Google Search and YouTube Ads Measurement CMA Testing Results without Third-Party Cookies

Important Notes:

- These results do not take into account Chrome's proposed updated approach to third-party cookies that elevates user choice. As a result of this updated approach, some observable signals may remain available, and could be a potential source for significant performance improvements.
- In parallel, since March 2024, there have been additional improvements made to the Privacy Sandbox APIs, better utilisation of the APIs by Google Ads, and outreach efforts to optimize adtech/publisher setup. We therefore expect continuous performance improvements as we keep innovating our integration with the ARA (e.g., see API configuration and API Usage) and other privacy-preserving signals.
- Lastly, advertiser adoption and implementation of tagging and other first-party data solutions is constantly evolving and these will also have an impact on observable signals, and could minimize third-party cookie reliance.
- Thus, these results serve as directional estimates at a fixed point in time, with incomplete ad traffic and inventory available for testing, and should not be considered a final reflection of ads performance on Google Search and YouTube as third-party cookie availability evolves.
- We also highly recommend and encourage advertisers that do rely heavily upon third-party cookies to adopt our best practices, as doing so could significantly reduce the bidding and reporting impacts estimated below.

Google's ads teams are committed to providing advertisers with effective and privacy-centric tools and have been conducting rigorous testing of the Privacy Sandbox APIs, in combination with other privacy-preserving signals, to understand how the APIs can support the measurement of ads performance without third-party cookies.

Between January and March 2024, we conducted end-to-end standalone experiments to evaluate the effectiveness of the Attribution Reporting API (ARA) in the Privacy Sandbox APIs, along with other privacy-preserving signals, on ads measurement for a portion of Google Search Ads and YouTube Ads traffic. We tested

the performance on two key use-cases of ads measurement: 1) bidding (performance of smart bidding campaigns) and 2) reporting (campaign level reporting of conversions).

Experimental Setup

For the bidding use-case, we used an "A/B" testing framework. In this framework, we randomised users into a treatment group and a control group. In the control group, we used third-party cookies along with other existing signals. In the treatment group, we replaced third-party cookies with the ARA and used it along with other existing signals. Separately, for each group, we trained bidding models and tested the performance in an online experiment.

For the reporting use-case, we used an "A/A" testing framework in which randomisation was not needed since we still had access to both third-party cookies and ARA on the same conversions. In this framework, we simply compared the results from third-party cookies and those from the ARA to evaluate the performance of ARA on the reporting use-case.

What we learned

The substantive majority of campaigns rely minimally on third-party cookies. For these campaigns we observe little to no change in their bidding or reporting performance.

A smaller subset of Google Search and YouTube Ads campaigns rely heavily on third-party cookies for conversion measurement; their results are relevant for this evaluation and thus included below.

Performance on Smart Bidding Campaigns:
For the smaller subset of Google Search Ads campaigns that do rely more heavily on third-party cookies today, we see that their bidding performance using ARA was about 80% as good as their bidding performance with third-party cookies.

For the smaller subset of Google YouTube Ads campaigns that do rely more heavily on third-party cookies today, we see that their bidding performance using ARA was about 60% as good as their bidding performance with third-party cookies.

Performance on Campaign-level Conversion Reporting:
For the smaller subset of Google Search Ads campaigns that do rely more heavily on third-party cookies today, we see that 60% of such campaigns' reporting performance using ARA was about as good as their reporting performance with third-party cookies.

For the smaller subset of Google YouTube Ads campaigns that do rely more heavily on third-party cookies today, we see that 50% of such campaigns' reporting performance using ARA was about as good as their reporting performance with third-party cookies.

It's important to note that during the experiments, some of the ARA functions were only utilised on Search Ads but not yet on YouTube Ads, which may have contributed to the variance in the performance results. As such, the disparity we observed during the experiments should not be considered a final reflection of the performance between Search and YouTube Ads as we continue to improve our strategies in utilising the ARA.

Below is a breakdown of the reporting impact across Search and YouTube Ads.

The reporting impact metric is defined as:

Reporting Impact Metric	
Campaigns Meeting the Quality Bar	% of campaigns which meet the reporting quality bar. A campaign meets the reporting quality bar when its APE(T) < e. APE(T) is the absolute percentage error, adjusted for campaigns with very small conversion counts. The methodology is described here. $$APE(T) = \frac{\lvert error \rvert}{max\{T, true\ \#\ of\ conversions\}}$$ The metric parameters (T, threshold e, time horizon) would be specified in the report.

Metric Parameters

Parameter	Definition	Value
T	Adjustment threshold for campaigns with very small 30d conversion counts	5 conversions in 30 days
e	Error threshold that defines the quality bar	20%

Note: The below metrics assume third-party cookies are completely unavailable. The actual metrics could change significantly depending on the choices users make in relation to third-party cookies.

Search Ads Reporting Impact Breakdown

We have broken down the impact by third party-cookie reliance.

Advertiser Third-Party Cookie Reliance *	Reporting Performance **
0%-20%	Almost 100% of campaigns
20% - 50%	~ 85% of campaigns
50% - 100%	~ 60% of campaigns

* Advertiser Third-Party Cookie Reliance denotes the % of Ad-conversions that are relying on third-party cookies for conversion measurement
** Reporting Performance - % Campaigns with 20% or lower reporting error

Important Note: These results serve as directional estimates at a fixed point in time, with incomplete ad traffic and inventory available for testing, and should not be considered a final reflection of ads performance on Google Search and YouTube as third-party cookie availability evolves. These results also do not take into account ongoing improvements to the Privacy Sandbox APIs made since March 2024, outreach efforts to optimize adtech and publisher setup, or Chrome's proposed updated approach to third-party cookies that elevates user choice.

YouTube Ads Reporting Impact Breakdown

We have broken down the impact by the same third party cookie-cookie reliance as done for the Search traffic above.

Advertiser Third-Party Cookie Reliance *	Reporting Performance **
0%-20%	Almost 100% of campaigns
20% - 50%	~ 75% of campaigns
50% - 100%	~ 50% of campaigns

* Advertiser Third-Party Cookie Reliance denotes the % of Ad-conversions that are relying on third-party cookies for conversion measurement
** Reporting Performance - % Campaigns with 20% or lower reporting error

Important Note: These results serve as directional estimates at a fixed point in time, with incomplete ad traffic and inventory available for testing, and should not be considered a final reflection of ads performance on Google Search and YouTube as third-party cookie availability evolves. These results also do not take into account ongoing improvements to the Privacy Sandbox APIs made since March 2024, outreach efforts to optimize adtech and publisher setup, or Chrome's proposed updated approach to third-party cookies that elevates user choice.

Looking ahead

We will continue iterating on our API integration and share regular feedback with the CMA on the Privacy Sandbox APIs as they evolve.

With the rapid advancements in AI, first-party data solutions, and privacy preserving innovation, marketers have the tools to be ready for a new era of growth.