BETTER FUTURE SERIES

DEMYSTIFYING IDENTITY IN DIGITAL ADVERTISING

White Paper

v1.0 Updated May 2021

THE OZONE PROJECT

THE END OF THE THIRD-PARTY COOKIE IN CHROME SIGNALS THE CLOSING OF A SIGNIFICANT CHAPTER IN DIGITAL ADVERTISING. WE ARE NOW ALL BUSILY DEBATING AND WRITING THE NEXT CHAPTER.

IDENTIFIERS PLAY A FUNDAMENTAL ROLE IN DIGITAL ADVERTISING, TOUCHING ALMOST ALL ASPECTS OF THE ECOSYSTEM.

THERE ARE TWO WAYS OF THINKING ABOUT THE CHANGES THAT LIE AHEAD:

- **TACTICAL – DETERMINING WHAT IS AFFECTED AND WHAT THE ALTERNATIVES ARE**
- **STRATEGIC – A DEEPER UNDERSTANDING OF WHY THINGS ARE CHANGING TO INFORM THE RIGHT ALTERNATIVES**

OZONE SEES THE CHANGES AHEAD AS AN OPPORTUNITY TO REFRAME DIGITAL ADVERTISING – TO PROVIDE A BETTER EXPERIENCE FOR THE USER AND TO ALIGN MEASUREMENT METRICS FURTHER WITH THE ACTUAL EFFECTIVENESS OF THE AD.

DEMYSTIFYING IDENTITY IN DIGITAL ADVERTISING

This paper provides a perspective on both the short term (tactical) and the long-term (strategic) solutions available to marketers, and the initiatives Ozone is investing in to build a better future for digital advertising.

We are addressing this paper broadly to a marketing audience. When discussing technological changes it is very easy to descend into technical language, jargon and acronyms – there is an abundance of that already available (including from Ozone!). As much as possible our aim here is to focus on the business impact, challenges and opportunities for change.

KEY TAKEAWAYS

- **Reimagine measurement,** don't re-architect the past. Share of attention should be a primary measure of advertising effectiveness
- **A good user experience is good business.** Happy users drive better results for publishers and advertisers. Poor targeting strategies build ad blindness and a worse user experience overall
- **Respect the people behind the data.** Innovating with solutions that protect a reader's data relationship with the publisher is critical to re-establishing trust with consumers. Personal data should not be broadcast in programmatic advertising
- **Targeting of groups rather than individuals** reflects the growing privacy preferences of consumers. Use of universal IDs for ad targeting does not
- **Long-term goals build sustainable solutions for the future.** Short-term fixes will not provide the structural changes needed for a better future for digital advertising

CONTENTS

1 IDENTITY IS IMPORTANT TO DIGITAL ADVERTISING

To provide context for the rest of the paper, this section describes the primary user identifiers that exist in digital advertising and how they are used, before summarising what changes are due to be implemented and what this is likely to impact in the near future.

What are IDs?

An ID is a key used to store data about a person, device, or household. An ID can be a driver's license number or a passport number, or a random series of numbers and letters that uniquely identify a person.

In digital advertising, an ID is used to store data about a person's demographics, behaviour, or geography to then use at a later time, primarily in ad targeting or measurement.

There are a few different types of ID:

- **Personal IDs:** used to identify a person (like an email address or a phone number
- **Anonymous IDs:** device IDs used to distinguish between the different devices a person uses but on its own is unable to determine the identity of the person using the device

Table 1: SUMMARY OF DIFFERENT IDS USED IN DIGITAL ADVERTISING

IDENTIFIER	TYPE	GRANULARITY	PERSISTENCE	SCOPE	ADDRESSABILITY	LONGEVITY
Third-party Cookie	Anonymous	Device (browser specific)	Low	Cross origin	Medium > Low (going away?)	<1 year
First-party Cookie	Anonymous	Device (browser specific)	High	Single origin	High	3-5 years
IP Address	Partially anonymous	Household	High	Cross origin	Medium	3-5 years
Email	Personal	User	High	Cross origin	Low	5+ years
Mobile number	Personal	User	High	Cross origin	Low	5+ years
IDFA / AAID	Anonymous	Device	High	Cross origin	Medium > Low (going away?)	<1 year
Universal ID (UID, ID5 etc)	Partially anonymous	Device	High	Cross origin	Medium	3-5 years
Context	Anonymous	Device	Low	Cross origin	High	5+ years

Why are IDs important?

IDs are used in a variety of ways in digital advertising:

- Managing ad frequency
- Targeting of ads
- Campaign measurement and attribution
- Inter-platform communication – connecting to other systems and data

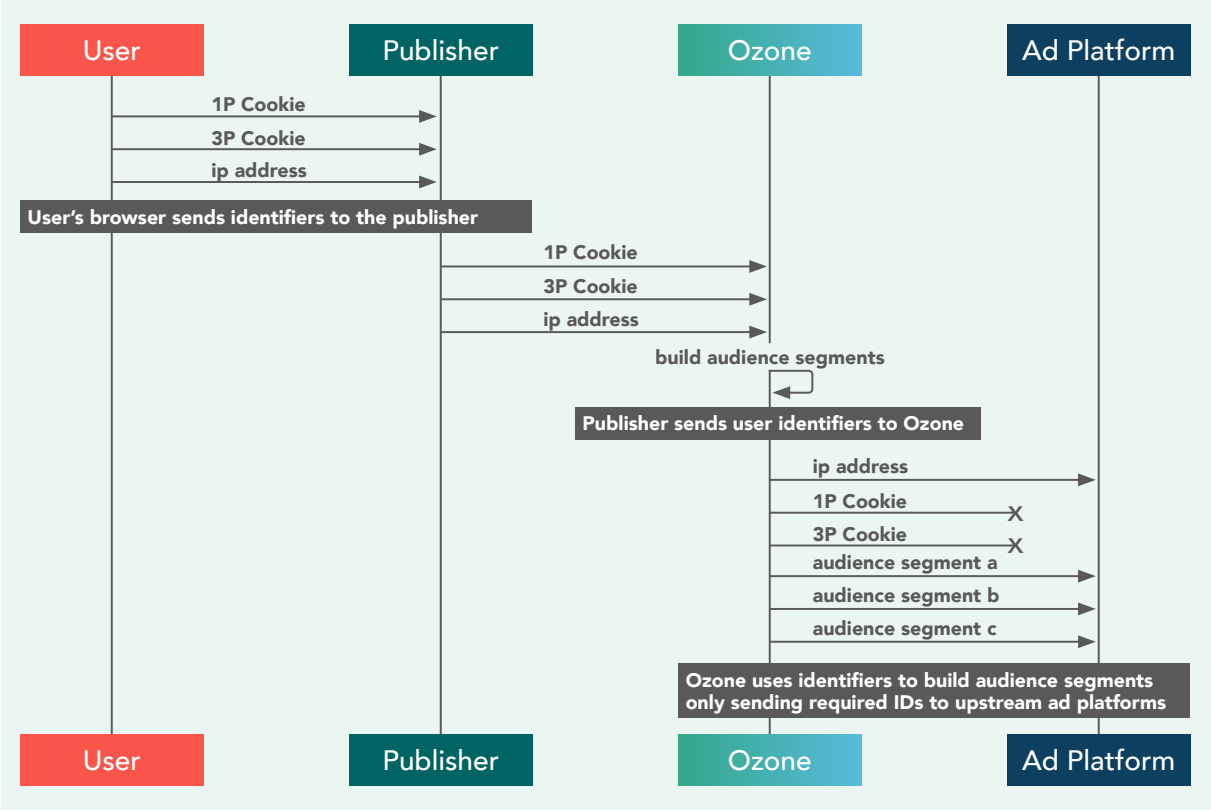
The third-party cookie is used for all of these purposes today, and each of these need to be addressed when evaluating new identity options when third-party cookies go away.

DOES OZONE HAVE AN ID?

At Ozone, when we talk about Ozone ID, we are referring to the many different data signals we use to build a rich understanding of our audience, including first party data, third-party data, IP addresses, and other identifiers. These signals are used internally and are not exposed outside of the Ozone ad platform.

Our interpretation of the GDPR, browser limitations, the reasons behind the changes to IDFA and the many consumer studies undertaken in recent years, is that users do not want an ID (whether personal or anonymous) passed from the publisher out into the ad tech ecosystem, where it is likely to be misused. Ozone respects that viewpoint.

Through Ozone, publishers keep control of identity data on behalf of their users. We believe this is in the best interests of a user's privacy and the commercial interests of publishers.



IDs and how they are used in digital advertising are described in more details in **Appendix i** and **Appendix ii.**

2 CHANGES ARE HAPPENING TO IDENTITY

Using an ID to track a user has been an incredibly powerful tool used by the ad tech industry since digital advertising began in the 1990s.

For all the amazing innovation and progress digital advertising offers marketers and publishers – scale in reaching detailed audiences, the ability to reach consumers in their hands in different mindsets and contexts, the creation of entirely new business models – the gains come with many persistent issues that have not gone away despite many years of trying.

Innovation occurred at an astonishing pace, while the impact on user privacy was largely ignored. The problems with the digital advertising ecosystem in its current state has affected its primary stakeholders in the following ways:

CONSUMERS

Research from the Advertising Association's 'Trust Working Group', public favourability towards advertising dropped from 48% in 1992, to just 25% less than twenty years later, largely due to excessive frequency and message bombardment, intrusive retargeting, and data privacy issues.

BRANDS AND MARKETERS

ISBA and PwC's landmark study in 2020 highlighted major transparency and accountability issues across the sector; advertiser campaigns appearing on an average of 40,000+ websites, only 51% of adspend reaching publishers, 15% spend unaccounted for, and the fact that only 12% of impressions could be matched.

PUBLISHERS

On the promise of increased monetisation to undervalued inventory and audiences, publishers passed their audience data to ad partners in raw form, to quickly find themselves disintermediated and commoditised, losing control of the advertiser relationship, value creation from their audiences being captured by others and publishers left to monetise ad inventory at increasingly low prices.

AD PARTNERS

Seeking greater and greater returns for shareholders, many ad partners created opaque business models and data silos with misaligned incentives based on scale and adtech metrics, compromising long held publisher and marketer relationships and becoming an invisible middle layer in the digital supply chain.

The challenges experienced by stakeholders are discussed in more detail in **Appendix iii**.

Consumer satisfaction with digital advertising has decreased to its lowest levels as disregard for user privacy continued, and there has been a steady groundswell of resistance to innovation as highlighted in the following five areas:

i. Ad blockers

Since 2010, there has been a steady increase to the number of people installing ad blockers on their computers and mobile devices. According to Statista, 36% of internet users in the UK claimed to use an ad blocker in 2020; a figure mirrored in a country-by-country study by HootSuite that also identified volume, irrelevance and intrusiveness of advertising as the primary reasons for their usage.

This highlights that the user experience with digital advertising is particularly bad, and as they felt no company was focused on improving their online experience, many users decided to take matters into their own hands and block ads altogether.

ii. Browser limitations

Apple and Firefox responded to the grass-roots ad blocker movement and built limitations around cookies and tracking tags directly into their web browsers. Safari and Firefox were the first web browsers to limit the way that cookies can be used as identifiers. Safari first introduced ITP (Intelligent Tracking Prevention) in 2017 and Firefox rolled out ETP (Enhanced Tracking Protection) in 2019. Google is some years behind the other two browsers in introducing privacy measures, but they are taking steps to catch up.

The changes first announced by Google in March 2020, will bring their Chrome web browser into closer alignment with the initiatives by Safari and Firefox to limit tracking of web browsing activity by third parties.

It is still not clear when Google will introduce these changes to Chrome. In their statement in 2020 Google indicated 'within the next two years', which implies some time early in 2022.

iii. Mobile device limitations

Apple built on the browser limitations they enabled in Safari and announced they will ask consumers to explicitly opt-in to share IDFAs in iPhones, due to be rolled out to customers using iOS 14 in Q2 2021.

> ***" Privacy is a fundamental human right and at the core of everything we do. That's why with iOS 14, we're giving you more control over the data you share and more transparency into how it's used."***
>
> Tim Cook, Apple CEO, February 2021

It's unknown what long-term impact this change will have on tracking capabilities on Apple devices. Early feedback after this latest change was rolled out in iOS 14 is that only 4% of users have shared their IDFA with publishers.

iv. Government regulation

The GDPR was introduced in Europe in 2018 to regulate the privacy abuse that was happening in digital advertising. The GDPR is a regulatory model that is being studied around the world, and notably almost every state in the United States has some form of regulation that is similar to GDPR, being led by CCPA in California.

In their June 2018 study into programmatic advertising, the ICO expressed their concern about the amount of personal data transmitted in open programmatic advertising and the poor governance and controls. 18 months of industry consultation resulted in some improvements but not the change they were aiming for. An update by Simon McDougall in January 2020 indicated it was a question of when (not if) the ICO would take action against bad practices in the industry.

v. Inter-platform communication limitations

It's difficult to ignore the structural shortcomings with the interoperability of adtech platforms exposed in the PwC/ISBA report of June 2020 into programmatic supply chains. For an industry dominated by some of the largest companies in the world, PwC assessed the data maturity of programmatic advertising between weak and average, with only 12% of the total study actually resulting in measurable data.

Third-party cookies are the backbone of this interoperability, and despite their utility, invisible ID sync processes and broadcasting of personal data has degraded the user experience and created concerns about tracking and users privacy.

While IDs have been regularly used as a means for digital ad platforms to trade information, it appears that this will now be ending. Google provided an update on March 3, 2021 to clarify its position with regards to supporting 'universal' ID solutions.

> ***" ...once third-party cookies are phased out, we will not build alternate identifiers to track individuals as they browse across the web, nor will we use them in our products".***

> ***" We don't believe these solutions will meet rising consumer expectations for privacy, nor will they stand up to rapidly evolving regulatory restrictions, and therefore aren't a sustainable long term investment. Instead, our web products will be powered by privacy-preserving APIs which prevent individual tracking while still delivering results for advertisers and publishers."***

3 OZONE'S IDENTITY DESIGN PRINCIPLES

Changes, albeit being imposed on the digital advertising industry, should be seen as an opportunity for broader change to address the persistent issues, and lay a framework for a more sustainable digital advertising ecosystem.

i. Reimagine measurement: don't re-architect the past

The purpose of advertising is for an advertiser to capture the attention of potential consumers with the aim of encouraging them to buy their product. Consumer attention is difficult to measure so proxies are used. In digital advertising this meant ad impressions, clicks, last-click or last touch attribution modelling, all built from third party cookies.

The third party cookie was so versatile so we used it. But was it the best proxy for measuring advertising effectiveness? Taking it away creates more space to define new ones.

Performance advertising generates turnover, brand advertising generates profit. As the digital display advertising experience matures for consumers and marketers there is an opportunity to move away from pure performance marketing activity toward brand building, with new measures of success underpinning it.

What this means in practice:

- Imagine what attribution looks like in a new world, define new measures of success away from performance-only metrics, and better understand the role digital plays in the broader marketing mix
- Incorporate more brand studies, panels, attention and viewability measurement metrics into measuring
- Multi-touch (or last touch) attribution exists, not because it is a good methodology, but because the data was there, and there were no better options readily available. With less data, these attribution models will be siloed and limited to walled gardens platforms
- Focus on the long-term. Brand building takes time. Its value cannot be realised immediately, requiring a different framework for measuring performance and aligning the incentives of partners.

ii. Respect the people behind the data

Data ethics is on the rise. A company's investment in ESG (Environmental, Social & Governance) initiatives is important in growing business value. As consumers become more aware of their web data and how it's used, they will hold companies to account for poor practice and governance.

For most digital advertising activity, this responsibility primarily falls to publishers. By publishing engaging content, publishers curate the audiences that marketers seek. As data controllers, publishers should always be able to control the data entrusted to them by their readers. This is the primary challenge to overcome in today's digital advertising ecosystem.

What this means in practice:

- Respect the responsibility entrusted to publishers by their readers. Innovating with solutions that protect a reader's data relationship with the publisher is critical. Encouraging publishers to share raw identifiers in public ID frameworks risks compromising the relationship the publisher has with their reader.

- Personal data should not be broadcast in programmatic advertising bid requests. This means open market programmatic trading needs to change
- Don't be creepy. Following users around the internet with hyper-targeted ads does not make for a good brand experience nor does it respect user privacy

iii. A good user experience is good business

If 'privacy by design' had been a core principle of digital advertising 1.0 it's unlikely we would have the ecosystem we do today. Browsers are clogged up with a myriad of ad calls to unknown servers, GDPR consent banners appear on every new website, annoying ads follow users around long after they have purchased a product. Overall, the open web is a poor experience for most users.

All parties benefit if we focus on the user's experience. A better user experience means more attentive users, leading to better advertising engagement, and a more valuable exchange between consumers, advertisers and publishers. If it's good for the user, it's good for business.

What this means in practice:

- Share of attention should be a core measure of advertising effectiveness
- Ad clutter is a poor user experience. It might drive short term campaign metrics and last touch attribution models but won't drive long term brand awareness
- Poor targeting strategies build ad blindness and a worse user experience overall
- The concept of targeting groups or segments of users is most aligned with consumer privacy initiatives

4 SOLUTIONS FOR A BETTER FUTURE

Clear design principles are important in setting the agenda for the path ahead. How these principles are reflected in solutions and over what period of time is also important. A balance needs to be struck between short-term necessities and long-term gains.

This final section summarises some of the solutions currently available or being proposed to address the functional gaps left by third-party cookies. This is by no means exhaustive and, as many companies are actively exploring and developing solutions, is likely to change frequently.

Included in each sub-section are initiatives Ozone is investing in. Our initiatives are primarily focused on the long-term, reflecting our design principles, but not entirely. We are also pragmatic and know that a) we don't have all the answers, and b) there are short-term revenue and customer needs to be met that may not meet our long-term design principles.

4.1 Measurement and Attribution

How marketers measure the effectiveness of digital advertising in the future is undoubtedly the change that will have the most impact on the industry. An over-use of user-level data has prioritised performance metrics over brand, and encouraged attribution models that are easy to game and ultimately do not drive value for brands as they were intended.

Ozone expects there to be innovation in measuring campaign performance using groups, context and device data, but not user-level data. Examples include advertisers combining signals such as geography, time, campaign creative and targeting and device to understand the relative performance of different marketing strategies and partners, none of which require user-level data.

It's likely that in the short-term there will be a greater investment by marketers in walled gardens, principally Facebook and Google. These platforms utilise the largest pools of first-party data, and can offer advertisers a full-service proposition, from advertising to reach consumers through to supporting transactions. This means advertisers can reach scaled audiences and track them through to conversion with a single platform, albeit in a walled garden ecosystem.

There is already significant growth in digital display brand measurement and we expect this to continue. As marketers increasingly use digital for brand-building there is a need to better understand the impact of display advertising on brand metrics, and the impact this activity has on overall sales performance. This deeper understanding is achieved through the use of user panels and attention-based metrics – not as a result of user-level data.

Measurement changes in digital advertising are coinciding with other initiatives by marketers to standardise media measurement across channels. A greater absence of user-level data in digital channels will encourage the industry to align behind cross-media measurement initiatives such as Project Origin, being led by ISBA in the UK and ultimately the WFA.

OZONE INITIATIVES FOR MEASUREMENT AND ATTRIBUTION

INITIATIVE	DESCRIPTION	STATUS
Brand studies	Measuring brand lift and performance across Ozone platform	Live
Attention measurement	Measuring user attention and engagement using Lumen panel and attention methodology to verify and score Ozone environments	In progress
vCPM trials	Studies to better understand the underlying economics of completed video impressions	In progress

4.2 Frequency

Managing ad frequency will be a challenge without third-party cookies. But this is already the case with Safari and Firefox users, so ad partners have been grappling with the problem for some time now. It is likely there will be no single solution, rather each technology in the programmatic supply chain – whether it be a publisher adserver, SSP, DSP or advertiser adserver – will introduce 'probabilistic methods' to manage ad frequency for campaigns.

We should expect some issues with campaign delivery; for example an overuse through the supply chain in frequency capping, or bombardment of ads in some cases if frequency capping is under-used. Issues may also drive an increase in marketing spend away from the open display ecosystem to walled gardens who have better targeting controls to manage ad frequency within their own ecosystems.

In general, controls introduced by ad partners, while not perfect, will be at least as accurate as the current situation, given the known limitations with third-party cookies.

Another consideration may (and should) emerge as subscribers and registered user behaviour is better understood by premium publishers. High frequency readers of publishers are in general very engaged and perform well in advertiser brand studies, and as a result should be highly coveted by advertisers. But generic frequency capping configurations applied to campaigns by advertisers often limit exposure of ads to these valuable users.

OZONE INITIATIVES FOR MANAGING FREQUENCY

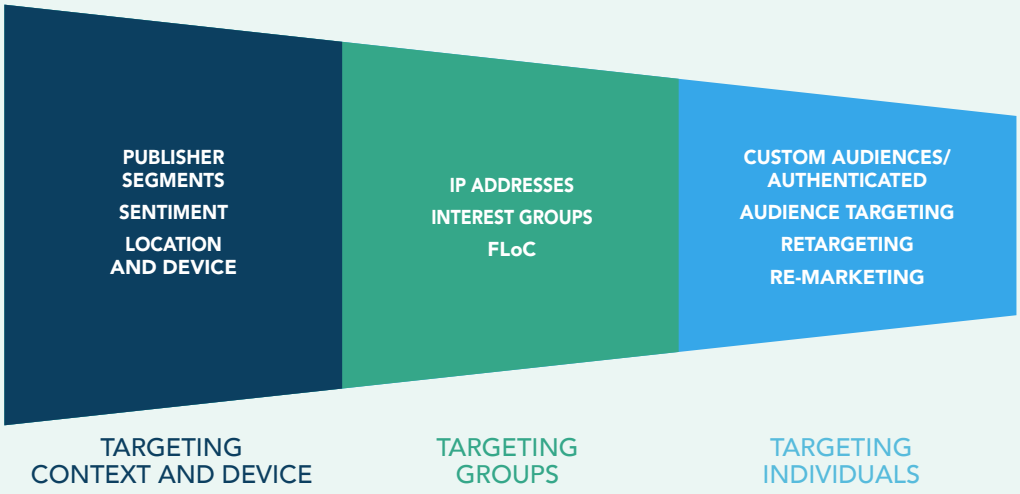
INITIATIVE	DESCRIPTION	STATUS
Ozone Audience campaign frequency management	Cookieless frequency management across Ozone Audience Managed Service and internal DSP, benchmarked against client frequency data	Successful test, now scaled
External DSP frequency test	Explore passing of non-personal signals in bid requests to ad partners to manage frequency	Discovery with Xandr Initial tests completed with Beeswax

4.3 Targeting

Alternative methods of targeting is the most often discussed topic when talking about a cookie-free future.

Identifiers and targeting capabilities in digital advertising are intrinsically linked, in some cases they are both the means and the end. To some marketers who are used to only audience targeting, they are thought of as the same thing. The distinction is where in the run-time process audience targeting is applied – see 'The principle of targeting individuals and groups' on page 15.

This graphic shows a broad overview of the targeting landscape and the role that IDs play:



i. TARGETING INDIVIDUALS

Targeting of individuals (users) is the primary targeting method used in programmatic advertising today, so unsurprisingly there are many different solutions being proposed and in development to emulate as much as possible how things are done today. All new solutions being proposed broadly fit into two different approaches:

CLEAN ROOM PLATFORMS:

Often given various names and descriptions – bunkers, clean rooms, safe data rooms – clean room platforms are are used to describe a similar process, where the controllers of data – principally a publisher and brand – copy their data into a neutral place where it can be queried, joined and analysed without either party ever being able to directly access or copy the other controllers data. User data can be safely joined with other data to create audience segments or groups that can then be targeted in delivery platforms.

Ozone is very supportive of the use of bunkers or safe rooms for matching first-party customer data to create targeting segments, that doesn't require sharing a user's data with the other data partner. There are a growing number of data companies offering these services to brands and publishers. Infosum and Permutive are examples of specialist companies that Ozone is working with to provide this service.

UNIVERSAL IDS:

Universal IDs work on a principle of using a single, common identifier to bring data that is entrusted to multiple data controllers together to create better targeting opportunities for a brand. Universal IDs are created by utilising first-party data signals from publishers to create an ID that can be transmitted to upstream ad partners.

There are many independent ID initiatives available to publishers and marketers – ID5, the Trade Desks UID 2.0 and Liveramp to name the more popular ones – are at various levels of maturity and with many different capabilities and offerings. For this reason it is worth understanding how they may be able to work with your business.

However, we don't believe that sharing raw identifiers (first-party cookies, email addresses, phone numbers) with ID vendors to build a universal ID graph and pass these

IDs to other ad partners in the supply chain, in their current form, is in the best interest of preserving a user's privacy.

Both approaches use IDs to facilitate targeting. A principle difference is when and how IDs are used – see 'The principle of targeting individuals and groups' below.

OZONE INITIATIVES FOR TARGETING INDIVIDUALS

INITIATIVE	DESCRIPTION	STATUS
Ozone Custom Audience	Creating custom audience segments by joining brand and publisher data in a data safe room for activation across the Ozone platform	Active trials
Controlled test of Universal IDs	Initial scoping to test UID 2.0 to understand performance and data controls	Not started

THE PRINCIPLE OF TARGETING INDIVIDUALS AND GROUPS

Most digital campaigns target groups of users not individuals. For example:

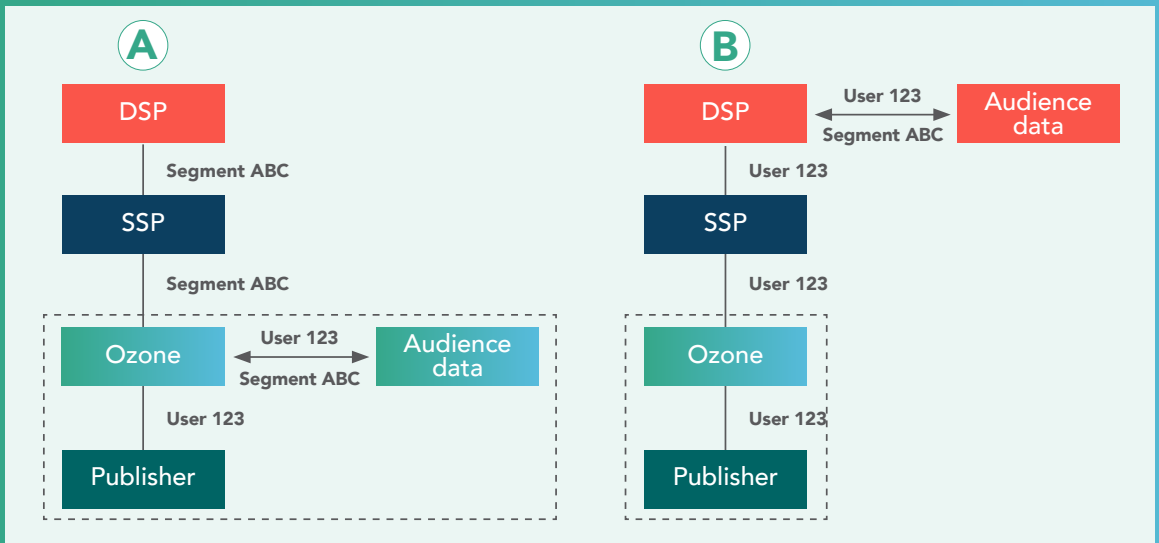
- a marketer wanting to re-market to existing customers, or
- reach new potential customers that meet a certain profile

These are both examples of targeting groups of users. An example of targeting an individual would be re-targeting a user who has just visited a retailers' site to encourage them back to complete a purchase.

When and how audience targeting is applied to a campaign determines whether an ID needs to be passed between ad partners.

A If audience targeting is applied by the publisher (using publisher first-party data) then a segment can be passed to the buyer and an ID is not necessary as a targeting segment or deal.

B However, if targeting is applied further upstream, for example in the DSP, then an ID needs to be passed so the user can be matched by the DSP to any applicable audience segments



Ozone is very committed to developing and improving **A** in a way that meets all of our design principles.

ii. TARGETING GROUPS

The primary benefit of targeting groups of users rather than individuals is the diminished exposure of targeting activity to data privacy regulation and user concerns which meets Ozone's design principles. While this topic has been popularised by Google through their Privacy Sandbox initiative Turtledove, targeting of groups – e.g. publisher PMPs – has been in use for many years.

Ozone is enthusiastic about group targeting as a long-term solution to most campaign strategies, particularly prospecting and branding campaigns, as individual-level targeting is less important than reaching the right audience group.

Most digital display advertising targets groups. Publisher PMPs and and programmatic Deals target groups of users exhibiting similar behaviours. The primary difference with the current discussion surrounding groups focuses on how this can be done effectively without requiring identifiers to be passed to ad partners at the moment of targeting (see 'The principle of targeting individuals and groups' for more information). IDs themselves should not be required for targeting of groups as long as the group or segment data is available to the marketer at the time of bidding.

Ozone is supportive of the principle thinking captured in Google's Privacy Sandbox. Reducing the volume of raw data passed in advertising, in favour of aggregated data, will remove many of the tracking issues consumers complain about, and align Chrome closer to other web browsers.

That said, there are two challenges for marketers to overcome with Google initiatives:

- Firstly, Google's proposals for targeting – Turtledove and FLoC – are still in relatively embryonic form. With a vague deadline of sometime in H1 2022 for implementation, marketers need to engage their ad partners to understand how changes to Chrome will affect them.

- Secondly, any changes proposed by Google for Chrome are specific to that browser. While Google is encouraging their proposals to become standards adopted by all browsers, there are currently no indications that this will happen.

While Ozone supports the principles of data minimisation captured in Turtledove and FLoC, we don't believe decisioning should be held in the web browser. Publishers are the primary party a user has engaged with, and should maintain this controller responsibility entrusted to them by the user.

OZONE INITIATIVES FOR TARGETING GROUPS

INITIATIVE	DESCRIPTION	STATUS
Audience Cohorts via Ozone Marketplace	Cohort-based audience targeting executed via existing Ozone Marketplace connections, without any use of IDs	Tested, Live

iii. TARGETING CONTEXT AND DEVICE

Ad targeting based on contextual and device data (primarily device and location information) does not require any IDs and is a fast growing method of targeting as marketers prepare for a cookie-free existence.

Before programmatic advertising emerged in c.2008, contextual targeting was the primary targeting method available to digital advertisers. While the focus since then has shifted to audience targeting and building large and complex profiles of users, investment in improving skills and campaign performance from context-based targeting methods has increased significantly in recent years. This change is being driven by the decreasing availability of audience targeting options due to GDPR compliance, and secondly by the reduced addressability offered by audience segments as support for third-party cookies diminishes.

A deeper analysis of the contextual environment allows for better understanding the sentiment of content topics as well as the relationship between adjacent content categories. For example, a mortgage lender may want to advertise to potential home owners and therefore the money section of a news publisher would be a logical context to advertise in. But knowledge that homewares content actually drives higher engagement levels is valuable as an adjacent context as the mortgage lender's message becomes complimentary to the editorial.

Advertising in context provides marketers with an opportunity to use the creative message to much greater effect. Our mortgage lender's message presented to a user in homewares content will be much more effective if tailored to specifically work with the editorial.

It's worth noting that Apple mobile devices are primarily contextual-only environments as these mobile devices don't allow advertisers to build a history of a user. So value in mobile is contextual and within the session, not profile-based.

Ozone expects contextual targeting to become a primary method of targeting in a cookie free ecosystem. Ozone is delivering significant performance for advertisers today using contextual methods, alongside their audience targeting.

OZONE INITIATIVES FOR TARGETING CONTEXT AND DEVICE

INITIATIVE	DESCRIPTION	STATUS
Ozone Audience Managed Service testing	Delivery of targeted ads to users without any form of ID	Successful test, now scaled

4.4 Inter-platform communication

Digital advertising platforms such as supply-side platforms (SSPs) and demand-side platforms (DSPs) are heavily reliant on universal IDs – predominantly third-party cookies – to sync and manage communications with each other.

With ad partners so heavily reliant on the third-party cookie for communicating with each other, for a while the future looked ominous. However, from what appeared to be a slow start, innovation, experimentation and collaboration with Google on Privacy Sandbox targeting initiatives has gathered apace. Most of these experiments are centred around the 'Turtledove' principle of primary ad decisions and data to be kept in the Chrome browser.

Whether these initiatives standardise outside of the Chrome browser is uncertain. What does seem clear is there will be many announcements of new initiatives in the latter part of 2021 as the industry readies for Chrome's expected removal of third-party cookies in 2022.

Ozone initiatives to date have focused on testing communications within our platform, and using data within Ozone's ecosystem and sharing segment and group data with others. In H2 2021 we will be working with ad partners to replicate this way of working in external environments.

OZONE INITIATIVES FOR INTER-PLATFORM COMMUNICATION

INITIATIVE	DESCRIPTION	STATUS
Ozone Custom Audience	Creating custom audience segments by joining brand and publisher data in a data safe room for activation across the Ozone platform	Active trials
Ozone Ad Manager	Self-serve console for buyers wanting to discover audiences and activate across Ozone's platform. Closed loop architecture allows for deeper level targeting and insights that through external buying platforms	Early build phase

5 SUMMARY

This new chapter for digital advertising ahead of us, yet to be written, is exciting. While consumers and their privacy sit at the heart of changes, there is a bright future ahead for our industry.

In truth, and like most, we can't really know what will be impacted once Google introduces changes to Chrome in 2022. But we do believe in sharing and collaborating and for this reason we are open about what initiatives we are testing and learning, and we will share the results of this work. It's only through this sharing of ideas and knowledge that we can move forward and embrace change.

> ***"Progress is impossible without change, and those who cannot change their minds, cannot change anything."***
>
> George Bernard Shaw, playwright and political activist

APPENDICES

6 APPENDIX i: Types of IDs

This section describes the main IDs that are used in digital advertising (note, throughout this paper we use the terms 'identifier' and 'ID' to mean the same thing).

Customer information: Customer information is personal data that can identify an individual such as an email address, phone number, first and last name, or home address. This information is generally considered very sensitive and valuable and is rarely shared in digital advertising, and as such, won't really be referred to in the rest of this paper.

Verified ID: A verified ID is a unique number or string that is created from customer information but doesn't reveal the actual identity of the person. For example, an email address *jo@bloggs.com* can be 'hashed' into 'abc123'. When 'abc123' is shared with ad partners there is no way for that ad partner to know that this ID is actually the email address *jo@bloggs.com*.

A verified ID is generally referred to as 'verified' because the customer has confirmed their identity in some way (such as clicking on an email link to confirm their registration) to filter out single use or invalid email addresses and phone numbers.

The important concept with a verified ID is that it can be used on multiple devices and apps, therefore associating any activity on various devices and applications back to a single user.

IDFA and AAID: Where a verified ID has knowledge of the existence of a person across multiple devices and apps, an IDentifier For Advertising (IDFA) is a unique number assigned to an Apple mobile device (iPhone or iPad) that is used in advertising in apps on those devices. In Android phones an IDFA is called an AAID (or GPS-AAID).

The distinction between person and device is important, as it means from an advertising perspective a single person who uses multiple devices can't be recognised as the same person.

Third-party cookie: A third-party cookie is very similar to an IDFA but for a web browser rather than a mobile device. Where an IDFA and AAID is an ID for my mobile phone (device), a third-party cookie is an ID for my Chrome web browser. For any sites I visit on my Chrome web browser my third-party cookie will be the same ID.

First-party cookie: A first-party cookie is more specific than a third-party cookie. It is an ID that is specific to my web browser and specific to each website that I visit. My first-party cookie ID when I am reading news on The Telegraph is different to my first-party cookie ID when I am reading The Guardian.

IP address: An IP address is not quite the same as other IDs listed here but is worth mentioning. An IP address relates to the internet connection your device is using – a home router or office WiFi connection – and isn't directly connected to a browser, device or you. There could be many people and devices that have the same IP address (for example at work). But there are times when only one or a small number of devices are related to an IP address (for example at home), and therefore it can be concluded that in some cases the IP address relates to an individual. It is for this reason IP addresses are sometimes included in discussions about IDs and why the GDPR interprets IP addresses as personal data.

6 APPENDIX ii: How IDs are used in digital advertising

IDs are used in a variety of ways in digital advertising. The humble third-party cookie is mostly used for all of these purposes today. It wasn't created for any of these purposes, but because it was there it was used by the advertising industry to great effect.

MANAGING AD FREQUENCY

Advertisers generally don't want to bombard users with lots of ads. Managing how many ads an individual sees is an important part of media planning, to ensure the advertiser isn't wasting their budget and also annoying users. Verified IDs, IDFAs, AAIDs and third-party cookies are the most effective and commonly used IDs in managing frequency for advertisers.

TARGETING

There are many types of targeting options available to advertisers in digital advertising where IDs are used, which can be organised into three main categories:

- Audience (personalised) advertising: where a user's browsing habits are grouped into 'interest' segments and associated with an ID. For example, users who have read content relating to business can be associated to a 'business user' group, and be later targeted by advertisers interested in reaching this group
- Re-targeted advertising: where a user has viewed specific content (generally a product page of a retail website) and then clicked away, and is presented with ads related to that product to encourage them back to the retailers website to purchase the product
- Re-marketing: similar to re-targeting but where the user is a known customer of the marketer, and the creative message is often different. Often this knowledge of a customer is used to 'not' market to existing customers (suppress), for example if the marketer is trying to reach new prospects rather than existing customers.

MEASUREMENT AND ATTRIBUTION

As consumers, our browsing behaviour on the internet and apps is fickle. In a single day we can use many apps and visit many different websites, the whole time consuming new content, being exposed to advertisements and purchasing products and services. Measuring the effectiveness of different advertising activity is complex for marketers, as we may be exposed to ads on one or more sites or apps, then end up purchasing a product on a different site.

All IDs – Verified IDs, IDFAs, AAIDs, third-party cookies and (to a lesser extent) first-party cookies – are used by marketers in measurement and attribution, to understand campaign performance, and to improve their marketing in the future.

INTER-PLATFORM COMMUNICATION

There are many technologies and companies that all work together in the background to make digital advertising work. When a web page is loaded into a user's web browser and an ad appears on the page, many companies have collaborated to make this possible and ensure that the advertisement is as relevant to the user as possible.

In order for this to happen, IDs are used to connect systems together. For example, a publisher may have an ID for a reader. The publisher, who works with ad partners to help them sell their advertising space, passes the ID (mostly Verified IDs, IDFAs, AAIDs or a third-party cookie ID) to them so that the ad partner can 'sync' the publisher's knowledge of the reader into a format the ad partner understands. This ad partner in turn works with other ad partners in the supply chain and therefore they map the ID they have with an ID the partner may have for your web browser or device.

IDs are also used to connect your data to other datasets with the aim of improving the relevance of the ad to you. For example, a publisher may know you are interested in business content, but by mapping your ID with a data partner, they can also learn that you are interested in holidays in Cornwall. This information can be combined to present more relevant advertising to you.

Very quickly there are many IDs mapped together that don't specifically identify you as an individual, but do have knowledge of your device or browser. This is what users, regulators and privacy advocates find the most concerning with the way things work today.

6 APPENDIX iii: The problems with identity

While the imminent changes outlined here are frustrating, and significant shifts in thinking are now required to address the impact outlined in the previous section, understanding why changes are being introduced can help inform what the right solutions might look like.

For all the amazing innovation and progress digital advertising offered marketers and publishers – scale in reaching detailed audiences, the ability to reach consumers in their hands in different mindsets and contexts, the creation of entirely new business models – the gains come with many persistent issues that have not gone away despite many years of trying.

Structurally digital advertising is better characterised as 'tracking by design', when the consumers and regulators are shifting toward 'privacy by design'.

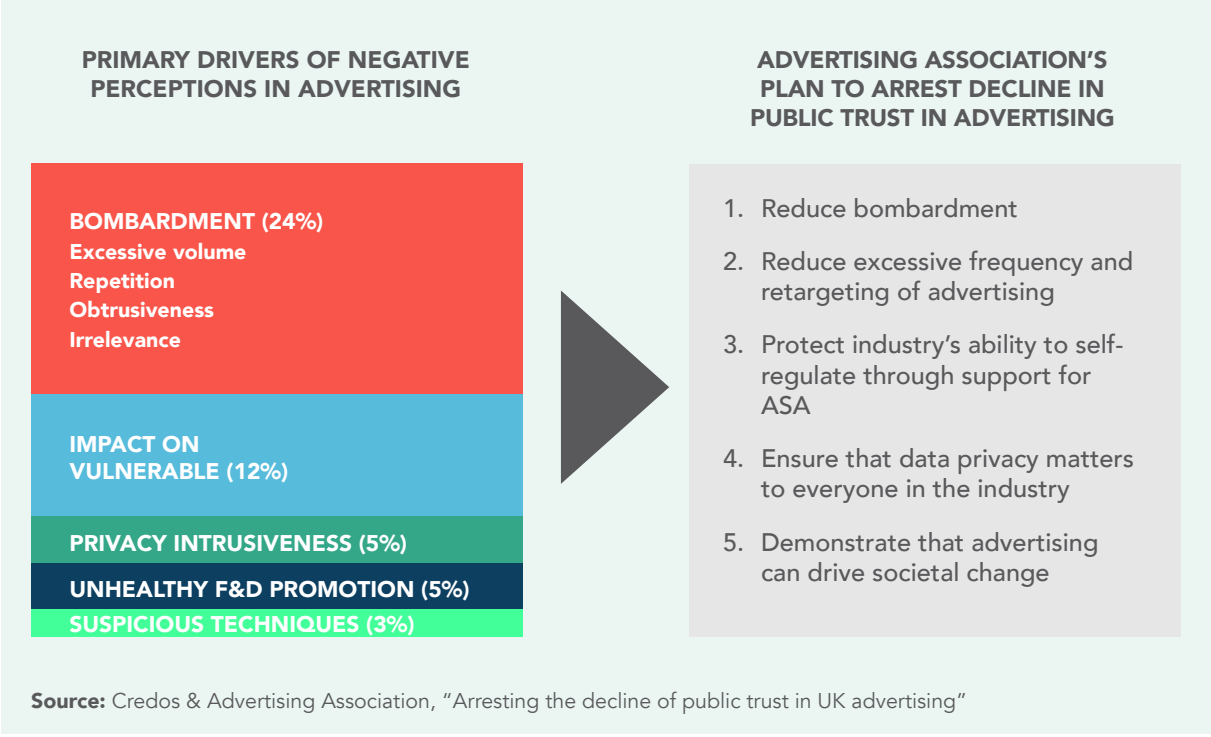
Important questions to consider:

- Why did Firefox and Safari make these changes years ago?
- Why do one-third of internet users have an ad blocker installed?
- Why was the GDPR introduced in Europe in 2018, and CCPA in California in 2020?
- Why is consumer satisfaction with advertising at an all time low?
- Why was there such an outcry (albeit amongst some no surprise at all) at the findings of the ISBA/PwC report last year into digital supply chains?

This following pages explore in more detail these issues from the perspective of different stakeholders.

Consumers and regulators

According to research from the Advertising Association's 'Trust Working Group', public favourability towards advertising dropped from 48% in 1992, to just 25% less than twenty years later. Upon reaching this historic low, it was clear that many of the symptoms of this related directly to digital, and in particular programmatic advertising; excessive frequency and message bombardment, intrusive retargeting, and data privacy issues. The fall-out caused the Advertising Association to create an action plan to tackle these issues and help restore public confidence in the communications sector.

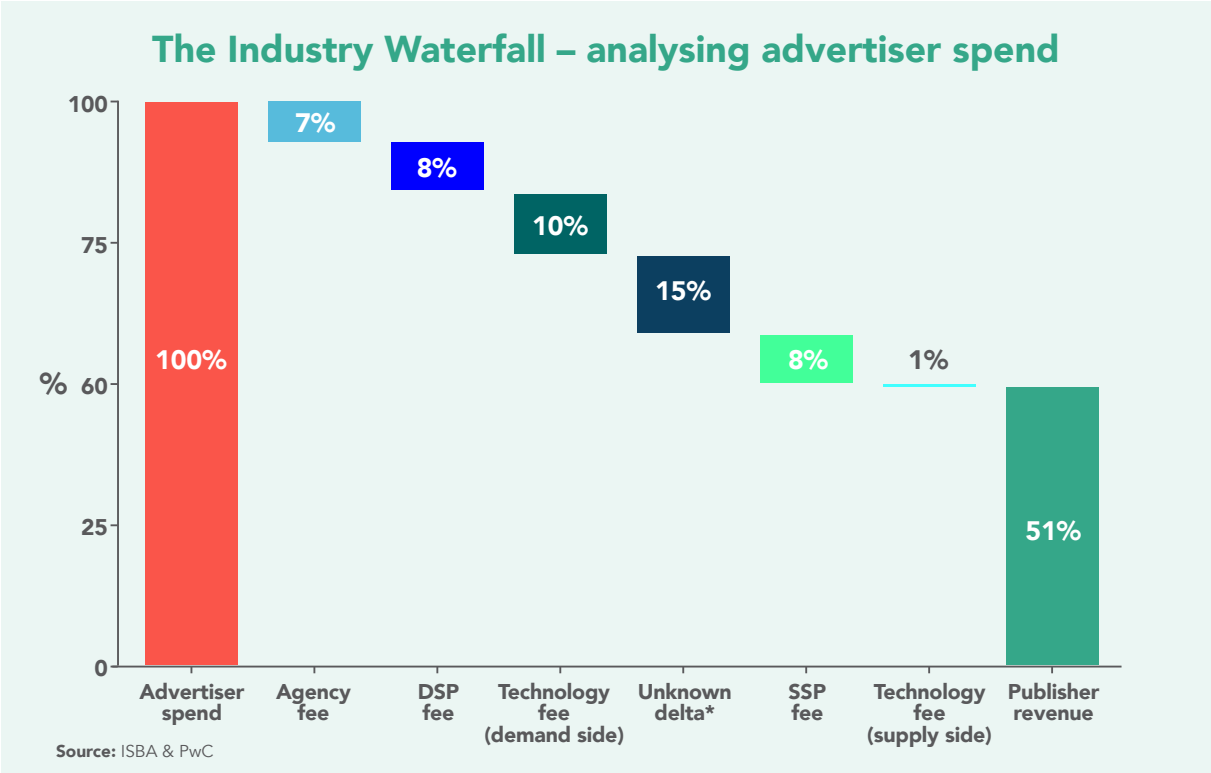


Source: Credos & Advertising Association, "Arresting the decline of public trust in UK advertising"

Similarly, the processes used in digital advertising - particularly programmatic - have long been deemed unacceptable and unethical by the UK's regulators. Since the GDPR's arrival in 2018, the ICO has been consistent in its criticism of the misuse of personal data in programmatic advertising. In its most recent January 2021 update, the ICO has been clear in its dictate that any organisation operating the adtech space should be assessing how they use consumer's personal data as a matter of urgency.

Brands and marketers

Creating industry headlines throughout 2021, ISBA and PwC's landmark study into the programmatic advertising supply chain (accounting for the vast majority of digital display spend) demonstrated an entire system unfit for purpose. This report highlighted major transparency and accountability issues across the sector; be it advertiser campaigns appearing on an average of 40,000+ websites, only 51% of adspend reaching publishers, the 15% 'unknown delta' of unaccountable spend, or the fact that only 12% of impressions could be matched.



At the same time, in June 2020 the WFA (World Federation of Advertisers) created their own guide to establishing data practices that respect consumer interests. The report entitled 'Data Ethics: The Rise of Morality in Technology' is based around four key principles:

- Respect: the data belongs to consumers and should only be used to improve their lives
- Fairness: data usage should be inclusive and eliminate bias rather than dividing groups
- Accountability: consumers expect companies to be open and transparent, with processes backed up by local and global governance
- Transparency: despite the complexity of online advertising, brands should lean more towards open and honest data practices

The significance of a data ethics approach is rooted in research that shows 74% of CMOs thinking this will be of increasing importance in their roles within the next five years.

Publishers

The emphasis on audience targeting in digital advertising has been challenging for publishers, in particular premium publishers. The investment in journalism and editorial governance has remained constant, but control over the monetisation of their audiences and inventory has shifted to platforms and buyers. This has significant consequences.

- On the promise of increased monetisation to undervalued inventory and audiences, publishers passed their audience data to ad partners in raw form, to quickly find themselves disintermediated and commoditised, losing control of the advertiser relationship, value creation from their audiences being captured by others and publishers left to monetise ad inventory at increasingly low prices.

Ad Partners

Seeking greater and greater returns for shareholders, many ad partners created opaque business models and data silos with misaligned incentives based on scale and adtech metrics, compromising long held publisher and marketer relationships and becoming an invisible middle layer in the digital supply chain.

It's difficult to ignore the structural shortcomings with the interoperability of adtech platforms exposed in the PwC/ISBA report of June 2020 into programmatic supply chains. For an industry dominated by some of the largest companies in the world, PwC assessed the data maturity of programmatic advertising between weak and average, with only 12% of the total study actually resulting in measurable data.