

# COUNTING COOKIES: THE RELIANCE, THE RISK, AND THE REMEDY

A study of third-party cookie dependency across 300 leading websites  
in the US, UK, and Australia



# Table of contents

3. [What we set out to find...](#)
4. [Why look into third-party cookie dependency?](#)
5. [Methodology](#)
6. [Defining & Categorizing Cookies](#)
7. [How large is the third-party cookie dependency?](#)
8. [What are third-party cookies used for?](#)
9. [Mitigating the Impact of Third-party Cookies on Advertising](#)
14. [What are third-party cookies used for?](#)
15. [How many third-party cookie domains and cookies were typical per site?](#)
16. [Market Specific Insights - Australia](#)
17. [Market Specific Insights - United Kingdom](#)
18. [Market Specific Insights - United States](#)
19. [Key Takeaways](#)
20. [So what can you do?](#)
21. [About](#)





# What we set out to find...

It's no secret that third-party cookies are crumbling, and until now, there has not been a wide-scale evaluation which provides numerical answers to the following questions:

- How large is the third-party cookie dependency?
- What are third-party cookies used for?
- What is the risk presented by third-party cookies being phased out?
- How many third-party cookie domains & cookies can you expect to find per site on average?

So we set out to find the answers ourselves.



# Why look into third-party cookie dependency?

Third-party cookies have been a hot topic in the digital analytics and marketing industry since the Google Chromium project [announced](#) they would follow Firefox's lead and phase out support of third-party cookies. However, even before Firefox's announcement in 2018, Apple had already [released ITP in 2017](#), which limited cross-screen tracking by degrading third-party cookies after 30 days. Now, after their most recent release, ITP 2.3 degrades some cookies after only 24 hours. The restrictions on third-party cookies just keep tightening and will also likely affect first-party cookies in the future.

In addition to pressure from browser engines to terminate third-party cookies, there is a major push from consumer awareness around privacy and trust. Consumers are more frequently insisting and expecting that brands allow them to dictate how their data is being used. This is especially true following European and US legislative developments in recent years with GDPR (Europe) and CCPA (USA).

Because of the push both from browser engines and consumers alike to limit, and even eliminate, third-party cookie usage, there has been a growing debate around the need for companies to investigate and understand the extent of their cookie dependencies. This starts with third-party and extends towards a first-party focus in anticipation of the post-cookie era.



# Methodology

In order to understand the true extent of the third-party cookie dependency, we looked at the top 100-200 sites in three different countries: the United States, the United Kingdom, and Australia.

Similarweb provided the rankings data for the top 100-200 domains for each region based on site traffic. Then, using their Privacy Compliance solution, ObservePoint crawled each of the domains to extract data regarding the various cookies each site used. After extracting the data, ObservePoint and DMPG collaborated to categorize each of the cookies. And finally, DMPG analyzed the data to glean valuable insights on third-party cookie dependency in the three regions studied and provide recommendations for mitigating those dependencies.



## Notes & disclaimer

- Site rankings data - Adult sites removed; a number of sites also blocked crawling tech, so they were removed, and items higher in the rankings were pulled into the top 100.
- Please note that the AU top 101-188 only included 87 domains due to 13 being removed for either relating to adult content or blocking crawling solutions.
- Due to the manual nature of the categorization, we expect some margin of error though every effort has been made, including multiple iterations of cross checking, to ensure data accuracy.



# Defining & Categorizing Cookies

There are two types of cookies: first and third-party. They are both small text files used by browsers to store information, but the way that they are set and used is different.

**First-party:** First-party cookies are set in the context of the host domain (website being visited) and can be accessed only by the web-server or JavaScript on that domain.

**Third-party:** Third-party cookies are set in the context of a different (third-party) domain and can be accessed by any site loading the third-party web server's code.

As third-party cookies are currently being phased out by big browsers, we focused our research on these cookies. And, in order to understand the areas where organizations are most dependent on third-party cookies, we broke them out into the following categories:

Cookie category	Definition
Necessary	Required for the site to function e.g. login, navigation, payments etc
Functional	Not essential for the site to work but enables preferences and localization of region and language preferences et al. Additional non-essential site functionality e.g. live chat, social sharing (Excludes anything advertising related)
Advertising	Used in advertising and/or or media targeting
Measurement	Used to measure or attribute user behaviour including digital analytics and screen capture
Personalization	Used to tailor the customer experience (Excludes advertising)
Unclassified	Cookie domains that were only observed being set on a single domain
Unknown	Cookie domains where ownership or use could not be readily identified

**Disclaimer:** Due to the manual nature of the categorization, we expect some margin of error, though every effort has been made to ensure data accuracy.



# How large is the third-party cookie dependency?

**Finding #1:** The prevalence of third-party cookies across the markets analyzed was significant. We found that 81.7% of the sites across markets are setting cookies in the third-party context.

**Finding #2:** The prevalence of third-party cookies across the top 100 sites evaluated was also remarkably consistent across markets with a variance of less than 1% in absolute terms. In other words, the results varied very little from one region to the next.

## So what?

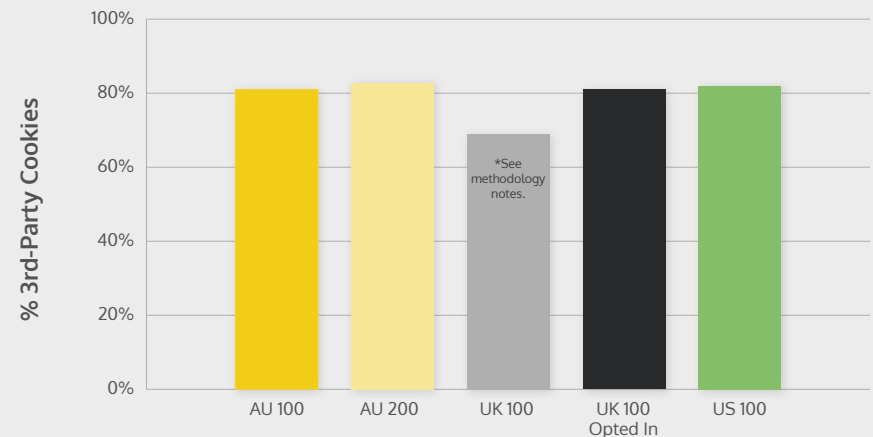
The high prevalence of third-party cookies (81.7%) shows how important it is that organizations understand and manage the risks to their business associated with the loss of third-party cookies.

Organizations who put off addressing, or ignore, the death of cookies run the risk of reduced marketing efficiency & return on marketing investment (ROMI), diminished measurement capability (analytics & attribution), and site functionality issues which could negatively impact customer experience.

**81.7%** Of the sites across markets are setting third-party cookies

	% 3rd-Party Cookies
AU 100	81.0%
AU 200	82.8%
UK 100	69.0%
UK 100 Opted In	81.0%
US 100	82.0%

% Sites Setting 3rd-Party Cookies



# What are third-party cookies used for?

## Finding #1: Advertising

The majority of third-party cookie domains identified support advertising tech. These accounted for 84.9% of the third-party domain counts. Third-party cookies used in ad-tech enable user profiling and support ad targeting and personalization across domains.

### So what?

This may not come as a surprise, but it does confirm that advertising should be one of the greatest concerns for brands across the globe. For a wide majority of brands, advertising is a key source of leads and revenue. In fact, worldwide digital ad spending is predicted to reach over \$375 billion by the end of 2021.

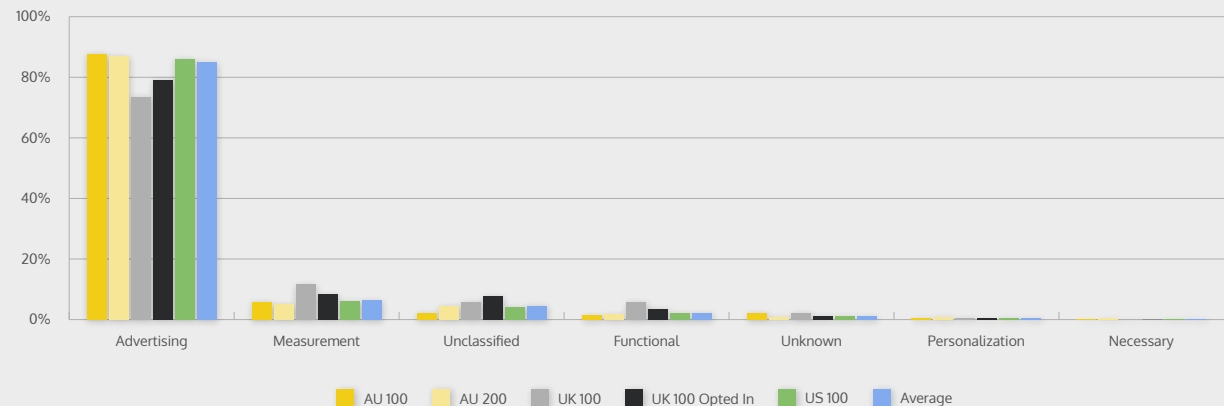
For digital marketers, getting their ads in front of their core audience and achieving maximum ROI on those dollars spent is a big concern. And it's a challenge that has often been answered with targeting and personalization via third-party cookies.

Therefore, as third-party cookies are phased out, **it is crucial to understand the scope of your dependence on advertising and targeting cookies and devise a plan for weaning off these cookies**. Otherwise, your visibility into your audience will become unreliable and your targeting data will become inaccurate.

**84.9%** of all cookies were used for advertising

	Advertising	Measurement	Unclassified	Functional	Unknown	Personalization	Necessary
AU 100	87.7%	5.8%	2.3%	1.5%	2.1%	0.5%	0.12%
AU 200	86.9%	5.1%	4.4%	1.7%	0.7%	0.8%	0.37%
UK 100	73.6%	11.7%	5.9%	5.9%	2.2%	0.6%	0.00%
UK 100 Opted In	79.1%	8.3%	7.6%	3.5%	1.1%	0.4%	0.00%
US 100	86.0%	6.2%	4.0%	2.2%	1.0%	0.6%	0.29%
Average	84.9%	6.3%	4.6%	2.2%	1.2%	0.6%	0.20%

3rd-Party Cookie Domains - Category % by Market





# Mitigating the Impact of Third-party Cookies on Advertising

First, it is important to acknowledge that there is no simple panacea. Mitigating the risks to advertising and/or developing alternatives to cookies is an issue the ad industry has been scrambling to address for some time now, and a good deal of uncertainty remains. Even Google has just announced an [extension to the deadline from 2022 to late 2023](#).

However, there are a few things you can do now to start mitigating risk and switching to third-party cookie alternatives including:

1. [Renew emphasis on first-party data](#)
2. [Prepare to shift to contextual targeting](#)
3. [Nurture second-party data partnerships](#)
4. [Leverage “walled garden” capabilities](#)



# Mitigating the Impact of Third-party Cookies on Advertising

## Alternative #1: Renew emphasis on first-party data

### Definition:

First-party data is data that you collect directly from users and customers. Common ways of obtaining first-party data include transaction data, inquiry forms, preference settings, direct feedback, survey responses, derived data from engagement with utility content, etc.

### How can this help you?

One of the most important strategic moves to make is ongoing investment in first-party data assets, as well as tech and capabilities that will both support competitive differentiation and minimize the dependency on third-party ad spend as far as possible.

First-party data confers competitive advantages and differentiation. Additional benefits include full ownership and control of user-consent management, which fosters sustainable, trusting relationships.



# Mitigating the Impact of Third-party Cookies on Advertising

## Alternative #2: Prepare to shift to contextual targeting

### Definition:

Contextual targeting can be defined as targeting advertising based on either the specific site, type of site, or specific content within sites (keywords/topics etc) to maximize relevance. In other words, placing ads around content the target audience is likely to view (e.g. putting a furniture ad in an interior design magazine or an ad for suitcases next to an article about travelling).

### How can this help you?

Contextual ad targeting is an approach that was largely supplanted by cookie-based ad targeting and does not require cookies to be effective. So, the key goal in ad targeting—i.e. driving relevance—can be achieved to varying degrees without the need for third-party cookies.

**Note:** Before switching tech or tactics, work closely with your developers, media agency partners, and ad-tech support teams to migrate existing solutions to first-party implementations where possible. If you identify advertising tactics or technologies which will simply not be possible without third-party cookies, then prepare to reallocate budgets and switch tactics ahead of time.

To learn more about contextual targeting read [here](#).



# Mitigating the Impact of Third-party Cookies on Advertising

## Alternative #3: Nurture second-party data partnerships

### Definition:

The concept of second-party data partnerships is quite simple: partner with a company who has an audience that you would like to reach and negotiate a deal to share data in a consented and privacy compliant manner.

### How can this help you?

Creating these alliances affords flexibility through partner selection and direct term negotiation, while ensuring adherence to usage consent. This can enable profile enrichment, enhanced targeting, and expansion of advertising reach while staying compliant with privacy regulations.

One reemergent concept to watch for is “data clean rooms,” which are secure environments allowing two or more parties to safely bring data together for the purposes of insights, attribution, or activation. Beyond the offerings by big ad platforms (see walled gardens) and large agencies (e.g. Merkle, Epsilon), private data clean rooms enable second-party initiatives and support governance and privacy compliance with fewer constraints.

To learn more about second-party data sharing, click [here](#).



# Mitigating the Impact of Third-party Cookies on Advertising

## Alternative #4: Leverage “walled gardens” capabilities

### Definition:

Walled gardens are closed ecosystems controlled by large companies and publishers such as Google, Facebook, and Amazon where they share aggregated, anonymized data with advertisers. Walled gardens also have strict privacy controls which prevent advertisers from viewing or pulling any user-level data.

### How can this help you?

Walled gardens provide access to a majority of the addressable market; hence they account for a huge portion of global ad spend. This concentration means that you can focus & consolidate your advertising efforts. In addition, walled gardens offer a range of tools that enable targeting and measurement without relying on third-party cookies.

One recent example of a walled garden initiative is Google’s Federated Learning of Cohorts (FLoC) within Privacy Sandbox. According to Google, FLoC “proposes a new way for businesses to reach people with relevant content and ads by clustering large groups of people with similar interests. This approach effectively hides individuals “in the crowd” and uses on-device processing to keep a person’s web history private on the browser.”

So instead of receiving consumer-level data, FLoC would provide you with aggregated, anonymized data about a group of people who have similar browsing habits that relate to an audience you would like to target.

Google claims that, “advertisers can expect to see at least 95% of the conversions per dollar spent when compared to cookie-based advertising.” The solution is new, so that number remains to be proven, however, FLoC—and other walled garden initiatives—are still viable alternatives to using third-party cookies for targeting and advertising.





# What are third-party cookies used for?

## Finding #2: Measurement & Website CX

While the dependency on third-party cookies is much lower for the other non-advertising categories, we did find sites among the top 100 that still have dependencies on other technologies for things like measurement, site personalization, and other functionality such as surveys, live chat, and sharing. There were even a few sites which had necessary functionality with third-party cookie dependencies relating to login and payments.

### So what?

Although these cookies only account for about 9.32% of all cookies (if we exclude all unknown and unclassified cookies), any dependency on a third-party cookie for necessary measurement and functionality is a concern.

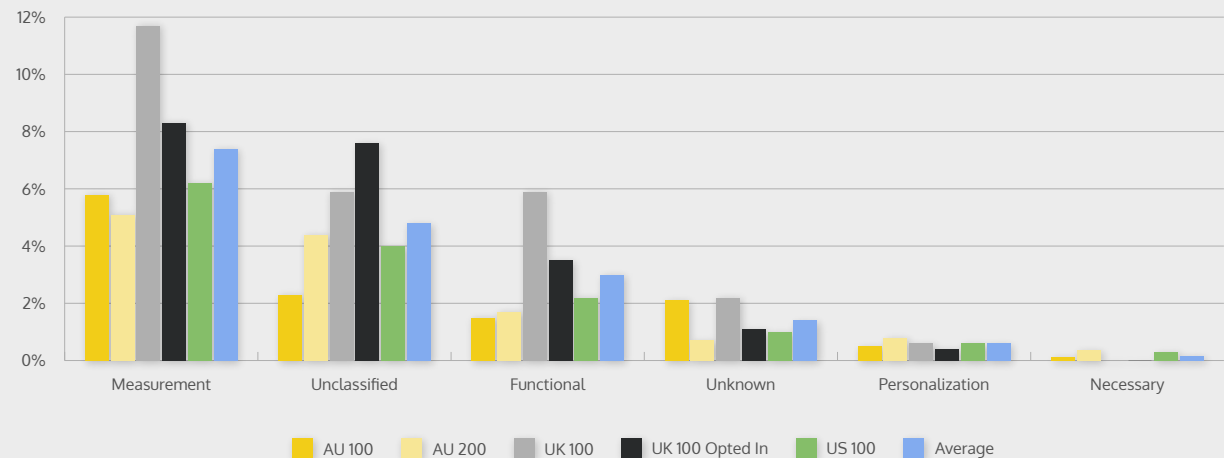
Though the bulk of the conversation surrounding third-party cookies currently focuses on those used for advertising, targeting, and personalization, Google support of all third-party cookies will [cease in 2023](#).

So for companies who have even a small dependency on third-party cookies for necessary web function, **looking into first-party options and/or solutions that do not require cookies should be a high priority in the coming months.**

**9.32%** of all cookies were used for functions such as measurement, personalization, live chat, surveys etc.

	Measurement	Unclassified	Functional	Unknown	Personalization	Necessary
AU 100	5.8%	2.3%	1.5%	2.1%	0.5%	0.12%
AU 200	5.1%	4.4%	1.7%	0.7%	0.8%	0.37%
UK 100	11.7%	5.9%	5.9%	2.2%	0.6%	0.00%
UK 100 Opted In	8.3%	7.6%	3.5%	1.1%	0.4%	0.00%
US 100	6.2%	4.0%	2.2%	1.0%	0.6%	0.29%
Average	7.4%	4.8%	3.0%	1.4%	0.6%	0.16%

3rd-Party Cookie Domains - Category % by Market





# How many third-party cookie domains and cookies were typical per site?

Looking at the number of third-party cookie domains and the number of cookie names reveals that **on average you will find 20 unique domains and 37 uniquely named cookies per site scanned**. Although, there is a very wide distribution as indicated by the difference between the Median and Mean (i.e. skew caused by higher values—see table below).

Average Domains/Site:

**20**

Average Cookie Names/Site:

**37**

## So what?

**Maximum values were observed in the US** with one site setting third-party cookies for 110 unique domains and 247 uniquely named cookies. Clearly, some businesses will have more work to do than others when reviewing their cookie dependencies.

This suggests that for the majority of organizations, phasing out their use of third-party cookies should be a high-priority project. With such a high number of cookies, the task at hand will not be an inherently simple or quick process. Establishing a roadmap and getting a head start on reducing reliance on third-party cookies is key.

## Key Takeaways:

1. Establish a roadmap now to phase out third-party cookie dependency.
2. Start implementing the roadmap as soon as possible.

### 3rd-Party Cookie Domains

	AU 100	AU 200	UK 100	UK 100 Opted In	US 100
Median	12	12	3	5	12
Mean	21	19	7	15	24
Maximum	84	70	49	87	110
Unique cookie domains	230	226	147	220	283
Website count	1,681	1,349	489	1,216	1,979

### 3rd-Party Cookie Names

	AU 100	AU 200	UK 100	UK 100 Opted In	US 100
Median	20	17	5	8	19
Mean	39	35	12	28	48
Maximum	165	148	96	178	247
Unique cookie names	488	435	308	499	732
Website count	3,170	2,484	796	2,257	1,391

# Market Specific Insights - Australia

**87.7%**

Highest percentage of sites with advertising dependent third-party cookies

## Top 100 vs Top 200 Sites

Showed no significant difference when looking at third-party cookie prevalence or category distribution

## Small number of sites

With third-party cookie dependencies which related to functional & necessary categories (live chat, social sharing, log-in and payment)



**Disclaimer:** Further investigation is needed in the long tail to classify the higher proportion of single 3rd party cookie domains which were grouped as 'unclassified'.

# Market Specific Insights - United Kingdom

79%

Lowest percentage of sites with advertising-dependent third-party cookies

8.3%

Highest dependency on third-party cookies linked to measurement

## Small number of sites

With third-party cookie dependencies which related to functional & necessary categories (consent management\*, social sharing, log in & live chat)



**Note:** Our initial crawl of the UK domains revealed a significantly higher prevalence of consent management solutions. This became quite apparent when comparing the data with a second pass in which we scripted cookie opt-in acceptance. See 'UK 100 opted-in' series which shows a significant reduction in the skew for non-advertising cookie categories.

# Market Specific Insights - United States

**86%**

Second highest advertising category dependency

**6.2%**

Second highest dependency on third-party cookies which were linked to measurement

## Small number of sites

With third-party cookie dependencies which related to functional & necessary categories (surveys, social sharing, log-in and payments)





# Key Takeaways

## 450 Third-party cookie domains

Over 450 third-party cookie domains were identified across the sites analyzed in the AU, UK, and US markets.

## 81.7% of all sites are setting third-party cookies

A huge dependency currently exists today with 81.7% of sites setting third-party cookies.

## 84.9% of all cookie domains were in relation to advertising

The most prominent dependency identified related to advertising technology which comprised of 84.9% of all cookie domains found.

## 9.32% of all cookie domains related to web CX & measurement

A number of other tech dependencies were identified which more directly link to website CX & measurement.



# So what can you do?

## Step 1:

### Understand your exposure:

Quantify the number of domains setting third-party cookies on your site to understand your third-party cookie exposure.

## Step 2:

### Dig into the details:

Catalogue the cookies on your site to identify and understand the technologies and associated capabilities in your digital ecosystem that have dependencies on third-party cookies.

## Step 3:

### Develop a roadmap to mitigate the risk:

As you develop your cookie mitigation roadmap, you will need to work closely with tech leads and developers in your organization and on the vendor side to eliminate the dependency as much as possible.

Identify what alternatives to ad cookies you will use to ensure effective advertising strategies. Some alternatives include:

- Renewing emphasis on first-party data —In order to rely primarily on first-party data assets, you will likely need additional time and resources to develop content and utility applications which confer enough value to encourage users to move into an authenticated state.

- Preparing to shift to contextual targeting — Investing in contextual targeting is another way to prepare for a future state without heavy cookie reliance.
- Nurturing second-party data partnerships—Develop second-party data assets and compete in “trust practices” such as data sharing through private data clean rooms.
- Leveraging “walled garden” capabilities—These capabilities include access to a majority of the addressable market as well as a range of tools that enable targeting and measurement without relying on third-party cookies.

There are some advertising technologies which will simply be rendered ineffective. Scenarios which require third-party cookies for profiling and targeting across domains and have no viable alternative may be eliminated entirely. Prepare to reallocate budgets from these technologies.

## Step 4:

### Get to work!





# About

## { "D M P G" }

DMPG is a highly experienced team of ~25 digital experience enablement specialists certified in the Google & Adobe MarTech stacks. We have teams in London & Australia; providing data layer, analytics, tag management, conversion rate optimisation, personalisation, and marketing automation services. We punch well above our weight in end-to-end delivery, enabling our clients to fully leverage their tech, data, and people using well established strategies & processes that we have refined over the last 8 years.

Click [here](#) to learn about DMPG's cookie audit consulting services.

## *ObservePoint*

ObservePoint brings insights, automation, and compliance to the chaos of customer experience data with their Data Governance solutions: Technology Governance, Privacy Compliance, and Campaign Performance. These solutions empower insights-driven companies to trust their data with automated analytics testing, protect customers with compliance monitoring, and improve experiences with validated, data-driven insights.

Click [here](#) to learn how ObservePoint's privacy compliance features can help you.

## similarweb

Similarweb is the official measure of the Digital World. Our online traffic data enables us to deliver an unbiased, objective view of real-world web and app performance. From executing day-to-day tactics, to building long-term digital strategies, all your decisions can now be driven by the most important data there is—reality. Similarweb helps organizations of all sizes win their market with the power of Digital Intelligence.

To learn more about Similarweb, click [here](#).