

Hybrid Attribution

How Alphabet, Facebook and Apple are ruining attribution tracking. And why brands need to move to a Hybrid Approach instead.

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Crimtan's mission is to be a trusted partner who delivers the most relevant, consented advertising that drives exceptional ROI across every stage of the customer lifecycle.

In our quest to achieve this, we want to make sure that our clients are **able to deliver lifecycle marketing in display across any channel, format, browser and device.**

The industry is changing quickly, with user privacy being at the centre of everything that we do. We applaud and embrace these changes, and our solution intends to fully support the rights of any individuals whilst ensuring that decisions made by large corporates such as Google and Apple do not restrict overall user choice, enabling any brands we work with to leverage digital displays, whether on a computer device or on a bus stop to build more relevant engagements with the customers.

Running successful lifecycle in display needs creativity and a reactive ability to optimise: Finding and appealing to the customers that are right for your brand.

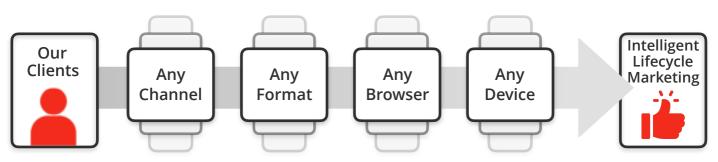
A key element in optimisation is understanding what is working for you, and doubling up. Having to do this with one eye closed given current industry challenges faced with attribution means marketeers have to work twice as hard to get to the same place.

This White Paper explores the need for a new approach in attribution across digital advertising, called **Hybrid Attribution**. It talks about the current situation and reasons why it is necessary, the industries unhealthy obsession with clicks as a measure of engagement, and the hybrid approach that we are rolling out to our clients to be able to deliver cohesive display strategies to find new customers, prospect them to conversion, and grow lifetime value:

Through complete lifecycle marketing.

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Each side is focusing on their own business models, making browser changes that are ostensibly done in the name of 'privacy', but in fact, also are restricting user choice. What does this mean for brands that want to firstly deliver, and then secondly track relevant, consented customer engagements across any browser or device?

By relying on current tracking mechanisms in display to try to deliver, and then understand the value of attribution on both new and existing customer engagements, brands are struggling. But why have we ended up caught between Google and Apple? And how can brands survive this war on data?

It's been a tricky two years for attribution.

It's been a difficult couple of years for the display advertising industry. In 2017 Apple rolled out Intelligent Tracking Prevention (ITP)¹, which limited the ability for website owners and advertising platforms to track users across domains by purging third party cookies after 30 days. Taking things one step further, earlier this year Apple launched ITP 2.1², which caps the lifespan of first-party cookies to a maximum of seven days.

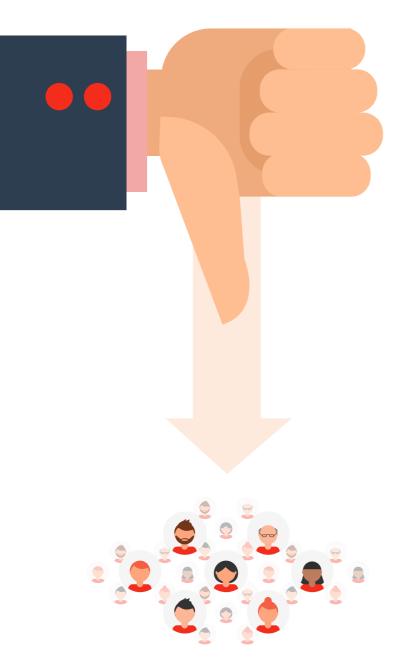
Combine this with **ITP 2.2**³ which now limits first party cookies to just 24 hrs, marketeers are being blinded in Safari.

by announcing changes that enable
Chrome users to delete cookies used for online ad targeting without losing first-party data⁴. At the same time pitching a "Google Universal Browser ID" which will give them even more control over all advertising globally.



And then, of course, just to make things more interesting we have the data restrictions enforced by 2018's GDPR and the upcoming ePR of 20205: The former focusing on a pseudonymous online identifier and the latter focusing on 'non-essential cookies' and therefore their usage in attribution and analytics. The recent Information Commissioner's Office (ICO's) guidance on the matter has confirmed that this is relevant now – no tracking without explicit consent.

Who is the biggest loser in the data battle?



Sadly, it's everyone: the brands trying to advertise, their customers looking for products and offers they want, and the businesses like publishers who rely on advertising to support their free content model.

Research⁷ has already shown that customers actually prefer seeing relevant ads to irrelevant ones. However, it has also shown that without transparency about how this is delivered this perception can change⁸. Advertising is the lifeblood of the internet's free content model, and every brand knows that the right message, at the right time, with the appropriate relevancy delivers results and customer loyalty.

So, as long as it's done transparently, why shouldn't brands with the right legal means (explicit consent) deliver ads to customers who want to see them? And why shouldn't businesses who rely on advertising be able to show relevant ads? As long as all three parties' consent to it, it's a win-win-win situation.

But how can we make sure we can correctly attribute performance given the current industry challenges?

The importance of good attribution.

Accurate attribution has long been a holy grail for marketeers. Understanding the value of marketing spend and the impact of allocating it to activity to generate a positive Return on Investment (ROI) is key for any successful business looking to raise awareness, acquire customers and grow customer lifetime value through retention: for every business to survive they need to earn more than they spend.

In every customer engagement lifecycle, there is brand introduction, product (or service) introduction, product (or service) consideration, product (or service) investigation, product (or service) decision, and then product (or service) re-engagement and loyalty.

Not every marketing investment bears immediate results nor 'the final' result (conversion), and with a vast array of places available to spend money, a marketeer wants to ensure that they can maximise their returns with the spend that they have available, ensuring that their campaigns are finding the right customers to bring cost/benefit into the positive across their marketing mix.

Attribution systems look to help marketeers make informed decisions about the channels that might be working for their business across every single element of these different customer engagements.



There are many attribution systems out there, and probably one of the most prolifically used globally is **Google Analytics**. The basic version is, perhaps unsurprisingly given its adoption, free: and for that price it is a pretty good analytics solution.

However, **Google Analytics**, like many attribution systems, **is only focused towards clicks**, **and only looks at last click attribution and assisted click attribution only**. This is not going to give you a full picture of brand engagements, when many engagements might not result in complete direct action, such as a click, immediately.

The obsession with clicks has meant that Display and its benefits are not fully represented in Google Analytics reports, so for many the opportunity here is, in most cases misunderstood.

More recently with the launch of GV360, Alphabet is looking at ways to give a fuller picture, but with a price tag not shy of \$100K plus per year for a licence fee, this is out of the reach of many businesses.

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Alphabet chose to keep **Google Analytics** this way for the simple reason that **Organic Search** and **Paid Search** are 2 channels where they dominate, and the 2 channels which are used most prolifically during the final stages of a purchase decision.

Google Analytics is one of the best marketing tools that Google has in its broad arsenal. Figure 1 below shows an example of this. Log into any Google Analytics account, go to Acquisition > All Traffic > Source / Medium and you will nearly always see 'google / organic' and 'google / cpc' in the Top 5 every single time. And millions in marketing will do this every day of the week, many times.

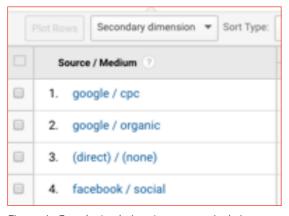
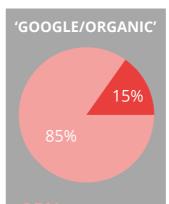


Figure 1: Google Analytics: A not untypical view of the click traffic driver of any business today!

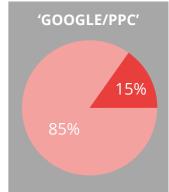
Why sources of clicks don't describe the full picture.

Most marketeers are beginning to understand that maybe, performance in here is not what it seems. **Drill into these 2 numbers and Google Analytics and what might you see (see charts opposite):**



85% (your brand name or brand name plus product or service) - Your hard work building a brand elsewhere not through Google's organic search.

15% - Other keywords that Alphabet can claim their search helped someone to find your brand.

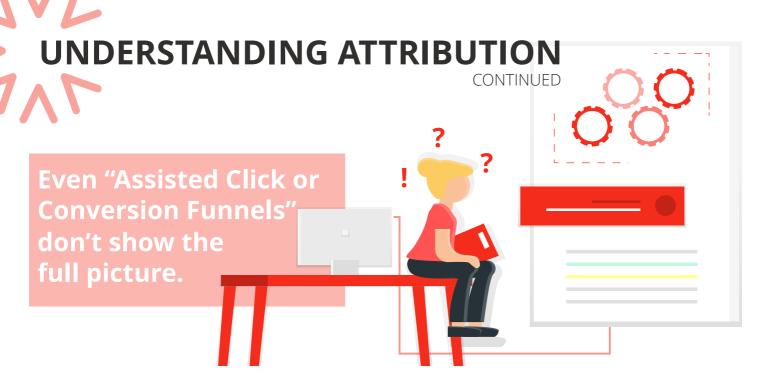


name or brand name plus product or service) - Your hard work building a brand elsewhere not through Google's pay-perclick service.

15% - Other keywords that Google can claim their search helped someone to find your brand

85% of traffic pegged under 'google' in Google Analytics is a result of other hard work doing other marketing activities in what we can term as a 'halo effect'; performance and click traffic that is not as a result of Alphabets tools but of other activity.

Combine this 85% with the other key 'source / medium' in the Top 5 called '(direct / none)' which indicates all those customers that go directly to your site, and the key traffic driving activity is fast not becoming anything to do with Alphabet nor anything that Google Analytics can show you either.



To try and assuage any marketeer curiosity as to what might be driving these, **Alphabet then introduced Assisted Conversions into Conversions > Multi-channel Funnels** but again this included fundamental flaws in its 'attribution':

- It assumed that every customer engagement resulted in a click when clearly many activities in marketing offline and online would not result in that.
- > It still focused on the 'Source' being Google even when 85% of that value wasn't.

Figure 2 outlines these 'Click' Multi-Channel Groupings in Google Analytics, again focusing on those channels that are largely 'last-click' focused.



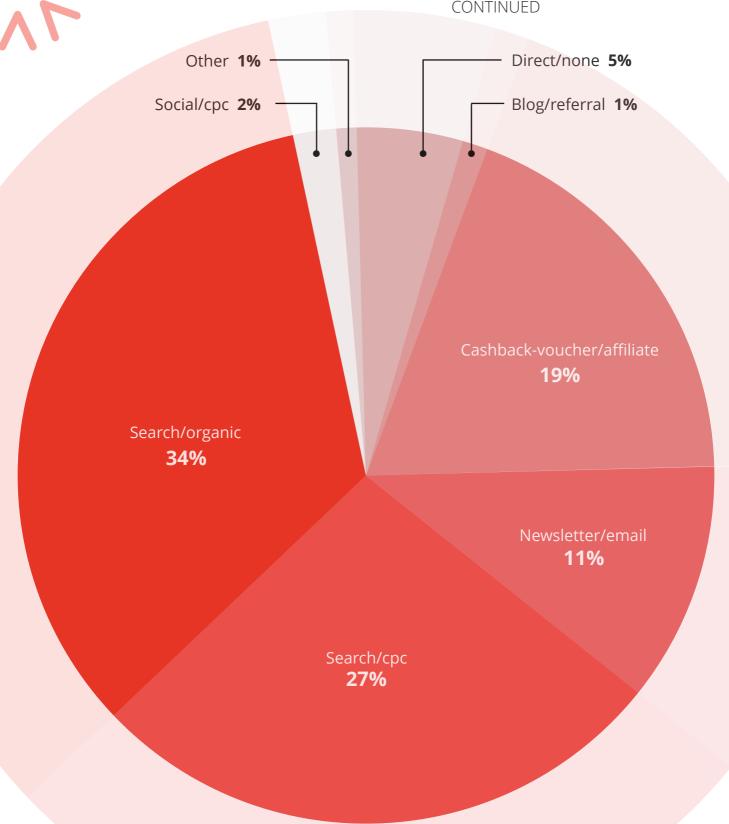
Figure 2: Google Analytics: a not untypical view of 'Assisted Conversions' (N.B. Other advertising here refers to affiliate sites that might offer vouchers and cashback)

So where is the traffic coming from? This is where proper attribution theory and the correct methodology comes into play.

Overlaying 'Engagements'

For the same data we look at these click-based channel groupings and overlayed engagement tracking just through the Display Channel. The engagement was based on 'views' of items rather than 'clicks' on items.

The pie chart ove<mark>rleaf shows where proportions of non-click attributions are being allocated to in Google Analytics:</mark>



The results are not surprising. "Search cost per click" and "Search organic" are being attributed display activity by the customer going into a search engine and searching for a (brand) term as discussed above.

Cashback and Voucher affiliates are being attributed display activity as frequently shoppers, as their last action before buying, will go and see if there is a discount voucher available.

CONTINUED

Focus on attribution across lifecycle engagements.

In any business you have to find new customers, prospect them to conversion and then grow their lifetime value. At any one of these stages a customer might engage but not necessarily 'click' with your brand – subconscious action is as important as conscious action in building a business, and these sub conscious actions will all add to the halo effect on conscious engagements at a later stage.

True attribution modelling and understanding the value of marketing spend needs to try and include all these engagements regardless of whether it is a click or not. Engagements like a view and dwell should not be ignored. Google Analytics proves that customers are searching for your brand and also coming direct to your site, so understanding where and how they decided to do that is an important factor when it comes to deciding where to put the next budget.

Lifecycle marketing is all about engaging the customer with the right message, at the right time, in the right place, with the right context across the lifecycle. It is a well-known fact that the most expensive part of a lifecycle engagement with a customer is getting them to engage with you for the first time. Once they engaged and then visited the site, you can then embark on a cyclical process of engagement to conversion and

re-engagement to visit again, driving customer lifetime value and loyalty.
Without the first more expensive element, you won't be able to facilitate and achieve the second.

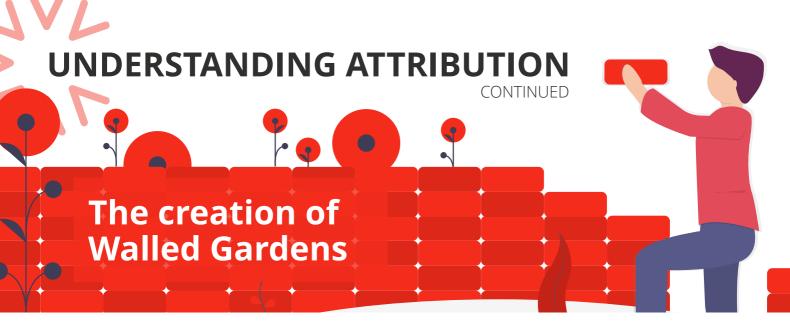
The challenges for the technology of attribution tracking.

Attribution in marketing is by no means a perfect science. The world is not fully digitised, so whilst any digital channel could be marked with an engagement tracker, some sensible assumptions need to be taken for non-digital activity.

Attribution results that are used to focus budgets is as much about judgement as it is about hard statistics, and most technologies available have different attribution theory approaches.

Understanding cause and effect is key in any type of marketing campaign, and with increased digitisation it has become easier to make get a better understanding of what drives customer lifetime value across the lifecycle. Even for offline measurement, by understanding the locations of any activity, one can attribute this to uplifts in conversions across a brands estate and begin to understand what the right marketing mix might be.

In any case important to not become wholly reliant on a single source of reconciliation to get to an answer of what are the right engagements to focus due to a number of factors.



Company valuations are based on a number of things - but when it comes to **FANG** (Facebook, Amazon, Netflix and Google) "data" and "control" become key factors impacting market capitalisations for any of these companies.

Walled gardens are set-up to ensure that data is closed within them, and control is maintained. Whilst Netflix might not be declared as an advertising platform (yet), product placement is rife in most shows, and as it becomes its own production and distribution house, the revenues for this will not be insignificant.

And with Google (37%), Facebook (22%) and Amazon (8%) taking nearly 70% of all digital advertising spend, not being able to effectively build attribution activity across these companies because of various restrictions they impose makes it very difficult to achieve a holistic view for what is driving performance.

It is certainly frustrating for any marketeer that for a quarter of the market (Facebook & Amazon) you cannot track customer engagements using any tools other than those provided by these businesses.



The Business models of Walled Gardens

Combine the opaqueness of each of the Walled Gardens choice of attribution theory and how this is executed, and outside of **FANG** you are left with **Apple**, that doesn't rely on advertising to generate value and is not in their business model. **It is still a** walled garden, but focuses on selling devices with services set up to ensure that migration away from operating system, storage and device becomes difficult (believe me I know, I am 'bound' to Apple, yet still a begrudging supporter).

Any marketing efforts you undertake should support user privacy and transparency about how data is used, and respect user choice for relevant advertising.

CONTINUED

Relevant advertising however, is not just about targeting against an ID (defined as personal data under GDPR), and Apple's moves with the Intelligent Tracking Prevention System has meant that it is, well, impossible to understand what actually works through attribution for any type of advertising across the Apple estate. In addition Mozilla (Firefox) have now adopted a similar approach as Apple, so the 2 biggest browsers after Google Chrome now reject any type of attribution using third party cookies.

Research⁹ has already shown that **customers prefer seeing relevant ads to irrelevant ones.** I think it is generally accepted and understood that advertising is the lifeblood of the internet's free content model, so restricting ALL relevant advertising that might or might not use personal data in a browser is killing a key part of what enables the Internet to be an information source.

If marketeers can't attribute their performance, they will focus on channels where they can attribute – even if they are less effective, impacting the balance of content vs advertising and potentially putting many businesses out of business.

What needs to be measured in attribution.

To achieve accurate attribution there are 4 things that you need to monitor and measure and link back to your goals.

- 1 Monitoring a placement, and how much it costs.
- Monitoring interaction a potential customer might have with this placement.
- Reconciling a conversion result with the placement that drove the conversion result.
- Defining the value of an interaction and contribution of the placement to the overall conversion.

So to be able to correctly attribute, what is the impact of this current environment?



THE IMPACT OF CURRENT ENVIRONMENT

Alongside the **FANG** group continuing to build up walled gardens to make it more challenging to build a cohesive crosschannel attribution model by enforcing use of their own tools, there are 3 current drivers that are fundamentally impacting the ability of any marketeer to build a cohesive attribution model:

- Different behaviours of browsers when it comes to their approach to privacy and tracking mechanisms.
- Ongoing legislation changes, primarily in Europe but also starting to appear in the US and across Asia.
- Changing user sentiment tarring many things that might not be related nor intrusive with the same brush.

Quantified impact on a third-party cookie-based solution.

To find out the extent of the impact of the current environment, we analysed a solution based on a cookie ID against a Hybrid Attribution solution we discuss later and its impact in each browser and across each device type. The analysis was initially done in the UK.

In the UK, **Safari** penetration (with the abundance of iPhone) is very high on mobile, while **Chrome** has a higher penetration on desktop.

The results clearly demonstrate the challenges of a third-party cookie attribution system versus a potential hybrid approach:

Attribution based just on third party cookie IDs tracked:

35% less attribution on Chrome

95% less attribution on Safari

The impact of this on the device was felt:

37% less on Desktop

75% less

We also compared this against some attribution results against **Doubleclick Campaign Manager (DCM)**; now known as **Google Campaign Manager**. It became clear that **even Alphabet is struggling to achieve any attribution on Safari.** Whilst Apple has certainly decided on the privacy that is best for its users, it has also made it very difficult for aggregated attribution to happen on its browser, regardless of whether the marketing is using personal or non-personal information.

THE IMPACT OF CURRENT ENVIRONMENT

CONTINUED

So, third-party targeting and attribution is now dead in Safari. For regions where iPhone dominates, marketeers are flying blind in the fastest growing area of advertising revenue and customer engagement – **the mobile**. Even then, given **Chrome has 50-60% share of the total browser market across all devices**, the 2nd (Safari) and 3rd (Firefox) largest browsers don't allow third party cookies at all. **Other options need to be sought.**

OPTION

Moving from third-party cookies into the first-party world.

With third-party cookies, previously the lifeblood of targeting and attribution now dying, some in the industry have started to move into the 1st party world. Facebook, Alphabet and Microsoft all released a 1st party tracker soon after Apple's initial release of ITP10. A first party cookie can be defined as a cookie that is relevant to a specific domain. First party cookies are used for many things on websites such as remembering a basket, where you might have visited on the website and might want to visit again, passing information through a checkout process and much more.

The different treatment of 1st party and 3rd party cookies is not insignificant. Both browsers and legislation recognise some instances of this 'type' of cookie to be more 'essential' in the effective operation of a website and therefore do not immediately block or delete it. Even Safari, with the latest release of ITP 2.1 allowed them to exist on the browser for a period of seven days, and that is a rolling seven days from its last use.

Whilst 1st party cookies might be helpful for tracking activity on a single domain, they become less useful when trying to attribute customer engagements to conversions across multiple touchpoints on multiple domains. Without the different activities being linked to a specific browser holistically, as the 'golden bullet' for attribution they are limited as it really only can work for one channel (i.e. Facebook) and one domain (i.e. a brand using Facebook). Combine this challenge with Apple's ITP 2.2, which now shortens first party cookie lifetime down to a rolling 24 hrs, they cannot support proper lifecycle attribution.

In any case, 7 days and soon to be 24 hrs to complete an end-to-end customer engagement within a lifecycle is normally not long enough, so depending on option A as a single solution for attribution across multiple touchpoints will never give you a complete picture.

THE IMPACT OF CURRENT ENVIRONMENT

CONTINUED

OPTION B

Moving from Deterministic attribution to Probabilistic attribution.

Deterministic attribution is matching to a 100% certainty an engagement to an outcome. An online identifier residing in a cookie might help you do this. Probabilistic attribution uses a number of pieces of information and puts them all together. With enough pieces of information you then reach a statistically significant result that a specific engagement relates to a specific conversion.

In the absence of 'matching' pseudonymous IDs in a deterministic way, with the advent of more sophisticated machine learning capabilities and to a lesser extent 'Al' in the current environment (maybe more in the future), it has become easier to read and interpret signals that could imply statistically significant links between several events or scenarios.

With the average number of **Internet connected devices** last year reaching an all-time high at **3.5 per household**¹¹, much has been done in the use of probabilistic matching in attempt to understand **cross-device engagements by single customers** across their multitude of devices.

Historical data is critical in the process to develop machine learning, and for that matter AI to identify trends and scenarios that can be linked together. The main challenge around this is volume: to be able to set probabilistic matching off in an algorithm, there needs to be a lot of data as a basis. Combine this with data points in probable matching never being concrete, and the exponentially different ways in which a browser might interact with each different brand, the variations and predicting variations becomes challenging.

Much of probabilistic matching for attribution is based on **leveraging multiple datapoints in the different browsers to triangulate to a specific browser**. Again, a **walled garden has intervened**, **Alphabet** this time, to say that they are going to make it difficult¹² by 'frowning on this practice'.

Introducing Option

With pitfalls in the 2 different approaches being adopted, there has be another way, **Option X - The new approach - the Hybrid Attribution approach.**

In itself not a unique option, but gives you the marketeer the ability to leverage what they can, either Option A or Option B dependent on the situation in which the attribution is taking place.



Abstract

There is no way that we as marketeers can fully predict what Apple, Google, Facebook, Amazon or Netflix might choose to do, other than try and generate annuity revenues from existing customers and increase the revenue per customer year-on-year. To achieve this, these publicly listed companies will leverage all their existing assets and relationships, and position themselves in the best way to make this possible.

Unfortunately, Amazon and Facebook are closed books at the moment. Amazon maybe for not much longer after their recent acquisition of the Sizmek Ad Server¹³, but even Sizmek also struggled with attribution in Safari & Firefox in the same way Google Campaign Manager (previously DCM) has in the past.

Ultimately there is no point in pinning your business decisions on a single technology execution that does not give you the full picture. As a brand owner, you need to hedge your bets where you can.

Hybrid Attribution Methodology

Attribution is not about the perfect picture, it is about giving the best picture of the combinations that drive the best engagements and returns for your business.

In the same way any attribution solution looks to give the best picture in combinations, **Hybrid Attribution looks to take the best combinations of tracking to give you the closest picture to the truth**, and offset any challenges that the current environment might face.

Hybrid Attribution Supporting Legislation

Building a non-personal picture of aggregated analytics for attribution that works in multiple environments for a marketeer to try and figure out which channels work for them and change their budgets accordingly is not intended as a violation of the rights of individuals to control their personal data.

Given that a Hybrid Attribution approach might use both deterministic signals and data signals that help with probabilistic decision making, the recent ICO guidance for analytics and attribution¹⁴ suggests that these data signals will fall under personal data under GDPR, and some of the delivery systems (non-essential cookies and similar technologies) will fall under the current Privacy and Electronics Directive (PECR), soon to be replaced by the ePR.

In the UK, the Information Commissioners
Office (ICO) have released several pieces of
guidance on this, and has clearly indicated
that **explicit consent be required for the use of online identifiers under GDPR** and
explicit consent is required before delivering



any cookies or using similar technologies that are deemed non-essential.

The only real answer is to fully embrace the legislation, not only for relevant targeting, but also for attribution, and fully support the rights of individuals.

GDPR clearly states that any consent should be clear and unambiguous, as long as you are clear that a pseudonymous ID is being used for the purposes of understanding marketing effectiveness, potentially improve their experience and that you are not trying to capture their name, their email address, their address, their bank number and anything else that is personal to them then consent being granted should remain high. It is why, as an advertiser, you need to work with your advertising partners on your own site to gather explicit consents, as it has already been suggested that Data Protection Authorities (DPAs) like ICO do not think consent gathered through Real Time Bidding (RTB) is legal15.

It is why we peg our Hybrid Attribution system to our consent management and tag management platform consenTag™.

Ensuring attribution goes hand in hand with explicit consent mechanisms. We will only leverage hybrid attribution if we have the correct legal means, alongside you, to do so.



The Impact of using Hybrid Attribution by Browser

The analysis overleaf focused on conversions, both post-view and post-click conversions.

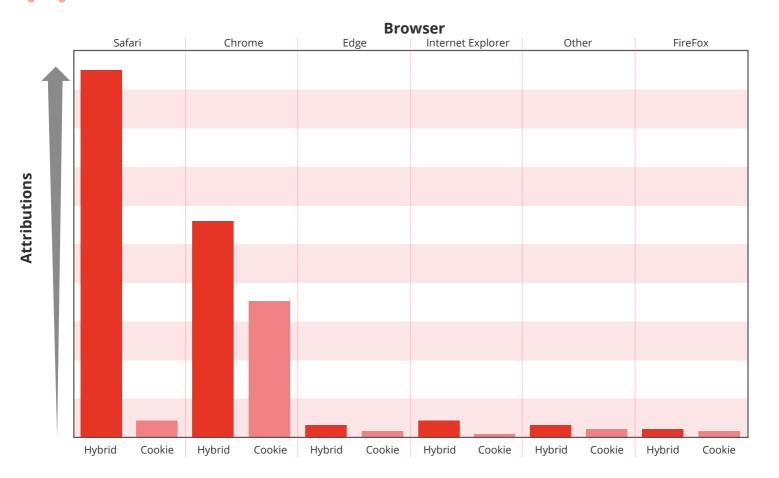
Post-view conversions had a 7-day attribution window, and post click conversions had a 30-day attribution window.

It is worth noting that we already knew that tracking based on third party cookies would be all but **useless in Safari**.

Given the impact of the current environment discussed in the previous chapter, and to show what additional benefits Hybrid Attribution can give - we explored using the hybrid methodology versus relying on third party cookies,

The figure overleaf highlights a relative index of impact that happened as a result of using a **hybrid attribution approach vs cookie approach by browser:**





Reasons for difference in attribution levels by browser:

- 15% of Chrome browsers have third party cookies blocked by default.
- Only 12% of Safari browsers are now on an old version that supports third party cookies at all.
- Only 22% of Firefox browsers are now from an older version that does block third party cookies by default.

And on mobile specifically:

- Apple iPhone accounted for 49% of the market in the UK, with a default browser of Safari where third party cookies are useless.
- Samsung accounted for 29% of the market in the UK, with a default browser of Chrome.

GOING FORWARD: HYBRID ATTRIBUTION AND THE DEATH OF COOKIES

Third-party cookie-based attribution is not giving marketeers a picture of what is working well. The analogy of having at least one eye closed and a hand tied behind your back is true.

Our analysis would suggest that if you want to continue to use an attribution model based on third party cookies **you should start to limit any activity to just Chrome across device.**

In the UK, this limits your marketing to approximately 50% of the overall market.



Why you need to move towards a transparent, lifecycle-based model.

So what now? To survive, brands need to find a way to maintain and grow market share through relevant, consented advertising that supports user choice, ePR and other legislation across any browser.

Any efforts should support user privacy and transparency about how data is used, and respect user choice for relevant advertising. And relevant advertising is not just about targeting against an ID.

We have found that a hybrid approach for targeting and attribution is the way forward in display and can be the most effective in finding new customers, prospecting them to purchase and grow customer lifetime value.

It combines multiple data points or identifiers that might be available in each browser to fully support the different approaches of Apple and Google. Even when storing no personally identifiable information and data which is fully minimised, it is still possible for a brand to deliver relevant (not personalised) advertising across any browser to those who consent.

And this is what all brands, customers and content owners want: the ability to deliver relevant, consented advertising in lifecycle marketing. So while Google and Apple are fighting their own battle, everyone else can carry on with business as usual.

For more information about this methodology or any of the topics in this whitepaper, please contact us at www.crimtan.com/contact



1	https://www.searchenginejournal.com/apple-intelligent-tracking/220379/ back to page >
2	https://www.forbes.com/sites/forrester/2019/04/10/apple-itp-2-1-what-it-is-what-it-means-
	and-why-it-matters/#6324cde07cb8 back to page >
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5	http://crimtan.com/gdpr/ back to page >
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3	https://techcrunch.com/2019/05/31/amazon-acquires-sizmek/ back to page >
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