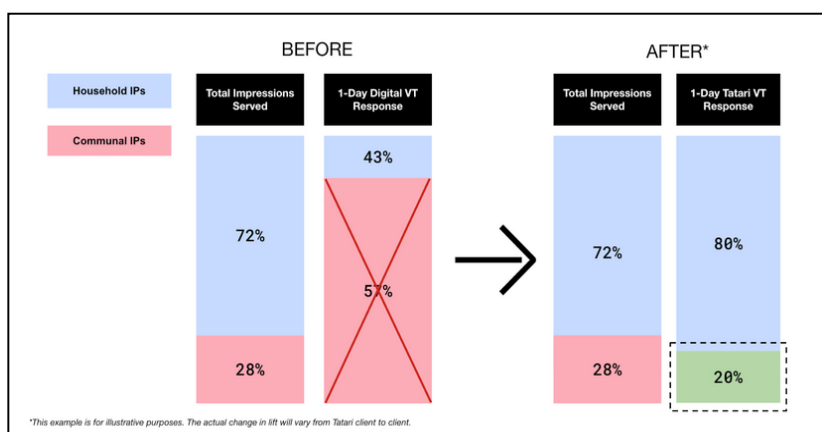
- Household IP addresses
- Communal IP addresses

Household IP addresses are more precise and are likely to have consistent users over time. On the flip side, Communal IPs pose a challenge, associating multiple individuals with a single address, as seen in places like office buildings, university campuses, coffee shops or when these individuals are using their phones or tablets connected to mobile internet service providers such as T-Mobile, Verizon, and so on. The risk? Over-attribution if not handled accurately.

In this Tatari client case study, it reveals that only 28% of impressions were across communal IPs, but a whopping 57% showed a 1-day view-through response, hinting at potential issues.



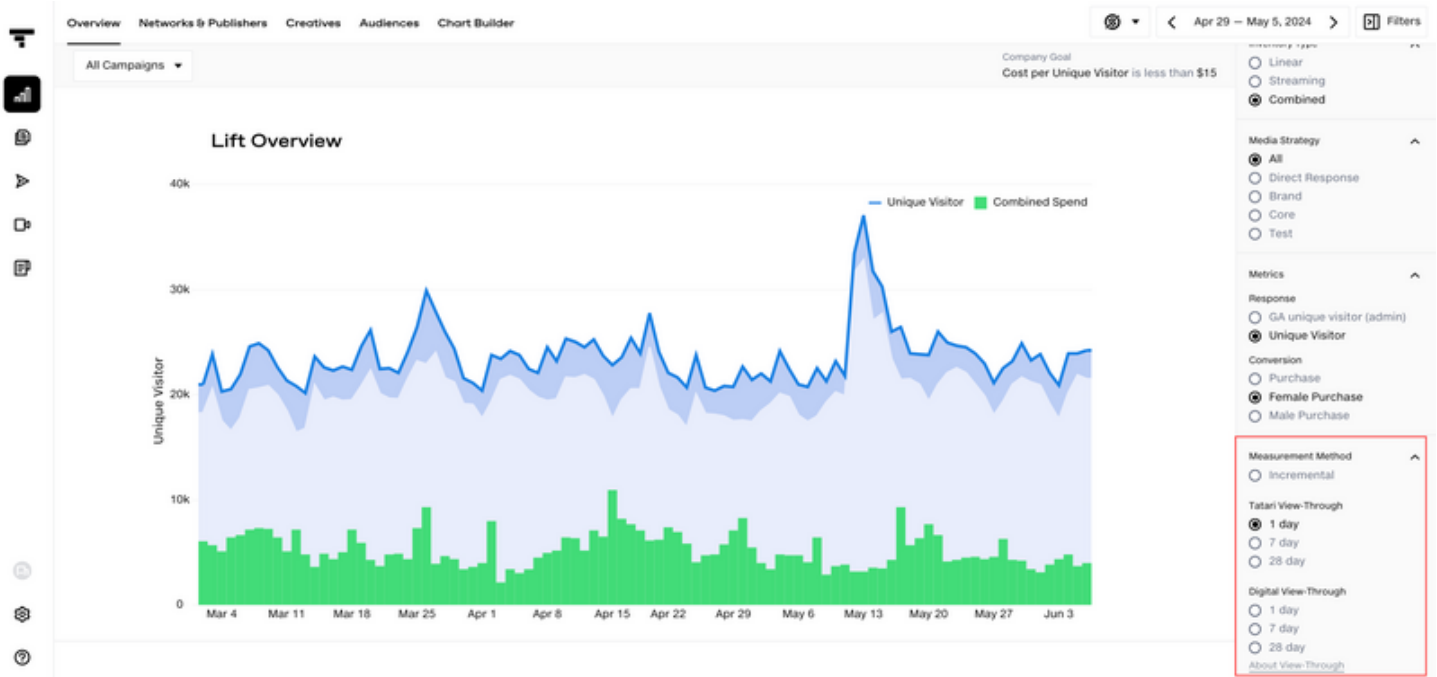
Tatari view-through corrects for this communal IP issue which leads to more accurate attribution than industry-applied digital view-through. As you can see in this visual, the Tatari view-through methodology results display a much more realistic total view of responses. This means more precise attribution, enabling you to make data-driven decisions to optimize your TV campaigns.



When to use incremental vs. view-through

We recommend the following for measuring streaming campaigns:

- Tatari view-through if your brand experiences either a high website visitation baseline (defined as >10K visitors per day) or a medium baseline with strong paid media efforts (defined as website traffic >1K visitors per day, of which over 25% is driven by paid media).
- Digital view-through if you want to complete a comparison of TV performance to your digital campaigns or other CTV providers
- And lastly, incrementality if you are a developing brand with a lower website visitation baseline (defined as <1K visitors per day) and still maturing paid media efforts (representing <25% of total traffic).



Additional resources

- [Continuous measurement of incrementality \(one-pager\)](#)
- [View-through vs. incrementality \(video\)](#)
- [The importance of incrementality in TV \(blog\)](#)

FAQs: Tatari View-Through Attribution

Written by Caitlin Mermelstein | Last published at: May 21, 2024

How do I know which view-through attribution (Tatari or digital) is right for me?

Tatari view-through (VT) is the recommended method, as it's built on TV-specific device graph data and methodologies. While it's conservative in nature, it's more accurate than industry-applied digital view-through.

Does the mobile ISP issue have a larger impact on linear, streaming, or programmatic?

The issue has a larger impact on streaming and programmatic since viewers are able to view content on the go (i.e. on their mobile devices).

How does the methodology handle a campaign that has a very large percentage of mobile ISP impressions?

All campaigns are handled in the same manner regardless of what percentage of impressions are served over a mobile ISP. However, this is rarely the case as most campaigns are served 20% or fewer impressions via mobile ISPs.

What factors would cause my Tatari VT data to be significantly different from digital VT? Or vice-versa, what would cause them to look similar?

Significant differences tend to be dictated by two factors:

1. The publisher's distribution of impressions served to mobile ISPs.
2. The responsiveness of home-based attributions (VT per impression). Typically, Tatari VT CPx will be higher than digital VT CPx.

Tatari VT could be lower than digital VT in instances where there is much higher responsiveness from home-based impressions relative to mobile-based impressions. If digital VT is similar to Tatari VT, this is usually due to the publisher serving nearly all impressions via home-based ISPs.

How would a viewer's IP address change from mobile to wifi?

When a user turns off wifi, they usually automatically connect to a mobile IP address.

How do IPv4 and IPv6 factor into this?

We only attribute against IPv4 addresses as IPv6 addresses change far more frequently and therefore are difficult to attribute against ([learn more](#)).

Video: Understanding Linear TV Measurement

Written by Caitlin Mermelstein | Last published at: September 28, 2022

Even though linear TV has been around much longer than streaming, it's typically more difficult to make a one-to-one attribution between someone seeing a TV ad and then taking action. Our data science team has created a proprietary methodology to accurately measure upper and lower-funnel performance, helping you precisely understand the impact of your TV ads.

Watch our short video below to learn more about our industry-leading incrementality method—which attributes customer actions as a result of TV advertising.

Embedded content from https://player.vimeo.com/video/487367118?app_id=122963

Negative Lift: Why It's Important for Accurate Measurement

Written by Caitlin Mermelstein | Last published at: June 28, 2024

A TV spot is unlikely to cause someone to *not* visit your website or download your app who would have done so otherwise if not for seeing that spot.

However, there are occurrences where this can happen statistically due to noisiness in the baseline.

Response measurement (website visits or installs) on small time scales is inherently noisy. This means that there are fluctuations up and down from minute to minute that cannot be controlled or predicted.

With TV lift, we are therefore trying to measure a signal that is co-mingled with this noisy background traffic. To better understand this process, we can consider this measurement as having three components:

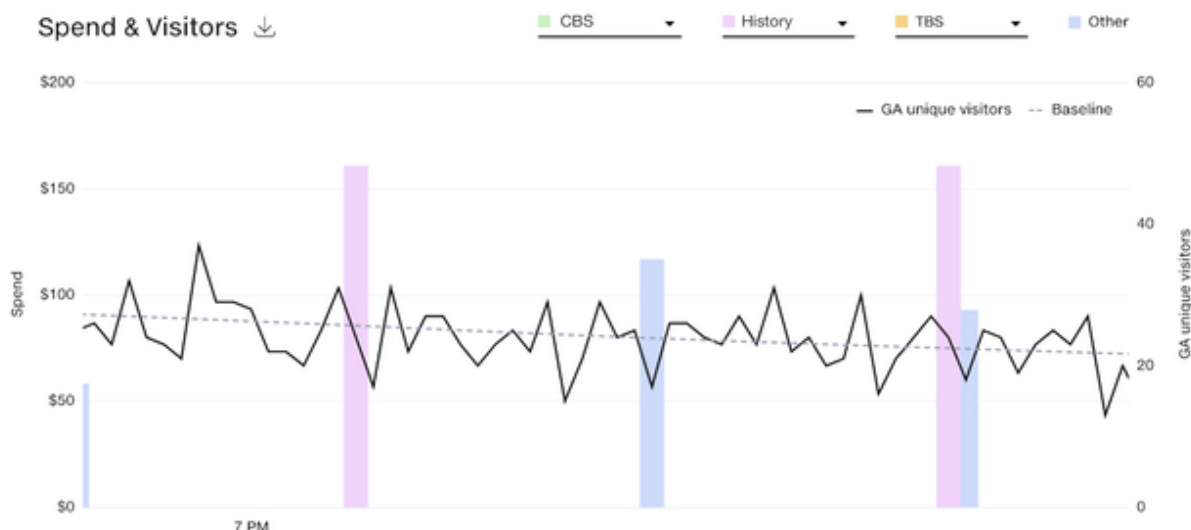
1. **Average background response:** This is represented by the smooth baseline, and changes slowly as the macro-level background response measurement changes over time.
2. **Response noise:** This represents the random fluctuations above and below the baseline on a minute-to-minute basis. Theoretically, this component has an average value of 0.
3. **Lift in the presence of a TV spot:** These are the responses contributed by the audience that sees the spot and subsequently converts. We assume this can never be negative, as it is only contributing excess response above the background converting the population.

A real-world example of spots with significant lift illustrates these 3 components:



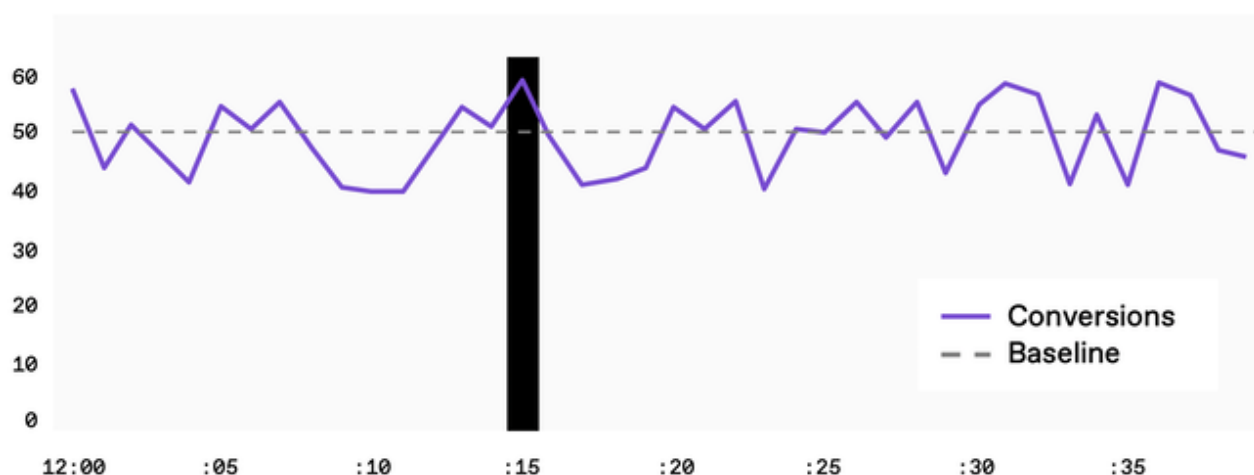
When measuring spot lift, we can consider these three components as purely additive. When we take the total response conversions in the presence of a TV spot and subtract out the baseline, we are left with the spot lift and noise components. For a single spot with a small lift relative to the noise, the noise can overwhelm the lift, and give spurious results.

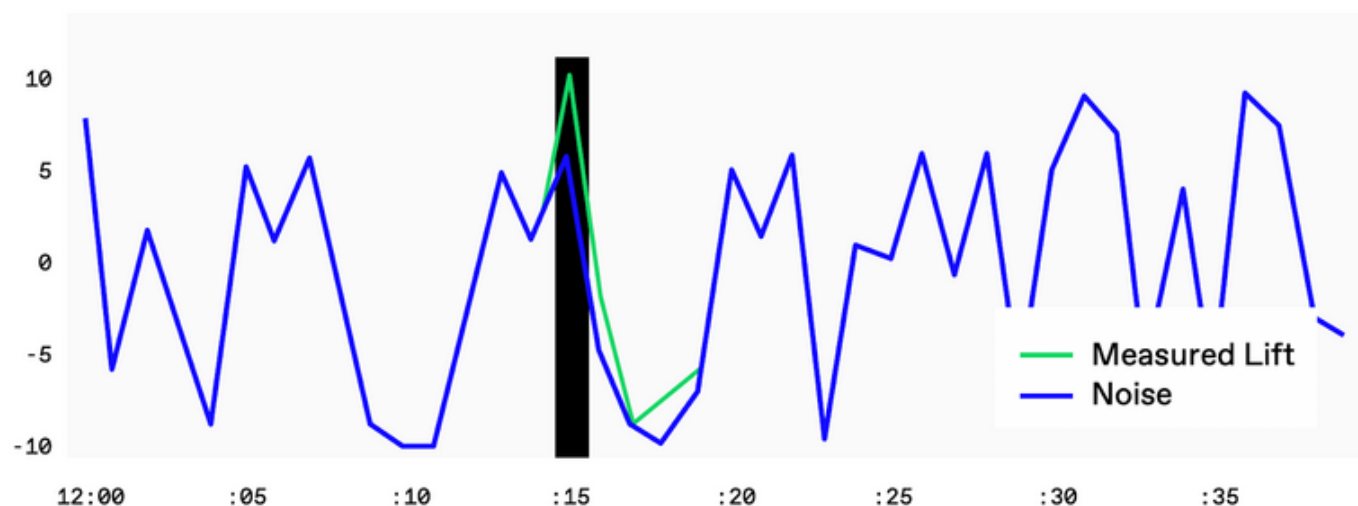
A real-world example of spots with little (possibly negative) directly-measurable lift:



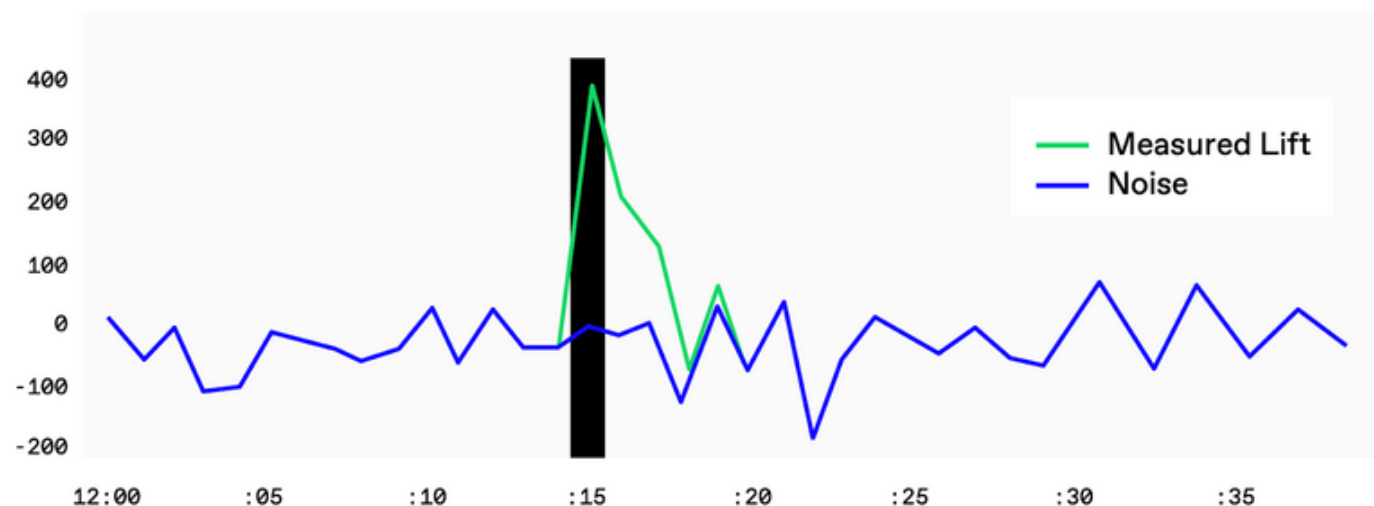
If we look at any single minute, since the noise is random and centered around 0, the value contributed by noise can be negative. Over the span of a few minutes of spot-related response conversions, the total noise contribution can still be negative and larger in magnitude than spot lift, which leads to a negative measurement of spot lift for the given small spot. Given enough minutes of measurement (think many small spots measured together), the noise component will tend to 0 and give us a valid measurement of spot lift in aggregate.

Simulated example (single small spot):





Simulated example (many small spots in aggregate):



If we were to bound the measured lift values for individual spots at 0 (on the low side), we would be excluding some of the negative *noise* values, which would then bias the average noise value positive (over many spots), and therefore artificially provide positive bias to the overall lift measurement.

Therefore, in the presence of a noisy response conversion measurement, we have to allow these negative lift values to persist, which in the long run leads to a more accurate measurement of spot lift.

You can now find negative lift values in [linear spend and impression files](#) within your Tatari S3 bucket.

How Do We Track Conversions for Linear TV?

Written by Caitlin Mermelstein | Last published at: September 28, 2022

Since we can't track viewers on a 1:1 basis, we don't know which of the total TV-window traffic is due to TV airings vs. the baseline group. Instead, we track that entire group of people through the funnel (assuming that TV and non-TV people behave the same in that window) and calculate a conversion rate for the group. We then assign TV credit based on the percentage of traffic (10% of traffic = 10% of the conversions). These results are then aggregated over every spot to get an overall conversion rate. To ensure the numbers are robust, we typically use the overall conversion rate as a prior for additional cuts. These values can make it more complicated, but it prevents ridiculous conversion rates on small amounts of data. In terms of timeline, we require a person to return to the site once every seven days. Phrased another way, our session time is 7 days. For attribution, we tie all events back to their most recent session. So, our timeline is effectively 7 day sessions, but the actual conversion window is generally 30 days (and can be longer but the 7 day session rule still holds).

FAQs: Linear Impressions

Written by Caitlin Mermelstein | Last published at: September 28, 2022

In our media plan, where do the impressions come from?

The impressions in the media plan come from the networks and are usually comparable to Nielsen ratings.

In my Tatari dashboard, where do the impressions come from?

At first, the impressions in the dashboard are projected impressions calculated by our data science algorithm. The algorithm calculation uses set-top box data from 30M+ households. Approximately three weeks after a spot (ad) has aired, we'll get actuals at which point we'll update the impressions in your dashboard.

Why are the impressions in the media plans different from the ones in the dashboard?

Networks use Nielsen data and we use set-top box data from 30M+ households. We prefer to use set-top box data over Nielsen as it gathers data from a larger sample size of all viewers (3 orders of magnitude, or one thousand times greater than the sample used by Nielsen), it's objectively collected (i.e. not from a written survey; see example at the bottom of the article), and it's collected much faster.

What value are you pulling from set-top box data?

We are pulling average audience (AA) impressions from set-top box data, not household (HH) impressions. AA is determined by this equation:

Average Audience = Total Hours Viewed / Time Frame of Event in Hours

Effectively Tagging UTM Parameters for Streaming TV Campaigns (For Websites)

Written by Caitlin Mermelstein | Last published at: September 28, 2022

When running a streaming TV campaign with Tatari, we'll embed a URL on the ad so viewers can click through to your website, app, or app store. Since it requires a click action, this is only supported on desktop and mobile devices and not connected TVs.

It's important to properly tag the UTM parameters on those URLs, not only so you can see how much traffic an ad drives and from where, but it provides you more accurate incremental results from TV.

What are UTM parameters?

[UTM parameters](#) are unique tags added to marketing campaign URLs that tell us the source, medium, and campaign type.

Example URL with UTM parameters:

```
www.yourwebsite.com/landing-page/?  
utm_source=tatari&utm_medium=streaming&utm_campaign=display&ta_campaign=  
{{er_mediaplan_id}}
```

How do I set them up?

Note: The steps below are only applicable for your website. If you have an app, please reach out to your Client Services Manager.

First, identify which URL you'd like to direct viewers on your website then add UTM parameters. We ask that you include two parameters for Tatari:

1. **utm_source** OR **utm_medium**
2. **ta_campaign={{er_mediaplan_id}}**

For **utm_source** OR **utm_medium** add one of the following:

- **tatari_streaming**
- **tatari-streaming**
- **streaming**
- **ott**
- **streaming_tv**

- streaming-{{er_vendor}}
- streaming_{{any string}}

Here are a few examples with effective tagging:

- https://yourwebsite.com/new-product/?utm_medium=streaming&ta_campaign={{er_mediaplan_id}}
- https://yourwebsite.com/new-product/?utm_source=tatari-streaming&ta_campaign={{er_mediaplan_id}}

Note: If you have already set up parameters for both *utm_source* and *utm_medium*, we request that you replace either of those with a parameter mentioned above.

The following are additional macros you can use when building UTM parameters. They will automatically populate once a viewer clicks on the ad, and can be useful for your internal reporting.

- {{er_advertiser}} - Advertiser name
- {{er_advertiser_id}} - Advertiser ID
- {{er_mediaplan}} - Media plan name
- {{er_mediaplan_id}} - Media plan ID
- {{er_vendor}} - Vendor name
- {{er_vendor_id}} - Vendor ID
- {{er_placement_group}} - Placement name
- {{er_placement_group_id}} - Placement ID
- {{er_creative}} - Video (or creative) name
- {{er_creative_id}} - Video (or creative) ID
- {{er_isci}} - Ad ID or ISCI in a 3rd party URL
- {{er_referrer}} - Referrer URL

A look under the hood: Click-throughs from streaming do not drive sales (and related measurement algorithm improvements)

Written by Caitlin Mermelstein | Last published at: September 28, 2022

At Tatari, we are continuously monitoring, analyzing and interpreting data to ensure high quality TV ad results for your business. We offer ads on streaming platforms that are shown through connected TV, mobile, and PC. For some ad deliveries on mobile and PC, platforms are enabling users to click through to your website URL that we've provided them.

We've been analyzing traffic that comes from click-throughs across all streaming platforms and are observing zero to low conversions from click-through traffic which we don't deem as high quality visits.

Platform	Click (% of immediate responders)	Conversion rates of click-through responders
CBS	62.0%	0.00%
CNN	35.2%	0.00%
Comcast	6.0%	0.00%
Discovery TV Everywhere	11.9%	0.00%
DirecTV Lifestyle	0.1%	0.00%
DirecTV Now	5.4%	0.00%
DIRECTV SPORTS	0.0%	0.00%
Fox News	60.8%	0.00%
Hulu	7.7%	0.00%
NBC	76.5%	0.00%

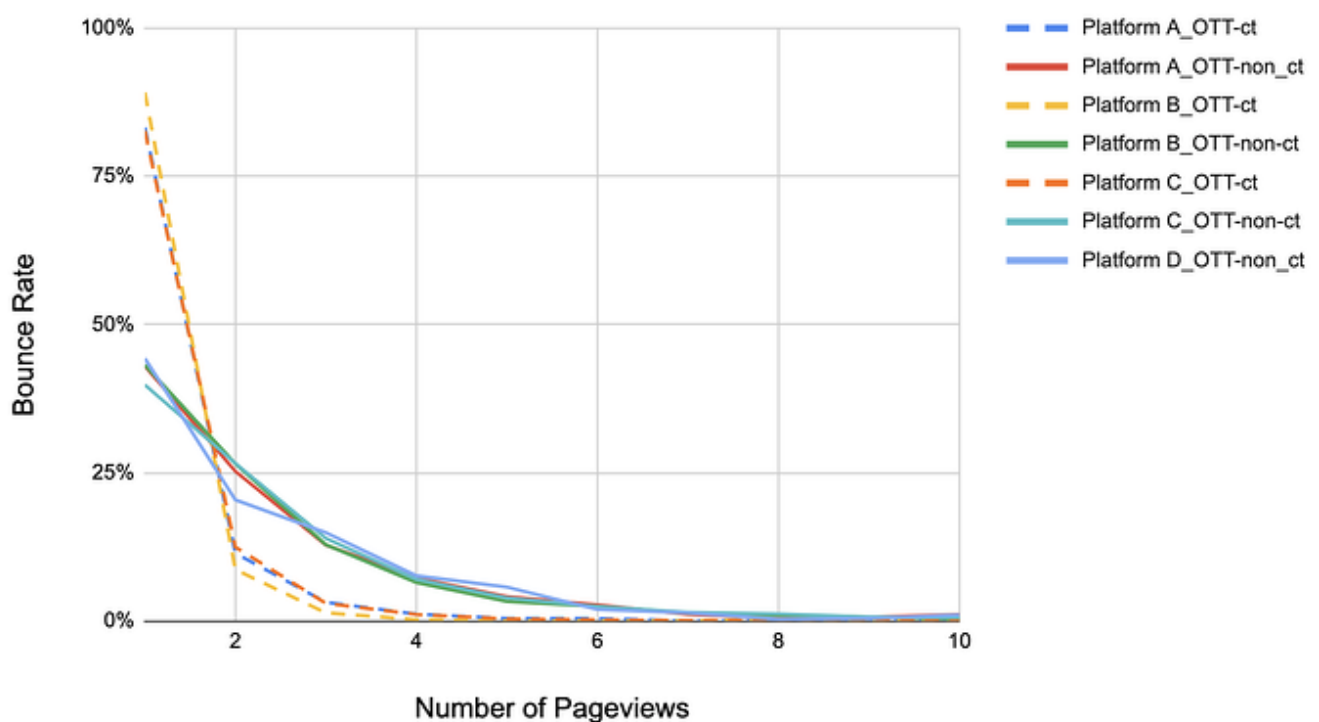
Pluto	0.0%	0.00%
Viacom	11.8%	0.00%

Pictured above: Of the people who responded to the streaming commercials on CNN, 35.2% of them did so by clicking through on the ad itself. However, none of those responders ended up converting (or purchasing).

Source: Data collected January 2020 across all Tatari advertisers

While these are actual clicks to your website, the placement of the link on these ads by the publisher could be causing people to accidentally click through to your website, resulting in over-attribution (or a lower incremental cost per visitor (CPV) and cost per acquisition (CPA)), paired with a high bounce rate.

Distribution of Pageview Performance



Example view of bounce rates from website traffic

Our incremental measurement methodology is the most precise methodology in the industry to show true CPV and CPA as a result of the TV ad because we subtract out a control group of those who would have visited your website regardless of seeing the ad. We're continuously improving this metric to make sure your results are high quality.

Click-through and non-click-through responses should be separated out in our incremental measurement because those who visit your website by directly clicking through are lower quality traffic and we do not believe that's the most accurate view of your campaign results.

To that extent, we are making the following changes to the algorithms to account for this.

- In the streaming dashboard, your historical (from October 2019 to present) and future incremental CPV and CPA metrics will increase for certain platforms including NBC, CBS, CNN (and others) because we are separating out click-throughs from non-click-throughs (per the above, we deem them to be low-quality, despite the fact that there was a visit!).
- In your offline reports, we will break it further down i.e. you'll be able to see the visitor lift for click-through and non-click-through performance metrics.

A clear way forward

As the streaming TV advertising market evolves and grows (fast!), so do our products and measurement algorithms, as demonstrated above. We break new ground every day. The foundation, however, remains the same i.e. incremental measurement. We stand by this, yet rest assured that Tatari will continue to publish view-through measurement (with 1-, 7-, and 28-day attribution) along the side. These are there to provide you with an apples-to-apples comparison across your other digital channels.

App Event Metrics from Streaming TV in Your Dashboard

Written by Caitlin Mermelstein | Last published at: September 28, 2022

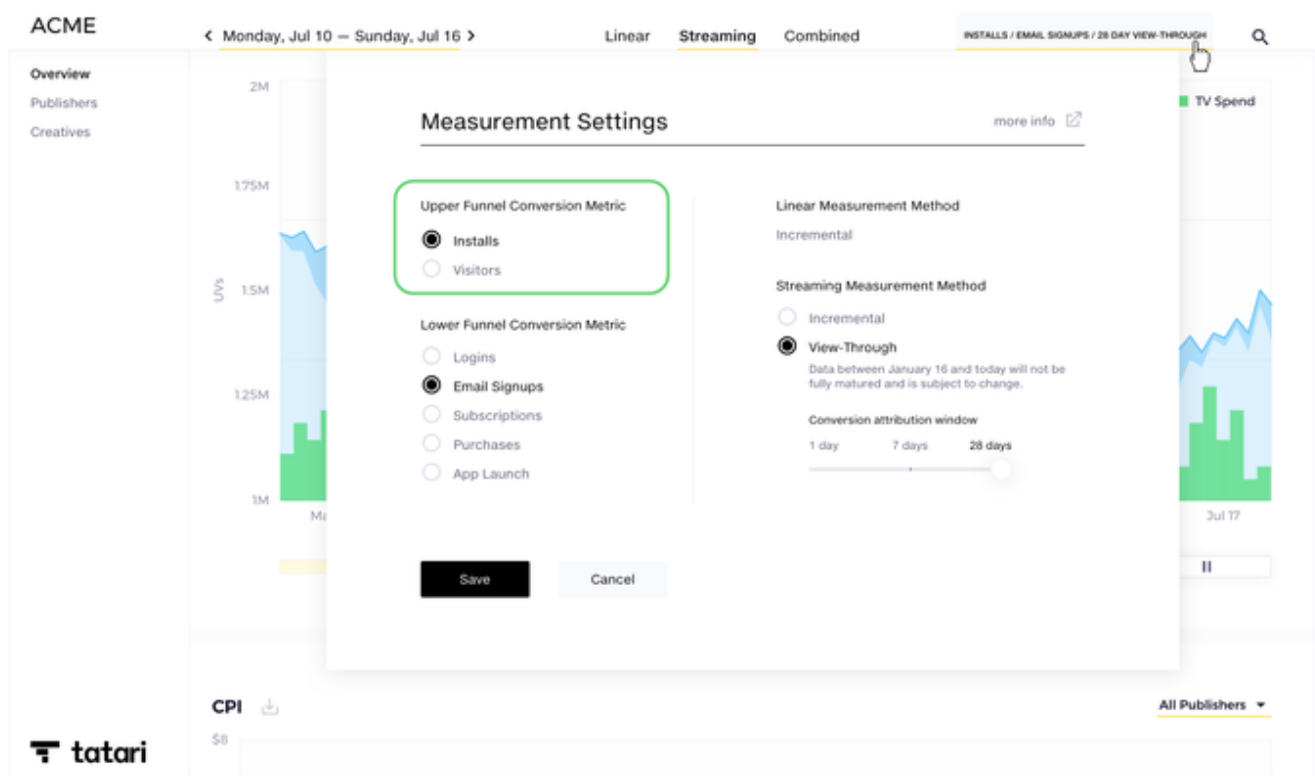
App event metrics allow you to measure the cost for every install and lower-funnel event from your Android or iOS application. You now have access to these metrics in your Tatari dashboard for streaming TV on both a view-through basis (the industry standard) and an incremental basis—a [method proprietary to Tatari](#) that more precisely measures TV ad response.

With this increased visibility into response for people who have installed or taken an action in your app, you can better optimize your portfolio and creatives, and drive higher ROI from both linear and streaming TV advertising.

Read the full announcement [here](#).

Where to find it in your dashboard

[Log in](#) to your Tatari dashboard and change your upper funnel metric setting to “Install” under the measurement panel. The streaming tab of your dashboard will immediately reflect app event metrics.



Release Notes

The following metrics in your dashboard will show cost per install, cost per acquisition and conversion rate metrics for both view-through (1, 7 and 28-day windows) and incremental.

Streaming Tab → Overview

- CPI as big number
- Install lift as big number
- Immediate lift in the install lift chart
- Drag lift in the install lift chart
- CPI chart by week and month, filterable by platform
- CPA chart filterable by platform

Streaming Tab → Platforms

- CPI as big number
- Install lift as big number
- CPI as a column
- Relative performance based on install lift
- CPA column

Streaming Tab → Platforms → Platform Drilldown

- CPI as big number
- Install response as big number
- CPI chart by week (includes “all CPI” baseline comparator)

Streaming Tab → Creatives

- Efficiency based on install lift
- Relative performance based on install lift
- CPA column

OTT Measurement - How Does it Differ From TV?

Written by Caitlin Mermelstein | Last published at: September 28, 2022

OTT buys are tracked using an entirely different method than linear. For OTT, Tatari uses IP data and tracks performance on a 1:1 basis. We see who saw the ad (by IP) and then see which of those people come to the site (IP via pixel). Additionally, we subtract out a control group to ensure we are truly measuring incremental performance. Linear TV is measured using a spike-based attribution method. We see the amount of additional traffic over the baseline to provide the incremental traffic.

Audience Dimension in Reports

Written by Jaycee Spies | Last published at: July 02, 2024

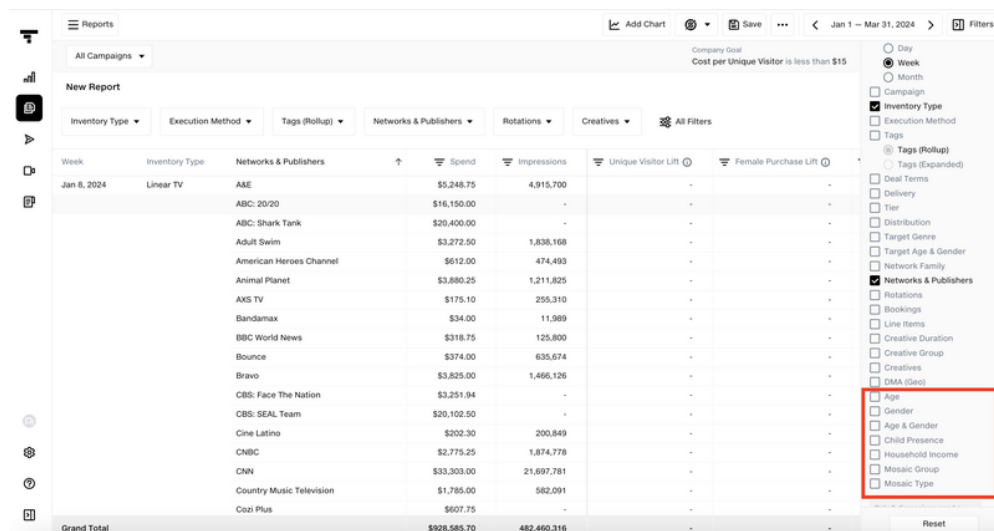
Leverage audience filters in Reports to gain valuable insights into your target audience and optimize your streaming TV campaigns for better results. Tatari partners with industry-leading data providers, including Experian, to provide detailed insights into the ages, genders, incomes, and lifestyles of the people reached by your campaigns.

What audience dimensions are available?

- Age
- Gender
- Gender x Age
- Child Presence
- Household Income
- Mosaic Group (a lifestyle segmentation system)
- Mosaic Type (a more specific lifestyle category within a Mosaic Group)

Where do I find audience dimensions in Reports?

You can find audience dimensions in your Tatari reports. Navigate to Reports → Format → Dimensions.



The screenshot shows the Tatari Reports interface. The 'New Report' section is active, displaying a table with columns for Week, Inventory Type, Networks & Publishers, Spend, Impressions, Unique Visitor Lift, and Female Purchase Lift. The 'Filters' panel on the right is open, showing the 'Dimensions' section with a red box highlighting the available audience dimensions: Age, Gender, Age & Gender, Child Presence, Household Income, Mosaic Group, and Mosaic Type. The 'Mosaic Group' and 'Mosaic Type' options are currently selected.

Week	Inventory Type	Networks & Publishers	Spend	Impressions	Unique Visitor Lift	Female Purchase Lift
Jan 8, 2024	Linear TV	A&E	\$5,248.75	4,915,700	-	-
		ABC: 20/20	\$16,150.00	-	-	-
		ABC: Shark Tank	\$20,400.00	-	-	-
		Adult Swim	\$3,272.50	1,838,168	-	-
		American Heroes Channel	\$612.00	474,493	-	-
		Animal Planet	\$3,880.25	1,211,825	-	-
		AXS TV	\$175.10	255,310	-	-
		Bandamax	\$34.00	11,989	-	-
		BBC World News	\$318.75	125,800	-	-
		Bounce	\$374.00	635,674	-	-
		Bravo	\$3,825.00	1,466,126	-	-
		CBS: Face The Nation	\$3,251.94	-	-	-
		CBS: SEAL Team	\$20,102.50	-	-	-
		Cine Latino	\$202.30	200,849	-	-
		CNBC	\$2,775.25	1,874,778	-	-
		CNN	\$33,303.00	21,697,781	-	-
		Country Music Television	\$1,785.00	582,091	-	-
		Cozi Plus	\$607.75	-	-	-
		Grand Total	\$928,585.70	482,460,316	-	-

Note: These dimensions are currently available only for Streaming inventory.

Benefits of Using Audience Dimensions

- **Deeper Insights:** Go beyond publisher performance to see which demographics are responding to your ads.
- **New Opportunities:** Identify publishers that reach your target audience and expand your campaign reach.

- **Optimized Buys:** Allocate your budget more effectively by knowing which audience segments perform best.

Recommend Views for Audience Dimensions

Audience dimensions are most useful at higher levels of granularity. Here are few recommended views of data to get started:

- **Age**
 - Dimension: Age
 - Metrics: Spend, CPA
 - Pivot: Networks & Publishers
- **Age & Gender**
 - Dimensions: Age Gender
 - Metrics: Spend, CPA
 - Pivot: Networks & Publishers
- **Household income**
 - Dimension: Income
 - Metrics: Spend, CPA
 - Pivot: Networks & Publishers
- **Age & Creative**
 - Dimension: Age
 - Metrics: Spend, CPA
 - Pivot: Creative
- **Mosaic type**
 - Dimension: Mosaic type
 - Metric: Spend

FAQs

Q: Why am I seeing N/A in some areas?

A: You might see "N/A" for some audience data points. This happens when:

- The ad impression occurred on a communal IP address (e.g., in an airport or office building) where demographics aren't available.
 - Note: Tatari's attribution methodologies, specifically Incremental and Tatari View-through, distinguish between household and communal IPs which allows us to isolate true 1-to-1 household relationships to ensure precise attribution. Learn more [here](#).
- Experian has some data for the impression, but that specific field (like age or gender) is unknown.

Q: Why do my metrics change when I add a dimension?

A: This data is at the household level, which means the metrics are recalculated based on the specific audience segment defined by the added dimension.

Q: What are Mosaic Groups and Mosaic Types?

A: Mosaic is a system developed by Experian to categorize people based on their lifestyles. It works in two levels:

- **Mosaic Groups:** These are broad categories that group people with similar demographics, incomes, and lifestyles. Think of them as general buckets like "Young Professionals" or "Empty Nesters."
- **Mosaic Types:** These are more specific categories within each Mosaic Group. They provide a more granular view, like "Urban Young Professionals" or "Retired Empty Nesters in Rural Areas."

For a detailed breakdown of the Mosaic Group and Type categories, please see [here](#).

Q: I targeted a specific demographic group, but the report shows impressions outside that target. Why?

A: Often times publishers target based on content and Tatari uses Experian data to validate audience targeting from publishers. Since Experian data is based on households, there might be additional demographics within a household that saw your ad.

Q: I see lift in my report, but there's no spend or impression count. Why?

A: Tatari calculates lift (improvement in a metric) separately from spend and impressions. Occasionally, impressions trickle in after a campaign ends, contributing to the lift but not affecting spend or impressions.

Video: DragFactor Enables Next-Day Measurement

Written by Caitlin Mermelstein | Last published at: September 28, 2022

When an ad airs on linear TV or a streaming platform, you'll see an immediate response, or an influx of visitors to your website. However, not everyone visits right away—many respond days, weeks, or even a month later. This delayed response is hard to measure directly because it occurs later in time, often going unaccounted for or even misattributed by most - but not with Tatari.

We know you need to see your campaign's performance results that measure both the immediate and delayed response. Tatari's [DragFactor quantifies the relationship between these two types of response as a multiplier](#). Simply put, this helps you understand how many additional delayed responders you can expect in the future for every immediate response you see now. This information is available in near real-time, right within your Tatari dashboard.

Watch our short video to learn more about DragFactor including how we calculate category and custom DragFactors.

Embedded content from https://player.vimeo.com/video/597297399?app_id=122963&h=770daeb0c3

DragFactor Enables Next-Day Measurement

Written by Caitlin Mermelstein | Last published at: June 28, 2024

At Tatari, we measure TV performance by both immediate lift and delayed response to your campaign. Immediate lift (or direct response) occurs when a customer visits your website or app within a short time window after an ad airs and delayed response accounts for additional visitors after the initial time window up to 30 days later. These together give you a total response.



We pride ourselves on next-day measurement of TV performance so instead of waiting 30 days to report results, we use DragFactor to calculate the total response, which is a multiplier between total response and immediate lift. The premise is that the total response will be proportional to the immediate response.

If your TV campaign starts on or after March 15, 2021, you will initially start with a category DragFactor, which is calculated using data from other comparable companies in your industry. Note if we don't have sufficient data to create a category DragFactor, you will start with a default 2.2, which is conservative.

If your TV campaign starts before March 15th, you'll start with a default 2.2 DragFactor.

Once you accrue enough data, we'll assess whether we can provide you with a more precise, custom DragFactor.

Calculating your custom DragFactor

Your custom DragFactor is calculated deterministically through IP matching to identify the proportion of incremental TV traffic response to your ads.



With IP-level data from smart TVs (on linear) and publishers (on streaming), we can see if and when a user's IP address visits your site using Tatari Tag Manager (pixel) and/or your app integration data. This allows us to see how many IPs respond within the first few minutes (**immediate lift**) and how many total responded within 30 days (**total response**).

For total response, we make sure to subtract out a control group to ensure that we aren't claiming people that would have come to your site anyway. Then, it's a straightforward calculation:

$$\text{DragFactor} = \frac{\text{total response}}{\text{immediate lift}}$$

In order to get enough data for a custom DragFactor, it usually takes 4 months of airings and \$1M of spend on linear, and 6 weeks and \$250K spend on streaming. However, it does vary from client to client depending on the response rate and visitor level.

We encourage you to discuss a custom DragFactor with your Client Services Manager once your TV campaign has enough data to establish statistical significance.

Watch our [short video](#) to learn more.

FAQs: DragFactor

Written by Caitlin Mermelstein | Last published at: September 28, 2022

What is a category DragFactor? How does Tatari validate that?

Category DragFactor is the average of all advertisers within the same industry. As of March 15, 2021, all new Tatari clients start with a category DragFactor until we've accrued enough data to calculate one that is customized to your business.

[Custom DragFactors](#) tend to cluster together in the same range based on what industry they are in. Historical data analysis shows that the industry average is highly correlated with custom drag factors, and thus this is a good proxy in the absence of a custom DragFactor.

Once a custom DragFactor is established, how often will it be updated?

Custom DragFactors are refreshed monthly (subject to having sufficient data). Reach out to your Client Services Manager to review the output and decide when to implement it into your reporting.

I currently have a default DragFactor. Why is 2.2 the default?

For Tatari clients starting prior to March 15, 2021, the default DragFactor was set to 2.2 - a conservative estimate as this was the lowest DragFactor computed across all of our clients. As our portfolio of clients has expanded, new clients as of March 15, 2021 will have a category DragFactor, which is the average of similar brands in your industry.

Why do we use a DragFactor on streaming if we have 100% IP matching?

DragFactors are still employed on streaming so that we can provide you next-day results by translating immediate response to total response.

Does the DragFactor assume delayed response converts at the same rate as immediate response?

In short, DragFactor is solely a metric to measure total response, not conversions. A response is when a user takes action upon viewing an ad, such as a website visit or app install. A conversion is when a user moves from one stage of the funnel to the next, such as when a user browses your site and eventually purchases a product. We define it as total response divided by immediate lift.

Note: We almost always find that delayed responders typically have considerably higher conversion rates than immediate responders.

Is a control group removed from the Drag Factor calculation? If so, how exactly is that created?

Yes, we first compute the view-through response for those exposed to an ad. We then subsequently subtract out a control group (composed of similar users) to eliminate the response for non-exposed users. Subtracting these distributions results in the incremental response. From this, the DragFactor is calculated as the final response vs. the immediate response.

[Learn more about DragFactor.](#)