



AUSTRALIAN COMPETITION
& CONSUMER COMMISSION

Digital advertising services inquiry

Final report

August 2021



Australian Competition and Consumer Commission
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Executive summary

Overview

Advertising technology (ad tech) services perform a critical role in the digital economy. They help Australian businesses ensure their advertisements reach consumers and are essential for many online publishers to monetise advertising space and fund online content.

Weak competition in the supply of ad tech services can harm Australian advertisers, publishers and consumers. In particular, without a competitive and innovative ad tech supply chain, the ability of Australian websites and app owners, such as news publishers and providers of other online content, to make important and valuable content available to many Australians is placed at risk.

The ACCC has found competition for ad tech services in Australia is ineffective, with Google dominating the supply of ad tech services. In 2020, we estimate that over 90% of ad impressions traded via the ad tech supply chain passed through at least one Google service. Google is by far the largest supplier of each key ad tech service. Its share of impressions is over 70% at each stage of the supply chain, and it has a share of between 40–70% of revenue for services where revenue data is available.¹ Google's dominance is underpinned by multiple factors including its data advantage, access to exclusive inventory and advertiser demand, and integration across its services.

Over more than a decade, Google's vertical integration and strength in ad tech services has allowed it to engage in a range of conduct which has lessened competition over time and entrenched its dominant position. The ACCC is examining a number of allegations raised during this inquiry under the Competition and Consumer Act 2010 (CCA). Enforcement action can perform an important role in addressing and preventing anticompetitive conduct. However, the ACCC does not consider that proceedings under existing legislation will be sufficient alone to address the systemic competition concerns identified in this report. Investigation and court proceedings are lengthy and necessarily retrospective, seeking to address harms after they have occurred.

Ad tech services change rapidly and, without the benefits of competition, can evolve in ways that fail to benefit users and consumers. New regulatory solutions are required to effectively address the competition concerns we have identified, in an enduring and timely way. Therefore, it is recommended that the ACCC be given the power to develop sector specific rules to apply to those providers of ad tech services that meet pre-defined criteria linked to their market power and/or a strategic position.

Such rules should allow the ACCC to address conflicts of interest, prevent anti-competitive self-preferencing behaviour, address data advantage issues, and transparency problems, where these create efficiency or competition concerns. The rules must be proportionate, targeted at addressing the greatest harms, and evidence based, so that they do not place undue regulatory burden on the ad tech sector. However, the powers must also be flexible and capable of adapting to a dynamic and complex digital environment, and allow Australia to align its regulatory solutions with those being developed internationally.

It is recommended that the ACCC be responsible for enforcing the regulatory solutions proposed in this report. As the national competition and consumer agency, with a specialist digital platforms section, the ACCC is the best placed regulator to administer and enforce such rules.

¹ The ACCC was unable to estimate revenue shares for advertiser ad server services or publisher ad server services as we were unable to obtain the data necessary to do so.

Many of the concerns identified in this report are common to other digital markets dominated by one or two key platforms. For example, the ACCC has previously identified similar concerns with online search, social media and app marketplace services. In the September 2022 report for the Digital Platform Services Inquiry, the ACCC will consider whether a broader regulatory framework is required to address the common competition and consumer concerns we have identified in digital platform markets.² Stakeholder consultation on whether such regulation is necessary and on the design of any such rules, will commence in early 2022.

Ad tech is an important part of the digital economy

Ad tech services are used in the buying and selling of digital display advertising. They involve the automated use of complex algorithms and systems to trade digital ads in a matter of milliseconds. Ad tech allows a vast number of publishers to sell digital ad spaces on their websites to a vast number of advertisers. A competitive ad tech supply chain is vital to providing the rich and diverse advertising-funded internet content available to Australian consumers. The focus of this inquiry is on the use of ad tech to deliver digital display ads to consumers, not search or classified advertising.

Ad tech enables online publishers and advertisers to trade display advertising opportunities, a critical segment of digital advertising. Digital, or online, advertising is increasingly important in Australia, with the amount spent on digital advertising in Australia growing substantially in recent years. The Interactive Advertising Bureau Australia (IAB) estimates that between 2008 and 2020, spending on digital advertising quadrupled, growing from \$1.7 billion in 2008 to \$9.5 billion in 2020.

Display ads are one category of digital advertising. Consumers see display ads nearly every time they browse a website or engage with an app; whether on a smartphone, tablet, computer or other connected device. They can appear in many forms, such as banners, popups and videos. Other forms of digital advertising, include online search advertising (for example, the paid-for listings in Google Search results) and classifieds ads (the ads shown on classifieds websites such as Gumtree) and typically serve a different purpose to display advertising and are not regarded as effective substitutes. As illustrated in figure E.1 below, we estimate that display advertising expenditure was around \$6.5 billion in Australia in 2020.

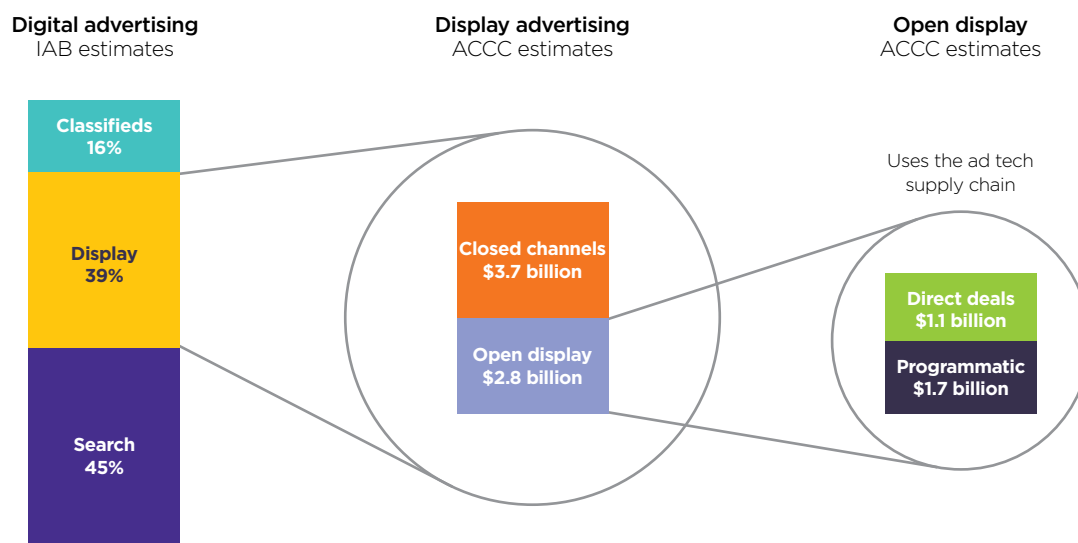
There are two ways display ads can be traded; through open display channels or through closed channels. Open display channels can be used by different website publishers to sell their ad inventory to many advertisers. Closed channels (also called owned and operated channels), on the other hand, involve publishers selling their ad inventory directly to advertisers using their own systems. Social media platforms, such as Facebook, operate closed channels to sell their advertising space.

Ad tech is a broad umbrella term to describe the complex technology used by advertisers and publishers to facilitate the buying and selling of digital display advertising through **open display** channels.

This report focuses on open display channels, a critical route for Australian online publishers (websites and apps) to reach advertisers and vice-versa. The ACCC estimates open display channels, were worth around \$2.8 billion in Australia in 2020, or around 43% of the total amount spent on display advertising.

² The ad tech specific rules proposed in this report could form part of this broader regulatory framework.

Figure E.1: Estimated size of digital advertising channels in Australia³



Source: ACCC analysis of data obtained from ad tech providers and provided by IAB Australia.

Ad tech is not used to sell or purchase advertising opportunities on closed channels such as the Facebook and Instagram platforms. This report does not focus on these platforms, which sit outside the ad tech supply chain. However, we have considered how closed channels, particularly Facebook's services, may impact competition for smaller advertisers' expenditure.

Competitive ad tech services are vital to Australian advertisers, publishers and consumers

A competitive ad tech supply chain is important to Australian advertisers, publishers and ultimately consumers.

Without strong competition in the ad tech supply chain, advertisers will likely pay more to ad tech suppliers for poorer quality services, resulting in poorer returns on their advertising spend. These increased costs may then be passed on to consumers in the form of higher prices for goods and services supplied by those advertisers.

Further, many Australian online publishers rely on open display channels, and ad tech services, to sell advertising opportunities on their websites and apps and earn revenue. Weak competition is likely to lead to publishers of websites and apps paying more for digital advertising services, and can mean they receive less revenue for the ad inventory they sell.

If publishers earn less revenue for their advertising space, they are likely to produce less, and/or lower quality, online content. Alternatively publishers may explore alternative monetisation strategies, for example by charging consumers to access their websites or apps. Australian consumers are therefore at risk of facing reduced access to diverse and high quality information and services online. This is particularly problematic where digital advertising is used to fund content that is important to the public or has broader public benefits, such as journalism.

³ In making the estimates in this report, we have attempted to capture the majority of the market, and compare figures on the same basis. However, it is possible that not all providers are captured in the industry size and share estimates included in this report. Further, while we requested information on a consistent basis, the ACCC has not been able to verify the accuracy of the all information provided to us, and we have relied on ad tech providers to provide us with accurate information, including in accordance with our statutory notices. Accordingly, it is possible that some of the estimates in this report could slightly under or overstate actual figures, such as the size of an advertising segment or the share of revenue or impressions for a firm.

Ad tech is complex, and a single transaction can involve many ad tech providers

The ad tech supply chain is made up of four key services used by publishers and advertisers. Publishers sell ad spaces on their websites or apps (called ad inventory) via the supply chain, using two main ‘publisher-side services’:

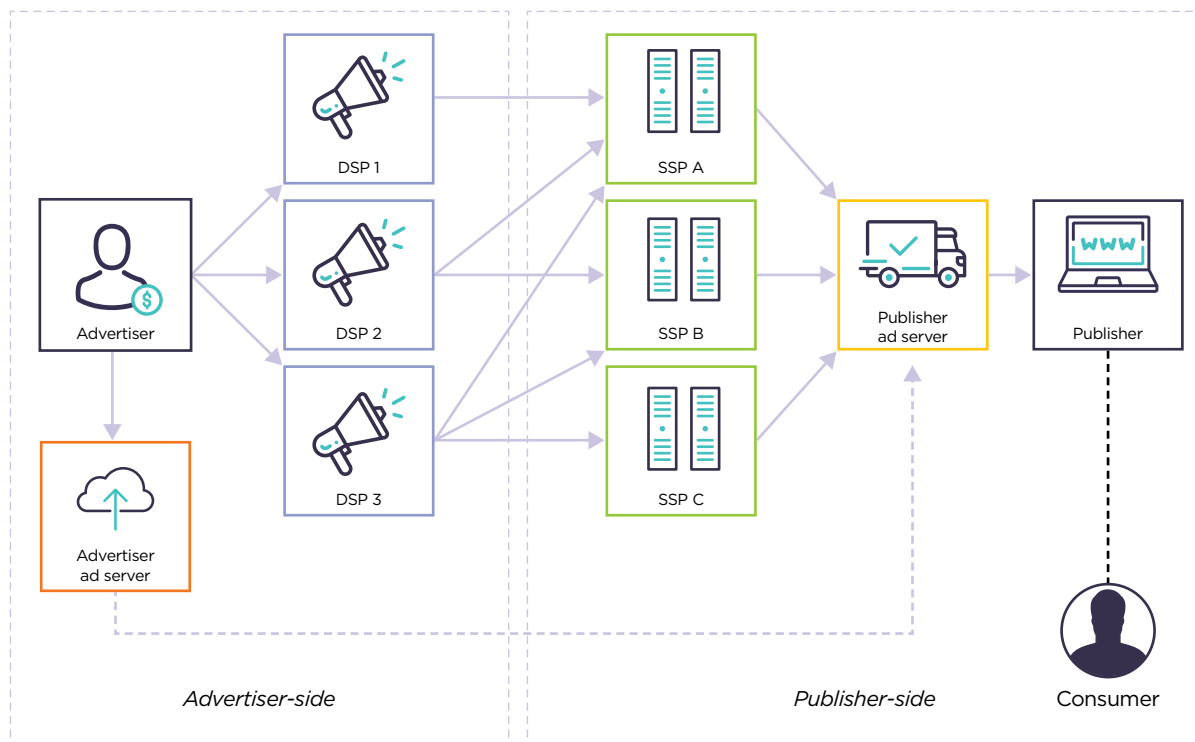
- publisher ad servers
- supply-side platforms (SSPs).

Advertisers buy ad inventory to show their ads in, using two main ‘advertiser-side services’:

- advertiser ad servers
- demand-side platforms (DSPs).

The way that transactions occur across the supply chain is complex, and the exact services involved in a transaction may not always be the same. Generally though, when a consumer visits a publisher’s property, such as a website or app, its publisher-side services send out a request to many advertisers through their advertiser-side services, asking for bids from advertisers who would like to show an ad to the consumer. The advertiser-side services and publisher-side services then run a series of automated processes, including auctions, to select a winning ad which is then sent to the publisher. These automated transactions take place as the webpage or app load for the consumer. This is illustrated in the figure E.2 below.

Figure E.2: Overview of the ad tech supply chain



There are also a number of other providers supplying services to help advertisers and publishers with the collection and use of data, and that measure the performance of ad tech services and digital ads.

Data about consumers, and their online activity, and in some cases offline activity, is critical to ad tech, as it enables one of the key features of the open display channel, the targeting of ads to specific consumers. Targeted advertising is seen to benefit both publishers and advertisers. Better targeting allows advertisers to potentially earn a higher return on their advertising investment, and publishers to earn more revenue from their ad inventory. There are also potential benefits to consumers given advertising often helps fund publishers’ online content. Some customers may also prefer seeing ads for

goods and services that are more relevant to their interests. However research shows that over half of Australians are uncomfortable, or very uncomfortable, with targeted advertising based on what they have said and done online.⁴

Google's dominance in the ad tech supply chain creates problems for competition, advertisers and publishers

Google dominates the ad tech supply chain

Google is the largest supplier of ad tech services across the entire ad tech supply chain; no other provider has the scale or reach across the ad tech supply chain that Google does. Unlike many of the other providers, Google is also a key 'publisher' or source of ad space; supplying ad inventory to advertisers on its own properties including YouTube, Gmail and Google Search.

Based on our estimates of the supply of ad tech services in Australia in 2020, Google's share of impressions for each of the four main services was between 70 and 100% and, for those ad tech services where revenue information is available, Google's share of revenue was between 40 and 70%.⁵

Table E.1: ACCC's estimates of Google's share of revenue and impressions for main ad tech services, Australia, 2020

	Share of revenue	Share of impressions
Publisher ad servers	Insufficient data available	90-100%
SSPs only	40-50%	70-80%
SSPs and ad networks	50-60%	70-80%
DSPs	60-70%	80-90%
Advertiser ad servers	Insufficient data available	80-90%

Source: ACCC analysis of data obtained from ad tech providers.

In relation to publisher and advertiser ad server services, Google faces minimal competition from its rivals. Google has a 90-100% share of impressions for publisher ad server services and an 80-90% share of impressions for advertiser ad server services in Australia in 2020. No other provider imposes a significant competitive constraint on Google. While the revenue earned from publisher ad server services is generally not significant, the ACCC considers that Google has been able to use its control of this service to provide its more profitable SSP service with a significant competitive advantage.

While there are multiple providers of DSP and SSP services, Google is still by far the largest supplier, and no other providers are close competitors. Rival DSP and SSP providers typically focus on large advertiser and publisher customers, meaning smaller customers have little choice of supplier. Further, even though large publishers and advertisers may choose to use non-Google services, they will often use the rival's services in addition to Google's core services (multi-homing), and will not completely substitute away from Google.

There are a number of factors contributing to Google's dominance across the ad tech supply chain. All of Google's services benefit from Google's integration across ad tech services. Google's ad servers further benefit from high switching costs, while its DSPs and SSPs benefit from Google's access to exclusive inventory and demand and its access to data. In particular, Google's ability to leverage its access to data from its large range of consumer-facing services, like Search, Android and Maps, has led to Google having an actual, and perceived, data advantage which has contributed to its strength in DSP services.

4 Office of the Australian Information Commissioner, [Australian Community Attitudes to Privacy Survey 2020](#), September 2020.

5 Share of revenue is an ad tech provider's share of the total revenue earned by the main providers of the service in Australia, in relation to open display advertising served to users in Australia. Share of impressions is an ad tech provider's share of the total impressions traded or served by the main providers of the service in Australia, in relation to open display advertising served to users in Australia.

Google's access to data has contributed to its dominance in ad tech

Google's access to a large volume and range of first-party data, gathered through its customer facing services, such as Search, Maps and YouTube, as well as its third-party data appears to have provided Google with a competitive advantage in the supply of ad tech services, but in particular, in the supply of DSP services.⁶

Google submitted to the ACCC that it does not use its first-party data to provide targeted advertising through its ad tech services on third-party inventory (that is, on websites and apps Google doesn't own). However, there is a widely-held perception in the industry, among advertisers, rivals and publishers, that Google does use its first-party data in this way. In particular, industry participants consider that the information Google obtains via its core services, where it holds a dominant position such as Google Search, provides Google with an unparalleled advantage in ad tech and that its advantage is unlikely to diminish in the future.

The widespread view that Google is using its first-party data to provide targeted advertising via its ad tech services is in part due to Google's own ambiguous messaging about how it uses such data, including in public material on its websites aimed at advertiser customers. Further, Google's terms of service and privacy policies do not prevent Google using first-party data in this way.

The ACCC also notes that even if Google is not currently relying on first-party data in the supply of ad tech, there is nothing stopping it from doing so in the future. Google would be able to do so without seeking additional consent from its customers or otherwise notifying industry or its customers of a change of practice.

The ACCC is concerned that the widespread perceptions about how Google uses its first-party data in ad tech may be distorting competition in the supply of ad tech services in favour of Google. These views are due, at least in part, to Google's business and consumer-facing material. To address this, we recommend that Google ensure its public-facing material, including its terms and conditions make clear how it uses first-party data.

Recommendation 1: Google should amend its public material so that it clearly describes how Google uses first-party data to provide ad tech services

Google should amend its public material so that it clearly and unambiguously explains how it uses data that it collects from its consumer-facing services (also known as first-party data) to provide ad tech services. This should include a description of how both non-aggregated first-party data (data about a single consumer) and aggregated first-party data (such as combined data from multiple consumers) is used to provide ad tech services which enable the display of advertisements on third-party websites and apps.

Public facing material Google should amend includes:

- its Terms of Service, its Privacy Policy, and any other documents which set out or explain to consumers how Google uses their data⁷
- material aimed at business users, or potential business users, of Google's ad tech services, including any terms and conditions of service.

Google should make these amendments now and ensure the information remains up to date.

⁶ First-party data generally refers to data that a provider collects directly from consumers when using the provider's service. Third-party data is data about consumers that is collected from third-party services, or collected about a consumer's interactions with a third-party website or app.

⁷ Terms of Service refers to Google's Terms of Service, found on Google's Privacy & Terms webpage. See Google, *Google Privacy & Terms: Terms of Service*, <https://policies.google.com/terms?hl=en-UK>, accessed on 18 August 2021. Privacy Policy refers to Google's Privacy Policy found on Google's Privacy & Terms webpage. See, Google, *Google Privacy & Terms: Privacy Policy*, <https://policies.google.com/privacy?hl=en-UK>, accessed on 18 August 2021.

Clear public statements about how Google uses first-party data in ad tech services, including how it creates audience segments or otherwise enables advertisers to target consumers online, will provide greater transparency and address the confusion that currently exists about how Google uses its first-party data in ad tech. Addressing this confusion will assist in promoting competition by enabling advertisers to make more informed decisions about their choice of ad tech providers.

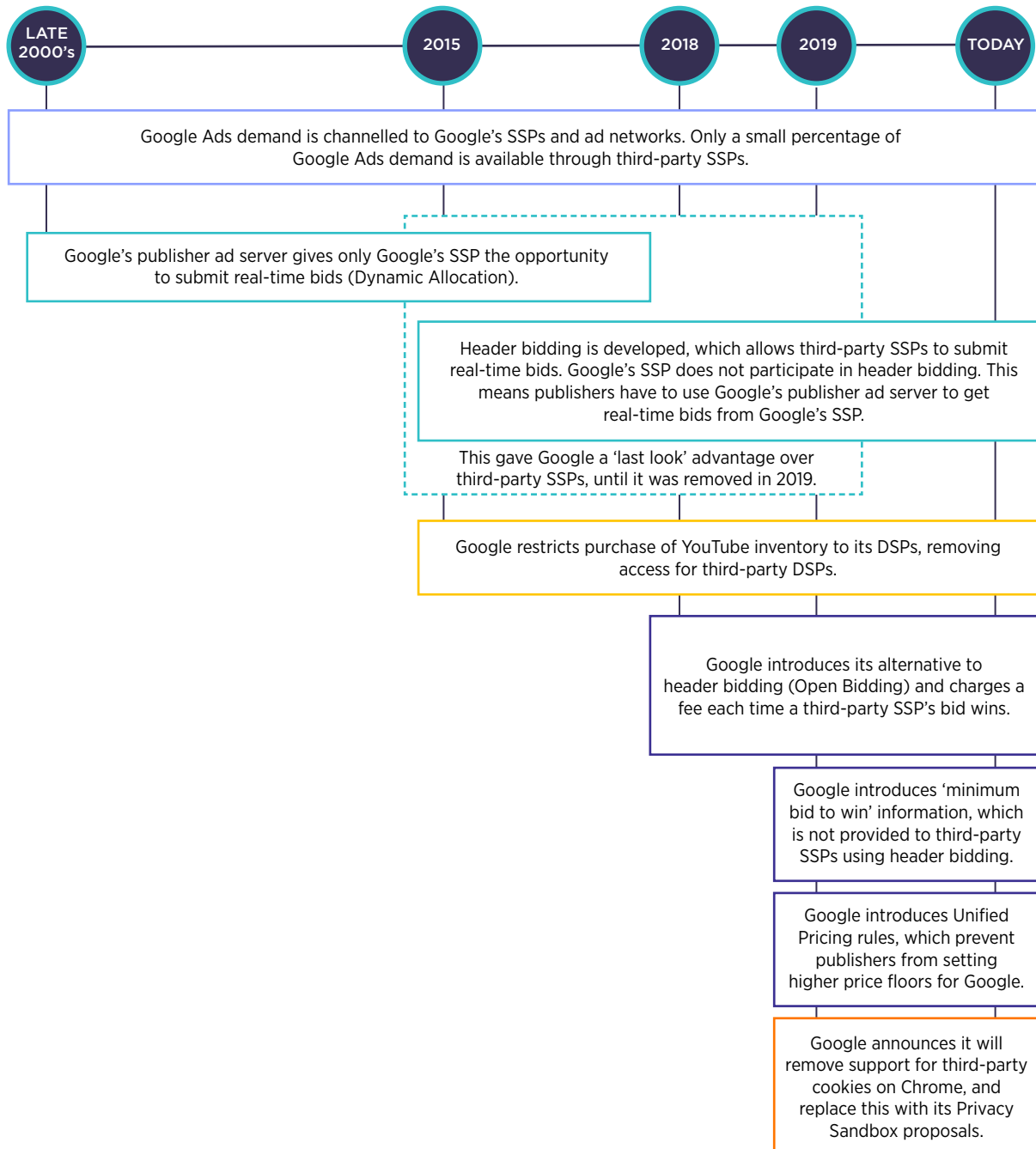
Google has engaged in self-preferencing conduct

The ACCC considers that Google's vertical integration and dominance across the ad tech supply chain, and in related services, have allowed it to engage in leveraging and self-preferencing conduct, which has likely interfered with the competitive process. For example, Google has:

- restricted the purchase of YouTube (which is Google-owned) inventory to its own DSPs
- directed demand from its DSPs (particularly Google Ads) to its own SSP
- used its publisher ad server to preference its own SSP over time
- restricted how its SSP works with third-party ad servers
- used its control over auction rules in its publisher ad server to advantage its other services.

The ACCC considers that over time, this conduct has had the cumulative effect of lessening competition for the supply of ad tech services, and allowed Google to establish and entrench its dominant position in the ad tech supply chain. Figure E.3 highlights Google's conduct that has impacted competition over time.

Figure E.3: Google's conduct over time



Australian law does not prohibit a firm from possessing a substantial degree of market power. It also does not prohibit a firm with a substantial degree of market power from 'outcompeting' its rivals by using superior skills and efficiency to win customers at the expense of firms that are less skilful or less efficient. This conduct is part of the competitive process, which drives firms to develop and offer products that are more attractive to customers, and should not be deterred. However, it is contrary to the CCA for a firm with substantial market power to damage the competitive process by preventing or deterring rivals, or potential rivals, from competing on their merits, through for example, preferencing its own services.

The ACCC recognises that not all self-preferencing is anti-competitive. However, the ACCC considers that the cumulative effect of the conduct described in figure E.3 has been to prevent both actual and future rivals of Google's ad tech services from competing effectively with Google's vertically integrated services. The lack of effective competition in the supply of ad tech services also harms publishers and

advertisers, depriving them of lower prices, higher quality services and/or greater innovation. The cost of this reduction in competition is ultimately passed onto consumers.

The ACCC is continuing to consider the specific allegations that have been made against Google over the course of the inquiry under the competition provisions of the CCA, including:

- Google limiting DSP access to YouTube inventory and offering volume discounts or other incentives to advertisers
- channelling demand from Google's DSPs to its own SSP
- Google's use of its publisher ad server to preference its SSP, including through Google's refusal to participate in header bidding and Google's charging of fees for third-party publishers who win bids on Google's Open Bidding platform.

Google's integration creates conflicts of interest which can harm advertisers and publishers

Google's activities across the supply chain means that, in relation to a single transaction, Google can act on behalf of both the advertiser (the buyer) and the publisher (the seller) and operate the ad exchange (SSP) connecting these two parties. As the interests of these parties do not align, this creates conflicts of interest for Google. For example, the interests of its advertiser customer to buy advertising opportunities at the cheapest price are in conflict with the interests of its publisher customer to maximise their revenue (by selling advertising inventory at the highest possible price). Google can also face conflicts where the interests of its customer conflict with the interest of one of Google's related services.

The potential for a provider to act contrary to the interests of a customer is reduced where the customer has visibility over whether their provider is operating in their best interests, and if not, the ability to switch to another provider. However, in ad tech, the opacity of the supply chain means that it is not always clear to the publisher or advertiser customer whether their contracted Google ad tech service provider is acting in their best interests. Further, advertisers and publishers are not easily able to switch to competing providers as Google's services are often considered 'must haves'.

These conflicts of interest can harm both advertisers and publishers. In some cases, the concerns can also be characterised as self-preferencing, where Google is acting in the interest of a related business. For example, where Google has used its publisher ad server to favour its own SSP over rival SSPs, thereby putting the interests of its own business over the interests of its publisher customers. The ACCC considers that this conduct may well have reduced the revenue that publishers would have obtained if all SSPs were treated comparably by Google's publisher's ad server.

However, there are also concerns arising from Google's conflicts between advertiser and publisher customers. In particular, there is significant industry concern about Google not acting in the interest of its publisher customers, by sharing bidding and auction information between its publisher and advertiser side services. The ACCC has been unable to ascertain whether this conduct is occurring but notes that the absence of measures to manage such conflict, and alternative services, mean there is a risk that such conduct is taking place.

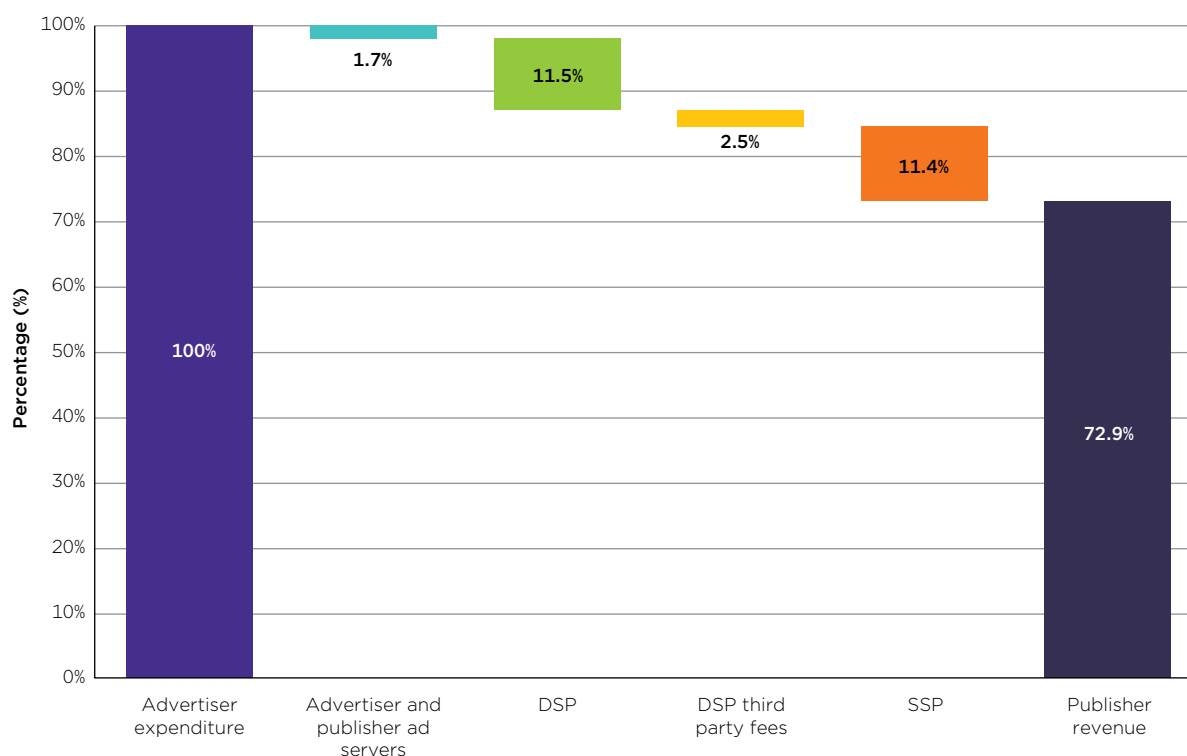
In other markets where conflicts of interest arise, there are regulatory frameworks in place to manage them. For example, in financial services, there are legal requirements that limit the risk that providers will not act in the best interests of their clients. However, there is currently no regulation applying to ad tech services to manage conflicts of interest.

Weak competition is likely contributing to high ad tech fees

Our estimates show that in Australia in 2020, 27% of advertiser expenditure, in buying programmatic advertising opportunities, on average, went to fees for the four main ad tech services. The total amount of advertiser expenditure retained by ad tech providers is likely to be higher than this, with advertisers and publishers often using additional ad tech services, beyond the four key services.

The ACCC recognises the benefit that ad tech services provide to both publishers and advertisers. Nevertheless, the ACCC considers that these fee levels are higher than they would be if the supply of ad tech services was more competitive, and likely reflect the market power that Google is able to exercise in its dealings with both advertisers and publishers. High levels of ad tech fees reduce the revenue publishers obtain for their advertising inventory and therefore the funds available to invest in the online content they make available to consumers. High ad tech fees also increase advertisers' costs with consequential effects for the price of goods or services sold by such businesses.

Figure E.4: ACCC estimates of average fees for ad tech services in Australia, 2020⁸



Source: ACCC analysis of data obtained from ad tech providers.

Substantial regulatory reform is needed to promote more robust competition in ad tech

New rules should apply to Google's supply of ad tech services to address its dominance and problematic conduct

Currently, the primary way the ACCC is able to address competition concerns arising from self-preferencing and other conduct identified in this report is through taking enforcement action under the CCA. However, on its own this is insufficient to address the type and scale of concerns arising in ad tech and will fail to remedy the systemic competition concerns identified.

First, the nature of enforcement action is that investigations are confined to focus on a very specific breach of the CCA. This means that it is not well-suited to the systemic concerns we are seeking to address, which cover conduct over many years and relate to multiple separate ad tech services. It may not address situations where one instance of the conduct ceases as a result of enforcement action, but where the platform is able to adapt and achieve the same competitive impact through different behaviour. Secondly, investigation and court proceedings are lengthy and fail to remedy concerns with the immediacy which is often required to prevent long lasting harm. This is likely to be particularly acute with ad tech given both its complexity and opacity. Enforcement is also necessarily retrospective,

⁸ These are the ACCC's estimates of the average fees charged by ad tech providers for digital display advertising delivered to users in Australia.

seeking to address harms after they have occurred. Thirdly, it is difficult to obtain remedies that address the cause of the problem, or provide sufficient penalties to deter very large global platforms from engaging in similar conduct in the future.

Accordingly, the ACCC recommends that a set of sector specific rules be established that applies to Google's supply of ad tech services.

Recommendation 2: The ACCC should be given powers to develop sector specific rules to address conflicts of interest and competition issues in the ad tech supply chain. The rules would apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position

The ACCC should be given powers to develop sector specific rules to address current competition issues arising in the supply of ad tech services. These rules should apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position in the ad tech supply chain. The ACCC should have powers to develop rules to manage conflicts of interest, prevent anti-competitive self-preferencing, ensure rivals can compete on their merits by having non-discriminatory access to certain services, and address transparency concerns.

Rules should be:

- developed in consultation with industry
- proportionate to the competition issues and conflicts of interest issues they are aimed at addressing
- enforceable by the ACCC, with penalties for non-compliance.

The exact criteria to determine which ad tech providers the rules would apply to would need to be developed. Given current concerns arising from Google's dominance and vertical integration across the ad tech supply chain, the ACCC expects the rules would apply to Google. However, rules should be capable of being applied to other ad tech providers in future, if they meet the criteria.

We also consider that any such rules should allow measures to be introduced to manage competition concerns arising from Google's data advantage. While Google states that it currently does not use its first-party data to target advertising on third-party websites, it is important that the ACCC should be able to address competition issues that may arise from Google's use of first-party data more extensively in the future.

This is particularly important in light of Google's proposal to remove support for third-party cookies from its Chrome browser and replace these with its Privacy Sandbox Proposals, currently scheduled to be rolled out in late 2022-2023. Under these proposals, Google is proposing to replace the targeting and measurement capabilities of third-party cookies, which are currently a key feature of ad tech services, with new technologies that will run on Chrome. Google has stated it is making such changes to protect users' privacy, by preventing the tracking of consumers across the web.

However, many stakeholders have expressed concerns about the impact of these changes on the ad tech sector and, particularly on those publishers who rely on selling advertising space on their websites or apps. While the likely impact of Google's Privacy Sandbox on ad tech services is not yet clear, the inability of ad tech providers, advertisers and publishers to use third-party cookies to create data sets to target advertising suggests that first-party data will become increasingly important.⁹

Given the unparalleled level of first-party data Google holds, by virtue of Google Search and its other key customer facing services, there is a concern that Google will, in the future, have a stronger incentive to use first-party data to advantage its ad tech services, with a significant impact on competition in the ad tech supply chain. Accordingly, we recommend that one of the tools available to the ACCC under

9 The CMA is currently conducting an investigation into whether Google's Privacy Sandbox proposals breach UK competition laws, and announced in June that it had a number of competition concerns about the proposals. Google has offered the CMA commitments to address these concerns, which the CMA intends to accept, subject to a consultation process. Further information is available [here](#) and in chapter 4.

the proposed new rule making power should include the development of a data separation measures or data access requirements to address the competition risks that may arise from Google's first-party data.

Recommendation 3: The power to introduce sector specific rules should allow the ACCC to address competition issues caused by an ad tech provider's data advantage

The power to introduce sector specific rules proposed in **Recommendation 2** should include the ability for the ACCC to implement measures to address competition issues arising from an ad tech provider's data advantage where:

- the provider meets the criteria linked to its market power and/or strategic position in the ad tech supply chain (as outlined in **Recommendation 2**)
- the provider's data advantage arises from the ad tech provider's market power and/or strategic position in a related activity
- the ACCC finds the data advantage has increased, or has the potential to increase, the provider's market power.

Measures available to address the data advantage should include:

- data separation measures (for example, preventing an ad tech provider from using data it has collected from its consumer-facing services (i.e. first-party data) to provide ad tech services on third-party sites and apps)
- data access requirements (for example, requiring the provider to give other ad tech providers access to the provider's first-party data).

We acknowledge that currently it may be difficult for data access requirements to be implemented in a way that adequately protects consumers' privacy and complies with the *Privacy Act 1988* (Cth) (including any future amendments). However technological developments may make this possible in the future.

Transparency of the ad tech supply chain must improve

For competition in the supply of ad tech services to be effective, advertisers and publishers need to be able to assess and compare the price and quality of competing ad tech providers' services so that they can choose the providers that will best suit their needs. The easier it is for advertisers and publishers to assess price and quality of service, the more likely it is that competition will reward those ad tech service providers who offer the best value for money.

A lack of transparency can also lead to advertisers and publishers choosing not to use ad tech services, or to use such services less, where a lack of transparency undermines their trust and confidence in the ad tech supply chain.

Many aspects of the ad tech supply chain are opaque

We have found that a number of aspects of the supply chain lack transparency, including the pricing and operation of the supply chain. The complexity of the supply chain contributes to a lack of transparency and can make it difficult for advertisers and publishers to understand how the supply chain is operating. However, the operation of Google's ad tech services appear, in particular, to lack transparency.

First, we have found that while advertisers and publishers are generally able to observe the fees they are being charged by their provider in relation to an advertising opportunity or transaction, they have no visibility over the total fees, or take rates (total fees and charges by tech service providers across the supply chain in relation to that advertising opportunity or transaction). This has the potential to limit advertisers' and publishers' ability to make decisions that would allow them to optimise the sale and purchase of ad inventory. We are concerned that the lack of transparency of fees across the supply chain undermines trust in the ad tech supply chain, and limits the ability of advertisers and publishers to make informed decisions about the best way to buy and sell in the ad tech supply chain.

Secondly, there are a number of specific concerns with the level of transparency in relation to Google's ad tech services. Specific examples of how Google has limited the ability of advertisers and publishers to assess the performance and price of its services include:

- Google's restrictions on advertisers ability to measure the performance of its DSP services when they serve ads on YouTube
- Google not providing publishers with enough information about auction outcomes to consider the performance of its publisher side services
- Google not providing sufficient information about the take rates of Google Ads to understand and compare its pricing.

The ACCC considers that the lack of transparency provided in respect of Google services is likely due to the lack of competitive pressure faced by Google in its supply of ad tech services. At the same time, the dominance and the ubiquity of Google's ad tech services make it more important that the operation of the Google services are sufficiently transparent to facilitate competition and foster trust in the operation of the entire supply chain. Transparency issues across the supply chain should be addressed by industry in the first instance.

We consider that as a first step, industry led measures should be used to address these transparency issues, and therefore recommend that industry should develop standards to increase the transparency of take rates and address verification issues.

Recommendation 4: Industry should establish standards to require ad tech providers to publish average fees and take rates for ad tech services, and to enable full, independent verification of demand side platform services

To address the transparency issues identified across the supply chain, industry should, in the first instance, work together to develop and implement standards that require providers operating in Australia to publish average fees and take rates for ad tech services. These industry standards should aim to improve fee and take-rate transparency, and enable ad tech customers to meaningfully compare the fees and take rates across different ad tech providers and services. These industry standards should set out the categories of fees to be published, which should be adopted across the industry.

Additionally, to enable advertisers to assess DSP services fully and independently, industry is encouraged to develop and adopt a standard that allows full and independent verification of DSP services.

However, if such voluntary industry standards are not effective in achieving transparency to meet the needs of advertisers or publishers, or if the standard is not made within a reasonable period of time, the ACCC could introduce measures to address transparency issues under the rules proposed in **Recommendation 2** (to address Google specific issues) or **Recommendation 6** (for industry wide issues).

Google should also voluntarily provide publishers with additional information on the operation and outcomes of its publisher server auctions to increase the transparency of its publisher server auctions and allow publishers to make better informed decisions about how they sell their inventory.

Recommendation 5: Google should provide publishers with additional information about the operation and outcomes of its publisher ad server auctions

Google should provide publishers with sufficient information to compare bids received from different SSPs. Specifically, publishers should be able to compare bids received through Google's SSP (Google Ad Exchange) and Open Bidding, to bids received through header bidding. They should also be able to match bid information to the price an impression is sold for.

If the information provided by Google is insufficient to enable publishers to carry out this comparison, the ACCC could introduce measures to require Google to improve the transparency of its publisher ad server auctions under sector specific rules outlined in **Recommendation 2**.

Future measures to address transparency may be required

While we consider that industry led solutions are an important first step to address transparency issues, such measures are not always effective, particularly where key industry players do not participate. Therefore, it is also important that the ACCC has the ability to introduce transparency requirements to improve competition and efficiency in the future, should industry fail to find a solution. Therefore we recommend that the ACCC should have the power to make targeted, effective and proportionate rules that would apply across the ad tech industry to promote transparency in the supply of ad tech services.

Recommendation 6: The ACCC should be given powers to develop and enforce rules to improve transparency of the price and performance of ad tech services. The rules would apply across the Australian ad tech supply chain

The ACCC should be given powers to introduce transparency requirements which would apply across the Australian ad tech supply chain. These powers would have broader application than the sector specific rules proposed under **Recommendation 2**, but would only allow for measures to improve transparency to be introduced.

Measures could include common transaction IDs, or requirements to publish prices and take rates in a standard form. As is the case with the sector specific rules proposed in **Recommendation 2**, any transparency measures would be developed in consultation with industry, and would need to be effective at addressing the transparency concerns and proportionate to the harms identified.

While the majority of the transparency issues currently appear to be confined to Google, we consider that this measure is necessary given the complexity of the ad tech supply chain, and the reliance that advertisers and publishers place on their providers to assess quality and price of ad tech services. Such a recommendation would allow the ACCC to effectively address systemic transparency problems in ad tech if they arise in the future. Unlike the ad tech specific rules which we propose under recommendation 2, this recommendation envisages a transparency specific measures that would apply to across all of industry.

Australia's regulation should be aligned globally where possible

In making the recommendations set out in this report, the ACCC has sought to address the competition concerns that we have found to exist in the supply of ad tech services to Australian advertisers and Australian publishers.

A number of overseas competition authorities have also examined competition in ad tech services and Google's conduct and influence in those markets. Many of the key findings set out in this report reflect similar conclusions reached by our counterparts overseas. Further, the recommendations put forward by the ACCC and, in particular, the need to introduce sector specific rules in Australia are broadly consistent with the proposals put forward overseas. In particular, the UK Competition and Markets Authority has indicated that the proposed Strategic Market Status regime is intended to apply

to a number of Google services including in the ad tech supply chain. Other jurisdictions, including the European Union, the United States, Japan and Germany have introduced or are considering the introduction of specific regulatory regimes to address the competition issues associated with digital platforms, which are expected in, at least some instances to have some application to Google's ad tech services.

The ACCC recognises the benefits associated with international alignment. Alignment will provide regulatory certainty to ad tech providers and their advertiser and publisher customers. International regulatory coherence will also assist Australian consumers and businesses benefit from regulation to improve competition being implemented globally.

The ACCC will continue to advocate strongly for a high degree of international alignment in the measures necessary to address the competition and consumer concerns identified in ad tech services and digital platforms more broadly.

ACCC to consider the need for broader sector specific rules to apply to digital platform markets

Common concerns in digital platform markets

The concerns identified in this report are similar to concerns the ACCC has identified in its previous reports in relation to online search, social media and app marketplaces. These markets, like the supply of ad tech services, are characterised by high barriers to entry and expansion such as those stemming from network effects, economies of scale and advantages of scope. They are also dominated by one or two vertically integrated firms who hold a strategic position and who have the ability and incentive to engage in anti-competitive leveraging conduct such as self-preferencing.

In this report, we have gone further than in previous ACCC inquiry reports and have recommended that the ACCC, or another regulator, be empowered to develop sector specific rules to deal with these concerns in relation to ad tech. In particular, we have recommended that a set of rules be developed to apply to ad tech providers which meet a set of criteria linked to market power or a strategic position.

We now consider it is necessary to explore whether specific rules are required to apply to digital platform markets more broadly to address the competition and consumer concerns identified in our previous reports. The ACCC intends to do this in our fifth interim report for the Digital Platform Services Inquiry, due to the Treasurer in September 2022.

Digital Platform Services Inquiry fifth interim report (September 2022)

The ACCC will give further consideration to the need for broader regulatory changes as part of its Digital Platform Services Inquiry - Interim Report September 2022 (fifth interim report). This is the mid-term report of the five year Digital Platform Services Inquiry (2020–2025).¹⁰

The fifth interim report will focus on competition and consumer issues raised in the course of the Digital Platform Services Inquiry to date, as well as issues raised in the Ad Tech Inquiry and Digital Platforms Inquiry 2017–2019, to the extent they cover digital platforms and factors within the scope of the Digital Platform Services Inquiry. The report will consider whether there is a need for changes to Australia's existing competition and consumer regulation to address common issues we have identified in our Inquiries and if so, what such a regime could include.

The ACCC plans to release a concepts paper in the first quarter of 2022 to seek feedback and inform the fifth interim report.

The fifth interim report is due to the Treasurer by 30 September 2022.

10 For more information about this inquiry, and the September 2022 report, see [Digital platform services inquiry 2020–2025](#).

Supplement to the executive summary: further detail on proposed sector-specific rules

Recommendation 2 is that sector specific rules should apply to ad tech providers that meet pre-defined criteria linked to their market power and/or strategic position, to address competition issues and manage conflicts of interests. Given current concerns arising from Google's dominance and vertical integration across the ad tech supply chain, the ACCC expects the rules would apply to Google in order to be effective. This supplement provides additional detail about the potential content of such rules.

While the ACCC is firmly of the view that rules are required, the most appropriate form of any rules will be a matter for Government to consider. The ACCC will also consider this further as part of the fifth interim report. Further, an evidence based assessment, informed by industry consultation, would be required to ensure the specific obligations and prohibitions are effective, targeted and proportionate to the competition harms identified.

Prohibitions on anti-competitive bundling and/or tying of services

The rules should prevent ad tech providers, who are subject to the rules, from unreasonably restricting the purchase of exclusive inventory to their ad tech services, or making use of one of their ad tech services contingent on integration with their other ad tech services. However, this rule should only apply where the inventory or service is considered essential or important to advertisers, publishers, or other users.

These rules could address the conduct identified in this report by:

- preventing Google from making YouTube inventory only available for purchase through its DSPs, which could enable advertisers to purchase YouTube inventory on other DSPs
- preventing Google from making Google Ads demand available only through its SSP, which could allow publishers to use third-party SSP to access bids from Google Ads customers.

Obligations to provide non-discriminatory or equivalent access to ad tech services

The rules should include an obligation for ad tech providers subject to the rules to provide non-discriminatory or equivalent access to ad tech services and associated information. This could include requirements to apply the same rules regarding access to and use of its services by third parties as it applies to its own related services. However, there could be exceptions to this rule, such as requiring that third parties meet certain technical or other requirements before being granted access under the rules.

These rules could address the conduct identified in this report by:

- Requiring Google to provide equivalent information to auction participants, and not share information preferentially. This could address Google's restrictions on the provision of minimum bid to win information for SSPs using header bidding, and prevent it from providing its own services with additional information about auctions.
- Preventing Google from charging third-party SSPs a fee for using Google's publisher ad server, but not its own SSP.

Requirements to manage conflicts of interest

The rules should include obligations for ad tech providers subject to the rules to put measures in place to manage conflicts of interest that arise because of their position as a supplier of services across the supply chain.

These rules could include:

- Requirements that the specified ad tech provider does not use information about the operation of one ad tech product to supply another ad tech product. For example, preventing an SSP from providing its DSP with competitors bidding information to inform its bidding algorithm.
- Requirements that the specified ad tech provider act in the best interests of advertisers or publishers. For example, requiring that DSPs act in the best interests of their advertiser customers, and SSPs their publisher customers.

Transparency requirements

The rules should include additional transparency requirements for ad tech providers subject to the rules.

These rules could address the transparency issues identified in this report by:

- requiring Google to provide information on auctions in its publisher ad server, such that publishers are able to compare bids from header bidding with bids from Google's Open Bidding and its SSP
- requiring Google to take steps to facilitate independent assessment of its DSP, and provide the average fees for Google Ads.

List of Recommendations

The ACCC's recommendations are listed below.

Recommendation 1: Google should amend its public material so that it clearly describes how Google uses first-party data to provide ad tech services

Google should amend its public material so that it clearly and unambiguously explains how it uses data that it collects from its consumer-facing services (also known as first-party data) to provide ad tech services. This should include a description of how both nonaggregated first-party data (data about a single consumer) and aggregated first-party data (such as combined data from multiple consumers) is used to provide ad tech services which enable the display of advertisements on third-party websites and apps.

Public facing material Google should amend includes:

- its Terms of Service, its Privacy Policy, and any other documents which set out or explain to consumers how Google uses their data¹¹
- material aimed at business users, or potential business users, of Google's ad tech services, including any terms and conditions of service.

Google should make these amendments now and ensure the information remains up to date.

Recommendation 2: The ACCC should be given powers to develop sector specific rules to address conflicts of interest and competition issues in the ad tech supply chain. The rules would apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position

The ACCC should be given powers to develop sector specific rules to address current competition issues arising in the supply of ad tech services. These rules should apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position in the ad tech supply chain. The ACCC should have powers to develop rules to manage conflicts of interest, prevent anti-competitive self-preferencing, ensure rivals can compete on their merits by having non-discriminatory access to certain services, and address transparency concerns.

Rules should be:

- developed in consultation with industry
- proportionate to the competition issues and conflicts of interest issues they are aimed at addressing
- enforceable by the ACCC, with penalties for non-compliance.

The exact criteria to determine which ad tech providers the rules would apply to would need to be developed. Given current concerns arising from Google's dominance and vertical integration across the ad tech supply chain, the ACCC expects the rules would apply to Google. However, rules should be capable of being applied to other ad tech providers in future, if they meet the criteria.

11 Terms of Service refers to Google's Terms of Service, found on Google's Privacy & Terms webpage. See Google, *Google Privacy & Terms: Terms of Service*, <https://policies.google.com/terms?hl=en-UK>, accessed on 18 August 2021. Privacy Policy refers to Google's Privacy Policy found on Google's Privacy & Terms webpage. See, Google, *Google Privacy & Terms: Privacy Policy*, <https://policies.google.com/privacy?hl=en-UK>, accessed on 18 August 2021.

Recommendation 3: The power to introduce sector specific rules should allow the ACCC to address competition issues caused by an ad tech provider's data advantage

The power to introduce sector specific rules proposed in Recommendation 2 should include the ability for the ACCC to implement measures to address competition issues arising from an ad tech provider's data advantage where:

- the provider meets the criteria linked to its market power and/or strategic position in the ad tech supply chain (as outlined in recommendation 2)
- the provider's data advantage arises from the ad tech provider's market power and/or strategic position in a related activity
- the ACCC finds the data advantage has increased, or has the potential to increase, the provider's market power.

Measures available to address the data advantage should include:

- data separation measures (for example, preventing an ad tech provider from using data it has collected from its consumer-facing services (i.e. first-party data) to provide ad tech services on third-party sites and apps)
- data access requirements (for example, requiring the provider to give other ad tech providers access to the provider's first-party data).

We acknowledge that currently it may be difficult for data access requirements to be implemented in a way that adequately protects consumers' privacy and complies with the *Privacy Act 1988* (Cth) (including any future amendments). However technological developments may make this possible in the future.

Recommendation 4: Industry should establish standards to require ad tech providers to publish average fees and take rates for ad tech services, and to enable full, independent verification of demand side platform services

To address the transparency issues identified across the supply chain, industry should, in the first instance, work together to develop and implement standards that require providers operating in Australia to publish average fees and take rates for ad tech services. These industry standards should aim to improve fee and take-rate transparency, and enable ad tech customers to meaningfully compare the fees and take rates across different ad tech providers and services. These industry standards should set out the categories of fees to be published, which should be adopted across the industry.

Additionally, to enable advertisers to assess DSP services fully and independently, industry is encouraged to develop and adopt a standard that allows full and independent verification of DSP services.

However, if such voluntary industry standards are not effective in achieving transparency to meet the needs of advertisers or publishers, or if the standard is not made within a reasonable period of time, the ACCC could introduce measures to address transparency issues under the rules proposed in Recommendation 2 (to address Google specific issues) or Recommendation 6 (for industry wide issues).

Recommendation 5: Google should provide publishers with additional information about the operation and outcomes of its publisher ad server auctions

Google should provide publishers with sufficient information to compare bids received from different SSPs. Specifically, publishers should be able to compare bids received through Google's SSP (Google Ad Exchange) and Open Bidding, to bids received through header bidding. They should also be able to match bid information to the price an impression is sold for.

If the information provided by Google is insufficient to enable publishers to carry out this comparison, the ACCC could introduce measures to require Google to improve the transparency of its publisher ad server auctions under sector specific rules outlined in Recommendation 2.

Recommendation 6: The ACCC should be given powers to develop and enforce rules to improve transparency of the price and performance of ad tech services. The rules would apply across the Australian ad tech supply chain

The ACCC should be given powers to introduce transparency requirements which would apply across the Australian ad tech supply chain. These powers would have broader application than the sector specific rules proposed under Recommendation 2, but would only allow for measures to improve transparency to be introduced.

Measures could include common transaction IDs, or requirements to publish prices and take rates in a standard form. As is the case with the sector specific rules proposed in Recommendation 2, any transparency measures would be developed in consultation with industry, and would need to be effective at addressing the transparency concerns and proportionate to the harms identified.

Setting the scene

On 10 February 2020, the Treasurer directed the ACCC to hold an inquiry into the markets for the supply of digital advertising technology services (ad tech services) and digital advertising agency services (ad agency services) (the Inquiry).

The Inquiry follows the Digital Platforms Inquiry (DPI) which concluded in 2019. In the DPI we identified concerns with the complexity and opacity of ad tech services, including the role of advertising agencies, and recommended an inquiry be held into competition for the supply of these services.¹²

Scope of the Inquiry

The focus of the Inquiry is the intensity of competition in, and the efficiency of, markets for the supply of ad tech services and related ad agency services.¹³ Ad tech services are the range of services which facilitate the automated buying, selling, and delivery of, digital display ads to a consumer.

The Ministerial Direction specifies that the matters to be considered by the inquiry include, but are not limited to:

- the intensity of competition in the markets, and the efficiency of the markets, for the supply of digital advertising technology services and digital advertising agency services (those markets), with particular regard to:
 - how competition in those markets impacts on competition in the market for the supply of digital display advertising services
 - the availability to advertisers, publishers and other market participants of information on activities in those markets
 - the revenue of, and share of an advertiser's digital display advertising services expenditure retained by, ad tech providers
 - the concentration of power in those markets and between suppliers
 - auction and bidding processes
 - the impact of mergers and acquisitions in those markets
 - the behaviour of suppliers in those markets
- the relationships between suppliers and customers in the markets
- whether services are being provided to the satisfaction of all market participants.¹⁴

The full Ministerial Direction is at Appendix A.

The services covered by the Inquiry

The Inquiry has looked at competition for the supply of ad tech services used to facilitate the supply of **digital display advertising**. There are three types of ads consumers see online; search ads, classified ads, and digital display ads. Digital display ads, include banner and video ads that appear in websites, and the ads shown on mobile apps. Search ads are search result listings that an advertiser pays to be displayed, and classified ads are ads shown on classifieds websites. Search and classified ads are outside the scope of this Inquiry.

¹² See, Australian Competition and Consumer Commission (ACCC), [Digital Platforms Inquiry: Final Report](#), June 2019 (DPI Final Report).

¹³ For the purposes of the Inquiry, ad agency services are the services provided by advertising agency relating only to negotiating, acquiring or managing ad tech services.

¹⁴ Competition and Consumer (Price Inquiry – Digital Advertising Services) Direction 2020.

Digital display ads are sold in two main ways; through the open display channel, and through closed channels. The **open display channel** is made up of many websites operated by different publishers, who use ad tech services to sell their digital display ad inventory (the spaces where ads appear on their websites and apps) to many different advertisers. **Closed channels** (also called owned and operated channels) covers publishers who sell display ads directly to advertisers using their own systems, and not ad tech services. It is mainly made up of large publishers, such as social media platforms. Because closed channels do not use ad tech services, we have not examined these closely as part of this Inquiry. However, we have considered them to the extent that they may impact competition in open display channels.

In the interim report for this Inquiry we focused on the use of ad tech services to deliver display advertising to mobile or desktop web browsers, and not mobile apps. While there are some differences between the suppliers in and operation of ad tech services used for display ads on mobile apps, we have found that the trends and issues we discuss in this report generally apply to both mobile app and mobile browser services. As such, the final report considers ad tech services that deliver display advertising to both browsers (mobile and desktop) and mobile apps.

The types of ads and services covered by this Inquiry are explained in more detail in chapter 2.

Consumer privacy

The recommendations in this Report have focussed on addressing the harms caused by a lack of competition and transparency in the supply of ad tech services. In examining proposals for reform, we have considered the potential implications of recommendations for consumer privacy, and have carefully considered how the recommendations in this Report can be implemented so that consumer privacy is protected. We have also considered consumer privacy issues when they have been raised by Google as a reason for taking actions that stakeholders have raised concerns about.

The Australian Government is currently conducting a review of the *Privacy Act 1988* to ensure privacy settings empowers consumers, protect their data and best serve the Australian economy.¹⁵ The review was announced in response to recommendations in the DPI.

Our approach to data analysis

We have analysed a large volume of data obtained from ad tech providers and some other market participants during the inquiry. We have used this data to make a range of observations about the size of different types of digital advertising channels, shares of revenue and impressions for different services, and other industry trends. Generally, the figures discussed in the Report relate to digital display advertising delivered to consumers in Australia via the ad tech supply chain (i.e. open display channels).

In making our estimates in the Report, we have attempted to capture the majority of the market, and compare figures on the same basis. However, it is possible that not all providers are captured in the industry size and share estimates included in this report. Further, while we requested information on a consistent basis, the ACCC has not been able to verify the accuracy of the all information provided to us, and we have relied on ad tech providers to provide us with accurate information, including in accordance with our statutory notices. Accordingly, it is possible that some of the estimates in this report could slightly under or overstate actual figures, such as the size of an advertising segment, or share of revenue or impressions for a firm.

¹⁵ Attorney-General's Department (AGD), [Review of the Privacy Act 1998: Terms of Reference](#), accessed on 9 August 2021.

About the Inquiry

This is the final report for the Inquiry. In March 2020 we released an issues paper (the Issues Paper) seeking stakeholder views on a range of issues, and in January 2021, we released an interim report for this Inquiry (the Interim Report) setting out our preliminary findings, which included:

- Google was by far the largest provider of key ad tech services in Australia.
- Google's strong position across the supply chain, along with the opacity of the supply chain, meant Google likely had the ability and incentives to favour its own related businesses, and raised conflict of interest concerns.
- A significant amount of advertiser spend was retained by ad tech providers.
- A number of aspects of the ad tech supply chain appeared to be opaque, such as pricing and performance.

The Interim Report also set out a number of proposals to address the issues we identified. Feedback was sought on these proposals, which included:

- Rules to manage conflicts of interest and prevent self-preferencing in the supply of ad tech services.
- Proposals to enhance the ability of advertisers and publishers to assess the price and quality of services.
- Promoting competition in the industry through boosting data portability (allowing a consumer's data to be moved or shared at their request) and interoperability (allowing data to be shared between firms without a request from a consumer).
- Mandating the breaking up of datasets held by large incumbents, to make it easier for rival ad tech providers to enter and compete in the supply of ad tech services.

We have consulted with a wide range of stakeholders over the course of this Inquiry, including advertisers, publishers, ad agencies, and ad tech providers. Over 80 submissions were made to our Issues Paper and Interim Report combined. The Issues Paper, Interim Report and public submissions are published on our website.¹⁶

We issued statutory notices under section 95ZK of the *Competition and Consumer Act 2010* to obtain a significant volume of detailed information from ad tech providers, which has allowed us to gain unique insight into the operation of ad tech markets that would otherwise not be possible from publicly available information.

We also appreciate the engagement with international agencies during the course of the Inquiry including the Competition & Markets Authority (UK), the Department of Justice (US), the Federal Trade Commission (US), the Autorité de la Concurrence (France), the European Commission, the Headquarters for Digital Market Competition (Japan), the Comisión Nacional de los Mercados y la Competencia (Spain) and the New Zealand Commerce Commission.

This information and engagement has informed our findings and the recommendations that we have made in this report.

¹⁶ See, Australian Competition and Consumer Commission (ACCC), [Digital advertising services inquiry: project overview](#).

Structure of this report

This report builds on the preliminary analysis and findings discussed in the Interim Report.

The remainder of the report is structured as follows:

Chapter 1 – An introduction to ad tech: Chapter 1 provides an overview of how ad tech services fit into the online advertising landscape, what ad tech services are and how they operate, who the main providers are, and how consumer data is used in providing ad tech services.

Chapter 2 – Overview of the Australian ad tech industry: Chapter 2 provides an overview of the ad tech industry in Australia. It describes the significance of this sector, discusses some broad trends in display advertising relevant to the ad tech industry, and presents our findings on prices and price trends for ad tech services in Australia.

Chapter 3 – Competition in ad tech: Chapter 3 discusses the state of competition for each ad tech services and the reasons for Google's position across the ad tech supply chain.

Chapter 4 – The effects of Google's dominance and vertical integration: Chapter 4 discusses issues arising from Google's dominant or strong position in the supply of ad tech services, and its vertical integration across the supply chain, and our recommendations to address these issues.

Chapter 5 – Transparency in ad tech: Chapter 5 looks at transparency issues across the operation, pricing and quality of ad tech services. It also discusses our recommendations to address these issues.

Chapter 6 – Advertising agency services: Chapter 6 discusses the role of ad agencies in ad tech, a range of issues around conflicts of interest and transparency, and how advertisers can address these problems.

Appendix A – Ministerial Direction

Appendix B – How ad tech providers compete

Appendix C – Google's acquisition of ad tech providers or related services

Appendix D – Glossary

1. An introduction to ad tech

Key points

- There are three types of digital advertising: search, classifieds and display advertising. The Inquiry focuses on the use of advertising technology, or ad tech, to deliver digital display ads, which are all the online advertisements that are not search ads or classifieds ads. Consumers see display ads nearly every time they are online looking at websites or apps, whether on a mobile device such as a smartphone or tablet, a desktop or laptop computer.
- Ad tech plays an important role in facilitating the automated buying, selling and display of ads which are targeted at consumers.
- The ad tech supply chain is made up of a series of providers who supply services to advertisers and publishers, such as ad servers, demand-side platforms and supply-side platforms. The way these services interact to trade display ads is complex, and many auctions can be involved in determining the ad that will be shown to an individual consumer.
- Consumer data is important to ad tech providers because it enables ad targeting, which is a key feature of display advertising.
- Targeted advertising can benefit both publishers and advertisers. Better targeting has the potential to allow advertisers to earn higher return on their advertising investment, and publishers to earn more revenue from the sale of ad inventory. It can also have some consumer benefits. For example, it may help publishers provide online content to consumers for free or at a lower cost. It can also mean consumers see ads for goods and services that are more relevant to their interests.
- However, there are also risks of consumer detriment from targeted advertising which relies on consumer data. Targeting of alcohol or gambling ads are typical examples of targeting that can exploit vulnerable consumers and cause harm.
- We continue to support recommendations from the Digital Platforms Inquiry final report which could help to address such consumer harms including:
 - the Australian Consumer Law be amended to introduce a prohibition on certain unfair trading practices, which would enable the ACCC to undertake strategic enforcement action to deter ad tech providers, advertisers, publishers, and digital platforms from collecting or using data in ways that have the potential to result in substantial consumer harm but is conduct not captured by the existing provisions of the ACL
 - an enforceable code of conduct be developed by the Office of the Australian Information Commissioner to enable proactive and targeted regulation of digital platform data practices.

This chapter explains how ad tech services fit into the digital advertising landscape. It discusses what display advertising is and how ad tech services are used in the buying, selling and delivery of targeted display advertising. We discuss the roles of the key market participants in the ad tech supply chain (the series of ad tech services which buy and sell display ads), and explain how the supply chain operates. We also discuss the importance of consumer data in ad tech and how it is collected and used by ad tech providers.

1.1 Digital advertising in Australia

With consumers spending so much time online, digital advertising (or online advertising), is an important way for advertisers to reach them. As noted above, we have only considered display advertising in this Inquiry. This section discusses what display advertising is and how it is sold.

1.1.1 What is display advertising?

Display ads are the digital ads that are not search ads or classifieds ads. Website and app owners (called publishers) sell ad spaces (called ad inventory) where display ads can be shown. Advertisers, either directly or through agencies, purchase these spaces and their display ads are then shown in these ad spaces (called ad impressions).

Box 1.1: Online advertising terminology

Search advertising: ads shown when a consumer performs a search query on a general search engine (such as Google and Bing) or a specialised search engine (such as Amazon or Expedia).

Classified advertising: ads shown on general classifieds websites (such as Gumtree) or specific classifieds websites (such as Seek and Domain).

Display advertising: all other types of online advertising, including advertising in banners or videos on webpages, in mobile apps, and alongside social media content.

Ad inventory: the ad space a publisher has to offer for sale. It can be an area on a websites or an app, or a spot in an online video. A publisher sells ad inventory and an advertiser buys it.

Ad impression: a single ad displayed (or 'served') to an individual user on a website or app.

There are a number of different types of display ads including:

- **Banner ads:** ads appearing at the top, bottom, and down the side of webpages. Ad content may include images and sometimes animations.
- **Video ads:** videos shown before, during or after video content, such as on YouTube or appearing as a pop-up on article-based website. Video ads can include:
 - **Instream video:** ads shown when viewing online videos in a 'video-player'. They can be shown before, during or after video content.
 - **Out-stream video:** video ads that are shown outside of a video, like pop-up or video within an online article.
 - **Stories:** video ads shown in social media platforms, such as video ads displayed on Snapchat and Instagram.
- **Native or sponsored content:** ads that adjust to match the format and function of the surrounding content, and can appear as part of the page they are shown on. Whereas banner ads tend to stand out from surrounding content, native ads tend to blend into the page, and it can be more difficult for a consumer to see that they are advertising. For example, on a news website, a native ad could look like an editorial comment. They also include ads such as, promoted posts or sponsored product links in social feeds or paid-for recommendations on webpages.
- **Rich media ads:** ads that involve an interactive element. For example, ads that expand across a webpage when a user hovers over them, or ads that float down a webpage.

Consumers see display ads nearly every time they are online, whether on a mobile device such as a smartphone or tablet, a desktop or laptop computer, or other connected devices. They are shown when consumers visit websites on web browsers and also on mobile apps.

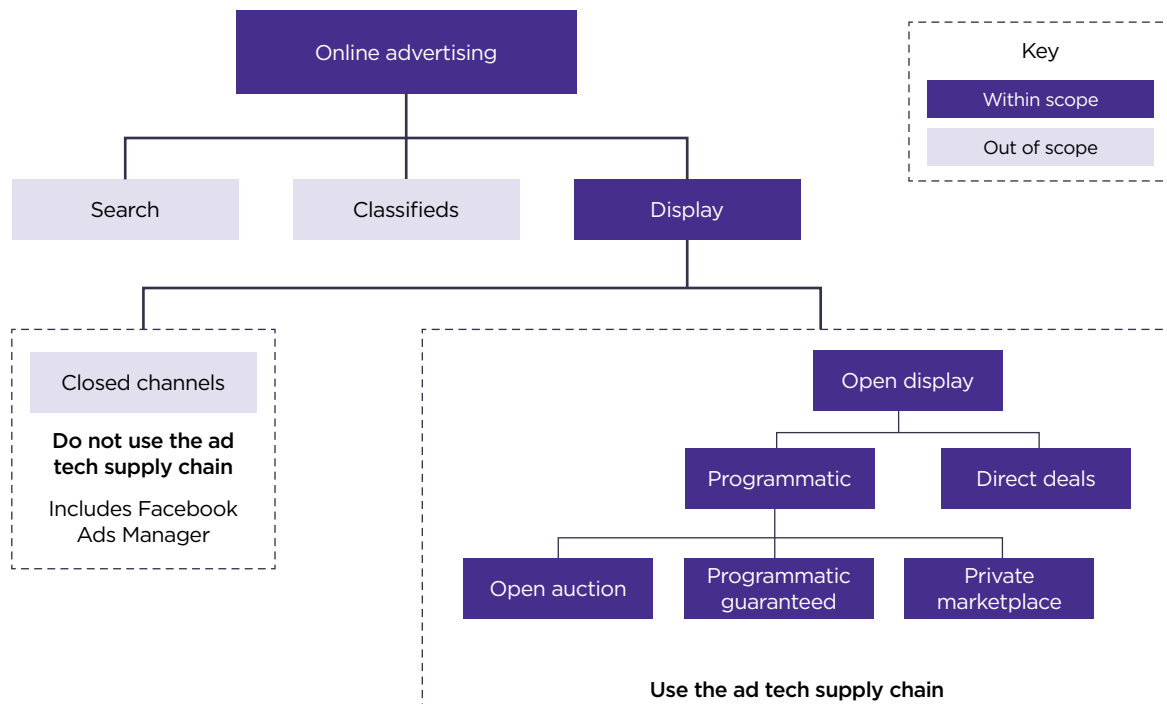
1.1.2 Ad tech services and display advertising

Display advertising is sold through two channels, closed advertising channels (closed channels) and open display advertising channels (open display channels). Ad tech services are only used in open display channels. In summary:

- **Closed channels:** A small number of online publishers, which sell very large volumes of ad inventory and have significant resources sell their own ad inventory (referred to as owned and operated inventory) directly to advertisers using their own systems or platforms. These are called closed channels because they can only be used to purchase inventory from a single publisher who owns and operates the system or platform, and does not interconnect with ad tech services. The largest publisher operating a closed channel is Facebook, which sells ads on its properties, such as Facebook and Instagram through its own system called, Facebook Ads Manager.
- **Open display channels:** Open display channels use ad tech services to sell display ad inventory from a wide range of publishers to advertisers. Unlike closed channels, when advertisers buy inventory through open display channels, they are able to access inventory from many publishers.

How display ads are sold, and how ad tech fits into the broader digital advertising industry is illustrated in figure 1.1.

Figure 1.1: How ad tech services are involved in the sale of online advertising



As shown in figure 1.1, there a number of ways that open display channels, and ad tech services, can be used by publishers of digital advertising to sell their available space (ad inventory) to advertisers for advertising.

The first way is through **direct deals**, where publishers and advertisers make an agreement (sometimes called an insertion order) that the advertiser will buy a certain amount of ad inventory on the publisher's properties (e.g. websites or apps).¹⁷ Premium ad inventory is more likely to be sold by publishers via direct deals, even though they lack the same real-time targeting capability as programmatic trading.

¹⁷ Ad tech services do not play a large role in facilitating these direct deals. Insertion orders are written contracts detailing an advertising deal between an advertiser and a publisher. They contain information related to an advertising campaign such as starting date, end date, ad type, frequency, rates and fees, and target audience.

The second way publishers can sell their ad inventory is **programmatically**. Programmatic trading uses ad tech services to facilitate the automated buying, selling, and delivery of ad inventory, one impression at a time. Here ad tech services are used to:

- offer a publisher's ad inventory to a wide range of advertisers
- make a series of automated decisions that determine the ad to be shown, and the price paid, in relation to that ad inventory
- deliver the relevant ad to the publisher.

This all occurs in the time it takes for a website or application to load, and allows ads to be targeted at an individual consumer.

There are three main types of programmatic trading that publishers can use to sell their inventory:

- **Open auctions:** here a wide range of advertisers are invited to bid on ad inventory. Open auctions can involve a series of auctions which are used to determine the winning bid and the price paid by the winning bidder.
- **Private marketplaces:** these are invite-only auctions where only a select group of advertisers are invited to bid on ad inventory. This channel may also be referred to as private exchange, private auctions, or closed auction.
- **Programmatic guaranteed:** here the advertiser and publisher directly negotiate for a fixed volume of ad inventory at a fixed price, but use ad tech services to automate the delivery of the ads (that is, the decision to serve the ads to consumers are made in realtime and for each impression).¹⁸ This channel may be referred to as programmatic premium, programmatic direct, programmatic reserve, or preferred deals.

1.2 The ad tech supply chain

The operation of the ad tech supply chain is complex, and involves a number of services provided to advertisers and publishers which each perform different roles. This section explains how the supply chain works by providing an overview of the supply chain, discussing the main participants and their role, and then providing an example of how ads can be traded through the supply chain.

1.2.1 An overview of the supply chain

The ad tech supply chain involves a series of intermediary ad tech services which are used in the open display channel to connect advertisers and publishers to deliver advertising to consumers, most often in a targeted way. It enables billions of targeted ads to be sent to consumers nearly instantaneously.

18 Interactive Advertising Bureau IAB (UK), [The Programmatic Handbook](#), October 2016, p. 35.

Figure 1.2: Overview of the ad tech supply chain

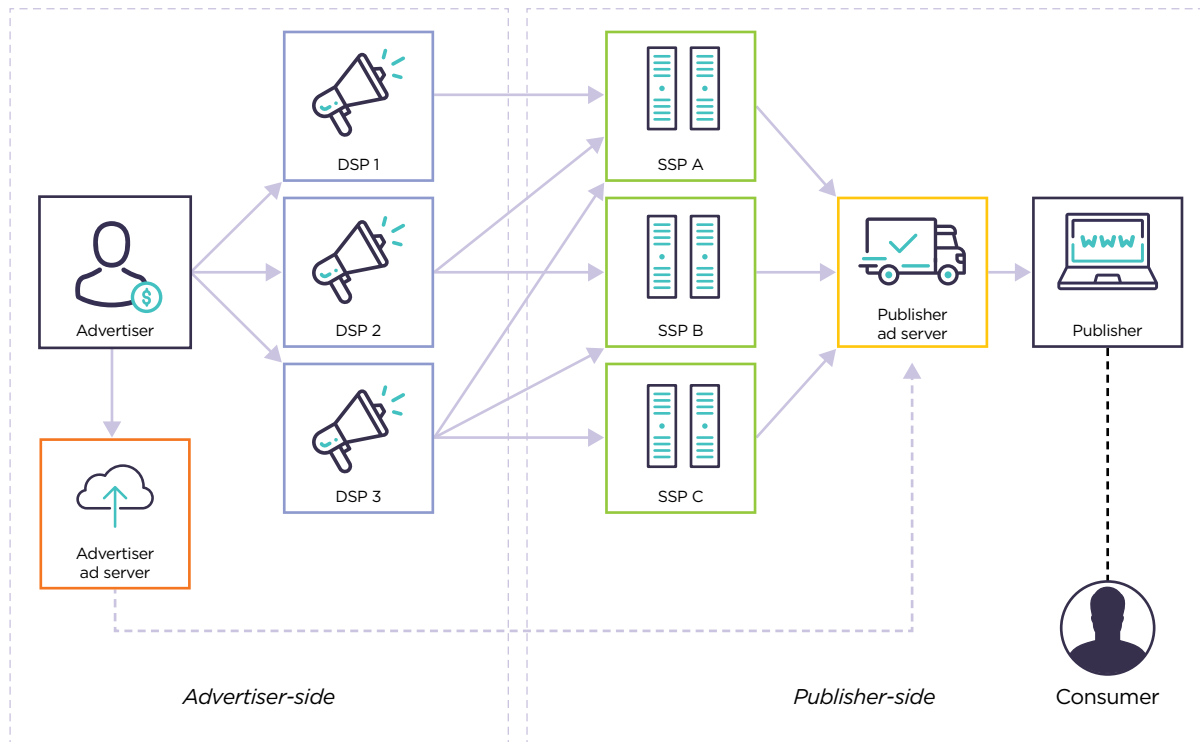


Figure 1.2 provides an overview of the key participants in the supply chain, and how these participants connects to each other. In summary:

- Publishers, sell ad inventory via the supply chain, using ‘publisher-side services’. There are two of main publisher-side services:
 - publisher ad servers
 - supply-side platforms (SSPs).
- Advertisers, buy ad inventory to show their ads in, using ‘advertiser-side services’. There are also two main advertiser-side services:
 - advertiser ad servers
 - demand-side platforms (DSPs).

When a consumer visits a publisher’s property, such as a website or app, its publisher-side services send out a request to many advertisers through their advertiser-side services, asking for bids from advertisers who would like to show an ad to the consumer. The advertiser-side services and publisher-side services then run a series automated processes, including auctions, to select a winning ad which is then sent to the publisher and shown to the consumer.

1.2.2 Key market participants in the ad tech supply chain

This report primarily discusses seven key participants along the ad tech supply chain; from publishers and the ad tech services they use to sell ad inventory through to advertisers and the ad tech services they use to buy ad inventory. There are also a number of other services providers supplying services to help with the collection and use of data, and measure the performance of advertising and ad tech services.

Publishers

Publishers are the sellers of ad inventory. Publishers include anyone with online properties such as websites and apps on which display advertising might be supplied. This could include:

- website owners that display ads on their websites or apps, such as The Age and BuzzFeed
- broadcasters and video websites that display ads alongside, or that are embedded within, online video content, such as 9Now, SBS On Demand, and YouTube
- social media platforms that display ads alongside social media content, like Facebook, Twitter, Snapchat
- app developers that make advertising-funded apps, generally for mobile devices, such as King and Halfbrick Studios (developers of popular cross-platform games).

Advertisers and ad agencies

Advertisers are the buyers of ad inventory. Advertisers are anyone who uses advertising to communicate a message. They can include businesses, non-profit organisations, and government agencies.

Some advertisers, particularly larger advertisers, will use ad agencies to develop and implement advertising campaigns. For the purpose of our inquiry we have only discussed ad agency services relating to the planning and buying of display advertising. Ad agencies offer specialised skills and experience in planning and managing advertising spend using ad tech services, which individual advertisers may not have. Smaller advertisers are less likely to use ad agencies as it is more costly than using self-service ad tech tools such as Google Ads, or purchasing display inventory through closed systems like Facebook Ads Manager.

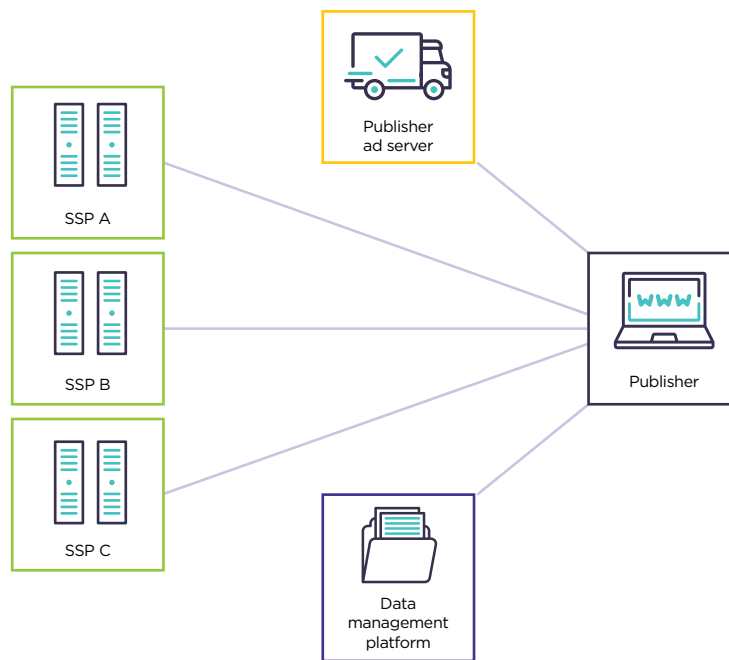
Ad agencies are discussed in more detail in chapter 6.

Ad tech services used by publishers

Publisher-facing ad tech providers assist publishers to sell their ad inventory. The two main ad tech services that publishers use are SSPs and publisher ad servers.

Similarly to advertisers, publishers may also use data services providers (such as data management platforms) to collate, manage, and use data they collect and receive from various sources to assist with pricing and measuring the performance of their ads. Publishers' relationships with publisher-facing ad tech providers is illustrated in figure 1.3.

Figure 1.3: Publisher facing ad tech services



Publisher ad servers

Publishers use publisher ad servers to organise and manage ad inventory on their online properties (such as websites and apps), which involves:

- making decisions about ads that will be shown, and deciding how to fill the available ad inventory in a way that maximises the publisher's revenues
- serving the selected ads
- collecting, analysing and reporting on data to allow the publisher to better understand advertiser demand for its ad inventory.

Publishers generally use one publisher ad server, due to the coordinating role it performs.

Supply-side platforms

Publishers use SSPs to automate the sale of their ad inventory. Historically, the functions that an SSP conducted were performed by two separate platforms:

- an ad exchange which would run real-time auctions between DSPs to select which advertiser's bid would win the ad impression
- an SSP that would make decisions to maximise the price at which ad inventory is sold, such as setting price floors and deciding which buyers can bid for particular ad inventory.

Over time, ad exchange functions have merged with SSP functions so that both the roles outlined above are now generally performed by SSPs. For this reason, ad tech providers performing both SSP and ad exchange functions are referred to as SSPs throughout this report.

The main functions of SSPs include:

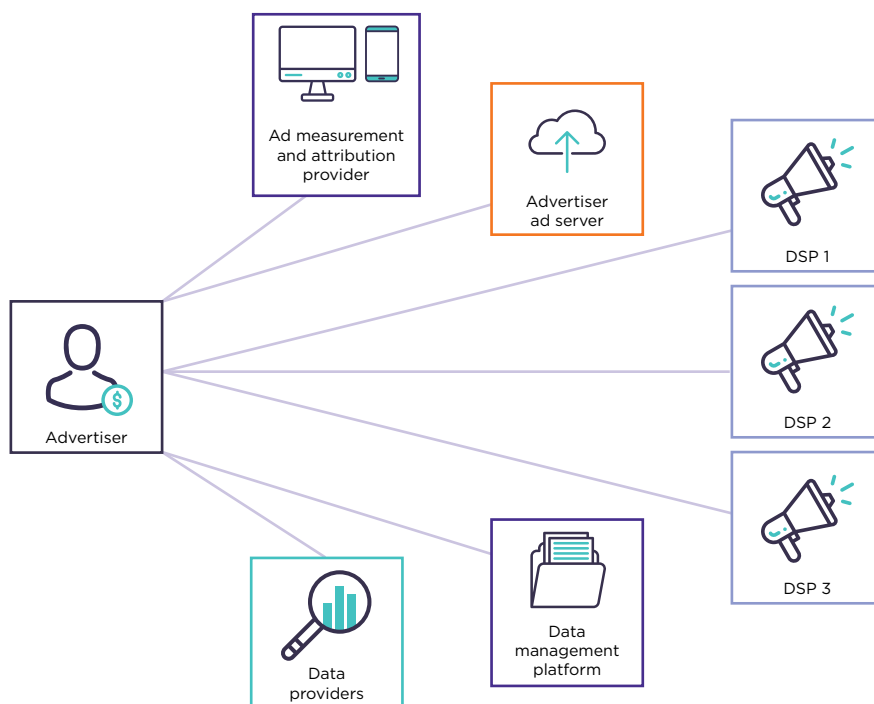
- running real-time auctions between DSPs in response to bid requests received from publisher ad servers or directly from publishers where header bidding is used
- allowing publishers to manage how their ad inventory is sold and how the SSP auctions operate, to an extent
- providing publishers with information about the performance of their inventory.

Many publishers, particularly larger ones, may use more than one SSP at a time. To access multiple SSPs at the same time, publishers may use a process called ‘header bidding’. Header bidding is discussed below in box 1.2.

Ad tech services used by advertisers

Advertisers and ad agencies contract with advertiser ad servers and demand-side platforms to buy display advertising. Advertisers may also use data services providers, or verification and attribution providers to measure the performance of their ads and ad tech providers (discussed below). An advertiser’s relationships with advertiser-facing ad tech providers is summarised in figure 1.4.

Figure 1.4: Advertiser facing ad tech services



Advertiser ad servers

Advertisers use advertiser ad servers to manage their ad campaigns and host the image or video files for their ads. Advertiser ad servers can be used to:

- send the ad image or video file to publisher websites as required
- manage the way ads are delivered to consumers (for example, frequency capping)¹⁹
- track the performance of an advertiser’s ads

While it is possible for advertisers to use different advertiser ad servers to manage their ads, they generally use one ad server to ensure consistency in ad measurement.

Demand-side platforms

Advertisers use DSPs to help with buying ad inventory programmatically according to parameters set by the advertiser. DSPs can be used to:

- use automated algorithms to make buying and bidding decisions for advertisers in response to bid requests received from SSPs
- allow advertisers to target their ads to specific audiences in real-time, using data available to the DSP
- collect, analyse and report on the performance of the advertiser’s ad campaigns.²⁰

¹⁹ Frequency capping refers to limiting how many times a consumer is shown the same ad.

²⁰ Competition and Markets Authority, [Online platforms and digital advertising market study: Final report](#), 1 July 2020, Appendix M, pp. M21–M22.

Some advertisers, particularly larger advertisers or ad agencies, may use more than one DSP at a time. However, they will generally use a single DSP for a particular ad campaign.

Providers of other services

There are a number of other services in the ad tech supply chain. These services may provide alternative options for buying and selling ad inventory, measure the performance of ad tech services or help with the collection and use of data. These include:

- ad networks
- ad verification and attribution providers (sometimes referred to as measurement providers)
- data management platforms
- data providers.

Some DSPs and SSPs may also provide some of the same functions as these services, which means that advertisers and publishers may not always require the services of separate data or measurement service providers.

Ad networks

Ad networks are another service used by advertisers and publishers to buy and sell display advertising respectively.²¹ Ad networks do not all operate in the same way and it is difficult to provide a common definition of ad network services.

Historically, ad networks purchased ad inventory from publishers at a fixed price, repackaged it and aggregated it with ad inventory from other publishers to on-sell to advertisers. However, more recently, some ad networks have introduced some real-time bidding features, and may bid directly for publisher ad inventory through header bidding. Some other ad networks may also sell inventory to DSPs or buy ad inventory from SSPs.

Ad verification and attribution providers

Advertisers use ad verification and attribution providers to help them measure and assess the performance of their ad tech providers, and their ad campaigns.

Ad verification providers perform the following functions:

- **brand safety:** checking and providing brand-safety. This involves taking steps to stop the advertiser's ads being shown in webpages or in contexts that could harm an advertiser's reputation. It also involves checking that advertisers are not charged where ads are served in an 'unsafe context'
- **viewability:** verify that the ads delivered were delivered in a way that is viewable to the consumer. This helps advertisers ensure that they do not pay for ads which could not be seen
- **ad fraud:** preventing and detect instances of ad fraud, which most often involves ads being served or clicked on by bots and not consumers.

Ad attribution providers help advertisers assess how effective an advertising campaign is. They do this by tracking the actions that a consumer takes after seeing an ad. That is, it helps an advertiser see which ads led customers to purchase products or sign up to services. This can then be used by an advertiser to measure the performance of their ad tech providers.

Data management platforms

Data management platforms provide publishers, advertisers, DSPs and SSPs with tools to store, manage and analyse their own sources of consumer data and any data they obtain from other parties. The key functions of data management platforms include:

- combining data directly collected by the advertiser or publisher (first-party data) with data obtained from others (third-party data), which may include information such as user purchase history, geographic data and sociodemographic data

²¹ Examples of ad networks include Google AdSense and the Facebook Audience Network.

- analysing data to enable the targeting of ad campaigns to particular consumers or groups of consumers
- using data, including from ad campaigns, to analyse ad performance and to manage ad campaigns.²²

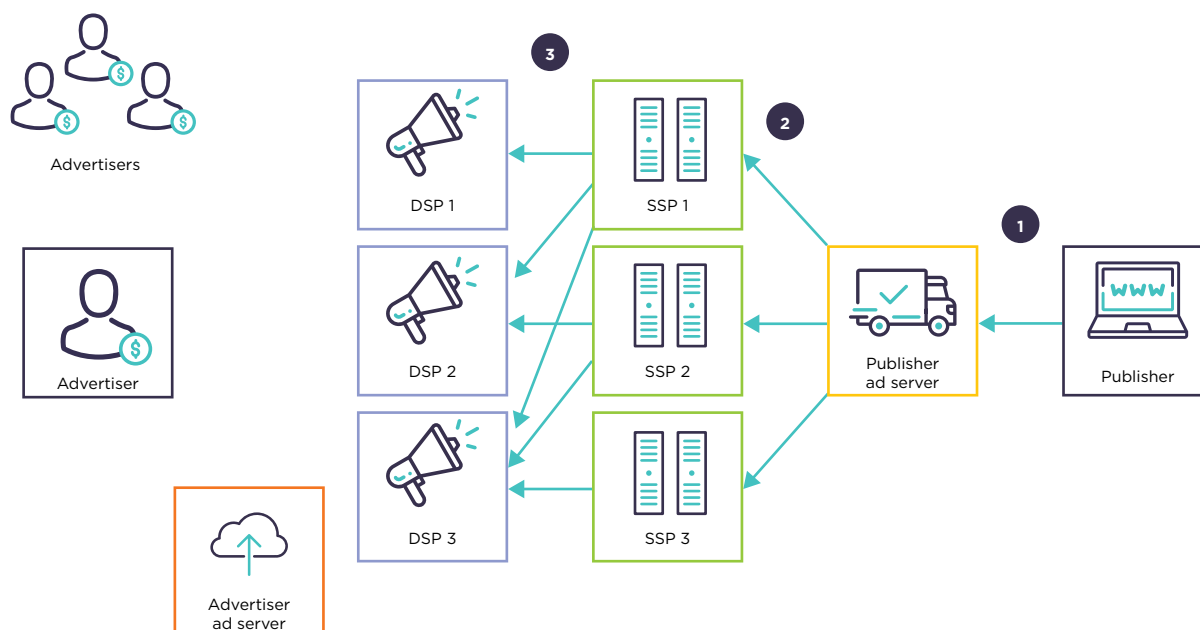
Data providers

Data providers supply data (or insights generated from the analysis of data) to advertisers, publishers, and other ad tech providers. Data providers mostly provide inferred data generated through their own processes, using volunteered, observed and inferred data.²³ Data providers may collect data from a variety of sources, including from third-party cookies on publisher sites, from public information such as online records, and from the records of public authorities.²⁴ Many data providers also purchase information about consumers from commercial sources, like retailers or websites that require consumers to log in to access services.²⁵ Data providers will then create databases of individuals (called audiences), which advertisers can purchase and use for targeted advertising.²⁶

1.2.3 An example of a programmatic ad tech transaction

To help illustrate how the ad tech supply chain operates, the following provides an overview of the general steps in an open auction transaction. Below we describe the key steps of an open auction transaction, beginning with a request for bids from a publisher when a consumer visits their website (figure 1.5), the bidding and auction process (figure 1.6) and then the serving (that is, ‘displaying’) of the winning ad to the consumer (figure 1.7).

Figure 1.5: Ad request and bid requests for an open auction



22 Competition and Markets Authority, [Online platforms and digital advertising market study: Final report](#), 1 July 2020, Appendix M, pp. M32–33.

23 Competition and Markets Authority, [Online platforms and digital advertising market study: Final report](#), 1 July 2020, Appendix F, p. F11.

24 Autorité de la concurrence (FR) and Bundeskartellamt (DE), [Competition Law and Data](#), 10 May 2016, p. 39; Federal Trade Commission, [Data Brokers: A Call For Transparency and Accountability](#), May 2014, pp. 11–13.

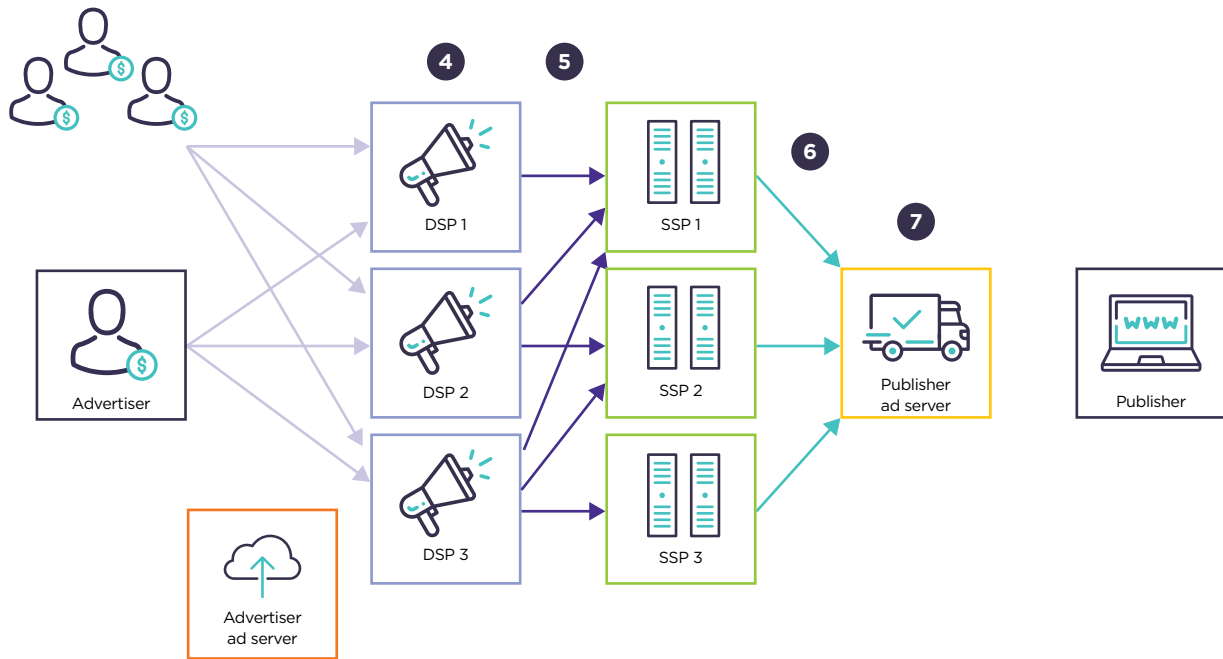
25 Federal Trade Commission, [Data Brokers: A Call For Transparency and Accountability](#), May 2014, pp. 11–13.

26 M. Wlosik, [What is a Data Broker and How Does It Work?: Type 1: Data Brokers for marketing and advertising](#), Clearcode, 4 February 2019, updated 25 November 2020.

The starting point is a consumer visiting a publisher's webpage or opening an app where there is ad inventory available to be filled. This is followed by:

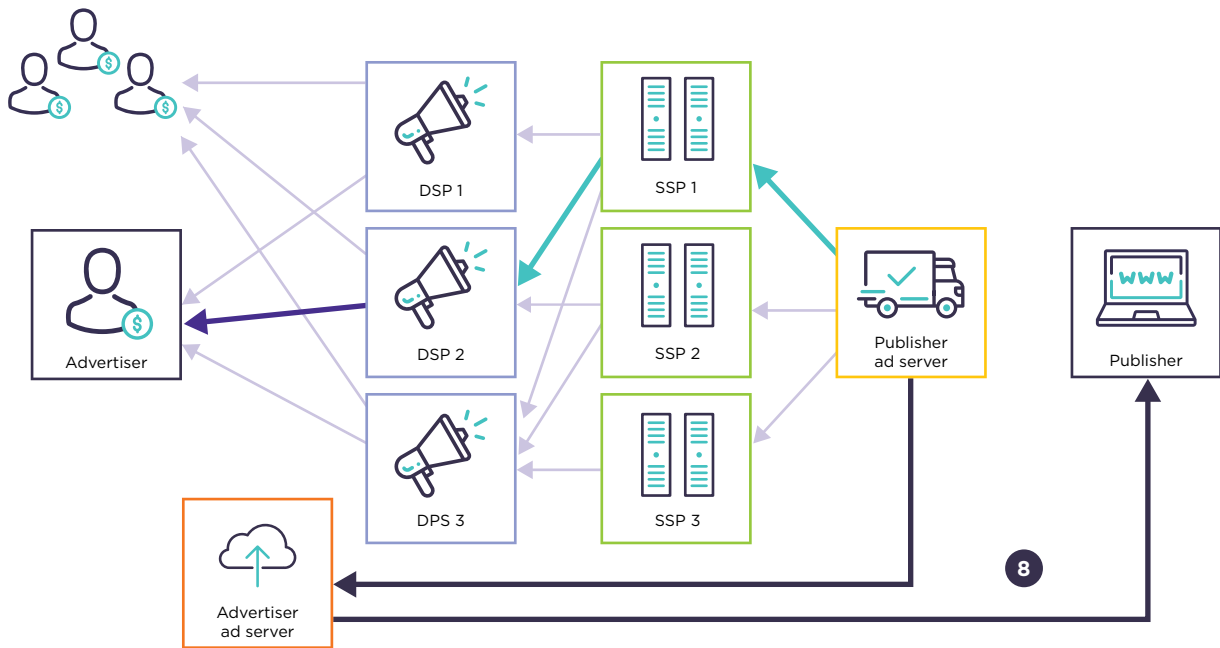
1. The publisher's website sends an ad request to its publisher ad server. If the ad inventory has been reserved under a direct deal, the publisher ad server will serve the corresponding advertiser's ad.
2. If the ad inventory is not reserved, the publisher ad server sends ad requests to one or more SSPs that the publisher uses. This ad request generally contains information about the ad inventory (for example, what size or format the ad inventory is, or what type of page is being viewed) and any information that the publisher may have on the consumer who is visiting the site.
3. The SSPs send this information, along with a request for bids, to a number of DSPs.

Figure 1.6: Advertiser bid flows for an open auction



4. Once the bid request is received, the DSPs use an auction, selection or ranking process to decide which advertiser bids to submit, based on information previously provided by advertisers. The DSPs can link up with the advertisers' data management platforms to see if there is any additional information on the user (first-party or third-party data) that would assist in deciding how much to bid.
5. The DSPs send bids, on behalf of advertisers, back to the SSPs.
6. Each SSP conducts an auction between the DSPs that have submitted bids, and selects the winning bid. SSPs then send their winning bids to the publisher ad server.
7. The publisher ad server picks the winning ad, based on the rules set by the publisher (for example, based on a header bidding auction in the publisher ad server).

Figure 1.7: Winning ad is served



8. The publisher ad server then notifies the winning advertiser's advertiser ad server which sends the ad creative to the publisher website to be displayed to the consumer. This link between the advertiser ad server and the publisher website also allows the advertiser ad server to track and measure the advertiser's campaign.

The exact steps, and ad tech providers involved in any specific ad tech transaction can differ from the description above. They will also differ for different types of transactions. For example:

- programmatic guaranteed transactions only involve the ad tech services utilised by the single advertiser and publisher involved in the transaction
- private marketplace transactions only involve the ad tech services utilised by the publisher involved in the transaction and the group of advertisers who have been invited to participate
- direct deals generally use limited ad tech services, and may involve an advertiser ad server and publisher ad server, or even fewer ad tech services depending on the arrangement between the advertiser and publisher
- publishers may opt to use header bidding, which is an additional process in the supply chain where SSPs send their bids to an auction run by the web browser using code on the publisher's website, or to an auction run on a third-party server or the publisher ad server.

Box 1.2: What is header bidding?

Header bidding is a process that allows multiple SSPs to bid on the same ad inventory at the same time, with the winning bid selected via auction. Generally, header bidding is run by a web browser using code embedded on the publisher's website. However, header bidding can also be run in a third-party server or the publisher ad server.

Ad tech supply chain for advertising on mobile apps and connected TV

There are some differences in the ad tech supply chain for advertising delivered via mobile apps. This is due to the different characteristics of mobile app advertising. For example, in mobile games, users are likely to follow a linear path through the app which means that the publisher knows in advance what ad opportunities will be available.²⁷

²⁷ Competition and Markets Authority, [Online platforms and digital advertising market study: Final report](#), Appendix M, 1 July 2020, p. M12.

We understand that the ad tech supply chain for advertising on mobile apps has a greater use of ad networks.²⁸ However, many advertisers and publishers use DSPs, SSPs and header bidding in a similar way to as described above.²⁹

A growing area of open display advertising is advertising via connected TV. Display advertising, purchased through programmatic means and direct deals, can be delivered to consumers using connected TV devices (e.g. smart TVs, or other devices that connect to the TV).³⁰ For example, this advertising might be displayed when a consumer watches television content using an app on a smart TV. We understand that the supply chain for advertising delivered via connected TV is relatively similar to that described above. However, there are some differences, including limitations on the use of header bidding.³¹

1.3 Consumer data in ad tech

Data about consumers, and their online activity, and in some cases offline activity, is important to the supply of ad tech. It enables one of the key features of the open display channel, its ability to target ads to specific consumers. This section outlines why ad targeting is valuable, how ad tech providers gather or access data about consumers, and how they are able to build consumer profiles using this data to target ads to consumers. It also discusses some of the potential consumer harms that can arise from targeting.

1.3.1 Value of ad targeting

Targeted advertising is seen as important by both publishers and advertisers. For advertisers, the ability to target ads is valuable when trying to increase brand awareness amongst specific consumer groups, or to trigger specific consumer actions (such as a purchase). For an advertiser, the ability to better target an ad to a consumer's inferred interests has more potential to engage the consumer in the desired action, resulting in a higher return on the advertising investment.

For publishers, because targeted ads are more valuable to advertisers, the ability to provide targeted advertising allows them to earn greater revenue from advertising on their properties. That is, publishers are better able to 'monetise' consumers attention through the sale of better targeted ads on their website or apps, which can be priced according to the extent a consumer engages with those ads (for example, per click).

There are two main ways that ads are targeted towards the consumer viewing them:

- **Contextual targeting:** This is where ads are targeted to consumers based on the context in which the ad is shown. Contextual targeting uses limited data about the consumer viewing the ad. Instead it uses data about the context in which an ad will appear. This can include information about the website or app attributes (such as its location, language, keywords, and contents), the environment (date, time), and the ad format. However, consumer data may play a role where contextual content is personalised or served based on user data or profiling.
- **Personalised targeting:** For this type of targeted advertising, also called behavioural targeting, ads are targeted to individual consumers based on inferences about their personal attributes, such as their interests, demographics or characteristics. These inferences are made using personal or behavioural data collected about the consumers browsing activity or other activities.

This also includes retargeting, where ads are targeted to consumers who visit an ecommerce site or app without completing a transaction. Retargeting aims to recapture the consumer's interest in the product or service. This relies on specific data about the consumer's past browsing or transaction history.

28 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), Appendix M, 1 July 2020, p. M12.

29 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), Appendix M, 1 July 2020, p. M12.

30 IAB Australia, [Connected Television Handbook](#), 2020.

31 IAB Australia, [Connected Television Handbook](#), 2020, p. 27.

Personalised targeting can be of particular value to advertisers, as it enables them to reach consumers who are most likely to respond positively to ads.³² This means that a key factor that ad tech providers compete on is the ability to provide personalised targeting capabilities that use detailed data on consumers' demographics, interests, preferences and behaviours. In order to do this, ad tech providers seek to access a rich set of data about consumers' demographics, interests, preferences and behaviours, and use this data to create profiles about consumers so that they can then serve ads targeted at their interests. How they do this is discussed in the section below.

1.3.2 Data sources for personalised targeting

Ad tech providers are able to build profiles on consumers' demographics and interests from data that they collect or access from a wide range of sources. These generally fall into two broad categories: first-party data and third-party data that ad tech providers use to collect data.

The same data about a consumer, for example their age, could be first-party data or third-party data. This is because whether data is first-party, or third-party depends on how the provider got access to the data, not what the data relates to.

Data gathered directly from consumers – first-party data

First, ad tech providers can collect data directly from consumers from the services and products they provide to consumers, this is called **first-party data**. This means that an ad tech provider will only collect first-party data where they also consumer facing services, such as shopping, social media or search services to consumers. The greater the number of services and more diverse the services they provide, the more first-party data they will gather. For example, Google is in a position to collect a broad range of data about consumers from the wide range of consumer services it offers, such as search, maps, Gmail and the Android operating system. Other ad tech providers with first-party data sources include, Amazon, Twitter, and the various Facebook owned services. However, most other ad tech providers have limited sources of first-party data.

Data collected from third-parties – third-party data

Secondly, ad tech providers also collect data about consumers from third parties and from consumers' interactions with third-party websites and apps (i.e. websites and apps not owned by the ad tech provider), this is called **third-party data**.

Many ad tech providers rely on data provided by third-parties to provide targeting services as they do not operate the consumer facing services that allow them to gather data directly from consumers. Ad tech providers' sources of data from third parties include:

- data provided by advertisers (for example, customer demographic information or target audience)
- data provided by publishers (for example, data on the users visiting the publisher's website)
- data provided by third-party data providers (for example, audience segments)
- data collected from third-party cookies (discussed in box 1.3)
- data collected when a user signs into an app or website using a large digital platform's consumer single sign-on functionality (for example, sign in with Google and log in with Facebook).
- other ad tech providers as a part of carrying out their roles in the ad tech supply chain (for example, issuing bid requests, reporting ad sales)
- some forms of offline data.

32 Competition and Markets Authority, [Online platforms and digital advertising market study: Final report](#), 1 July 2020, Appendix F, p. F33.

Third-party cookies are currently an important way that ad tech providers collect third-party data. More information about third-party cookies is in box 1.3.

Box 1.3: What are third-party cookies?

Cookies are small text files stored in a consumer's website browser that are associated with a particular domain. Third-party cookies are text files created by domains other than the website that the user is visiting at the time.

Ad tech providers use third-party cookies to track a consumer across different websites ('cross-site tracking'), re-target ads, and for ad-serving. Cross-site tracking allows ad tech providers to build a profile of the consumers based on their online activities and browsing behaviour. Third-party cookies are currently an important way that ad tech providers collect data and have a considerable impact on their ability to effectively target ads.

Because of their central role in enabling the collection of third-party data, third-party cookies are used extensively by providers of display advertising and ad tech services. For example, social plug-ins that allow a user to like or share content to a digital platform place third-party cookies on a consumer's browser and are used to enable cross-site tracking and targeted advertising.

The ad tech industry is slowly moving away from the use of third-party cookies, and it is likely that they will become obsolete in the next few years. This is due to web browsers limiting support for or blocking third-party cookies. Currently many browsers, like Safari and Firefox, block third-party cookies by default. Google is also phasing out support for third-party cookies on Chrome, which it has indicated will be complete by 2023.

It is not yet clear what will replace the functions of third-party cookies, but Google is currently developing alternatives for Chrome (the Privacy Sandbox proposals). These are discussed in more detail in chapters 3 and 4.

1.3.3 Using data to build a profile of a consumer

In order to provide personalised advertising, ad tech providers will often need to link together the data they have collected over time about a consumer from a range of sources, and combine it to create profiles of consumers (these profiles often do not actually identify a consumer, but use a range of anonymised identifiers associated with a consumer).

To combine data from various datasets on individual users to create these profiles, ad tech providers need to be able to identify the same user in different datasets. Ad tech providers are able to do this by matching and connecting unique identifiers associated with consumers.³³

While datasets are 'de-identified' they often still contain information that links to a specific user (unique identifiers). Examples of unique identifiers include internet protocol (IP) addresses, cookie IDs, device IDs, advertising IDs, and device fingerprints. Ad tech providers who also have consumer facing services, are often able to collect more of these identifiers, and match them more accurately, as the identifiers will be the same across their consumer-facing services. For example, Google's use of its DoubleClick ID and Android Advertising IDs, which are assigned to a user and persistent across its consumer-facing services, means that it is able to quickly and accurately link together data collected from first and third-party sources.

Overall, the need to match data across data sets means that ad tech providers with access to large first-party data sets, or those who have access to persistent identifiers, (such as Google) are often able to build better profiles of consumers, and provide more effective targeting. The impact that this can have on competition is discussed in detail in chapter 3.

³³ Competition and Markets Authority, [Online platforms and digital advertising market study: Final report](#), 1 July 2020, Appendix G, p. G12.

1.3.4 Impact on consumers

Consumers can benefit from targeted display advertising in a range of different ways. Display advertising revenue enables many online publishers to provide consumers with access to content for free or at a lower cost. In addition, it can also lead to consumers seeing ads for goods and services that are more relevant to their interests.

However despite the benefits of the collection and use of consumer data, there are also risks of consumer harm. These harms can arise in situations where too much personal data is collected, where consumers are not informed or do not consent to how their data is collected, processed, used, or stored, and also in the case of data breaches.

For example, ad tech providers and other digital platforms, which have broad discretions to collect and use consumers' data without consent (or potentially without consumers understanding fully what they consented to when they used a service or made a transaction) can give rise to consumer harms from increased profiling, the potential for price discrimination and exclusion, and risks to vulnerable consumers.

The lifestyles of Australians are also changing, particularly during the COVID-19 pandemic with work, education, entertainment, socialising and shopping increasingly occurring online. This is resulting in increasing amounts of data on individual consumers becoming available than ever before, potentially raising the risk of harm. This is particularly concerning in circumstances where consumers are unsure how to, or cannot, exercise control over their data and how it is used.

Stakeholders have raised a range of additional concerns regarding consumer harms arising from the use of data for ad targeting purposes, including:

- Programmatic advertising and real-time bidding auctions relying on potentially invasive data practices, and that bid requests which may contain sensitive personal data are frequently shared between numerous ad tech providers.³⁴
- Unfair use of data contributing to consumer mistrust of the digital industry. These include practices such as unfair or inappropriate targeting, over-collection or misuse of personal information.³⁵
- The use of data collected to deliver highly personalised and targeted ads to vulnerable consumers, including children, for alcohol, gambling, or unhealthy food and beverages.³⁶
- The application of price discrimination, using advertiser interfaces that encourage addiction to products, lack of consumer control over data, and risks to personal security and the safety of children.³⁷
- The ability of consumers to understand the use of their data through ad tech and make informed decisions that reflect their true preferences, which one stakeholder submits cannot be fully addressed through improved consent practices or an unfair trading prohibition.³⁸

34 Dr Katherine Kemp, [Submission to Ad Tech Inquiry Issues Paper](#), 25 April 2020, pp. 9–10.

35 Association for Data-driven Marketing & Advertising, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 7.

36 Cancer Council, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 1; Foundation for Alcohol Research and Education, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, pp. 1–2; Obesity Policy Coalition, [Submission to Interim Report](#), February 2021, p. 1.

37 Association for Data-driven Marketing & Advertising, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 7.

38 Centre for AI and Digital Ethics, University of Melbourne, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, pp. 1–2.

Previous ACCC recommendations

We made two recommendations in the DPI Final Report that could help to address these consumer harms, which we continue to support.

Prohibition on unfair trading practices

In the DPI Final Report we recommended that the Australian Consumer Law (ACL) should be amended to introduce a prohibition on certain unfair trading practices.³⁹ We remain of the view that such a prohibition would enable the ACCC to undertake strategic enforcement action to address the risk of ad tech providers, advertisers, publishers, and digital platforms collecting or using data in ways that have the potential to result in substantial consumer harm, but is conduct not captured by the existing provisions of the ACL.

The recommended amendments would also align Australia's legislation with overseas jurisdictions. We are currently working alongside our fellow ACL jurisdictions, and the Australian Government, to progress our consideration.

OAIC privacy code for digital platforms

In the DPI we also recommended that an enforceable privacy code of practice should be developed by the OAIC for digital platforms. In its response, the government reconfirmed its earlier announcement that it would introduce legislation to enable the OAIC to develop a binding privacy code to apply to social media platforms and other online platforms that trade in personal information. The Attorney General's Department has indicated it is expecting to release an exposure draft of legislation, for public consultation, in 2021.

³⁹ ACCC, [Digital Platforms Inquiry – final report](#), June 2019, p. 498, recommendation 21.

2. Overview of the Australian ad tech industry

Key points

- Digital advertising is increasingly important in Australia, with the amount spent on digital advertising in Australia growing substantially in recent years. The IAB estimates that between 2008 and 2020, spending on digital advertising quadrupled, growing from \$1.7 billion to \$9.5 billion. Display advertising made up around 40% of the total amount spent on digital advertising in Australia in 2020.
- We estimate that in 2020, \$2.8 billion was spent on **open display advertising** in Australia, which is the focus of this inquiry. This represents about 43% of total display advertising, with the rest being spent on closed channels. Within the open display advertising category, we estimate that approximately \$1.7 billion was spent on **programmatic advertising** in Australia in 2020.
- Display advertising on mobile devices is a key way for advertisers to reach consumers. This reflects the growing use of smartphones by consumers. In Australia in 2020, around 66% of **display advertising** spend was for advertising shown on mobile devices. Mobile apps are also an important source of ad inventory in the ad tech supply chain. We estimate that advertising delivered via mobile apps made up 44% of advertiser expenditure on display ads sold **programmatically** in Australia in 2020.
- Video ads make up a large proportion of **display advertising** in Australia. The IAB estimates that spend on video display advertising was \$1.9 billion in 2020. Video display advertising has also grown significantly in recent years, from 18% of **programmatic** advertising expenditure in Australia in 2017, to 39% in 2020.
- The value placed on video display advertising is also shown by looking at their price relative to other display advertising. We estimate that the price of display advertising is much higher for connected TV, than for display advertising delivered via browsers and mobile apps. Prices are also much higher for video advertising than non-video advertising.⁴⁰
- Ad tech providers retain a significant proportion of advertiser spend. We estimate that in Australia in 2020, on average, fees for the four main ad tech services amounted to approximately 27% of advertiser expenditure on **programmatic advertising**. We consider these fee levels are higher than they would be if the supply of ad tech services was more competitive, and likely reflect the market power that Google is able to exercise in its dealings with both advertisers and publishers.
- Over the past four years, fees for ad tech services have remained relatively stable, or fallen slightly. For programmatic advertising, we observed that average fees for DSP services, and advertiser and publisher ad server services, changed little from 2017 to 2020. Average fees for SSP services decreased by 20%, in the same period. As these are average prices and fees across all ad inventory, there are a number of factors that may have driven these trends over time. For example, changes in fees could represent underlying changes in the mix of ad inventory and deal types used by advertisers and publishers, and not just changes in the fees charged by ad tech providers.

This chapter describes the significance of digital display advertising, discusses broad trends in display advertising relevant to the ad tech industry, and presents our findings on prices and fees for ad tech services in Australia.

⁴⁰ In this Report, we use 'price' to refer to the overall price advertisers pay for advertising, including the price of the ad inventory and any fees for ad tech services along the supply chain. We use 'fees' to refer to fees charged by providers for particular ad tech services along the supply chain.

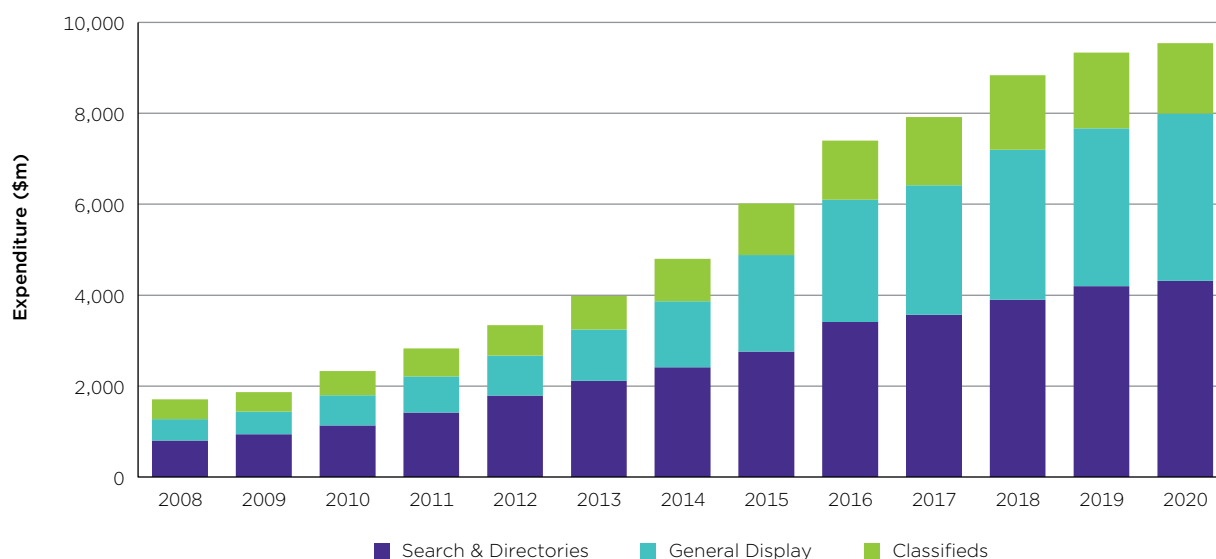
2.1 The size of the ad tech industry in Australia

2.1.1 Advertiser spend on display advertising is significant and growing

Digital advertising is now an essential way for advertisers to reach Australian consumers. The IAB estimates that advertising expenditure on **digital advertising** has grown substantially from \$1.7 billion in 2008 to \$9.5 billion in Australia in 2020. Spend on search advertising makes up the largest portion of overall digital advertising expenditure, but display advertising still makes up a significant proportion at around 39% in 2020.

While the proportion spent on **display advertising** has remained relatively stable over the last five years, the total amount spent on digital display advertising in Australia has grown by about 37%, from \$2.7 billion in 2016 to \$3.7 billion in 2020. This is illustrated in figure 2.1 below.

Figure 2.1: Digital advertising expenditure, Australia, 2008 to 2020



Source: IAB Australia, ACCC analysis.

2.1.2 Open display is an important advertising channel

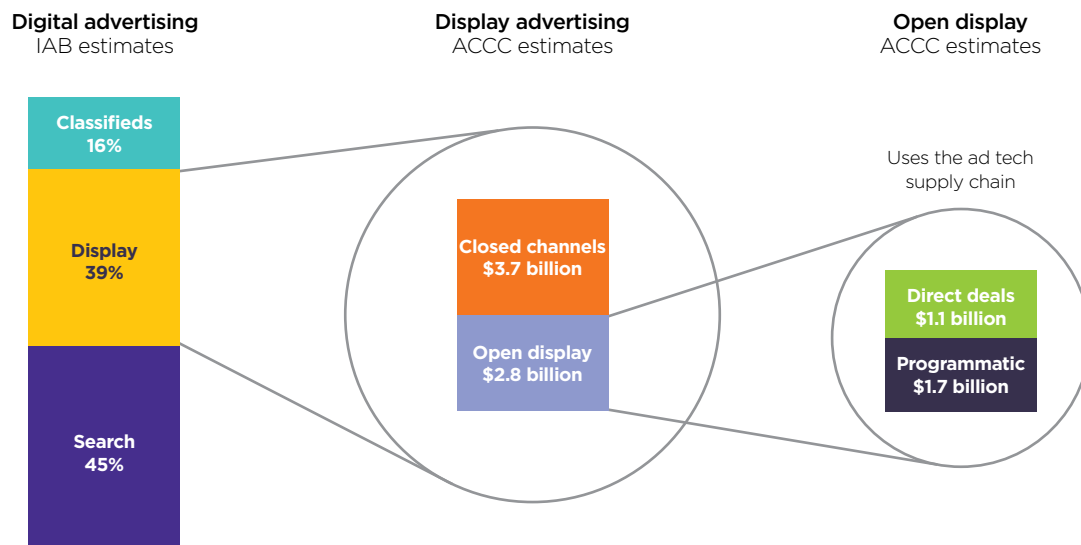
As discussed in chapter 1, advertisers can purchase display advertising through closed channels and open display channels. Closed channels (which do not use ad tech services) are used by very few publishers to directly sell display advertising on their owned and operated inventory. Open display channels (which involve ad tech services) are used by a wide range of publishers to sell display advertising to advertisers.

It is difficult to precisely measure the value of display advertising sold through closed and open display channels in Australia. This is due in part to the variety of ways advertising is sold, and the number of parties who can be involved in each transaction. However, based on the information available, we estimate that approximately \$2.8 billion was spent on **open display advertising** in Australia in 2020, representing about 43% of total display advertising (which we estimate was up to \$6.5 billion).⁴¹ Figure 2.2 shows the ACCC's estimates of advertising expenditure on digital, display and open display advertising in Australia for 2020.⁴²

⁴¹ Our estimates of advertiser expenditure on display advertising are based on display advertising served to users located in Australia. The IAB's estimates of the value of display advertising, in figure 2.1 above, are based on revenue generated by Australian publishers. As a result, our estimates of the value of the display advertising category differ.

⁴² In making these estimates in this Report, we have attempted to capture the majority of the market, and compare figures on the same basis. However, it is possible that not all providers are captured in the industry size estimates included in this report. Further, while we requested information on a consistent basis, the ACCC has not been able to verify the accuracy of the all information provided to us, and we have relied on ad tech providers to provide us with accurate information, including in accordance with our statutory notices. Accordingly, it is possible that some of the estimates in this report could slightly under or overstate actual figures, such as the size of an advertising segment.

Figure 2.2: Estimated advertising expenditure on digital, display and open display advertising, Australia, 2020



Source: ACCC analysis of data obtained from ad tech providers and provided by IAB Australia.

Open display represents a smaller, but still significant, proportion of digital advertising. Many Australian publishers rely on open display channels, and ad tech services, to sell advertising on their properties (websites and apps) and earn revenue.

Within open display, publishers can sell their advertising through direct deals or programmatically, as discussed in chapter 1. Direct deals use limited ad tech services, while programmatic sales are heavily reliant on ad tech services. We estimate that spend on **programmatic advertising** was about \$1.7 billion in Australia in 2020, and around \$1.1 billion on **direct deals**.

Overall, it is clear that the ad tech supply chain is an important way for publishers to monetise their online content, and for advertisers to reach their audiences.

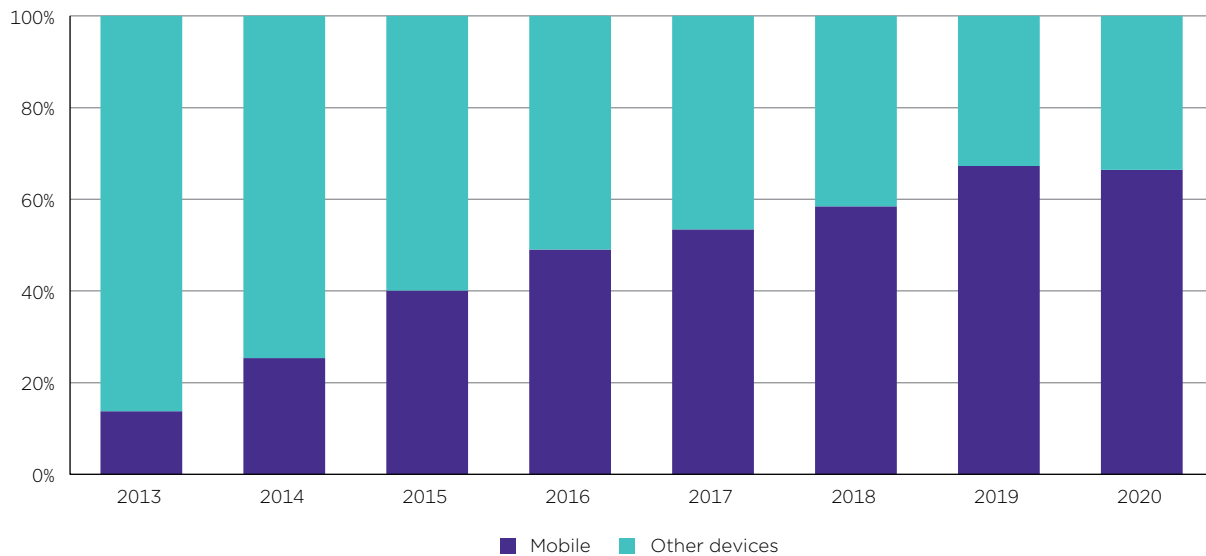
2.2 Display advertising trends

This section discusses some key trends in display advertising, which are important to understanding the issues discussed in the report.

2.2.1 Advertisers spend more on display ads on mobiles than on other devices

As consumers increasingly access online content using smartphones, advertiser expenditure on display advertising shown on mobile devices has grown significantly. Between 2013 and 2020, the IAB estimates that the amount spent on **display advertising** shown on mobile devices (including mobile browsers and mobile apps) in Australia has increased from \$155 million to \$2.4 billion. It now represents over 66% of the total amount spent on display advertising, as illustrated in figure 2.3. This shows that the focus of display advertising is increasingly likely to be on advertising delivered via mobile devices.

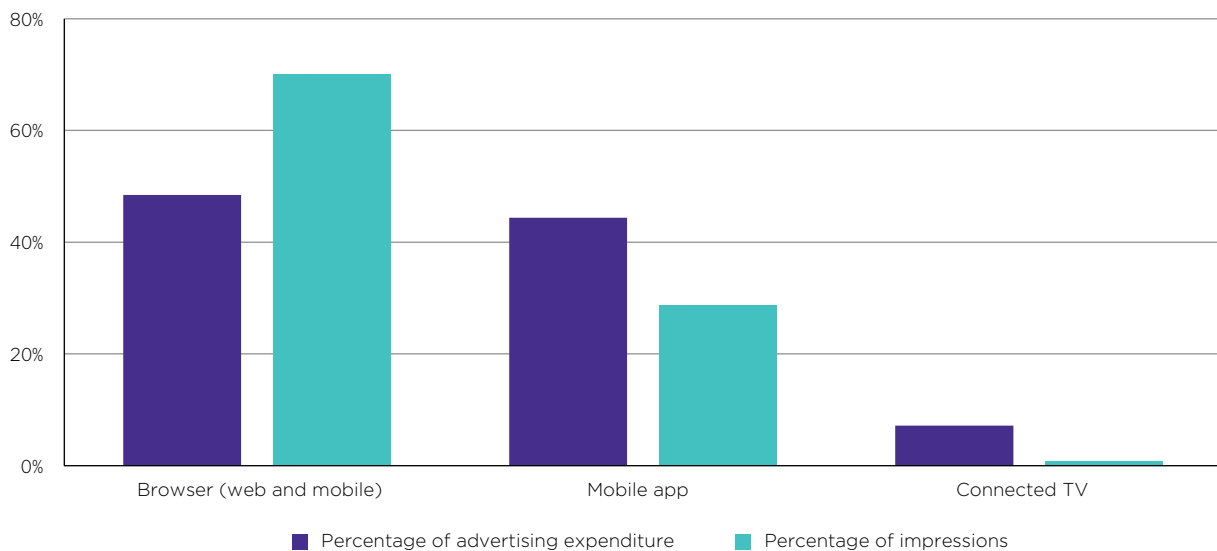
Figure 2.3: Proportion of display advertising expenditure on mobile and other devices, Australia, 2013 to 2020



Source: IAB Australia, ACCC analysis.

We have also looked at expenditure and impression numbers for programmatic display ads shown on browsers, apps and connected TV, as shown in figure 2.4 below. Our analysis illustrates that mobile apps are also an important way for advertisers to reach consumers. We estimate that advertising delivered via mobile apps (which does not include mobile browsers) made up 44% of advertiser expenditure, and 30% of impressions, for ads sold **programmatically** in Australia in 2020.

Figure 2.4: Estimated proportion of programmatic advertising expenditure and impressions, shown via browsers, mobile apps, and connected TV, Australia, 2020⁴³



Source: ACCC analysis of data obtained from ad tech providers.

Connected TVs are another way that advertisers can show consumers display ads. Connected TVs are TVs connected to the internet, and include smart TVs or other devices that connect a TV to the internet. For example, video advertising, purchased programmatically or through direct deals, might be displayed when a consumer watches television content using an app on a smart TV. Currently, a fairly small proportion of ads shown programmatically are shown to consumers using connected TVs (as shown in figure 2.4).

⁴³ Our estimates are based on data obtained from ad tech providers for display ads shown to users in Australia. We note that these figures may not include data from all ad tech providers operating in Australia.

In 2020, we estimate that advertising delivered via connected TV made up 7% of advertiser expenditure and 1% of impressions of ads sold programmatically in Australia. However, we understand that relatively higher amount of connected TV advertising is sold via direct deals, compared to other device types.⁴⁴ This means that the proportion of display ads shown on connected TV sold through open display channels (which includes programmatic advertising and direct deals) is likely to be higher than the figures set out above for programmatic advertising only. We also estimate that the average price of advertising via connected TV is much higher than for advertising delivered via browsers and mobile apps.

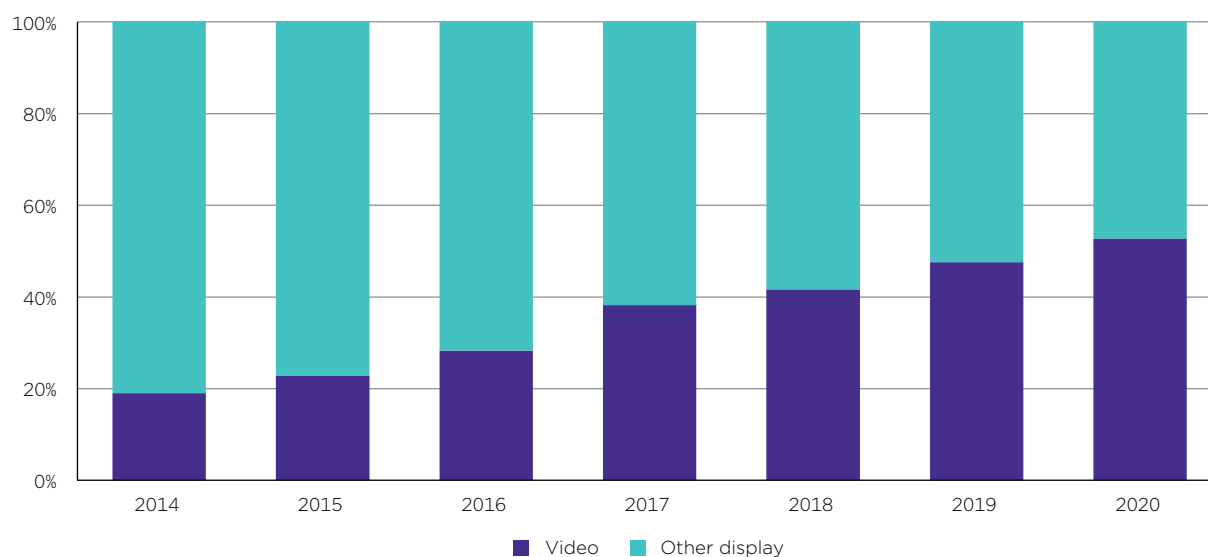
We also note that it is likely connected TV ads will become more important in the future, as advertising expenditure on ads shown on connected TV is growing. For example, for a sample of larger publishers in Australia, the IAB estimates that connected TV increased from 23% of video advertising in the December quarter of 2018, to 50% of video advertising in the December quarter of 2020.

2.2.2 Video advertising is increasingly important to advertisers

During the first quarter of 2021, the IAB estimates that advertiser expenditure on video advertising made up 54% of the total amount spent on **display advertising**. Video display advertising includes advertising on YouTube and on streaming services such as broadcast video on demand (BVOD), as well as other video advertising, across all devices (desktop, mobile and connected TV).⁴⁵

This has followed considerable growth over the last five years. In 2014, spend on video display advertising in Australia was \$276 million, growing by 6 times to \$1.9 billion in 2020. This has likely been driven by significant changes in consumer behaviour to view substantially more video content online. In addition, the increase in video advertising is also likely to be driven by an uptake in connected TV. These trends are illustrated in figure 2.5 below.

Figure 2.5: Proportion of display advertising expenditure on video and other display advertising, Australia, 2014 to 2020



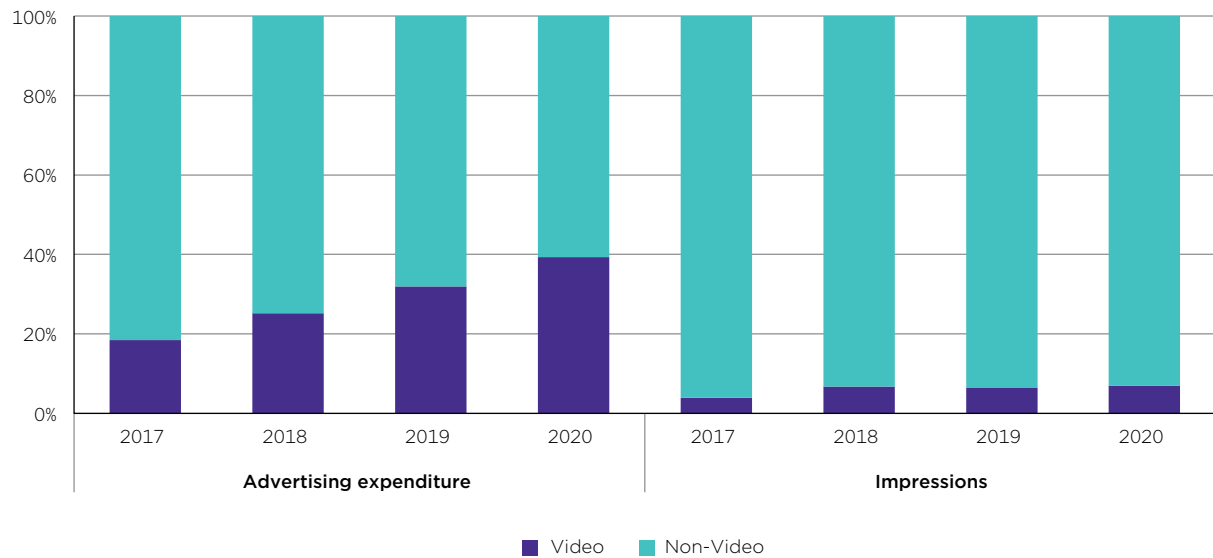
Source: IAB Australia, ACCC analysis.

Data analysed by the ACCC indicates that there has also been substantial growth in video advertising sold programmatically in Australia. As shown in figure 2.6 below, we estimate that video advertising made up 18% of expenditure on ads sold **programmatically** in Australia in 2017, doubling to 39% in 2020. While video advertising made up a much lower proportion of programmatic advertising by impressions (at 7% in 2020), this is explained because video advertising is typically more expensive than other display advertising.

44 M. Wlosik, [What Is Connected TV \(CTV\) & OTT Advertising and How Does It Work?](#), Clearcode, 16 March 2021, updated 28 June 2021; Xandr, [Connected TV: Advertising's Creative Canvas](#), 2021.

45 BVOD refers to traditional TV broadcaster content that is made available to watch online on-demand and includes services such as SBS on Demand and 9Now.

Figure 2.6: Estimated proportion of programmatic advertising expenditure, and impressions, for video and non-video display advertising, Australia, 2017 to 2020⁴⁶



Source: ACCC analysis of data provided by ad tech providers.

2.3 Pricing trends

This section presents our findings on average prices, fees and trends for ad tech services in Australia. Understanding ad tech fees is important as a significant portion of advertiser expenditure goes to fees for ad tech services along the supply chain. Additionally, the level of ad tech prices and fees is relevant to understanding market dynamics for display advertising and ad tech services.

⁴⁶ Our estimates are based on data obtained from ad tech providers for display ads shown to users in Australia. We note that these figures may not include data from all ad tech providers operating in Australia.

Box 2.1: Ad tech prices and fees

In this Report, we use the following terms:

- **Prices:** The overall price paid by advertisers or agencies for programmatic display advertising, including the price of the ad inventory and any fees charged for ad tech services along the supply chain. Ad inventory may be sold to advertisers on a per impression basis (reported as cost-per-mille, or cost per 1,000 ads served), or other bases such as cost-per-click or cost-per-action.⁴⁷
- **Fees:** Fees are charged by providers for particular ad tech services along the supply chain (described below).

Fees for ad tech services

Ad tech providers generally charge fees for ad tech services in the following ways:

- **Advertiser ad servers:** for each ad impression served (e.g. \$0.05 CPM = \$0.05 per thousand impressions).
- **DSPs:** based on a percentage of the total amount an advertiser spends through the DSP on ad inventory (e.g. fee of 15% of total price of ad inventory bought through the DSP). They may also charge for services provided by third parties, generally data providers or verification services.
- **SSPs and ad networks:** as a percentage of the total amount a publisher earns through the SSP or ad network (e.g. 15% of total revenue that the publisher earns from the SSP).
- **Header bidding:** as a percentage of the total amount a publisher earns through the header bidding service.⁴⁸
- **Publisher ad servers:** for each ad impression served (e.g. \$0.05 CPM = \$0.05 per thousand impressions).

2.3.1 Ad tech fees make up a significant portion of advertiser spend

We estimate that on average, fees for the four key ad tech services made up 27% of advertiser expenditure on programmatic advertising in Australia in 2020.⁴⁹ This analysis also supports concerns that ad tech providers are retaining a significant amount of advertiser expenditure on programmatic advertising, potentially at the expense of the publishers which host the ad opportunities.

This builds on the estimates we presented in the Interim Report for 2019, where we estimated that fees for these four ad tech services made up 28% of advertiser expenditure.

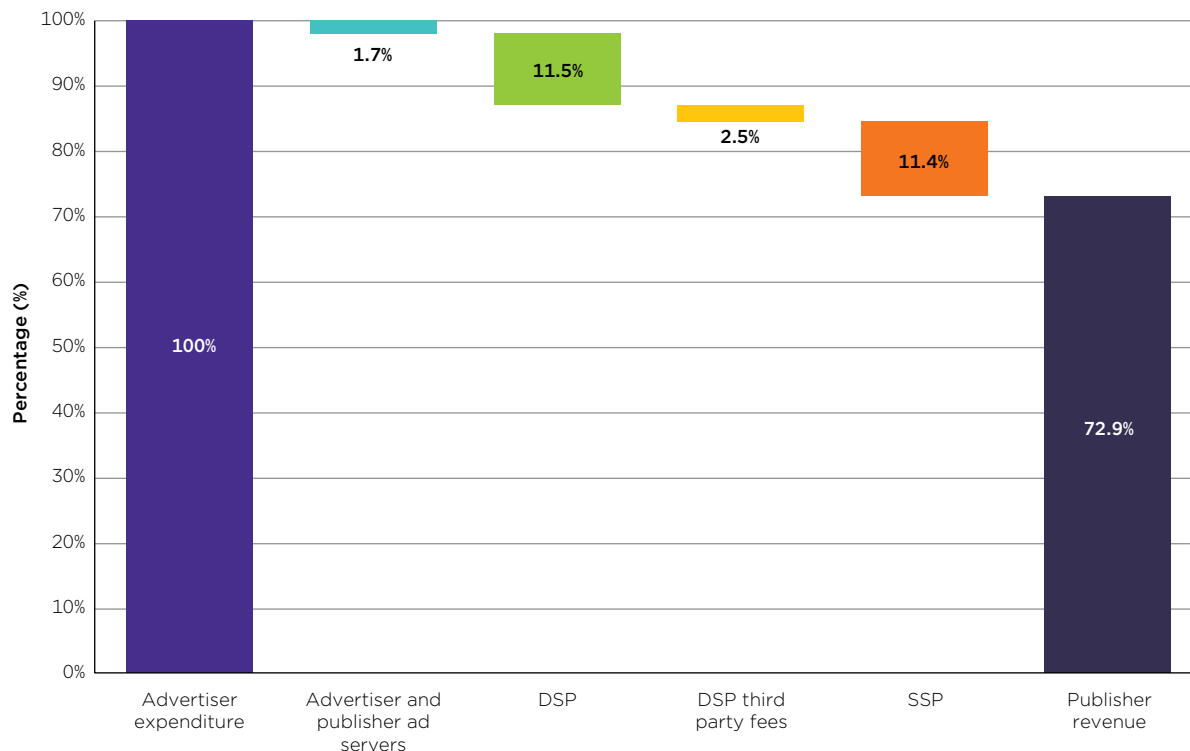
47 With cost-per-click (CPC), the ad tech provider charges the advertiser each time an ad is clicked on by a consumer. With cost-per-action (CPA), the ad tech provider charges the advertiser when an ad leads to a specific action by a consumer, such as a purchase or sign-up.

48 Publishers generally do not pay for header bidding, if they set this up themselves using code on their websites. However, this may require significant technical and operational expertise.

49 Our analysis includes fees charged by advertiser ad servers, DSPs, DSP third-party fees (including fees for data services and verification and attribution services), SSPs and publisher ad servers.

The total amount of advertiser expenditure retained by ad tech providers across the supply chain is likely to be higher than these average fees. This is because our analysis has not been able to account for all of the fees and costs across the supply chain.⁵⁰ Our estimates broadly consistent with other studies which have found fees account for 35–49% of advertiser expenditure through ad tech services.⁵¹ We note our estimates are likely lower as the other studies included additional services that are not included in our estimates.⁵²

Figure 2.7: Estimated average fees for ad tech services, Australia, 2020⁵³



Source: ACCC analysis of data obtained from ad tech providers.

We estimate that in Australia in 2020, advertiser and publisher ad server fees combined, made up approximately 1.7% of total advertiser expenditure.⁵⁴ We estimate that DSP fees were higher at 11.5% of total advertiser expenditure, while DSP third-party fees make up only around 2.5% of expenditure. SSP fees also made up 11.4% of total advertiser expenditure.

We also found that the size of fees charged by different ad tech providers for ad tech services can vary significantly. While the variation in fees may reflect differences in the pricing strategies of ad tech providers, it may also arise due to variations in fees for different ad inventory types, deal types and service inclusions.

⁵⁰ For example, our analysis does not capture fees for some ad tech services such as ad agency and trading desk services, data services, verification and attribution services that are not charged through a DSP, and fees for header bidding or Open Bidding. Further, it may not capture amounts that are retained by ad tech providers which are not disclosed to their customers.

⁵¹ See ISBA, [ISBA Programmatic Supply Chain Transparency Study](#), May 2020 and Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), Appendix R, 1 July 2020.

⁵² There are a number of other reasons why the estimates from ISBA and the CMA's studies may differ from our own. Our estimates are based on aggregate revenue figures (similar to the CMA's approach) and do not track the same set of transactions through the supply chain (as done in the ISBA study). These various estimates are also based on data from different time periods and locations, and may not capture the same mix of ad inventory.

⁵³ The ACCC's estimates are based on averages of the fees charged by multiple providers of each of these four services, using data provided in response to section 95ZK notices. These figures are the ACCC's best estimates, based on information from ad tech providers. This information was provided in relation to digital display advertising served to users in Australia in 2020

⁵⁴ The ACCC recognises that these are distinct services, provided to different customers. The estimate of publisher and advertiser ad server fees has been combined into a single figure in this report for reasons of confidentiality.

The ACCC recognises the benefit that ad tech services provide to both publishers and advertisers. Nevertheless, the ACCC considers that these fee levels are higher than they would be if the supply of ad tech services was more competitive and likely reflect the market power that Google is able to exercise in its dealing with both advertisers and publishers (discussed further in chapter 3). Further, the ACCC agrees with the broad comments expressed in the CMA report that greater competition in ad tech would likely increase efficiency to the benefit of both publishers and advertisers.⁵⁵

High levels of ad tech fees reduce the revenue publishers obtain for their advertising inventory and therefore the funds available to invest in the online content made available to consumers. High ad tech fees also increases advertisers' costs with consequential effects for the price of goods or services sold by such businesses.

2.3.2 Ad tech prices have been relatively stable over the last few years

We analysed average pricing for display advertising purchased programmatically from 2017 to 2020 in Australia, based on data obtained from a subset of ad tech providers.⁵⁶ We estimate that:

- The average price of display advertising purchased programmatically fluctuated slightly over the last four years, but is only slightly higher in 2020 than it was in 2017.
- Average fees for DSP services, and advertiser and publisher ad server services,⁵⁷ changed little over the period.
- Average fees for SSP services decreased by approximately 20% over the period.

As these are average prices and fees across all ad inventory, we note that there are a number of factors that may have driven these trends over time. For example, changes in fees could represent underlying changes in the mix of ad inventory and deal types used by advertisers and publishers, and not just changes in the fees charged by ad tech providers.

55 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, p. 65.

56 We note that not all ad tech providers were able to provide this information and there may be some providers who are not captured in our estimates. Prices analysed were for digital display advertising served to users based in Australia.

57 The ACCC recognises that these are distinct services, provided to different customers. Data relating to publisher and advertiser ad server fees has been combined into a single figure in this report for reasons of confidentiality.

3. Competition in ad tech services

Key points

- Google is the dominant provider of services across the ad tech supply chain. No other provider has comparable scale in any ad tech service or reach across the supply chain.
- While the extent of competition for the supply of each ad tech service varies, Google dominates the supply of ad tech services in Australia. We estimate that over 90% of all ad impressions traded in 2020 via the ad tech supply chain passed through at least one Google service.
- In relation to publisher ad server services, Google has an estimated 90–100% share of impressions. Google is the dominant provider of these services, facing weak competitive constraints due to high switching costs, the prevalence of single-homing and its superior integration with its supply-side platform (SSP).
- In relation to SSPs, Google is the largest provider of these services with an estimated 40–50% share of revenue and 70–80% share of impressions. Google's strong position is underpinned by its near-exclusive access to demand from Google Ads (one of Google's two demand-side platforms) and its vertical integration with Google's other ad tech services.
- In relation to advertiser ad server services, Google has an estimated 80–90% share of impressions for these services. Google's dominance is underpinned by its integration with Google's other ad tech services, and the prevalence of single-homing and high switching costs.
- In relation to demand-side platforms (DSPs), Google is the largest provider of these services, with an estimated 60–70% share of revenue and 80–90% share of impressions.
- Google's strong position in DSPs is underpinned by its data advantage, the integration between Google's services and its access to exclusive inventory. In particular, Google's access to a broad range of first and third-party data provides it with an advantage in the supply of DSP services. This data likely allows it to provide more focused targeting and attribution services than its competitors.
- Google states that it makes 'extremely limited' use of the first-party data it holds on individual users when providing ad tech services for the sale of third-party inventory. This would suggest that Google's ad tech businesses do not benefit from the data obtained from, for example, a consumer's use of Google Search and YouTube, and that this data is not used to improve the ad targeting capability of Google's DSPs. However, there is a perception in the ad tech industry that Google uses its first-party data more extensively than Google claims. The ACCC considers Google benefits from this perception.
- Even if Google does not currently make extensive use of its first-party data to target ads on third-party websites, there is a real risk that Google may use its first-party data more extensively in the future. This is because:
 - There is nothing to prevent Google using its first-party data to provide ad tech services on third-party websites. Indeed, Google's Privacy Policy suggests that it could do this, and it would not be required to seek consumers' consent to do so.
 - Using such data could provide it with a significant advantage over its rivals.
 - The value of first-party data is likely to increase in the future, as third-party cookies are phased out.

- In order to prevent Google leveraging its extensive first-party data to advantage its ad tech services, entrenching its position, and to address confusion within the industry about how Google currently uses its first-party data, we recommend the following:
 - Recommendation 1: Google should amend its public material so that it clearly describes how Google uses first-party data to provide ad tech services.
 - Recommendation 3: The power to introduce sector specific rules in Recommendation 2 should allow the ACCC to address competition issues caused by an ad tech provider's data advantage.
- At this stage, the ACCC considers that these recommendations would apply to Google. However, if in future these concerns arose in relation to other ad tech providers, then equivalent measures should apply to such providers.

We have considered the state of competition for the four key ad tech services: publisher ad servers, advertiser ad servers, SSPs and DSPs. This chapter is structured as follows:

- **Section 3.1:** provides an overview of competition in the ad tech supply chain, including an overview of Google's position in the supply of each ad tech service by examining Google's share of supply for these services, and describes how ad tech providers compete.
- **Sections 3.2 to 3.5:** discusses the state of competition for each ad tech service, finding that Google is the dominant provider of ad tech services across the supply chain, and assesses the efficacy of existing and potential competitive constraints on Google.
- **Section 3.6:** considers factors that influence competition across the ad tech supply chain, such as directly negotiated deals and barriers to entry, and assesses their efficacy as existing and potential competitive constraints on Google.
- **Section 3.7:** states our conclusions about Google's position in each of the four key ad tech services and the level of competition that Google faces.
- **Section 3.8:** discusses our recommendations to promote greater competition for ad tech services by addressing data advantage issues.

3.1 Overview of competition in the ad tech supply chain

Google is the dominant provider of ad tech services in Australia, although there are other competing providers of ad tech services. No other provider has comparable scale or scope compared with Google. This section provides an overview of the main providers of ad tech services, and Google's position across the supply chain.

3.1.1 Providers of ad tech services in Australia

Multiple businesses provide ad tech services in Australia, as illustrated by table 3.1 below.

Table 3.1: Main providers of ad tech services in Australia in 2020

	Advertiser ad servers	Demand-side platforms	Supply-side platforms	Ad networks	Publisher ad servers
Google	✓	✓	✓	✓	✓
AppNexus / Xandr	✓	✓	✓		✓
Verizon Media		✓	✓		
Amazon	✓	✓			
Adform	✓	✓	✓		✓
Facebook Audience Network				✓	
Flashtalking	✓				
Innovid	✓				✓
The Trade Desk		✓			
MediaMath	✓	✓			
Amobee		✓			
Adobe		✓			
Criteo		✓			
Magnite			✓		
PubMatic			✓		
Index Exchange			✓		
OpenX			✓		
Taboola				✓	
MoPub (Twitter)			✓		

Notes: There may be other providers of some ad tech services in Australia that are not captured by the above table. However, we understand these are the providers who provide the vast majority of ad tech services in Australia.

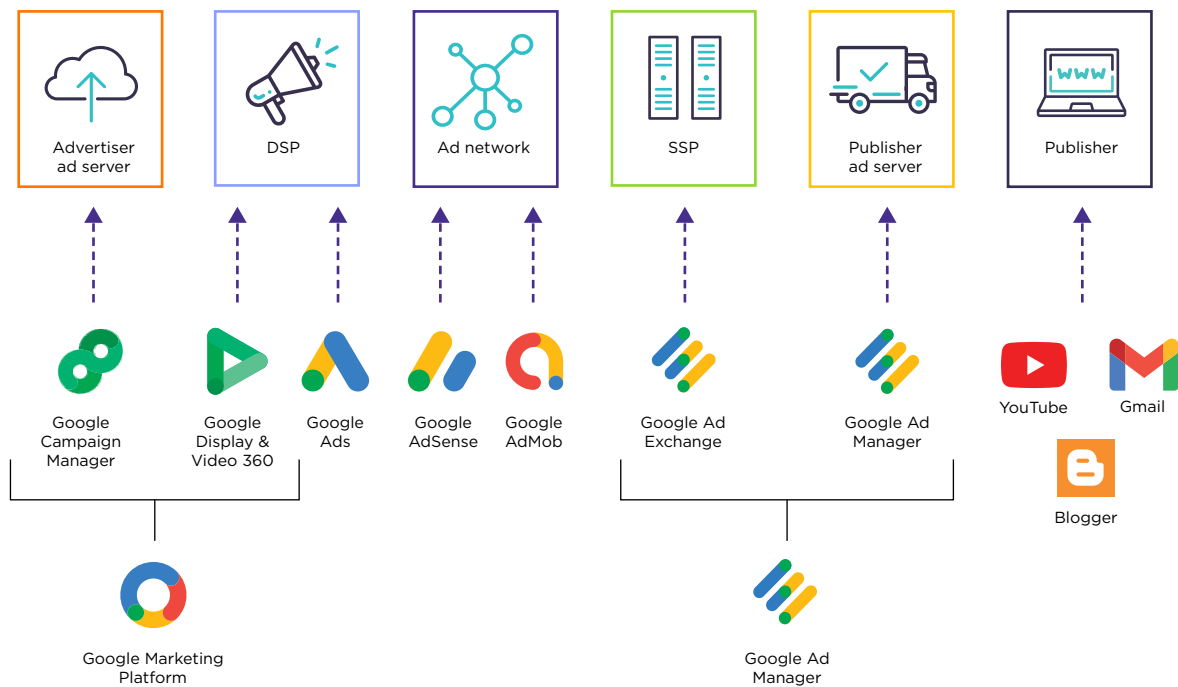
Source: ACCC analysis based on information obtained from ad tech providers.

While there are a number of providers, many of these are fairly small or serve small, or niche segments of the market.

3.1.2 Google is the main provider of ad tech services in Australia

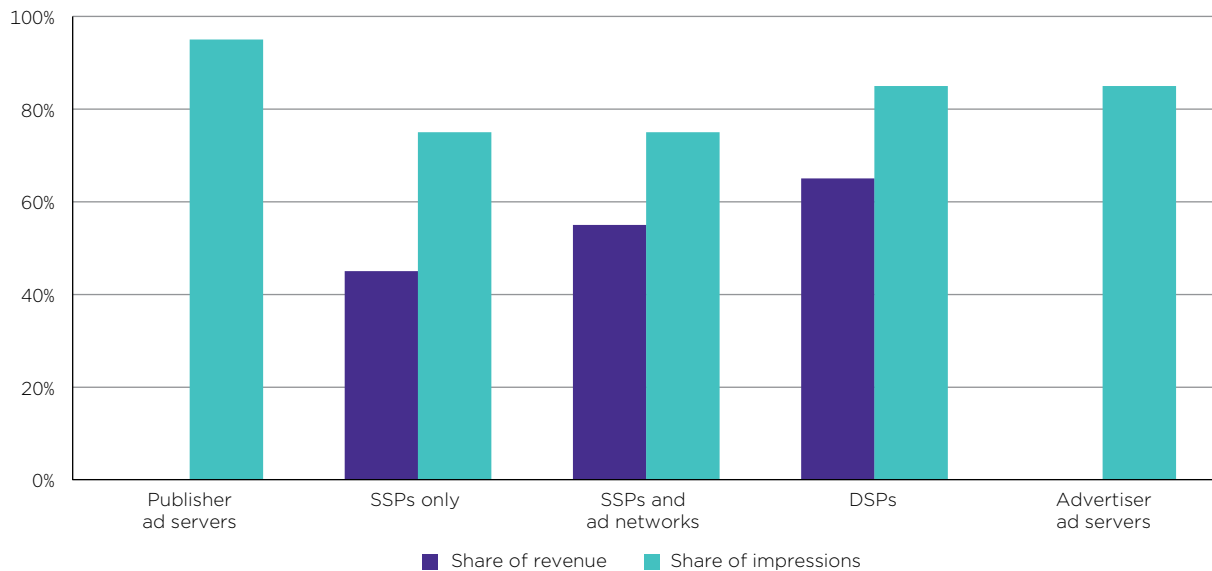
Google operates services across the entire ad tech supply chain, and is by far the largest provider of ad tech services. Unlike many of the other providers, Google is also a publisher, supplying ad inventory on its own platforms (for example, YouTube, Gmail and Google Search) to advertisers. Figure 3.1 shows the services that Google provides in Australia.

Figure 3.1: Google's ad tech and services available in Australia in 2021



Google is also the largest provider of services at each level of the supply chain. Figure 3.2 and table 3.2 below contain our estimates of Google's share of revenue and impressions for the four main ad tech services in Australia in 2020.⁵⁸ It shows that Google's share of impressions is over 70% at each stage of the supply chain, and it has a share of between 40–70% of revenue for services where revenue data is available.⁵⁹

Figure 3.2: ACCC estimates of Google's share of revenue and impressions for the main ad tech services, Australia, 2020



Note: The values in this chart are based represent the mid-point of the ranges included in the table below, and not the exact share of revenue or impressions for any service.

Source: ACCC analysis of information obtained from ad tech providers.

⁵⁸ Sufficient revenue information for publisher ad servers and advertiser ad servers is not available to the ACCC. Accordingly, shares for these services are based on share of impressions only.

⁵⁹ The ACCC was unable to estimate shares of revenue for advertiser ad server services or publisher ad server services, as we were unable to obtain the data necessary to do so.

Table 3.2: ACCC estimates of Google's share of revenue and impressions for main ad tech services, Australia, 2020

	Share of revenue	Share of impressions
Publisher ad servers	Insufficient data available	90-100%
SSPs only	40-50%	70-80%
SSPs and ad networks	50-60%	70-80%
DSPs	60-70%	80-90%
Advertiser ad servers	Insufficient data available	80-90%

Source: ACCC analysis of information provided by ad tech providers.

We have estimated these shares of revenue and impressions using information obtained from ad tech providers, including from s 95ZK notices, which we describe as follows:

- Share of revenue is an ad tech provider's share of the total revenue earned by the main providers of the service in Australia, in relation to open display advertising served to users in Australia.
- Share of impressions is an ad tech provider's share of the total impressions traded or served by the main providers of the service in Australia, in relation to open display advertising served to users in Australia.

These shares are our best estimates, based on information from ad tech providers that we understand to be the main providers of each service in Australia.⁶⁰

The following sections discuss the state of competition for each ad tech service, including Google's shares of revenue and impressions for each service.

3.1.3 Factors which influence competition for ad tech services

There are several factors that ad tech providers compete over in order to win customers. These include:

- performance and price
- integration with other services and ease of use
- for publishers, the ability of the ad tech services to connect the publisher with a wide range of demand
- for advertisers:
 - the ability of the ad tech services to ensure that the advertiser's ads are targeted to the particular customers they are trying to reach
 - the ability for their ad tech services to connect with audiences.

These factors are discussed in greater detail in Appendix B.

⁶⁰ In making these estimates, we have attempted to capture the majority of the market, and compare figures on the same basis. However, it is possible that not all providers are captured in the share estimates included in this report. Further, while we requested information on a consistent basis, the ACCC has not been able to verify the accuracy of the all information provided to us, and we have relied on ad tech providers to provide us with accurate information, including in accordance with our statutory notices. Accordingly, it is possible that some of the estimates in this report could slightly under or overstate the actual share of revenue or impressions for a firm.

3.2 Competition for publisher ad server services

Google is dominant in the supply of publisher ad server services in Australia, with weak competitive constraints.⁶¹ Google has an extremely high market share, and high switching costs, the prevalence of single-homing and Google's superior integration with its SSP provide Google with significant competitive advantages.

3.2.1 State of competition for publisher ad servers

Google is the largest provider of publisher ad server services in Australia, with an estimated 90–100% share of impressions in 2020. We are only aware of limited alternative publisher ad server suppliers available in Australia, including Xandr, as OpenX and Verizon Media stopped providing publisher ad server services globally in 2019 and 2020 respectively. As such, the supply of publisher ad server services in Australia is highly concentrated.

Table 3.3: ACCC estimates of Google's share of impressions for publisher ad server services, Australia, 2020

	Share of revenue	Share of impressions
Google Ad Manager	Insufficient data available	90–100%
All other providers		0–10%

Source: ACCC analysis of information provided by ad tech providers.

While Google has been the largest provider of publisher ad server services for a number of years, its position has grown further over time. Google's share of impressions for publisher ad servers has increased slightly from 2017 to 2020, rising by approximately 2 percentage points.

Stakeholders have also made submissions to the ACCC in this inquiry on Google's status as the largest publisher ad server in a highly concentrated market. Daily Mail Australia submits that Google captures the 'lion's share' and is the default ad server for the industry'.⁶² Similarly, News Corp Australia submits that Google is 'by far the leading publisher ad server in Australia' and that the only other significant publisher ad server in Australia that competes with Google is Xandr's publisher ad server.⁶³ It also submits that Google would have the ability to raise prices without losing customers due to its publisher ad server being a 'must have' service.⁶⁴

3.2.2 Reasons for Google's dominance in publisher ad server services

Two key reasons appear to underpin Google's position as the dominant publisher ad server and make it very difficult for other providers to effectively compete with Google in supply publisher ad server services:

- ease of use and integration with, and access to, Google's SSP
- the prevalence of single-homing and high switching costs.

Ease of use and integration with, and access to, Google's SSP

When a publisher signs up to use Google's publisher ad server, the publisher is provided with automatic access to Google's SSP, making it very easy to start selling ad inventory programmatically.⁶⁵ Publishers, that are either unlikely to, or not currently multi-homing, also do not need to additionally contract with Google's SSP, or other SSPs unless they choose to. This is because they already have a source of inventory demand via Google's SSP, which increases the ease of use of Google's service.

61 If a publisher sells ads exclusively through an ad network, the ad network may also provide some publisher ad server functions within its own platform. However, ad networks generally will not be able to serve ads bought through other channels, which makes them distinct from the publisher ad server services discussed in this section.

62 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 15; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 2.

63 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 12.

64 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 64.

65 A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 8.

Further, the use of both Google's publisher ad server and SSP means that publishers are able to receive the benefits of using a vertically integrated provider such as more streamlined operations and technological benefits.

Additionally, The Guardian Australia submits that with the integration of Google's SSP into Google's publisher ad server, it is easier for publishers to set up and run programmatic guaranteed campaigns, which The Guardian Australia states can otherwise be a very manual and time consuming process.⁶⁶

In addition, Google's SSP is a significant and important source of demand for publishers. In particular, access to Google's SSP is considered essential by many publishers because it is the main way that publishers are able to access to Google Ads demand, which is an important source of demand for publishers.⁶⁷ The majority of Google Ads demand is channelled through Google's SSP (see chapter 4 for further details regarding demand sent from Google Ads). As a result Google's publisher ad server is 'must have' for many publishers due to its automatic integration with Google's SSP and the access to the valuable demand it provides.⁶⁸

Furthermore, Google's publisher ad server is the most effective way for a publisher to access demand from Google's SSP. This is because of Google's decision not to participate in header bidding which is discussed in detail in chapter 4.

Publishers do not multi-home, and switching costs are high

The prevalence of single-homing and high switching costs constitute a significant barrier to entry and expansion in the market for the supply of publisher ad servers (barriers to entry are discussed in more detail below). This has contributed to, and entrenched, Google's leading position in publisher ad server services.

First, publisher ad servers are designed as a single service to organise and manage the selling of all of a publisher's ad inventory, and generally publishers will use only one publisher ad server.⁶⁹

Due to the central role publisher ad servers perform in managing the sale of advertising inventory, single-homing is both practical and operationally efficient.⁷⁰ Multi-homing is likely to be problematic for publishers. For example, evaluating and comparing performance across multiple publisher ad servers is difficult due to the different ways in which performance is measured and reported.⁷¹

Secondly, switching publisher ad servers is a complex, disruptive, lengthy and expensive process.⁷² Given the central role the publisher ad server performs in managing the sale of ad inventory for a publisher, any errors in migration to a new server will likely result in significant lost revenue due to unsold impressions.⁷³ The high switching costs involved in changing publisher ad server services increases the barriers to entry for a new entrant seeking to commence publisher ad server services, and entrenches Google's position as the dominant provider of these services. For example, when Verizon Media stopped supplying publisher ad servers in 2020, it was reported that the presence of high switching costs meant it was difficult for these rivals to encroach on Google's dominance.⁷⁴

66 Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 7.

67 This is discussed further in chapter 4.

68 For example, A&A Digital Services states that 'without this integration, the majority of the publishers (it works) with would not be able to monetise their inventory outside of their direct sold campaigns, as they would not qualify for other demand partner contract thresholds and would therefore have unsold inventory and a lesser revenue opportunity'. Similarly, Daily Mail Australia submits that it is 'not financially viable' to move away from Google's publisher ad server and the associated access to Google's unique demand it provides: A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 8; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 2 June 2020, p. 6.

69 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 11; Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, pp. M29–30, M65.

70 We note that the CMA also found that publishers typically single-home on one publisher ad server: Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M65.

71 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, pp. 2–3.

72 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 11; Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M66; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 15.

73 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 15.

74 R. Shields, 'Verizon Media to Shutter Oath Ad Server', Adweek, 4 March 2019, accessed 11 October 2020; C. Shruptine, 'OpenX Ad Server Alternatives', Kevel, 19 December 2018, accessed 13 October 2020.

3.3 Competition for SSP services

While there is some degree of competition for SSP services, Google is still by far the largest provider and faces little competitive constraint from its rivals.

3.3.1 State of competition

There are 9 main SSPs operating in Australia, of which Google is the largest provider. Google has an estimated 40–50% share of revenue and 70–80% share of impressions for SSPs in Australia in 2020. No other provider of SSP services has a share of revenue greater than 30–40% or a share of impressions greater than 0–10%.

Table 3.4: ACCC estimates of Google's share of revenue and impressions for SSP services, Australia, 2020

	Share of revenue	Share of impressions
Google Ad Exchange	40–50%	70–80%
All other providers	50–60%	20–30%

Source: ACCC analysis of information provided by ad tech providers.

Google's share of revenue for SSP services has decreased slightly from 2017 to 2020, by 4 approximately percentage points. However, its share of impressions has increased substantially from year to year over the same period, by approximately 13 percentage points. This period aligns with the growth of broadcast video on demand (BVOD) advertising.⁷⁵ BVOD ad inventory is higher in cost compared to other forms of advertising and has a significant impact on shares of revenue. Magnite CTV, which is Magnite's service focusing on connected TV/BVOD, has grown its share of total SSP revenue in Australia, between 2017 and 2020. Since BVOD advertising is relatively new and is an area of growth, we consider that there are likely to be changes in the competitive dynamics in this area. Some internal Google documents suggest that from at least 2019, Google was looking to grow its BVOD and connected TV business. Google's position for BVOD/connected TV may therefore improve over time, and accordingly, this may change its share of revenue for SSP services.

Some stakeholders also submit that Google's SSP is not constrained by its competitors, and that it is a must have service for many publishers. For example:

- Daily Mail Australia submits that Google's SSP is considered the default ad exchange, and that competition only exists amongst smaller SSPs such as The Rubicon Project [now Magnite], PubMatic and Index Exchange for a subset of publishers.⁷⁶
- News Corp Australia submits that Google is estimated to capture a 55.15% share of SSP services in Australia, and that it would have the ability to raise prices without losing customers due to its SSP being a 'must have' service.⁷⁷

3.3.2 Reasons for Google's strong position

Google's strong position for the supply of SSPs, compared to other suppliers of SSPs, appears to be underpinned by:⁷⁸

- its near-exclusive access to demand from Google Ads
- its integration with Google's publisher ad server and the ease of use of its SSP services
- Google conduct which has limited Google's SSP's exposure to competition.

75 S. Weaver, [Here's why BVOD is Australia's fastest-growing media category](#), AdNews, accessed 21 July 2021; Telaria, [BVOD 20/20 Sydney: What's now and what's next?](#), 11 December 2018, accessed 21 July 2021; CMO, [TV but not as you know it: insights for marketers exploring BVOD](#), accessed 21 July 2021.

76 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 2. We consider this subset of publishers to consist of medium to large publishers that have the ability and resources to multi-home on SSP services. As discussed further below, these publishers are very likely to include Google's SSP in their multi-homing mix.

77 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 62, 64.

78 The other 8 SSPs that compete with Google Ad Exchange in Australia include Adform, Index Exchange, Magnite, MoPub, OpenX, PubMatic, Verizon Media and Xandr.

Together, these factors mean that Google's SSP faces little competitive constraint from its rivals.

Access to Google Ads advertiser demand

As noted earlier, one of the key factors driving use of Google's SSP is its near exclusive access to the large and unique demand available from Google Ads, one of Google's DSPs.⁷⁹ Therefore, even considering the ability of some publishers' to multi-home,⁸⁰ the competitive constraint that competitors place on Google's SSP is limited due to Google's access to such important demand.

While Google Ads demand can be accessed via other SSPs in some cases, the vast majority of inventory bought through Google Ads comes from Google's own SSP. Many publishers consider that using Google's SSP is the only way to access Google Ads demand and submit that access to this Google Ads demand is a key reason to use Google's SSP.⁸¹

The Autorité de la concurrence (French Competition Authority) found that any competitive advantage that other SSPs may have from being able to access Google Ads demand is limited, because while other SSPs can receive demand from Google Ads, Google prohibits these other SSPs from advertising this fact.⁸²

Google Ads has a 30–40% share of revenue and a 50–60% share of impressions for DSPs in Australia in 2020. Additionally, a large number of smaller advertisers single-home on Google Ads as their DSP, resulting in advertiser demand from Google Ads not only being very significant, but also unique and exclusive. Access to this demand is important to publishers as it will increase the publisher's potential ad revenue. We consider that this access provides Google's SSP a significant competitive advantage over other SSPs.

Integration with Google's publisher ad server and ease of use

As discussed above in section 3.2.2, Google's offer of a publisher ad server and an SSP that automatically integrate with one another increases the ease of use and attractiveness of the set of services to publishers.

Google submits that the integration between its SSP and publisher ad server benefits publishers by improving reporting capabilities and reducing operational overheads, and notes that these efficiencies have been cited by a number of publishers.⁸³

We consider that the integration between Google's publisher ad server and its SSP is likely to result in benefits to publishers in that it improves the ease of use of the products. However, as set out below, we also have concerns about how Google leverages its position across multiple ad tech services. The ease of this set up is particularly attractive for small to medium publishers who, if they use Google's publisher ad server, do not need to contract with additional SSP providers unless they wish to utilise non-Google SSPs. Multi-homing requires a level of sophistication in the use of ad tech services, as publishers need to have staff with the relevant knowledge and resources to manage the use of multiple SSPs. Additionally, other providers of SSPs often have minimum required inventory thresholds to enable a trading agreement which medium to larger publishers are more likely to reach.⁸⁴ Smaller publishers are unlikely to fulfil the minimum required inventory threshold, or have the same level of knowledge and resources as larger publishers, and will therefore use Google's publisher ad server, and the automatic access that it provides to Google's SSP.

79 This is discussed further in chapter 4.

80 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, pp. 56–57.

81 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 30–31; D. Geradin and D. Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, p. 31; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, pp. 5–6, 14; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 15.

82 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 52.

83 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 19.

84 A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 8.

A range of Google conduct advantages its SSP

We consider there are a number of ways in which Google has used its role as publisher ad server to implement auction rules and features which have provided its own SSP with a competitive advantage. In particular, we consider that this conduct demonstrates that Google has been able to use its vertically integrated position in the ad tech supply chain to operate its supply side services in a way which has provided its SSP with a competitive advantage. This conduct is discussed more in chapter 4, but it is relevant to note here that this conduct includes Google's last look advantage, uniform price rules and open bidding fees.

Even if publishers were to multi-home, Google's SSP has a competitive advantage over other SSPs, therefore limiting Google's exposure to competition.

3.3.3 Constraint placed on Google's SSP by ad networks

While SSPs perform distinct functions to ad networks, there is a potential overlap between the two services as they both play a role in selling ad inventory, and in some cases ad networks may compete with SSPs in selling publisher ad inventory.⁸⁵ Therefore, in considering the level of competition for SSP services, we have also considered the role of ad networks, and the degree to which they compete with Google's SSP.

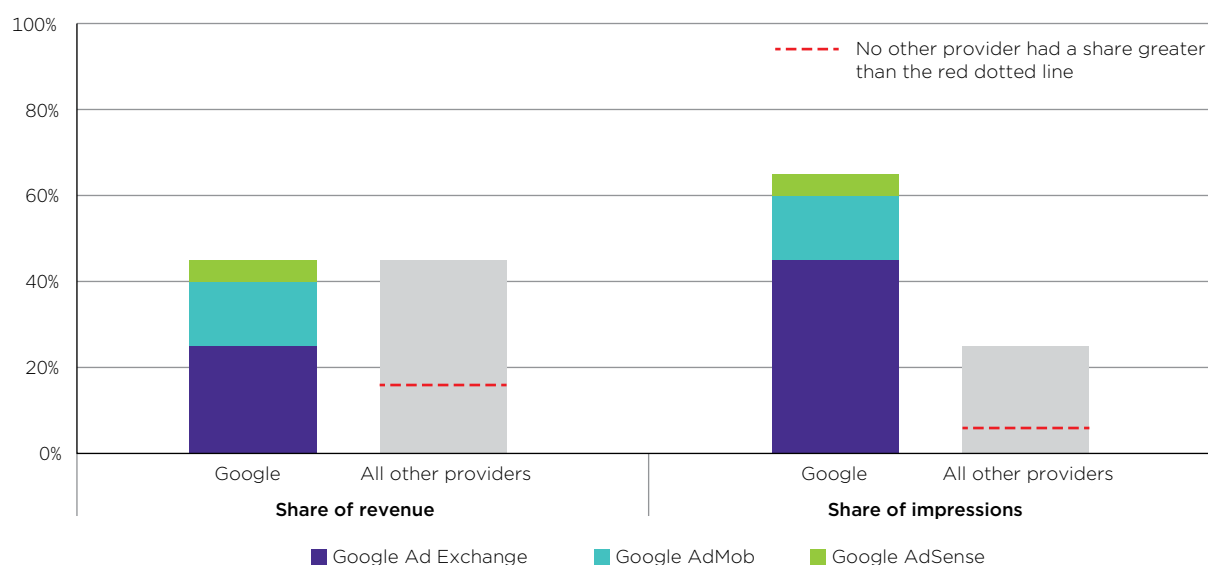
However, despite the inclusion of ad networks in our analysis, this does not change our conclusions about Google holding a strong position in the supply of SSP services.

Share of supply for SSPs and ad networks

Google operates two ad networks in Australia: an ad network for the sale of ad inventory on web browsers (called Google AdSense) and a separate ad network for the sale of ad inventory on mobile apps (called Google AdMob). When considering SSPs and ad networks together, Google had a combined estimated 50–60% share of revenue and 70–80% share of impressions in Australia in 2020 across its three different services. Google's shares of supply for SSPs and ad networks are larger than its share of SSP services alone. However, more significantly, when ad networks are included, no other provider has a share of revenue greater than 10–20% or a share of impressions greater than 0–10%. Even if ad networks are considered as an alternative to SSPs, Google holds a strong position and faces relatively low competitive constraints from rivals, which is outlined below.

⁸⁵ This view is expressed in several submissions from stakeholders, see: Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 2–3; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 12; Facebook, [Submission to Ad Tech Inquiry Issues Paper](#), 28 April 2020, p. 18. Additionally, we consider that ad networks have traditionally purchased ad inventory from publishers at a fixed price, repackage it and aggregate it with ad inventory from other publishers to on-sell to advertisers. However, more recently some ad networks have introduced real-time bidding features which blur the distinction between ad networks and SSPs.

Figure 3.3: Google's estimated share of revenue and impressions for SSP and ad network services, Australia, 2020



Note: The values in chart are based on the mid-point of the ranges included in the table below. They do not represent the exact values of revenue or impression shares.

Source: ACCC analysis of obtained from ad tech providers.

Table 3.5: ACCC estimates of Google's share of revenue and impressions for SSP and ad network services, Australia, 2020

	Share of revenue	Share of impressions
Google SSPs and ad networks	50–60%	70–80%
Google Ad Exchange	20–30%	40–50%
Google AdMob	10–20%	10–20%
Google AdSense	0–10%	0–10%
All other providers	40–50%	20–30%

Source: ACCC analysis of information obtained from ad tech providers.

Similar to our assessment of SSPs, Google's share of revenue for SSP and ad network services combined has decreased from 2017 to 2020 (by approximately 11 percentage points), while its share of impressions has increased (by approximately 6 percentage points).

The variations in shares of revenue and impressions is partly due to the mix of different types of ad inventory that are sold. For example, we understand that Google AdSense is typically used by smaller publishers and the ad inventory being sold is less likely to attract higher prices in comparison to ad inventory that may be sold by SSPs, resulting in Google AdSense having a higher share of impressions relative to its share of revenue.

Additional analysis of ads.txt files

The ACCC additionally conducted an analysis of ads.txt files on the top 10,000 websites in Australia to determine the prevalence of SSP/ad network services offered by different providers.⁸⁶ Where a

⁸⁶ Our analysis was based on a list of the top 10,000 websites in Australia in September 2020 that were frequently visited by consumers in Australia (excluding sites in the Adult Category to become the top 9,178 websites). Ads.txt files, which list authorised sellers for a website's ad inventory, were then scraped and analysed. As a result of the web scraping exercise, 2,767 websites with ads.txt files were identified. This equates to 30% of sites by count. See Appendix F for further explanation of this analysis. 526 websites were identified as only containing one provider, which represents 21% of all websites analysed that had an ads.txt file.

website used only one ad tech provider, Google was that provider 92% of the time. We note that where an ad tech provider was listed as Google, it could refer to either Google's SSP or Google AdSense. Additionally, we found that Google's ad tech services were present on 95% of these websites. The next most prevalent providers from this analysis were Xandr, Magnite, PubMatic, OpenX and Index Exchange, who all offer SSPs and were each present on 73–75% of these websites. While many publishers used more than one SSP and/or ad network to sell their ad inventory, the fact that Google is present on so many websites indicates that publishers generally use a Google service in addition to other SSPs and/or ad networks, or only use Google's services.

Limited constraint of ad networks on Google

Ad networks may be substitutes for SSP services for some publishers,⁸⁷ however, two of the major ad networks are owned by Google (AdSense and AdMob) and therefore do not provide competitive rivalry to Google's SSP.

Other ad networks in Australia include Facebook Audience Network and Taboola. Facebook Audience Network enables advertisers who are advertising on Facebook to extend their campaigns to purchase ad inventory on third-party publishers' mobile apps.⁸⁸ As such, the constraint provided by Facebook Audience Network is limited to publishers that are selling mobile app advertising. Similarly, Taboola specialises in displaying 'native content' from advertisers on publisher websites in a widget or feed alongside editorial content, and is more likely to be a complement to display advertising opportunities sold through the ad tech stack than an alternative to it.

3.4 Competition for advertiser ad server services

Google occupies a dominant position in the supply of advertiser ad server services, with its large market share indicative of the weak competitive constraint that its rivals provide.

Advertisers use advertiser ad servers to manage their ad campaigns and to serve ads on publisher websites or apps. This can be done independently of the DSP, SSP or publisher ad server involved in the transaction, or alternatively if an advertiser purchases ads via an ad network, the ad network will perform advertiser ad serving functions within its own platform.

Google Ads (a DSP) also offers integrated ad serving functions for ads bought through its service. If an advertiser sells ads exclusively through an ad network, the ad network may also provide some advertiser ad server functions within its own platform. However, ad networks generally will not be able to serve ads bought through other channels, which distinguishes them from the advertiser ad server services discussed in this section. Further discussion of ad networks and the degree to which they constrain advertiser side ad tech services are discussed in relation to competition for DSP services, below.

3.4.1 State of competition for advertiser ad servers

There are 7 main advertiser ad servers providing 'standalone' advertiser ad server services in Australia. These are Adform, Flashtalking, Google, Innovid, MediaMath, Sizmek (by Amazon) and Xandr.⁸⁹

Google is the largest provider of advertiser ad server services in Australia, with an estimated 80–90% share of impressions in 2020.

87 Publishers utilising ad networks are likely to be smaller publishers that do not necessarily need the level of sophistication and control regarding the sale of their ad inventory offered by SSPs

88 Facebook, [Submission to Ad Tech Inquiry Issues Paper](#), 28 April 2020, pp. 19–20.

89 We understand that some advertiser ad server services are offered as an add-on or integrated service alongside DSP services.

Table 3.6: ACCC estimates of Google's share of revenue and impressions for advertiser ad server services, Australia, 2020

	Share of revenue	Share of impressions
Google Campaign Manager	Insufficient data available	80–90%
All other providers		10–20%

Source: ACCC analysis of information provided by ad tech providers.

This is consistent with stakeholder submissions about Google's advertiser ad server (Campaign Manager) and the state of competition. For example, Daily Mail Australia submits that Google largely controls the market for advertiser ad servers with its Campaign Manager service.⁹⁰ Further, WPP AUNZ submits that there is low competition for ad serving due to there being few companies that offer the service.⁹¹

We understand that there is some differentiation between rival advertiser ad servers. One advertiser ad server states that it does not adhere to a single stack approach, and instead allows advertiser customers to select their own partners without compromising on connectivity between chosen ad tech partners. However, we do not consider that rival advertiser ad server services are a strong competitive constraint on Google's provision of these services, with the reasons for Google's dominance explained below.

3.4.2 Reasons for Google's dominance

There appear to be two key factors contributing to Google's dominance in the supply of advertiser ad servers.

Google's integration with other services provides it with a competitive advantage

Google's advertiser ad server is integrated with one of Google's DSPs (Display & Video 360), which provides it with a competitive advantage over other advertiser ad servers.

As both Google's advertiser ad server and Display & Video 360 are housed under the one advertiser-facing Google ad tech suite (Google Marketing Platform), advertisers which are drawn to using Google's DSP (this is discussed in further detail in section 3.5), are incentivised to use Google's advertiser ad server as well. The integration between the two services provides advertisers with consistent and seamless ad buying and performance tracking, so that if an advertiser were to use a non-Google advertiser ad server, it would likely require more time and effort to integrate with Google's DSP.

Advertisers are unlikely to multi-home and switching costs are high

Advertisers are unlikely to multi-home because advertiser ad servers function as a central hub which advertisers use to manage the delivery, tracking, and verification of all their digital ads.⁹² Therefore, using multiple services to perform this management function is likely to be costly and difficult to implement. Additionally, using one advertiser ad server is likely to assist with frequency capping and obtaining a more consistent measurement of ad campaign performance.

As the advertiser ad server acts as a central hub for advertisers, switching costs are likely to be significant. Advertisers that switch advertiser ad servers will need to reconfigure a number of processes such as their ad tags and integrations with their DSP, and any Application Programming Interfaces (APIs)⁹³ involved with the delivery of ads or reporting on performance.

The limits to multi-homing and the magnitude of switching costs are likely to raise barriers to entry and expansion. We consider these factors contribute to Google's dominant position.

90 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 3.

91 WPP AUNZ, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 2.

92 We note that the Competition and Markets Authority (CMA) concluded that there may be some occasions where advertisers may multi-home, such as for 'creative management' rather than for using an ad server for the measurement of ad performance, see Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M40. However, we consider that this is unlikely to alter the competitive dynamics for advertiser ad server services and that any multi-homing that does occur is minimal.

93 An Application Programming Interface (API) is a computing interface that defines interactions between multiple software intermediaries.

3.5 Competition for DSP services

While there is some degree of competition for DSP services, Google is still by far the largest provider and faces little competitive constraint from its rivals. There are a range of disadvantages that Google's rivals face in competing with Google to supply DSP services.

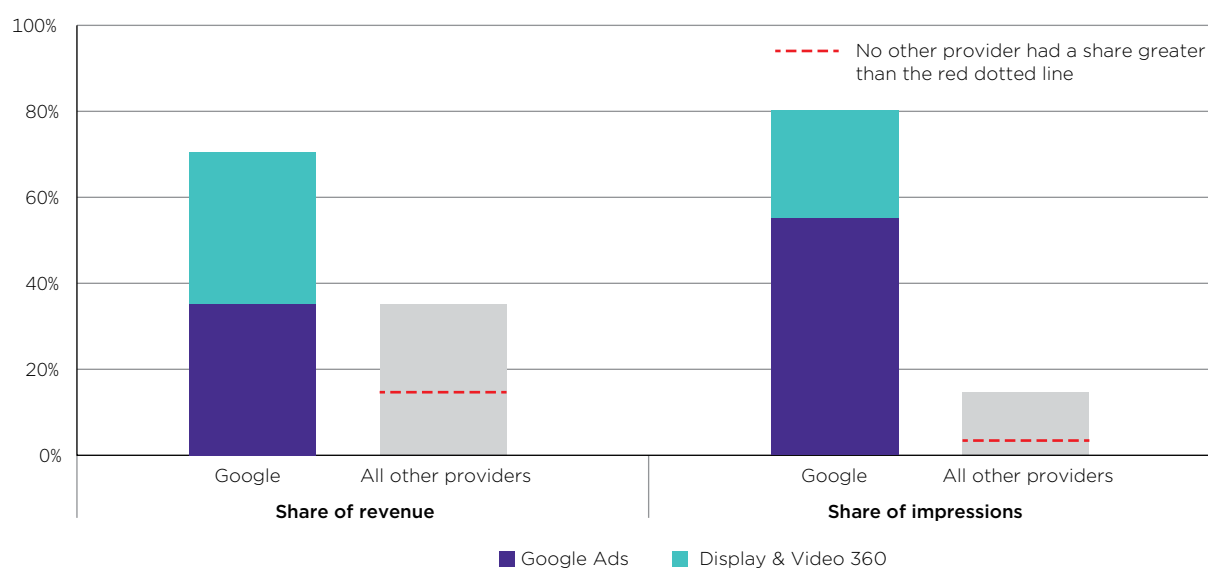
For the purposes of assessing competition for DSP services, the term 'Google's DSPs' is used to cover Google's Display & Video 360 service, and Google Ads. This is because access to publishers and Google's competitive advantage over other DSPs is similar across both services. However, Google's Display & Video 360 allows for more customisation in comparison to Google Ads and is typically used by larger and more sophisticated advertisers. Where a particular competitive advantage relates only to one of Google's DSPs, this is noted.

3.5.1 State of competition

There are 9 DSPs operating in Australia and, together with Facebook's closed channels, they provide a degree of competition for some advertiser customers. However, Google's position in the supply of these services is still very strong.

Google's two DSPs, Google Ads and Display & Video 360, are the largest providers of DSP services in Australia. Across both DSP services, Google has an estimated 60–70% share of revenue and 80–90% share of impressions in 2020. No other provider has a share of revenue greater than 10–20% or a share of impressions greater than 0–10%.

Figure 3.4: ACCC's estimates of Google's share of revenue and impressions for DSP services, Australia, 2020



Note: The values in chart are based on the mid-point of the ranges included in the table below. They do not represent the exact values of revenue or impression shares.

Source: ACCC analysis of information provided by ad tech providers.

Table 3.7: ACCC estimates of Google's share of revenue and impressions for DSP services, Australia, 2020

	Share of revenue	Share of impressions
Google DSPs	60–70%	80–90%
Google Ads	30–40%	50–60%
Display & Video 360	30–40%	20–30%
All other DSPs	30–40%	10–20%

Source: ACCC analysis of information provided by ad tech providers.

Google's share of revenue for DSPs has decreased slightly from 2018 to 2020 (by approximately 7 percentage points), while its share of impressions has increased slightly (by approximately 2 percentage points).

While Google's position is strong across the supply of DSP services, the factors impacting the extent of competition varies across different segments of customers. The competitive dynamics for the supply of DSP services to small advertisers (for which Google Ads is the dominant service) differ from the competitive dynamics applicable to larger advertisers (for which Google's Display & Video 360 DSP is the dominant service).

Box 3.1: Key differences between Google Ads and Google Display & Video

Google supplies two DSP services in Australia; Google Ads and Google Display & Video 360. Google Ads is predominantly used by smaller advertisers. This is because it is a fully automated DSP that is designed to be very easy to use, and suits less sophisticated advertisers. As discussed in chapter 4, Google Ads demand is primarily channelled to Google SSPs.

Display & Video 360 is aimed at larger advertisers, and connects with many SSPs. It requires a higher level of advertiser sophistication than Google Ads and provides advertisers with a higher level of control.

Differences in competition for large and small customers

Google Ads is the main supplier of DSP services to smaller advertisers, supplying far more advertisers than any other DSP. In 2020, between approximately 90,000 and 100,000 Australian customers used Google Ads, and between 1,000 and 2,000 customers used Google Display & Video 360. In the same period, Australian customers spent in the range of \$2,000 and \$3,000 for the use of Google Ads, in the range of \$140,000 to \$150,000 on Display & Video 360, and between \$51,000 and \$95,000 on a selection of other DSPs.

There are also differences between Google Ads and Display & Video 360 with respect to the closest sources of competitive constraints. As discussed below, for smaller advertisers we consider that Google Ads is likely to face more competition from Facebook Ad Manager's services than from other DSPs.

In contrast, we consider that the services offered by Google Display & Video 360 compete more closely with rival DSPs, with these DSPs competing to win the business of larger, more sophisticated advertiser customers. It is notable that, even within this segment of the market, which represents 60–70% of total advertiser spend on DSP services, Google is still by far the largest provider.⁹⁴

Competition for small advertisers

Google Ads is the only DSP that focuses on providing services to smaller advertisers. As such, other DSPs are unlikely to be close substitutes for small advertisers using Google Ads.⁹⁵ Additionally, Google's popular search advertising service is also currently provided through Google Ads. This means any advertiser purchasing Google's search advertising services through the Google Ads platform can relatively easily also use its DSP functions to purchase digital display advertising.⁹⁶

We consider that Facebook may be a closer substitute to Google Ads than other DSPs are to Google Ads. This is because, like Google Ads, Facebook's services are designed for smaller, less sophisticated advertisers. Facebook offers the Facebook Ad Manager service, which enables advertisers to purchase both Facebook's owned-and-operated ad inventory and mobile app ad inventory from Facebook Audience Network through the one interface.⁹⁷ Google submits that Facebook is a particularly close

⁹⁴ We have calculated this by excluding the revenue share of Google Ads from total DSP revenue.

⁹⁵ Competition and Markets Authority (CMA), [Online platforms and digital advertising market study final report](#), 1 July 2020, p. 215.

⁹⁶ Google, [Google Ads: What are the different types of Google Ads](#); Google, [Google Ads Help: Campaign Types](#), accessed 1 December 2020.

⁹⁷ Facebook, Business Help Centre, [About placements in Ads Manager](#), accessed 10 December 2020.

competitor for advertisers, and that any increase in fees for Google's ad tech services would likely lead to advertisers moving more spend to Facebook.⁹⁸

While we consider Facebook may offer a closer alternative to Google Ads for some smaller, less sophisticated advertisers than other DSPs, we also note that the services are differentiated from each other. For example, the two services provide access to different types of ad inventories, which is likely to limit the extent to which they are considered substitutes. As noted above, Facebook Ad Manager provides access to owned-and-operated inventory and mobile app ad inventory from Facebook Audience Network. In contrast, Google Ads provides access to Google's owned-and-operated inventory as well as general display inventory. The differences in the type of inventory offered by the two services may limit the degree of competitive constraint that Facebook Audience Network imposes on Google Ads for small advertisers. However, advertisers may still substitute between the two services to an extent.

Competition for larger advertisers

All DSPs, except for Google Ads, offer services designed for larger, more sophisticated advertiser customers. The DSP services designed for larger and more sophisticated advertiser customers represents approximately 60–70% of total advertiser spend on DSP services, of which Google is the largest provider.⁹⁹

There is a degree of differentiation across DSPs in relation to the type of advertising they focus on. The ACCC has analysed data indicating that while most DSPs have a mix of video and non-video advertisements, some providers have a greater proportion of video advertisements than other DSPs.

These DSPs can also be differentiated on the basis of the type of advertising inventory they focus on. Again, while most DSPs focus on a mix of different types of inventory, in 2020 most DSPs primarily focused on either browser or mobile app advertising. Some DSPs also included a share of CTV advertising, but this was only to a limited extent when compared to the focus on browser and mobile app advertising.

The degree to which a DSP specialises in providing a particular type of ad tech service may influence the extent to which an advertiser considers them as an alternative to Display & Video 360. The ACCC understands that an advertiser may value access to particular datasets that can be accessed through a DSP. For example, data from FlyBuys is likely to be valuable and is only available within The Trade Desk. Through The Trade Desk, advertisers can access de-identified sales conversion data from FlyBuys members, while a strength of Amazon's DSP is the ability to utilise Amazon's customer data.¹⁰⁰

DSPs may also specialise in a particular type of ad inventory. For example, the ACCC understands that The Trade Desk is considered to have a stronger CTV offering than Google's DSPs. Advertisers may take into account the ability to integrate a DSP with different partners and types of inventory. The CMA's Final Report is consistent with the conclusion that DSPs can be differentiated from each other, identifying that:

- a strength of Adobe Advertising Cloud's DSP is the ability to support all types of video inventory
- Criteo specialises in retargeting, and is differentiated by establishing direct relationships with publisher ad servers
- a strength of Xandr's DSP is the ability to connect with third-party technologies.¹⁰¹

For large advertisers we consider that third-party DSPs are likely to be a closer alternative to Google Display & Video than Facebook Ad Manager. This is because the services offered by third-party DSPs are more comparable to the services offered by Google Display & Video with one stakeholder submitting that 'the majority of big players are using Google Display & Video 360 and The Trade Desk

98 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, pp. 53–55.

99 We have calculated this by excluding the revenue share of Google Ads from total DSP revenue.

100 Competition and Markets Authority (CMA), [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M46.

101 Competition and Markets Authority (CMA), [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M47.

as a minimum.¹⁰² Unlike Facebook Ad Manager, which connects to a limited subset of non-Facebook publishers, other DSPs are able to connect advertisers to the SSPs used by a wide range of publishers to sell their inventory.

Advertisers that use Google Display & Video 360 are likely to have a range of different formats of advertising types (across CTV, video, and non-video). Therefore, they may be able to use a combination of third-party DSPs to shift spend away from Google Display & Video. However, the ACCC also notes that there are incentives for advertisers to limit their use of DSPs, and as such, there is likely to be a limit to the number of DSPs an advertiser could use.

Inventory purchased through Facebook Ad Manager, including Facebook's owned-and-operated inventory, may form part of their overall campaign, and may be important to an advertiser depending on the goals of a campaign. Larger advertisers have indicated that there is a degree of substitutability between Google's DSP services and those of walled gardens (such as Facebook's owned and operated inventory). However, the extent of this substitutability depends on the goals of the campaign. Generally, larger advertisers consider Facebook's owned and operated inventory to be in a separate category to advertising opportunities available via ad tech services such as those provided by Google's DSPs. Some advertisers may use Facebook Ad Manager to purchase mobile app advertising on non-Facebook inventory, however, we do not consider that this significantly increases the degree to which Facebook is a constraint on Google. In many cases, for larger advertisers, purchasing inventory through Facebook is likely to be a complement rather than a close substitute for DSP services for advertisers.

Constraint from ad networks

Advertisers may also use ad networks to buy display ad inventory from publishers.¹⁰³ In Australia, Facebook Audience Network and Taboola offer advertiser facing services. In addition, while the inquiry has characterised Google Ads as a DSP, it can also function similarly to an ad network, by connecting advertisers using Google Ads to publishers using Google's SSP to sell their inventory. The constraint that Facebook Audience Network imposes on both of Google's DSP services is discussed above.

Taboola specialises in displaying native content from advertisers on publisher websites in a widget or feed alongside editorial content. We consider that Taboola's services are substantially differentiated from services provided by other DSPs, and in particular, services provided by Google Ads and Google Display & Video 360. To the extent that Google's DSPs provide native advertising (or similar), this appears to be limited. Accordingly, we consider that the services provided by Taboola pose a limited constraint on Google's DSPs.

3.5.2 Reasons for Google's strong position

Google's strong position for the supply of DSP services for both larger and smaller advertisers, compared to other suppliers of DSP services,¹⁰⁴ is underpinned by the following:

- Google's data advantage
- Google's integration with search and other Google services
- access to exclusive inventory
- there are benefits to advertisers single-homing on a DSP.

Google's data advantage

A factor contributing to the strong position of Google's DSPs is its broad range of first-party data gathered from its consumer-facing services and third-party data from third-party sites and apps. Such data gives Google an advantage in providing both ad targeting and attribution services as part

102 A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 9.

103 For example, Daily Mail Australia submits that ad networks compete for agency demand on unique selling points such as custom creative formats and advanced attention metrics, compared to programmatic channels like DSPs: Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 3.

104 Other DSPs in Australia include Adform, Adobe, Amazon, Amobee, Criteo, MediaMath, The Trade Desk, Verizon Media and Xandr.

of its DSP services. The following discusses the extent of this data advantage, and section 3.8 below discusses our recommendations to address issues arising from this advantage.

Our view that Google's access to data provides it with an advantage in the supply of ad tech services is supported by industry feedback. Some stakeholders submitted that Google has a unique ability to collect, aggregate and offer data that is of most value to advertisers and publishers due to its large user base, and that this provides it with a significant competitive over rivals, who cannot provide similar data offerings.¹⁰⁵

Xandr, an ad tech provider, submits that this advantage incentivises advertisers to spend on Google's platform. It considers that the importance of data in digital advertising will not diminish in the future, and that until there is a reduction in data imbalances and data restrictions, the ability of other ad tech providers to compete with Google will be greatly inhibited.¹⁰⁶ Publishers note that the unique scale and depth of Google's data holdings is difficult for rivals to replicate and have contributed to its dominance in ad tech.¹⁰⁷

Internal Google documents also show that Google's data is seen as a key reason for using its services in the Asia Pacific region. For example, one Google document describes feedback provided to Google in relation to its Display and Video 360 (a Google DSP) in the Asia Pacific region and states in relation to audience targeting, 'Google data is seen as high quality and a benefit to accessing our platform'.

Another Google document appears to stress the value of Google's data to advertisers when using the Google Marketing Platform (an advertiser service, which includes Google's advertiser ad server and its DSP, Display and Video 360). It does this by:

- stating reasons that marketers should consider Google Marketing Platform is that it can allow them to 'Activate [their] 1p data alongside Google data and site analytics to drive long term growth'
- highlighting that a lack of access to 'proprietary/Google data', 'Google Audiences', as weaknesses of other DSPs that could be used as reasons to get advertisers to consider Google Marketing Platform.

Similarly, feedback provided by a prominent ad agency to Google states:

Demographic data and proprietary data options – also regarded as one of Google's key strength's [sic] traders are only now starting to see and use this tool but it separates itself from your competitors. The more options you can develop here would be solid...

First-party data advantage

Through its wide range of consumer-facing services, Google is able collect a broad and deep range of data about consumers. This is described in box 3.2 below.

105 Oracle Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 2; Verizon Media, [Submission to Ad Tech Inquiry Issues Paper](#), 28 April 2020, p. 5; Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), May 2020, pp. 13-14; Microsoft, [Submission to Ad Tech Inquiry Issues Paper](#), 24 April 2020, pp. 2-3; Special Broadcasting Service (SBS), [Submission to Ad Tech Inquiry Interim Report](#), 5 March 2021, p. 2; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 8.

106 Xandr, [Submission to Ad Tech Inquiry Interim Report](#), 2 March 2021, p. 3.

107 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 7; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 8; SBS, [Submission to Ad Tech Inquiry Issues Paper](#), 5 March 2021, p. 5; SBS; Special Broadcasting Service (SBS), [Submission to Ad Tech Inquiry Interim Report](#), 5 March 2021, p. 1; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 8.

Box 3.2: Scope of Google's first-party data collection

Google's 60 plus consumer-facing services means it has one of the broadest networks for first-party data collection, including the following sources:

- Data provided on signing up for a Google Account – name, date of birth, gender, email, phone number.
- Data provided through use of Google's many consumer-facing services, including search histories from Google Search, location history and movement data from Google Maps, and interests and hobbies from YouTube, Gmail and Blogger.
- Data collected from use of Google devices, such as Android phones and Google Home devices. This includes device-level data from an estimated 10.3 million Android smartphones in Australia,¹⁰⁸ as well as data collected via Google's own apps (e.g. YouTube, Gmail and Chrome) and third-party apps running on these devices, including IP addresses and other network connection information, location information, device attributes, device signals, etc. It also includes data collected on Google Home and Nest devices, including smoke alarms, indoor and outdoor cameras, thermostats, and doorbells.
- Payment data collected from use of Google Pay, which acts as a digital wallet and method of payment, and can collect data such as purchase history, credit/debit cards details and billing address under its terms of use.¹⁰⁹

As discussed in chapter 1, access to a wide range of first-party data can provide ad tech providers with a competitive advantage when providing ad tech services, particularly DSP services.

In the Interim Report, we found that Google's access to first-party data from its range of consumer-facing services (such as Search, Chrome, and YouTube) provided it with a significant competitive advantage in the supply of ad tech services including DSPs.¹¹⁰ This was because we considered that its extensive scope of first-party data would give Google's ad tech services the ability to provide superior ad targeting features compared to its rivals.

Since then Google has submitted that it makes extremely limited use of its first-party data from individual consumers when providing ad tech services that facilitate the sale of inventory on third-party sites (that is, when its services are bidding for, or targeting ads on, third-party display inventory).¹¹¹ It submits that its DSPs (Google Ads and Display & Video 360) generally do not use first-party data it collects about a consumer (for example through its services such as Google Search) for advertising to that consumer on third-party websites and apps.¹¹² Instead, Google has said that Google Ads and Display & Video 360 primarily use third-party data to target ads on these third-party websites and apps.¹¹³

While we acknowledge Google's submissions, we still consider that Google's first-party data provides it with a competitive advantage in the supply of DSP services. This is for a number of reasons.

First, Google uses its first-party data to provide targeting on its owned and operated inventory, including YouTube. For example, in its submission Google states that, 'Google Search data is used to inform Google audience categories for targeting on Google's products...'¹¹⁴ While Google's owned and operated inventory is only a subset of the inventory sold via its DSP we consider that the use of this data will make YouTube inventory, and other Google inventory, more attractive. Because this inventory is only available through Google's DSP (discussed further in chapter 4), we consider this likely provides Google with some advantage.

108 L. Spencer, 'Australians bought 9.2M smartphones last year', ARN, 20 February 2018, accessed 17 December 2020.

109 Google, [Data transparency](#), accessed on 15 July 2021; Google, [Data security & privacy on Google Home](#), accessed on 15 July 2021; D. C. Schmidt, [Google Data Collection](#), accessed on 15 July 2021.

110 See Chapter 2 of the [Interim Report](#).

111 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 63.

112 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 62.

113 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 63.

114 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 63.

Secondly, there is also a perception among many stakeholders, including advertisers, publishers and other ad tech providers, that Google is using data from its consumer-facing services (i.e. first-party data) to target non-Google inventory, such as to offer targeting to 'in market' audiences. We consider that this perception has likely contributed to its competitive advantage in providing DSP services. A number of advertisers have said that audience targeting features are one of the key factors that influences their decision to use Google's DSPs, in addition to other factors (such as access to inventory). Some ad tech providers have told us that one of the challenges they face when competing with Google is its exclusive and unique ability to access to valuable first-party data from its consumer-facing services.¹¹⁵

We also consider that Google has likely contributed to this perception through the ambiguous way it describes its data use and the audiences that can be targeted on its DSP services in marketing and selling its services. In particular, public material aimed at business users (or potential business users) of Google's services suggests Google is making greater use of its first-party data than Google has submitted to the ACCC. For example the Google Ads Help webpage which provides information about audience targeting states that:¹¹⁶

You can add audience targeting to ad groups and reach people based on who they are, their interests and habits, what they're actively researching or how they have interacted with your business...

How audience targeting works

For Display, Search, Video and Hotel campaigns, audiences are groups of people with specific interests, intents and demographic information, as estimated by Google. When adding an audience to a campaign or ad group, you can select from a wide range of categories, such as fans of sport and travel, people shopping for cars or specific people who have visited your website or app. Google Ads will show ads to people who are likely to be in the selected categories.

Note: The data used to generate audiences (for example, page visit history, past Google searches), may be used to improve the bidding and targeting of your audience campaigns.

This Google Ads webpage would appear to suggest that Google may use page visit history and Google searches in providing display advertising on Google Ads, and does not make a distinction between Google's own properties and third-party properties.

A further example from its customer facing material is Google's suggestion that it is using first-party data (specifically Google account information) to provide targeting features on its DSP through a 'Customer Match' feature. Customer Match is a feature on Google's DSPs, which it says can be used by advertisers to serve personalised ads on the Google Display Network.¹¹⁷ On its website, Google explains that in order to use Customer Match, an advertiser uploads their own customer data which Google then 'matches' with Google Accounts.¹¹⁸ It then explains that when the users of those Google accounts are signed in to their account, they will see that advertiser's ads as they use the search network, YouTube and Gmail or when they browse on the Google Display Network.¹¹⁹ The Google Display Network includes over 2 million websites, and is not just Google owned properties.¹²⁰ However, Google's material does not draw any distinction, which would make it clear that customer match data will be used differently depending on whether the page is owned by Google or not.

115 Xandr, [Submission to Ad Tech Inquiry Interim Report](#), 2 March 2021, pp. 2-3.

116 Google, [Google Ads Help: About audience targeting](#), accessed 24 July 2021.

117 See, Google, [About Customer Match](#), accessed on 18 August 2021.

118 See, Google, [About the customer matching process](#), accessed on 18 August 2021.

119 Google, [About Customer Match](#), accessed on 18 August 2021.

120 See Google, [Google Ads: Reach a larger or new audience with Google Display Network targeting](#), accessed on 20 July 2021.

Finally, in its submission to the Interim Report, Google said:

*Google audience categories work differently as between targeting ads on Google's own products (such as YouTube) and targeting on third-party websites and apps. For example, Google Search data is used to inform Google audience categories for targeting on Google's products, but it is not used to inform Google audience categories for targeting on third-party websites and apps.*¹²¹

However, Google's online material that explains how audience targeting works on Google Ads and Display & Video 360 does not make this clear, including for the following audiences: ¹²²

- affinity audiences (which allows advertisers to reach based on a holistic picture of their lifestyles passions and habits)¹²³
- in-market audiences (which find customers in the market, because they are researching products or actively considering buying particular services or products).¹²⁴

In particular, Google does not state that these audiences will operate differently on Google's own websites and other websites. The ambiguous way Google describes how its DSP services use first-party data, has likely contributed to the view that Google uses its first-party data in targeting for all its ad tech services.

Third-party data advantage

We consider that Google's access to third-party data currently provides it with a degree of competitive advantage in the supply of DSP services.

In the Interim Report we found that Google had a large network of third-party cookies across the web which provided its DSP with an advantage in ad targeting and attribution, with over 80% of the top 1,000 websites in Australia containing Google scripts. Google has since submitted that a third-party data advantage cannot be concluded from these results, as the most dominant script in these results is Google Analytics, which only collects consumer data when an Analytics customer (website owners who can be advertisers or publishers) agrees, and that this is not used for targeting on Google or third-party ad inventory.¹²⁵ However, even with Google Analytics scripts excluded, the ACCC found that Google's scripts are present on 58% of the top 1,000 websites. Facebook has the highest number after Google, with 38%, followed by other platforms which have scripts on 3 to 25% of the top 1,000 websites.¹²⁶

Google also submits that many other ad tech providers are able to collect third-party data, and that third-party data is non-rivalrous and not exclusive to any company. It considers other ad tech providers have a wide range of third-party data, and that it is not advantaged by its wide network of trackers.¹²⁷ However, we still consider that it is likely Google has a greater amount of third-party data available to it than other ad tech providers for a number of reasons. First, Google is able to collect third-party data on many Android apps from Google's Play Store. Google's software development kits (which allow it to collect third-party data) were found on 91% of the top 1,000 Android Apps in Australia.

Secondly, Google is also able to gather a larger amount of data about users where publishers use its supply side services, compared to its competitors. Google is able to collect data about consumers when they visit third-party websites that are part of the Google Display Network to create profiles of consumers.¹²⁸ The Google Display Network is large, and Google markets its Display Network as reaching 90% of Internet users worldwide, including across millions of websites, news pages, and blogs,

121 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 63.

122 See, Google, [Audience list targeting](#), accessed on 18 August 2021; Google, [Affinity audiences targeting](#), accessed on 26 August 2021; Google, [In-market audience targeting](#), accessed on 18 August 2021.

123 [Google, About audience targeting](#), accessed on 18 August 2021.

124 [Google, About audience targeting](#), accessed on 18 August 2021.

125 Google, [Supplementary submission 1 to Ad Tech Interim Report](#), 1 July 2021, p. 14.

126 This number may be lower if we were able to more closely examine the use of all scripts in a similar way to Google's.

127 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 65.

128 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix G, p. G95.

as well as Google's own properties.¹²⁹ It is also important in Australia, and in 2020, a significantly larger number of Australian publisher customers were part of the Google's Display Network, than used all other nonGoogle SSPs and ad networks combined.

Thirdly, we still consider that Google's access to third-party data provides it with a competitive advantage in the supply of attribution services, due to its restrictions on third-party access to data used for ad attribution on YouTube. This enables it to better engage in multi-touch attribution (which allows advertisers to understand how their ad inventory has performed across campaigns, including on other DSPs), and demonstrate the effectiveness of its DSPs and inventory, compared to others. These restrictions and their effect on competition are discussed further in chapter 5.

This is supported by submissions from stakeholders. For example, News Corp and Oracle submit that Google's access to data and its ability to track user activity provides means it can supply better attribution services, and this advantages it in supplying DSP services more generally.¹³⁰ The Guardian submitted that the data available to Google to provide attribution, 'enables Google to tell a story about the apparent effectiveness of its advertising business in a way that no other media company can'.¹³¹ Similarly, Microsoft submits that the prevalence of Google 'trackers or tags' across the internet allows it to undertake a more sophisticated analysis of attribution because it can more easily track a consumers journey across the internet. In addition, it also considers it has 'rich offline conversion tracking figures, and mobile data can be used to help measure offline conversion by tracking users actions based on a user's presence in the store'.¹³²

We note that the removal of support for third-party cookies on Chrome will make third-party cookies obsolete. This will likely mean that Google and other ad tech providers will not be able to use third-party cookies to collect data on third-party websites. Google also submits that once third-party cookies are phased out it will not build alternative identifiers to track individuals as they browse across the web.¹³³ This will mean that Google will no longer be able to derive an advantage from its use of third-party data. However, third-party cookies will not be phased out until 2023, and once they are it is likely that other data issues could arise (as discussed in section 3.8.2 below).

Google's integration with search and other Google services

The integration between Google's search and display advertising services in Google Ads and Google Display & Video 360, as well as the ease of use of Google's services, means that Google maintains a competitive advantage over rival DSPs, particularly for smaller advertisers.

Google's search advertising service is currently provided through Google Ads, which also offers its display advertising service. Google Search advertising is critical to many advertisers, as demonstrated by its significant share of overall online advertising revenue.¹³⁴

Any advertiser purchasing Google's search advertising services through the Google Ads platform can also use its DSP functions to purchase digital display advertising with little additional effort.¹³⁵ Separately, Google Marketing Platform, which is more often used by larger advertisers, includes both Google's Display & Video 360 (used to purchase display advertising) and Search Ads 360. Search Ads 360, like Google Ads, can be used to purchase Google's popular search advertising service.¹³⁶

129 Google, [Increase Reach with Display Ad Banners and More](#), accessed on 18 August 2021; Google, [Google Display Network Targeting: How it Works](#), accessed 18 August 2021.

130 See News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 36; Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 2.

131 Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 19.

132 Microsoft, Submission to [Ad Tech Inquiry Issues Paper](#), 24 April 2020, pp. 2-3.

133 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 66

134 The ACCC, [Digital Platforms Inquiry Final Report](#), June 2019, pp. 90-91, estimated that in 2018, search advertising comprised approximately 44% of total online advertising revenue.

135 Google, [Google Ads: What are the different types of Google Ads, accessed on 1 December 2020](#); Google, [Google Ads Help: Campaign Types](#), accessed on 1 December 2020.

136 Google, [Google: Google Marketing Platform](#), accessed on 1 December 2020.

Advertisers may also have a preference to use Google's DSP services if they already use other products from Google, which may be important if an advertiser customer wants to minimise the possibility of data and control loss across systems. For example, we are aware that some advertisers may decide to use Google's DSP because they are already using other non-ad tech Google services, such as Google's Cloud services.

The integration of Google's DSP services with other services Google provides to advertisers is likely to improve the ease of use of these services. In particular, small to medium advertisers may find the Google Ads offering attractive because they do not have the expertise, resources, or sufficient volume of ad spend to use other DSPs.¹³⁷ Additionally, while most advertising agencies are familiar with Google's DSP offerings, market feedback indicates that they are less familiar with other DSP providers, and agencies would require further training on how to use these DSPs.

Google's access to exclusive inventory

DSP providers such as Verizon, The Trade Desk and Amazon have partnerships with publishers that give them exclusive access to particular publisher inventory, which may increase the attractiveness of their DSP offering to an advertiser. However, we consider that YouTube inventory is particularly valuable to advertisers and is likely to provide Google with a significant competitive advantage over other DSPs. Further analysis of Google's conduct in tying YouTube inventory to its DSPs is considered in Chapter 4.

There are benefits to advertisers single-homing on a DSP

While some advertisers are able to, and have the incentive to, multi-home with DSPs, we still consider that the above factors mean Google is able to maintain a very strong position in the supply of DSP services, for a number of reasons.

There are clear advantages to using a single DSP. Advertisers that multi-home across DSPs are likely to face challenges in viewing their ad campaigns holistically, measuring performance across platforms, and frequency capping across ad inventory.¹³⁸

In addition, the complexities of the ad tech supply chain may mean smaller advertisers are less likely to have the expertise and resources to use more than one DSP. Accordingly, smaller advertisers are likely to single home on Google Ads, which can be simpler and may be cheaper to use for smaller advertisers because there are no minimum spend requirements. Stakeholders have indicated that usability of a platform is an important factor in deciding what DSP to utilise.¹³⁹ Additionally, we consider that another barrier to multi-homing is the cost involved in using a new DSP. We understand that the process of using a new DSP can be time-consuming and difficult in terms of cost. On-boarding another DSP requires staff to be trained in the new platform, which is likely to make it difficult for smaller advertisers and agencies to justify the addition of another DSP. One advertising agency indicated to the ACCC that only 5-10% of advertisers switch every year, or at least challenge their existing approach.

Larger advertisers are more likely to multi-home than smaller advertisers, which is consistent with Google's submission that large Australian agencies and advertiser partners use at least two DSPs.¹⁴⁰ Publicis Groupe also submits that for medium to larger advertisers and agencies, multi-homing is a viable solution.¹⁴¹ This is consistent with feedback from a market participant, who supported the view that mid-to-large advertisers were more likely multi-home on DSP services.

Agencies may recommend that advertisers use more than one DSP for a campaign, however, there may be budgetary and inventory constraints that prevent the use of more than one DSP for an advertiser's campaign. For example, a single DSP might be used if an advertiser needs a limited cost per completed view, or needs to access exclusive inventory.

137 Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 6; Competition and Markets Authority (CMA), [Online platforms and digital advertising market study final report](#), 1 July 2020, p. 215.

138 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 88; Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 18 May 2020, p. 14; Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 10; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 2.

139 A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 10.

140 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 57.

141 Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), February 2021, p. 6.

However, even for larger advertisers there are risks in multi-homing. For example, advertisers may avoid multi-homing because of the risk that an advertiser could end up bidding against themselves. Other benefits of single-homing include better frequency management, and ensuring that an advertiser is not repeatedly reaching the same consumer/group of consumers.

Similarly, the CMA found that while multi-homing is common, the advantages of single-homing typically outweigh the advantages of using multiple DSPs, and a number of large advertisers do single-home on Google's Display & Video 360 DSP.¹⁴² Google also offers discounts relating to volume of advertiser spend, with discounts being offered the more an advertiser spends on Google's DSP. These discounts can incentivise advertisers to increase the volume of purchases on Google's platform, and serve to limit the extent to which they multi-home across other DSP services.

These incentives to single-home strengthen the advantages that Google already gains through exclusive access to particular ad inventory such as YouTube. For example, if an advertiser intends to run advertisements on YouTube, incentives to single-home may make the advertiser more likely to use one of Google's DSPs for all, or a significant proportion, of its advertising spend.

Google submits that multi-homing by advertisers imposes a significant constraint on Google, with advertisers able to shift to services from other providers in response to an increase in price or decrease in quality of its services.¹⁴³ However, as noted above, this appears to only be applicable to larger advertisers. Even then, most advertisers will use at least one Google DSP, and then choose other DSPs in addition to Google's.¹⁴⁴ In its market study into online platforms and digital advertising, the CMA noted that across a sample of advertisers that engaged in both single-homing and multi-homing, most used Display & Video 360.¹⁴⁵

3.6 Factors influencing competition across the supply chain

There may be other sources of competitive constraint on Google's provision of ad tech services that influence competition across the four key ad tech services. In particular, we have considered whether directly negotiated deals between advertisers and publishers, and the threat of new entry are likely to impose a competitive constraint on Google's provision of ad tech services across the supply chain.

3.6.1 Directly negotiated deals between advertisers and publishers

Direct deals involve direct negotiation between a publisher's sales team and an advertiser to agree on a fixed price for a fixed volume of ad inventory, which is then manually filled with the advertiser's ads. Ad tech providers are minimally involved in the supply of display advertising using direct deals.

While the threat of advertisers or publishers using direct deals to bypass the ad tech supply chain may provide some constraint on ad tech providers, the following factors limit the degree of this constraint:

- **Resources involved in negotiating direct deals:** For many small advertisers and publishers that currently buy and sell ads and inventory in the ad tech supply chain, the costs involved in relying on direct negotiation for a large proportion of their display advertising may be prohibitive. Many publishers are unlikely to have the time, resources or expertise to sell all ad inventory on their websites via direct deals and programmatic direct. As such, publishers may lose potential revenue if they do not also sell inventory through the ad tech supply chain.
- **Surplus inventory:** Most publishers are unlikely to be able to sell all of their ad inventory via direct deals and programmatic direct deal types. This is partly due to the higher degree of publisher

142 Competition and Markets Authority, [Online platforms and digital advertising: market study final report](#), 1 July 2020, Appendix M, pp. M48-49.

143 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 57.

144 Microsoft, [Submission to Ad Tech Inquiry Issues Paper](#), 24 April 2020, p. 2; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 88.

145 Competition and Markets Authority, [Online platforms and digital advertising market study: final report](#), 1 July 2020, Appendix M, p. M49.

involvement required for the sale of ad inventory via direct deals and programmatic direct, in comparison to selling through the ad tech supply chain.

- **Programmatic channels provide benefits that direct deals do not:** The threat of using these channels is likely to be a weaker constraint on an ad tech provider than the prospect of losing business to another ad tech provider. This is because by bypassing the ad tech supply chain, advertisers and publishers are likely to forego some of the benefits they receive from using these services.

Direct deals which do not rely on using real time targeting are likely to serve a different purpose to buying advertising that uses the ad tech supply chain. We consider that these types of direct deals may be used where contextual targeting is considered more important and valuable.

3.6.2 Barriers to entry are high and the threat of new entry is unlikely to constrain Google's supply of ad tech services

Barriers to entry for the supply of ad tech services are high, and Google is unlikely to be constrained by the threat of new entry. The ACCC does not agree with Google's submission that ad tech markets in Australia are dynamic and highly competitive, and characterised by frequent entry and expansion.¹⁴⁶

There are very few players internationally that could conceivably enter the supply of ad tech services, and we consider that Google is likely to be minimally constrained by the threat of their entry. The key barriers for new entry relate to the need for ad tech providers to have sufficient scale in order to be able to integrate with other ad tech services, and with the systems of their customers. Providers of ad tech services have also pointed to Google's dominance across ad tech services as a structural reason why new entry that would provide any competitive constraint is highly unlikely.

Key costs of commencing supply of an ad tech service

The costs of commencing supply of an ad tech service can vary depending on a range of factors, including whether the provider already supplies some ad tech services either overseas or in Australia. Providers have supplied information to the ACCC on the key cost categories for supplying an ad tech service in Australia and indicated that many of the costs of a new entrant commencing supply of any ad tech service are likely to be similar. That is, the main costs are likely to be access to data centres, servers and internet costs, cloud computing, research and development costs, maintenance costs, marketing costs, and staff salaries. Ad tech providers have mixed views about the scale of the costs necessary to commence supply of an ad tech service in Australia.

We consider that providing a new ad tech business is likely to be costly and resource intensive. However, it is possible that commencing supply of a new ad tech service could be more achievable for an existing ad tech provider if it is able to leverage its existing expertise, assets and customer relationships, which could reduce the costs of new entry.

The need to enter with volume is a key barrier to entry

In order for an ad tech provider to successfully commence supply in Australia, it must be able to enter with sufficient volume to enable it to integrate with other services. One provider said that 'it is not possible to enter the market using an off-the-shelf ad tech product', in part because a new entrant must be able to support integrations with a large number and variety of parties, including other (rival) ad tech platforms and customer IT systems.

Another ad tech provider noted that a minimum spend or threshold is required before a new ad tech service can integrate with other services, and that 'this makes it (almost) impossible for newcomers to enter the industry. Not surprisingly, there has not to our knowledge.. been any new DSPs, ad servers or SSPs appearing with any success'. This view is supported by another ad tech provider who noted that new entry requires 'considerable time and expense to develop any ad tech service, and that the 'revenues associated with an individual transaction are small', concluding that 'it is necessary to enter at scale and gain market share quickly'. For these reasons, an ad tech provider commented that that 'all major product categories within ad tech have exceptionally high entry barriers'.

146 Google, [Submission to Ad Tech Inquiry Issues Paper](#), 1 May 2020, p. 13.

Access to consumer data is another barrier to entry

The importance of ad targeting and attribution functions in ad tech means that access to a broad range of high quality first and third-party data, and the ability to combine that data with accuracy, is key to ad tech providers being able to compete with incumbents. This significantly increases barriers to entry and expansion, because in order for new entrants or existing providers to compete, they need to either have existing access to sources of first-party and third-party data, or increase their access to existing data sources. While some ad tech providers have access to data from consumer facing services, such as Twitter and Amazon, many do not. Rather, they are reliant on data from third-party sources, such as third-party cookies (which are being phased out on Chrome as a result of Google's Privacy Sandbox initiatives) and data from data providers. In contrast, as described at 3.5.2, Google has access to a broad range of first and third-party sources from its consumer-facing services and tracking technologies.

Google's position in ad tech services is likely to deter new entry

As noted in sections above, the competitive advantage that Google has through its integration of a suite of ad tech services increases the barriers to entry for a new entrant. One ad tech provider commented that 'the main challenge facing an ad tech service is how to overcome the structural barriers to effective competition that exist as a consequence of Google's dominant platform and its conduct to entrench and strengthen that dominance', and that 'the reality is that under current conditions there is almost no amount of investment sufficient to pose a competitive threat to Google's ad tech services, or therefore to gain sufficient market share to be a successful new entrant'. Some ad tech providers have told us that one of the challenges they face when competing with Google is its exclusive and unique ability to access to valuable first-party data from its consumer-facing services.¹⁴⁷

We consider that Google's dominance across the ad tech supply chain enables Google to engage in conduct which further advantages its own ad tech services. This conduct is described in further detail in chapter 4. This is a strategic barrier to entry that is likely to be a strong deterrent to new entry in ad tech services.

3.6.3 Google's history of acquisitions have helped entrench its position in ad tech services

The Digital Platforms Inquiry considered several of Google's strategic acquisitions, including its acquisitions of YouTube and DoubleClick. The inquiry found that these acquisitions among others have served to entrench Google's position in search services and search advertising, particularly by providing it with advantages of scope and by reducing competition. While the Digital Platforms Inquiry primarily considered the acquisitions in the context of search services and search advertising, we consider it is likely that these acquisitions also impact the supply of services beyond search advertising, including ad tech. A list of Google's acquisitions of ad tech providers or related services is included in Appendix C.

With respect to Google's acquisition of YouTube, the Digital Platforms Inquiry found that YouTube provides Google with access to data that can be used to improve the quality of its ad targeting services by its DSPs. Further, it found that Google has also been able to encourage advertisers to use its DSP services by ensuring that YouTube advertising inventory can only be purchased through Google's DSPs.¹⁴⁸

With respect to Google's acquisition of DoubleClick, the Digital Platforms Inquiry found that at the time that Google acquired DoubleClick, DoubleClick had developed an ad exchange as well as advertiser-facing and publisher-facing ad servers, which could have provided a rival service for selling programmatic advertising.¹⁴⁹

We consider that in relation to Google's provision of ad tech services, Google's acquisitions of other ad tech businesses and related services have likely provided it with advantages of scale and scope. Further, Google's acquisition strategy of other ad tech businesses or related services may have enabled it to remove potential competitors, as well as providing Google with access to exclusive inventory and data.

147 Xandr, [Submission to Ad Tech Inquiry Interim Report](#), 2 March 2021, pp. 2-3.

148 ACCC, [Digital Platforms Inquiry Final Report](#), June 2019, p. 75.

149 ACCC, [Digital Platforms Inquiry Final Report](#), June 2019, p. 75.

These acquisitions may have enabled Google to strengthen and entrench its position in ad tech services, and subsequently weaken the constraint on its ad tech services from dynamic competition.

3.7 Conclusions

As discussed above, Google is by far the largest provider of services across the ad tech supply chain. It holds a very strong position in the supply of each of the four key ad tech services in Australia:

- In relation to publisher ad server services, Google has an estimated 90-100% share of impressions. Google faces weak competitive constraints due to high switching costs, the prevalence of single-homing and its superior integration with its SSP.
- In relation to SSPs, Google is the largest provider of these services with an estimated 40-50% share of revenue and 70-80% share of impressions. Google's significant share is underpinned by its near-exclusive access to demand from Google Ads and its vertical integration with Google's other ad tech services.
- In relation to advertiser ad server services, Google has an estimated 80-90% share of impressions for these services. Google's position is underpinned by its integration with Google's other ad tech services, and the prevalence of single-homing and high switching costs.
- In relation to DSPs, Google is the largest provider of these services, with an estimated 60-70% of share of revenue and 80-90% share of impressions. Google's strong position is underpinned by its data advantage, the integration of its services and its access to exclusive inventory.

3.8 Recommended steps to address Google's data advantage

A factor contributing to the strong position of Google's DSPs is its access to a broad range of first-party data and third-party data. In the Interim Report, we identified two proposals to address Google's data advantage:

- **Measures to improve data portability and interoperability:** this included data portability measures to enable consumers to move their data from one platform to another, and data interoperability measures to increase data mobility between firms, without a consumer request, such as requiring firms to provide access to certain types of data in a standard format, or common user or transaction IDs.
- **Data separation mechanisms:** these included requiring firms with a significant data advantage to implement data separation mechanisms within the company, such as data silos or purpose limitation requirements.

After conducting further investigation into the extent of Google's data advantage following the Interim Report and considering stakeholders' views, the ACCC makes the following recommendations. Our reasons for these recommendations are described in the sections below.

Recommendation 1: Google should amend its public material so that it clearly describes how Google uses first-party data to provide ad tech services

Google should amend its public material so that it clearly and unambiguously explains how it uses data that it collects from its consumer-facing services (also known as first-party data) to provide ad tech services. This should include a description of how both non-aggregated first-party data (data about a single consumer) and aggregated first-party data (such as combined data from multiple consumers) is used to provide ad tech services which enable the display of advertisements on third-party websites and apps.

Public facing material Google should amend includes:

- its Terms of Service, its Privacy Policy, and any other documents which set out or explain to consumers how Google uses their data¹⁵⁰
- material aimed at business users, or potential business users, of Google's ad tech services, including any terms and conditions of service.

Google should make these amendments now and ensure the information remains up to date.

Recommendation 3: The power to introduce sector specific rules should allow the ACCC to address competition issues caused by an ad tech provider's data advantage

The power to introduce sector specific rules proposed in Recommendation 2 should include the ability for the ACCC to implement measures to address competition issues arising from an ad tech provider's data advantage where:

- the provider meets the criteria linked to its market power and/or strategic position in the ad tech supply chain (as outlined in recommendation 2)
- the provider's data advantage arises from the ad tech provider's market power and/or strategic position in a related activity
- the ACCC finds the data advantage has increased, or has the potential to increase, the provider's market power.

Measures available to address the data advantage should include:

- data separation measures (for example, preventing an ad tech provider from using data it has collected from its consumer-facing services (i.e. first-party data) to provide ad tech services on third-party sites and apps)
- data access requirements (for example, requiring the provider to give other ad tech providers access to the provider's first-party data).

We acknowledge that currently it may be difficult for data access requirements to be implemented in a way that adequately protects consumers' privacy and complies with the *Privacy Act 1988* (Cth) (including any future amendments). However technological developments may make this possible in the future.

The ACCC does not currently propose that data portability measures should be extended to apply to the ad tech sector or that any other form of data portability be introduced to the ad tech supply chain, at this stage. This is because the ACCC is not currently convinced that the introduction of data portability measures in ad tech will effectively address issues arising from Google's data advantage in ad tech services.

150 Terms of Service refers to Google's Terms of Service, found on Google's Privacy & Terms webpage. See Google, *Google Privacy & Terms: Terms of Service*, <https://policies.google.com/terms?hl=en-UK>, accessed on 18 August 2021. Privacy Policy refers to Google's Privacy Policy found on Google's Privacy & Terms webpage. See, Google, *Google Privacy & Terms: Privacy Policy*, <https://policies.google.com/privacy?hl=en-UK>, accessed on 18 August 2021.

The ACCC is also not recommending that data interoperability proposals should be introduced at this time. Following feedback received following the interim report, the ACCC is concerned that competition benefits may be outweighed by privacy risks and associated consumer harm.

However, the ACCC considers that appropriately designed data portability and/or data interoperability requirements could be an important tool in the future to address market power concerns in digital platform markets, and may also help deliver benefits to users of the ad tech supply chain through innovative service offerings.

3.8.1 Data portability, interoperability and data access regimes

Data portability

Data portability measures refer to tools that increase data mobility at a consumer's request, such as requiring firms with a significant data advantage to provide consumers with an easy interface to move or share their data with a third-party.

Stakeholders' views on data portability were mixed. A number of stakeholders did not that consider data portability would be effective for ad tech.¹⁵¹ Others supported the introduction of a data portability proposal, submitting that it could promote competition whilst also preserving privacy, as the consumer would have control over any request to share their data.¹⁵² A number of stakeholders suggested that the principles of the Consumer Data Right (explained in box 3.3 below) could be used to introduce data portability in ad tech.¹⁵³

Box 3.3: Consumer Data Right

The Consumer Data Right (CDR) allows consumers to choose whether they will share their data, and who they will share it with. Under the CDR a consumer's data can be shared with accredited providers. The CDR includes rigorous consent requirements, and providers must make clear what information a consumer is sharing and how it will be used, who will have access to the data, how long they will have access to the data, and how to manage and withdraw consents.

The CDR has so far been introduced in banking, allowing consumers to share their existing banking data (such as transaction history, interest rate and account balances) with another bank. It will next be expanded to the energy sector.

We consider data portability could be used to promote competition in digital platform services. Data portability requirements have the potential to improve smaller platforms' access to data and improve their ability to compete with platforms who have a significant data advantage. Further, the data portability requirements have the benefit of putting consumers in control of how data about them is used and shared by providers. As such, we consider that data portability measures could form part of a regulatory regime to apply to digital platforms broadly in the future (which is discussed in more detail in chapter 4).

However, at this stage, the ACCC is not recommending that data portability, including the Consumer Data Right be rolled out to the ad tech sector¹⁵⁴. The ACCC also notes that it is a matter for the Australian Government as to whether a sector should be designated under the Consumer Data Right.

151 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 7; News Corp Australia, [Submission to Ad Tech Inquiry Interim Report](#), 19 March 2021, pp. 6–7; Guardian Australia, [Submission to Ad Tech Inquiry Interim Report](#); Verizon Media, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, pp. 1–2.

152 Reset Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 4; Computer & Communications Industry Association (CCIA), [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 5.

153 See e.g. Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, p. 9; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 10; Office of the Australian Information Commissioner, [Submission to Ad Tech Inquiry Interim Report](#), 16 April 2021, p. 4; Reset Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 4; Centre for Responsible Technology, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 7.

154 While stakeholders suggested the Consumer Data Right regime in the context of our data portability regime, the Consumer Data Regime can be more accurately described as a data interoperability regime, or protocol interoperability regime, as it involves designated data holders complying with prescribed rules and standards.

The key reason for this is that the ACCC is not convinced that data portability would effectively address the competition concerns that exist in relation to ad tech services. In particular, the ACCC does not expect many consumers would agree for their data, regarding their interaction with website publishers and advertisers, to be shared with different ad tech providers. The ACCC considers that consumers are particularly unlikely to be willing to share their ad tech data for the following reasons:

- Consumers are unlikely to be familiar with ad tech providers, as they generally do not provide services to consumers. As a result consumers are less likely to see the benefits of, and consent to, the porting data to an alternative ad tech provider.
- Consumers' lack of familiarity with ad tech providers will also likely make them less likely to trust these services, and consent to them accessing their data.
- Consumers are unlikely to actively choose and agree to the sharing of their data which it is used for the purpose of providing digital advertising. Research shows that over half of Australians are uncomfortable, or very uncomfortable, with targeted advertising based on what they have said and done online.¹⁵⁵

Some of these issues around consumers not consenting to porting of their data due to a lack of familiarity with ad tech services providers, could be addressed by providing consumers with incentives to port their data. As Oracle points out, competition in ad tech could be promoted by ad tech providers offering consumers incentives to port their location data, for example.¹⁵⁶ Such incentives could include ad tech providers offering a monetary reward or other promotional items, such as tickets or free services, when a consumer ports their data to the platform.¹⁵⁷

We acknowledge that such incentives could improve consumers' engagement with an ad tech data portability regime, but could also lead to other problems. In particular, they may lead consumers to provide consent to the sharing of their data across many different providers, without properly considering or understanding the privacy implications that arise from doing this.

Further, because there are many ad tech providers operating across the supply chain in Australia, many providers would likely seek access to the same consumer data, meaning a data portability regime for ad tech could lead to consumers' data being shared with many different entities, increasing its privacy risks.

Data interoperability

In the Interim Report, we proposed that data interoperability measures that increase data mobility, without a request from a consumer, such as common transaction ID and user IDs, could be used to address data access issues and provide a more level playing field. As these generally focused on the standardised sharing of non-personal, aggregated or anonymised data, the interoperability measures did not involve consent and therefore did not face the same barriers to uptake expected with the introduction of data portability.

The key data interoperability measures considered by the ACCC were common user IDs and common transaction IDs. Such IDs could help ad tech providers overcome issues around data access by enabling them to link together disparate datasets for use in performing ad targeting functions. This proposal received some support in submissions to the Interim Report, with a number of stakeholders submitting that the development of standards for data transfer would reduce excessive barriers to the transfer of data amongst ad tech providers.¹⁵⁸

However, we consider that the use of either type of common ID raises significant privacy risks, unless consumers consent to their use. This is because, even where these IDs are used to share de-identified information about consumers, it is likely many providers across the supply chain would be able to use other information they hold to 're-identify' the information. This would help providers to build detailed profiles about individual consumers, which could lead to a range of consumer harms (as discussed in

155 Office of the Australian Information Commissioner, [Australian Community Attitudes to Privacy Survey 2020](#), September 2020.

156 Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, pp. 10-11.

157 Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, pp. 10-11.

158 Xandr, [Submission to Ad Tech Inquiry Interim Report](#), 2 March 2021, p. 4.

chapter 2). These privacy risks are considerable, because for common IDs to be effective, they would need to be used across the industry, which could lead to consumer data being shared among many providers in the supply chain. A number of submissions to the Interim Report recognised this issue, with stakeholders stating that interoperability, without consumer consent, raised consumer privacy concerns.¹⁵⁹

Some of these privacy concerns could be mitigated if consumer consent requirements were included, but for the reasons outlined above, consumers are unlikely to consent to the sharing of their information with ad tech providers who they do not have a direct relationship with. Here as the common ID would be used across the supply chain, it would also be difficult to design an incentives scheme to consumer encourage uptake. Further, as such IDs would need to be shared among many providers across the ad tech supply chain, consumers would not be consenting to their data being provided to one provider, but many providers. Overall this would make it difficult for a consumer to know who they are consenting to their data being shared with.

At this stage, the ACCC consider the privacy risks from interoperability measures like common user IDs and transaction IDs in ad tech outweigh their competitive benefits. However, the ACCC considers that data interoperability, like data portability, may be an appropriate tool to address concerns arising from data advantage issues in digital platform markets in the future.

3.8.2 Google should be more transparent about how it uses data in ad tech

While Google states that it currently makes limited use of first-party data to provide ad tech services on third-party websites, Google's Privacy Policy and Terms of Service allow Google to do so. Google's Privacy Policy and Terms of Service for its services do not restrict how it will use first-party data in providing ad tech services, and its Privacy Policy even suggests it could be used for third-party inventory.¹⁶⁰

As a result, we consider that Google should amend its public material so that it clearly and unambiguously explains how it uses data that it collects from its consumer-facing services (also known as first-party data) to provide ad tech services. This should include a description of how both non-aggregated first-party data (data about a single consumer) and aggregated first-party data (such as combined data from multiple consumers) is used to provide ad tech services which enable the display of advertisements on third-party websites and apps. The public facing material Google should amend includes its Terms of Service, its Privacy Policy, and any other documents which set out or explain to consumers how Google uses their data.¹⁶¹ It should also include material aimed at business users, or potential business users, of Google's ad tech services, including any terms and conditions of service. There are two key reasons for this.

First, as discussed above, there is a perception amongst advertisers (and other stakeholders) that Google uses its first-party data on third-party inventory, and at least one stakeholder is sceptical of Google's submission that it is not using such data.¹⁶² This perception, which is based, at least in part, on Google's public facing materials is unfairly contributing to Google's data advantage. If Google updates its public facing material, including its Privacy Policy and Terms of Service, to state that it does not use first-party data in this way, it will help to address this perception about Google's data use. This will ensure that advertisers are fully informed about the extent of Google's data they are able to use on Google's DSPs when they are considering choosing a different service.

Secondly, we consider that it is important that Google makes clear to consumers and advertisers who use its services exactly how Google is using consumers' data to provide targeted advertising. Google

159 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, pp. 23, 26–28; Facebook, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 18.

160 Google, Privacy & Terms, [Privacy Policy](#), accessed on 18 August 2021.

161 Terms of Service refers to Google's Terms of Service, found on Google's Privacy & Terms webpage. See Google, *Google Privacy & Terms: Terms of Service*, <https://policies.google.com/terms?hl=en-UK>, accessed on 18 August 2021. Privacy Policy refers to Google's Privacy Policy found on Google's Privacy & Terms webpage. See, Google, *Google Privacy & Terms: Privacy Policy*, <https://policies.google.com/privacy?hl=en-UK>, accessed on 18 August 2021.

162 See, for example, Oracle, [Supplementary submission to Ad Tech Interim Report](#), 26 May 2021.

has submitted that its use of first-party data from individual consumers when bidding or targeting ads on third-party inventory is extremely limited. However, as noted above, public material aimed at the users (or potential users) of Google's services, including its Privacy Policy, also suggests Google is making greater use of its first-party data than has submitted to the ACCC. We consider that Google should specify exactly how it uses consumers' first-party data in providing ad tech services, so that it is clear to consumers how their data will be used.

3.8.3 Sector specific rules should include measures to address potential data advantage problems

As Google appears to be making fairly limited use of its first-party data in providing ad tech services, we do not consider that it is currently necessary to require Google to implement data separation requirements. However, we do consider additional measures are needed to prevent Google leveraging its extensive first-party data to advantage its ad tech services and entrench its position in a way that negatively affects the competitive process in the future.

Therefore, we recommend that the power to introduce sector specific rules proposed in Recommendation 2 should include the ability for the ACCC to implement measures to address competition issues arising from an ad tech provider's data advantage where:

- the provider meets the criteria linked to its market power and/or strategic position in the ad tech supply chain (as outlined in recommendation 2)
- the provider's data advantage arises from the ad tech provider's market power and/or strategic position in a related activity
- the ACCC finds the data advantage has increased, or has the potential to increase, the provider's market power.

Measures available to address the data advantage should include:

- data separation measures (for example, preventing an ad tech provider from using data it has collected from its consumer-facing services (i.e. first-party data) to provide ad tech services on third-party sites and apps)
- data access requirements (for example, requiring the provider to give other ad tech providers access to the provider's first-party data).

We acknowledge that currently it may be difficult for data access requirements to be implemented in a way that adequately protects consumers' privacy and complies with the *Privacy Act 1988* (Cth) (including any future amendments). However technological developments may make this possible in the future.

As noted above, currently we consider that it would only be necessary for such measures to apply to Google. However, we also recommend that the ACCC should have the ability to apply such measures to other businesses if they occupy a similar dominant or strategic position in the future and meet the pre-defined criteria outlined above.

Data separation would effectively result in data silos, preventing Google from using data collected from Google Search, YouTube, Android, Gmail and other first-party services to provide targeted advertising on third-party (that is, non-Google) inventory. Mechanisms for monitoring Google's compliance with the data separation requirements, and penalties for non-compliance will also be required for this recommendation to be effective.

Data access would require Google to allow other ad tech providers to access Google's data, to level the competitive playing field. However, as noted below, it is unlikely such requirements could currently be implemented in a way which adequately protects consumers' privacy. However, we acknowledge that technological developments may make this possible in the future.

Before introducing any such measure, the ACCC would assess the costs and benefits of doing so. This would include assessing the potential efficiency losses from data separation (discussed below), and a consultation process.

Reasons for recommendation

As discussed above, Google submits that it currently only makes very limited use of its first-party data to provide ad tech services for third-party inventory. Accordingly, it could be argued that a data separation requirement is unlikely to have a significant impact on the advantage Google's gains from its access to data in the supply of ad tech services.

However, there is a real risk that Google could use its first-party data to provide ad tech services on third-party inventory in the future, and if it were to do so, it could further lessen the ability of rivals to compete with Google by raising barriers to their entry and expansion.

There is nothing to stop Google using its first-party data

There are no legal or technical barriers to prevent Google from using its first-party data to provide ad tech services on third-party websites, and Google could change its approach and do so at any time. It could do this without seeking consumer consent, and without industry or regulators being aware that it was doing so or had done so.

In particular, Google's Privacy Policy states that one of the reasons it collects data from consumers is to 'provide personalized.. ads.' The policy provides an example of the use of first-party data for targeting stating that, depending on a consumer's settings, if they search for mountain bikes, they may see an ad for sports equipment when browsing a site that shows ads served by Google.' The policy does not state that consumers will only be targeted on Google ad inventory.¹⁶³

A number of Google's help pages also include statements about the use of first-party data on non-Google inventory. For example, in its 'About Google Ad Personalization' section, Google states that ads shown to users on its ad network (which includes non-Google sites) can be based on a consumer's Google account activity and information and activity on another device, their location, search queries (past and present), and activity when signed in to Google.¹⁶⁴

Google's incentive to use its first-party data

Given the attractiveness to advertisers of close targeting capability, it appears highly likely that Google would have incentives to use its first-party data to advantage in its ad tech business. While Google may currently not be using this data to advantage its ad tech business, Google has the ability to do this in future, and if it were to do so, it would likely provide it with a significant competitive advantage.

Google's search data is likely to be particularly valuable. The volume of data about consumers Google is able to collect through search data is not available to other ad tech providers or digital platforms, given Google's dominance in search markets, provides valuable information about consumers' interests, demographic information and purchasing intent.

¹⁶³ Google, Privacy & Terms, [Privacy Policy](#), accessed on 26 August 2021.

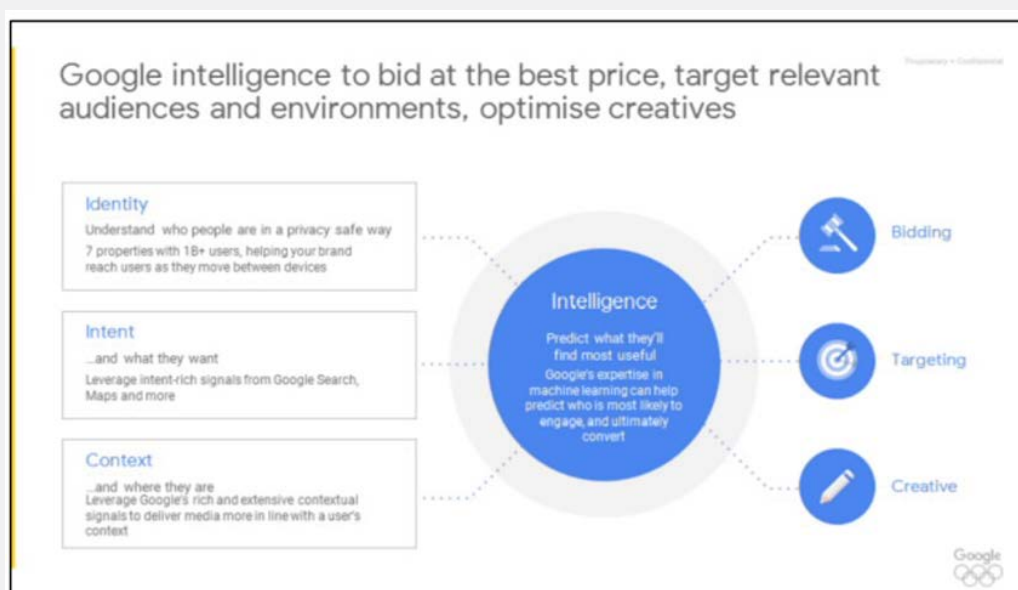
¹⁶⁴ Google, [Why you're seeing an ad](#), accessed on 18 August 2021; Google, About Google ad personalization, accessed on 18 August 2021.

Box 3.4: The value of Google's first-party data

Google's internal documents show how valuable Google considers its first-party data to be, and how it can advantage it in providing ad tech services. For example:

- A Google document from 2018 includes the following statement:

'Data as fuel: Google has data and insights from billions of users and the opportunity to more fully leverage GAIA data [data relating to individual users with Google accounts] and ML [machine learning] to improve targeting, attribution and enable new products ...'
- An internal Google document discussing the strengths of display and video advertising with Google notes that its key competitive strengths include, 'Google intelligence' which it describes as 'helping advertisers achieve the goals with Google's Smart Bidding algorithms, honed by Search'. The following extract from the document also shows that Google considers its access to data about users across its properties, including Google Search and Maps, to be valuable to targeting and bidding.



Source: Document obtained from Google.

Privacy sandbox changes

Google is proposing to remove Chrome support of third-party cookies, and replace the functions of cookies with its Privacy Sandbox Proposals (these are discussed in more detail in chapter 4) by the end of 2023. The removal of support for third-party cookies on Chrome means that none of the most popular web browsers will support third-party cookies after 2023, making them obsolete.

This is likely to increase Google's incentives to use and market the use of its first-party data on non-Google inventory. While Google has stated that it will use the Privacy Sandbox Proposals for targeting on non-Google inventory, and that it will not use its first-party data there are currently no barriers to prevent Google doing so.

Currently, DSPs rely on third-party cookies to collect information about consumers and provide it to advertisers for targeting, as they generally do not have access to first-party data from consumer-facing services. Without third-party cookies, DSPs will be required to rely further on sources first-party data to provide targeting.

Although other ad tech providers will have access to first-party data, their ability to use this will be much more limited than Google's because:

- the quality and scope of their data is far more limited than Google's, as they do not have a broad range of consumer-facing services more than a billion users
- they will not be able to offer as accurate or detailed profiles of consumers from targeting, as they do not have Google's large base of users. Instead, competitor DSPs will be reliant on data from a range of third-parties (including both online and offline sources), which is far more difficult to match to advertiser data, and requires costly integrations.

Box 3.5 below demonstrates Google's recognition of the increased importance that first-party data will have after the removal of third-party cookies.

Box 3.5: The value of first-party data as third-party cookies are phased out

Internal Google documents highlight the increased importance that first-party data will have as third-party cookies are phased out on browsers:¹⁶⁵

- An internal Google document includes the following statement: 'Arms race for data & insights: Data (esp 1p) driven insights increasingly viewed as a source of competitive business advantage.'
- An internal Google document from 2020 also makes the following statements:
 - 'As privacy expectations rise and the use of third-party cookies becomes increasingly constrained 'opportunities abound for privacy focused marketers and publishers: shaping a new era of predictive marketing, doubling down on 1st party data, and powering their efforts with machine learning, automation and contextual advertising.'
 - 'Focusing on 1st party data allows marketers to control the user experience, rely on accurate verifiable information and respect user choice when it comes to how their data.'

External Google marketing material also emphasises the importance of first-party data in the future. For example, in an online article targeted at advertisers, Google states that 'as digital advertising is reshaped by a number of significant, privacy-driven changes, investment in first-party data is emerging as a key strategy that can help marketers and publishers adapt.'¹⁶⁶

Detriments that may result from data separation

There are a number of potential detriments that we have considered in recommending that the ACCC have the ability to introduce a data separation requirement under the sector specific rules in the future.

A data separation requirement could lead to a reduction in efficiency if it reduced the value of personalised advertising to advertisers, and limited the ability to provide accurate attribution services. This could harm advertisers and publishers in two ways, by:

- reducing the amount that publishers earn for their advertising space (as advertisers may not be willing to pay as much for advertising inventory, or as advertisers may switch to alternatives with more accurate personalised targeting), and/or
- lowering the quality (for example, less personalised) of ads for advertisers, and thereby the return on their advertising spend.¹⁶⁷

These harms could then flow through to consumers. For example, through increasing cost of goods and poorer quality publisher content. Consumers may also lose benefits that may arise from receiving targeted and relevant advertising.¹⁶⁸ However, we do not consider that such harms will always outweigh the benefits of a data separation requirement. In addition, no publishers have raised concerns about data separation reducing their revenue. News Corp, The Daily Mail, The Guardian, SBS, and Free TV

¹⁶⁵ While these documents were released either before or just after Google's announcement about third-party cookies, they demonstrate how Google sees competition in ad tech without third-party cookies.

¹⁶⁶ Google and P. Coffey, [Cookies and Chrome: How to prepare your business for a more private web](#), *Think with Google*, January 2021.

¹⁶⁷ Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 30.

¹⁶⁸ Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 30.

all support data separation measures, submitting that they could promote competition, and level the playing field between digital platforms with data advantages and their competitors.¹⁶⁹

A data separation requirement could provide Google's rivals with an increased incentive to invest by reducing barriers to entry and expansion. Barriers to entry and expansion could be lowered as firms would face a more level-playing field and there could be greater transparency around actual data usage. It could also promote the development of new methods of delivering relevant and valuable ads to consumers. Ad tech providers, advertisers, and publishers, including Google, would be incentivised to develop new effective ways to fund internet content and target advertising that do not rely on collecting detailed data about consumers.

While there are some benefits of targeted advertising, and it is valued by advertisers and publishers, it is not necessarily the best way to advertise to consumers. As noted earlier, research shows many consumers are uncomfortable with data about their behaviour being used to deliver targeted advertising.¹⁷⁰ This preference has most recently been highlighted by only 4% of iOS users agreeing to be tracked, when given the opportunity to choose their preference due to Apple's App Tracking Transparency policy.¹⁷¹

Importantly, the ACCC notes Google's statements that it is not currently using data collected through its first-party services to benefit its ad tech business in any significant way and that it does not intend to use this data at all in the future. Given this, it is not clear how mandating data silos, in the way discussed above would reduce efficiencies.

These are issues that the ACCC would need to consider when determining whether a data separation requirement should be implemented in the future.

Data access regime

An alternative way to address any advantage Google has from its access to first-party data would be to require it to provide other ad tech providers with access to this data through a data access regime. For example, News Corp Australia recommended that digital platforms with an 'ad tech data advantage' be required to provide anonymised data to other market participants.¹⁷² It also recommends that those ad tech providers should be required to provide publishers with any information the ad tech provider collect about a user's interaction with a publisher's website, and provide to advertisers and publishers data collected about the sale, serving and display of inventory.¹⁷³ It submits that these proposals would facilitate effective competition for crucial aspects of ad tech services, such as targeting and attribution, and improve transparency.¹⁷⁴

While providing third parties with access rights to data held by Google may reduce Google's data advantage, this proposal also raises critical consumer consent concerns. If data access rights did not include a requirement that a consumer consents to the access or transfer, significant privacy concerns would exist even if data was anonymised due to the risks of re-identification. If consent requirements were included to address these important privacy concerns, it is unlikely that the access would be effective, given consumers' likely reluctance to agree that such data be shared, as outlined above.

However, we note that it is possible that there are technological developments in the future that could make it possible for a data access regime to be implemented in a privacy safe way. Therefore, we consider that the ACCC should have the ability to establish a data access regime which would provide the ability to require Google to provide competing ad tech providers with access to data in the future.

169 News Corp Australia, [Submission to Ad Tech Inquiry Interim Report](#), 19 March 2021, p 9; Special Broadcasting Service (SBS), [Submission to Ad Tech Inquiry Interim Report](#), 5 March 2021, p. 2; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 9; Guardian Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, pp. 6-7; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, pp. 8-9.

170 Office of the Australian Information Commissioner, [Australian Community Attitudes to Privacy Survey 2020](#), September 2020.

171 S. Axon, '96% of US users opt out of app tracking in iOS 14.5, analytics find Some of the first data on user behavior exceeds advertisers', *Ars Technica*, 8 May 2021.

172 News Corp Australia, [Submission to Ad Tech Inquiry Interim Report](#), 19 March 2021, pp. 7-9.

173 News Corp Australia, [Submission to Ad Tech Inquiry Interim Report](#), 19 March 2021, pp. 16-17.

174 News Corp Australia, [Submission to Ad Tech Inquiry Interim Report](#), 19 March 2021, p. 8, 17.

4. The effects of Google's dominance and vertical integration

Key points

- As discussed in chapter 3, Google is the dominant provider of key parts of the ad tech supply chain in Australia, and has a strong position in other ad tech services and related markets. In addition to being a vertically integrated ad tech provider, Google also operates a number of key consumer-facing services funded by advertising.
- While Google's vertical integration can lead to efficiencies and provide benefits to advertisers and publishers, it also gives rise to conflicts of interest and has resulted in significant competition concerns.
- Google's vertical integration means that, in a single transaction, Google can act on behalf of both sides of the transaction (the buyer/advertiser and the seller/publisher) and operate the ad exchange (SSP) connecting these two parties. It can also be a seller of its own inventory. Google's conflicts of interest have resulted in competition issues in ad tech markets, or otherwise led to poor outcomes for advertisers or publishers. We do not consider that the level of competition and transparency in the supply of ad tech services is sufficient to prevent Google acting contrary to the interests of its customers.
- We are also concerned that Google has been able to leverage its strength in particular ad tech services or in the supply of particular ad inventory, into related ad tech services. There are many examples of Google favouring its own related services at the expense of third-party ad tech services (self-preferencing). In particular, Google has:
 - restricted purchase of YouTube inventory to its DSPs
 - directed demand from its DSPs (particularly Google Ads) to its own SSP
 - used its publisher ad server to preference its SSP over time
 - restricted how its SSP works with third-party ad servers
 - used its control over auction rules in its publisher ad server to advantage its other services
 - announced plans which could allow it to use its position in providing the Chrome browser to preference its ad tech services.
- Not all cases of self-preferencing will have an anti-competitive effect and in some cases may be efficiency enhancing. However, self-preferencing which prevents or limit rivals from competing on their merits is a significant cause for concern when engaged in by a firm with Google's dominant position.
- The ACCC has not yet reached definitive views on the extent of the competitive impact of any one of the above examples. However, the ACCC considers that the cumulative effect of this behaviour over time has been to lessen competition in the supply of a range of ad tech services and entrenched Google's dominance and strength in ad tech services. This is to the detriment of Australian advertisers, publishers and consumers.
- The ACCC is continuing to consider the specific allegations that have been made against Google over the course of the inquiry under the competition provisions of the CCA.
- However, the ACCC considers that the problems it has identified cannot be effectively addressed using only the existing tools available to under the *Competition and Consumer Act 2010*, and makes the following recommendation:
 - Recommendation 2: The ACCC should be given powers to develop sector specific rules to address conflicts of interest and competition issues in the ad tech supply chain. The rules would apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position.
- The regulatory rules the ACCC is recommending would align with those being considered overseas, which will enable the ACCC to contribute to, and benefit from, international efforts to drive effective competition in ad tech services.

This chapter examines Google's vertical integration and market power across the ad tech supply chain, and how this has allowed Google to engage in conduct that has lessened competition for ad tech services over time. It is structured as follows:

- **Part 1** builds on the conclusions in chapter 3 regarding Google's dominance in the supply of ad tech services and discusses the benefits and concerns that arise from its vertical integration.
- **Part 2** examines specific behaviour that Google has engaged in over time, enabled by its vertical integration and strong position across the ad tech supply chain, including self-preferencing and leveraging conduct, and the impact that this has had on competition.
- **Part 3** recommends that rules should apply to Google to address these concerns with its position and conduct in ad tech services.

Part 1: Vertical integration

This section discusses the benefits and concerns relating to vertical integration, and considers how these apply to Google's services.

4.1 Google is vertically integrated and the largest provider of ad tech services

As discussed in chapter 3, Google is the largest supplier of ad tech services across the supply chain. It has a dominant or strong position in the supply of each of the four key ad tech services in Australia.

Google is a vertically integrated ad tech provider and is also involved in a number of key related consumer-facing services. Google supplies ad tech services (an advertiser ad server, two demand-side platforms (DSPs), a supply-side platform (SSP), two ad networks and a publisher ad server), operates a web browser (Google Chrome), and is a publisher across multiple properties (for example, YouTube and Gmail).

There are other vertically integrated ad tech providers, such as Xandr, Verizon and Amazon. However, Google is the only ad tech provider that supplies services across the entire ad tech supply chain and provides ad inventory. No other ad tech provider has the same coverage and scale as Google.

Google's vertical integration across the ad tech supply chain and provision of related services gives rise to some benefits and efficiencies, but may also lead to issues including conflicts of interest and competition concerns, which are discussed below.

4.1.1 Efficiencies and benefits from vertical integration

Vertical integration can give rise to efficiencies in the supply chain and provide benefits to advertisers and publishers. A number of stakeholders commented on the benefits of vertical integration, submitting that it can lead to cost savings, efficiencies and technological benefits such as reduced latency.¹⁷⁵

Some submit that vertical integration can also improve competition.¹⁷⁶ For example, WPP AUNZ (an ad agency holding group) submits that vertical integration has improved the competitive position of industry participants by providing scale and better product offerings.¹⁷⁷

Stakeholders have also commented on a range of other advantages of using vertically integrated firms.¹⁷⁸ For example, Omnicom Media Group (an ad agency) submits campaign implementation is easier for advertisers when using vertically integrated service providers, and that this reduces the

175 See Google Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 1 May 2020, p. 15; Verizon Media, [Submission to Ad Tech Inquiry Issues Paper](#), 28 April 2020, p. 4; Asia Internet Coalition, [Submission to Ad Tech Inquiry Issues Paper](#), 1 May 2020, p. 4.

176 See Verizon Media, [Submission to Ad Tech Inquiry Issues Paper](#), 28 April 2020, p. 4; WPP AUNZ, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 3.

177 WPP AUNZ, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 3.

178 See for example: Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 18 May 2020, pp. 27-28. Special Broadcasting Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 1.

resources required by advertisers to use them. It also submits that vertically integrated providers are able to provide superior inventory forecasting and delivery of programmatic guaranteed deals to publishers.¹⁷⁹ Similarly, SBS submits that vertical integration provides more ‘streamlined operations’ for users.¹⁸⁰

In relation to Google specifically, stakeholders submit the integration of Google’s services means that:

- there is a lower likelihood that bids from its DSP to its SSP will fail
- interconnection between ad tech services is easier
- more consistent measurements and metrics can be provided
- the use of consistent user IDs means it has greater targeting capabilities.¹⁸¹

4.2 Vertical integration may result in conflicts of interest

While vertical integration can generate benefits, an ad tech provider supplying multiple services across the supply chain is likely to face conflicts of interest. The ACCC notes that vertical integration and/or conflicts of interests are present in other contexts and do not always lead to concerns for users, but in certain circumstances they can raise competition concerns or other problems for the users of services. This section discusses how conflicts of interest can arise in ad tech services, the problems they can lead to, and discusses examples of how Google’s conflicts have led to issues for other suppliers, advertisers and publishers.

4.2.1 Types of conflicts of interest in ad tech

There are two key types of conflicts of interest that arise with a vertically integrated ad tech provider.

First, vertically integrated ad tech providers may face conflicts of interest between the interests of their related businesses, and the interests of their customers. For example, where a provider runs both a publisher ad server and an SSP, the provider could face a conflict of interest if its own profit-maximising interests conflict with the profit-maximising interests of its publisher customers. This would occur in a scenario where the ad tech provider would earn more if it sells the publisher’s inventory through its own SSP, while its publisher customer would earn higher revenue if its inventory is sold through rival SSPs.

Secondly, a vertically integrated ad tech provider may also face conflicts between the interests of different groups of customers. Where an ad tech provider supplies services to both advertisers and publishers, there may be conflicts between the interests of an advertiser and a publisher, meaning that it will be difficult for the provider to act in the best interests of both parties. For example, where an ad tech provider offers both DSP and SSP services, there is a conflict between acting in the interests of their advertiser customers, who will want the DSP to buy ad inventory for the lowest possible price, and publisher customers, who will want the SSP to sell its ad inventory for the highest possible price.

The existence of these conflicts of interest may make it difficult for advertiser and publisher customers to know whether their ad tech provider is acting in their interests. This is because their provider may be acting to advantage itself, or acting for a group of customers whose interests are not aligned with theirs. Such conflicts of interest can lead to worse outcomes for advertisers and publishers in terms of the price and quality of services. For example, it may lead to advertisers paying higher prices or buying lower quality ad inventory, or publishers making less revenue than they would if their provider was only acting on their behalf.

Conflicts of interest are particularly likely to arise in the ad tech supply chain where a provider operates an SSP or ad exchange where ad impressions are bought and sold, and is also a buyer and/or seller on that exchange. For example, Google operates an SSP (Google Ad Exchange) and also buys impressions on this exchange through its DSPs (Display & Video 360 and Google Ads). This means that Google’s

179 Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 18 May 2020, pp. 27–28.

180 Special Broadcasting Service Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p.1.

181 Asia Internet Coalition, [Submission to Ad Tech Inquiry Issues Paper](#), 1 May 2020, p. 4; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 32–33; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 7.

SSP has an interest in ensuring Google's DSPs purchase impressions on its exchange at a lower price, which may not align with the interests of the publishers using the Google's SSP service.

Conflicts of interest are less likely to lead to problems where advertisers and publishers have access to sufficient information that enables them to identify whether their ad tech provider is acting in their best interest and, if they identify that their provider is not acting in their best interests, they are able to switch to alternative providers. This is because ad tech providers would likely lose business to their rivals if they acted contrary to the interests of their customers. However, where customers are unable to observe whether a provider is acting in their interests or cannot easily switch to an alternative provider, conflicts of interest are more likely to be a cause for concern.

The circumstances that give rise to conflicts of interest and the circumstances that can give rise to leveraging conduct (discussed in section 4.3 below) can be similar. For example, if a provider runs both a publisher ad server and an SSP, the provider may face a conflict between its own interests and those of publishers. If the provider has a dominant position in the supply of publisher ad server services, it may be able to use its position to limit the competition it faces in the supply of SSP services.

Such conflicts are not unique to ad tech markets. For example, conflicts of interest arise in financial markets where firms supplying financial services act on behalf of both buyers and sellers, or where entities that operate exchanges for the buying and selling of securities offer other services.

Box 4.1: Conflicts of interest in financial markets and services

Conflicts of interest in financial markets and services may arise in a range of situations. Generally, financial regulation includes rules that manage these conflicts of interest.

For example:

- Financial services firms may act on behalf of both buyers and sellers of financial products. This can potentially give rise to conflicts of interest. However, in financial services there are a number of obligations placed on these firms which limit the risk that they will not act in the best interests of their clients. These include legal obligations to manage any conflicts and to act in the best interests of their clients.¹⁸² They are also prohibited from using inside information or distorting auction outcomes.¹⁸³ Contravening these provisions can carry criminal and civil penalties.¹⁸⁴
- Entities that operate exchanges for the buying and selling of securities may face conflicts of interest where they operate other services used by competitor exchanges, for example, cash equity clearing and settlement services. In relation to the Australian Securities Exchange (ASX), Regulatory Expectations seek to ensure that ASX remains responsive to users' evolving needs and provides access to its monopoly cash equity clearing and settlement services on a transparent and non-discriminatory basis with terms and conditions, including pricing, that are fair and reasonable.¹⁸⁵
- Entities that operate exchanges for the buying and selling of securities may also face conflicts of interest where they are also listed on their own exchange (for example, shares of the ASX are listed and traded on the ASX). These entities are subject to regulation which requires them to manage conflicts of interest.¹⁸⁶

182 *Corporations Act 2001* (Cth) ss 912A(1)(aa), 961B(1).

183 *Corporations Act 2001* (Cth) ss 1043A & 1041A-1041G.

184 *Corporations Act 2001* (Cth) ss 1317E, 1311(1).

185 In October 2016, the Council of Financial Regulators (CFR) and the ACCC released the *Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia* (Regulatory Expectations). The Regulatory Expectations were revised in September 2017. The Regulatory Expectations take a largely principles-based approach to describing the conduct expected of ASX as a monopoly provider of cash equity clearing and settlement services. The CFR and the ACCC have also provided additional guidance on how the Regulatory Expectations apply in certain specific circumstances. See: Council of Financial Regulators, [Application of the Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia](#), October 2020.

186 *Corporations Act 2001* (Cth) ss *Corporations Act 2001* (Cth) ss 792A(1)(a), 792A(1)(c)(i).

Unlike financial markets, there is no regulation applying to ad tech services that prohibits or manages conflicts of interest. In the ad tech supply chain, Google is able to represent both sides of the transaction (the buyer and the seller), and operate the exchange, without any obligations to manage the conflicts of interest that can arise.

Further, we do not consider that the level of competition and transparency in the supply of ad tech services is sufficient to prevent Google acting contrary to the interests of its customers. As discussed in chapter 3, we consider that it is not always possible for advertisers and publishers to use alternatives to Google services. Further, many aspects of the ad tech supply chain are opaque, making it difficult for providers to monitor conflicts of interest when they arise (see chapter 5).

The conflicts of interest faced by Google have led to problems in the past, and there is a significant risk that they could give rise to problems in the future. Specific examples of how conflicts of interest faced by Google have created problems in the ad tech supply chain are set out below.

4.2.2 Issues arising from Google's conflicts of interest

As noted above, we consider that Google's conflicts have led to poor outcomes for advertisers and publishers.

Some examples of the problems conflicts of interest have contributed to include:

- Google using its publisher ad server to favour the interests of its SSP over the interests of its publisher customers (for example, through the 'last look' advantage discussed in section 4.6, and the Unified Pricing rules discussed in section 4.8.4). This may lead to publishers earning lower revenue than they could otherwise earn if Google was not favouring its SSP over rival SSPs.
- Google requiring advertisers to use its DSPs to access its publisher properties, such as YouTube, to increase advertiser spend through its DSPs (discussed in section 4.5). This may limit advertisers' ability to freely choose which DSPs to use, which may lead to advertisers paying higher prices or buying lower quality ad inventory.
- Google sending demand from its DSPs exclusively to its SSP, potentially in conflict with the interests of its advertiser and publisher customers (discussed in section 4.6). This may lead to advertisers buying ad inventory that is less suited to their needs, or limit publishers' ability to freely choose which SSPs to use.

We also note that there is significant industry concern about Google's ability to share bidding and auction information between its services. Here, Google may not be acting in the best interests of either of its advertiser or publisher customers. Rather than running an open auction that protects the interests of both advertisers and publishers, Google could be sharing information between its services to maximise its own profits. For example, recent allegations about so-called Project Bernanke (where it was alleged that Google was using data from its publisher side services to inform its DSPs' bids) highlight industry uncertainty about whether Google's publisher side products give privileged access to bidding and auction information to its DSPs.¹⁸⁷ This has historically been of concern through conduct such as the 'last look' advantage provided to Google's SSP (discussed in section 4.6). However, there are also broader concerns that there is little ability for advertisers, publishers or other ad tech providers to verify that Google does not share bidding and auction information between its services.

Google submits that it does not face conflicts of interest in the provision of ad tech services, and that the ACCC's Interim Report found nothing more than the potential for conflicts of interest. Google notes that as an auction operator, it has a commercial imperative to balance the interests of publishers and advertisers.¹⁸⁸ We consider that Google clearly faces conflicts of interest, because the interests of different groups of customers on different sides of the transaction, as well the interests of its related services, cannot always be aligned. Therefore, these conflicts may harm advertisers or publishers, where there are no measures to prevent Google acting contrary to their interests when it provides services to them.

187 J. Horwitz and K. Hagey, 'Google's Secret 'Project Bernanke' Revealed in Texas Antitrust Case,' *The Wall Street Journal*, 11 April 2021; Sluis, S., 'What Pubs And Ad Tech Really Think Of Google's 'Project Bernanke'', *AdExchanger*, 13 April 2021.

188 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, pp. 35-36.

We have considered information from Google about how it manages its conflicts of interest. Google does not consider that it faces conflicts of interest. However, it provided the following examples of ways that it ‘balances publisher and advertiser needs’. These include:

- Contractual restrictions on information sharing between Google’s ad tech services, including prohibitions on sharing information that publishers enter into its publisher ad server to Google’s DSPs’ bids.
- Internal restrictions on the sharing of data , including only enabling Google’s DSP employees to access data on Google’s publisher side services where there is a legitimate need to process the data, with access limited to the least privileges necessary, and using access control levels.¹⁸⁹ In addition, with respect to Google Analytics, engineers will only be permitted access to data where they can demonstrate a business need to do so, such as maintaining and providing the service, and are only able to access data related to that purpose.

Based on the information provided by Google, we are not convinced that Google’s internal processes and policies are sufficient to manage the significant conflicts of interest that it faces. This is because Google may easily change these internal policies, and because there are a range of exceptions that apply.

Conflicts of interest are more likely to lead to issues where advertisers and publishers are limited in their ability to switch to alternative providers, and where there is insufficient transparency. We consider that this is the case in relation to Google’s conflicts of interest. This means that self-regulation of these conflicts is unlikely to be appropriate.

As these conflicts can lead to poor outcomes for advertisers and publishers, we consider that measures may be needed to manage these conflicts and improve confidence in the operation of Google’s ad tech services (see the ACCC’s recommendation 2 that a regulatory regime should apply to Google in the supply of ad tech services, including to manage conflicts of interest, discussed in Part 3 of this chapter).

4.3 Vertical integration gives rise to risks of leveraging and self-preferencing conduct

Vertical integration may lead to competition concerns where an integrated provider has the ability and incentive to leverage its dominance in one market or service to restrict or limit competition in a related market. As mentioned above, the circumstances that give rise to conflicts of interest, and the circumstances that can give rise to leveraging conduct, can be similar.

A number of issues are relevant in assessing whether a provider has the ability and incentive to leverage a position of strength in one market to restrict or limit competition in a related market, including:

- The strength of the provider’s position in the first market or service. The provider must have sufficient power in the supply of the service in order to prevent participants counteracting the effects of the leveraging conduct by switching away from the provider to effective alternatives.
- The incentive of the provider to engage in leveraging conduct. In particular, the gain to the provider from reducing competitive rivalry in the related market must be sufficient to offset any loss incurred from the leveraging conduct (such as fewer sales of the services in the first market).

There are a number of different ways that a provider could leverage its strength from one market or service into a related market or service. This includes self-preferencing, where a provider gives preferential treatment to its own services when competing with the services of other ad tech providers, limiting the ability of other ad tech providers to compete on their merits.¹⁹⁰

Australian law does not prohibit a firm from possessing a substantial degree of market power. It also does not prohibit a firm with a substantial degree of market power from ‘out-competing’ its rivals by using superior skills and efficiency to win customers at the expense of firms that are less skilful or

189 For example, personnel from Google buyers are unable to access data from its publisher ad server and SSP to train bidding or machine learning algorithms.

190 See J Cremer, Y de Montjoye and H Schweitzer, [Competition policy for the digital era: Final Report](#), European Commission, 2019, p. 7.

less efficient. This conduct is part of the competitive process, which drives firms to develop and offer products that are more attractive to customers, and should not be deterred. It is also not necessarily problematic if a vertically integrated provider engages in self-preferencing. Businesses are generally not required to act in a non-discriminatory way.

However, it is illegal for a firm with substantial market power to damage the competitive process by preventing or deterring rivals, or potential rivals, from competing on their merits. Leveraging conduct by vertically integrated providers may, in some cases, have the potential to infringe the Competition and Consumer Act 2010 (CCA). As discussed in section 4.10.2 below, the ACCC is considering whether certain conduct discussed in this chapter may have breached the CCA.

As Google is the leading supplier across the ad tech supply chain, and is dominant or strong in all of the key ad tech services, we consider it is in a different position compared to other vertically integrated operators. Its pervasiveness in ad tech services and related markets, and the ‘must have’ nature of some of its services, puts it in a special position, such that where it does engage in self-preferencing conduct, it has the potential to significantly impact competition for ad tech services.

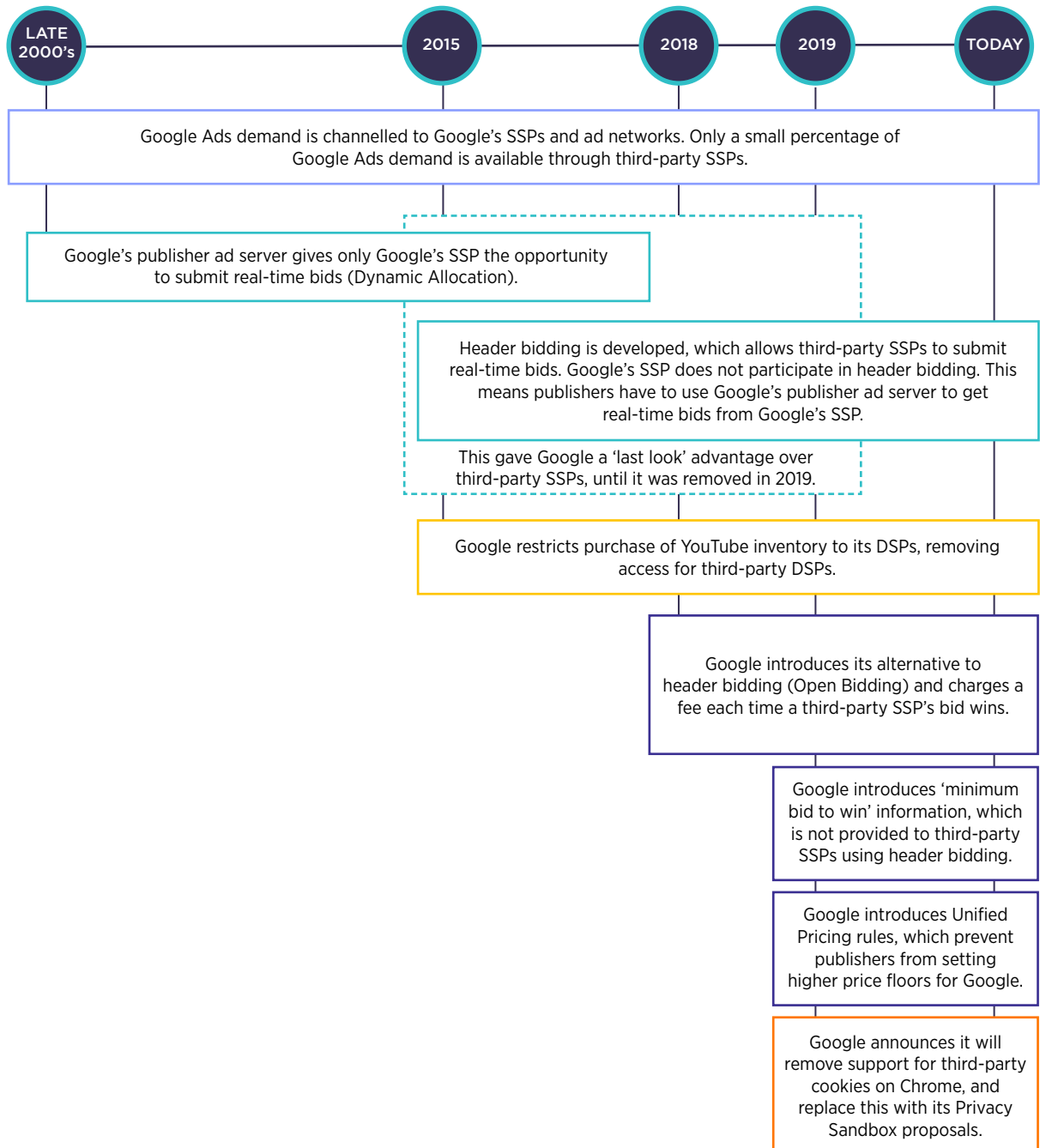
Part 2: How Google’s conduct over time has impacted ad tech services

This part sets out our consideration of Google’s conduct in relation to leveraging, self-preferencing and conflicts of interest concerns.

In particular, we are concerned that Google has engaged in conduct that has lessened competition and efficiency in the ad tech supply chain:

- restricted purchase of YouTube inventory to its DSPs (section 4.4)
- directed demand from its DSPs (particularly Google Ads) to its own SSP (section 4.5)
- used its publisher ad server to preference its SSP over time (section 4.6)
- restricted how its SSP works with third-party ad servers (section 4.7)
- used its control over auction rules in its publisher ad server to advantage its other services (section 4.8)
- announced plans which could allow it to use its position in providing the Chrome browser to preference its ad tech services in the future (section 4.9).

Figure 4.1: Google's conduct over time



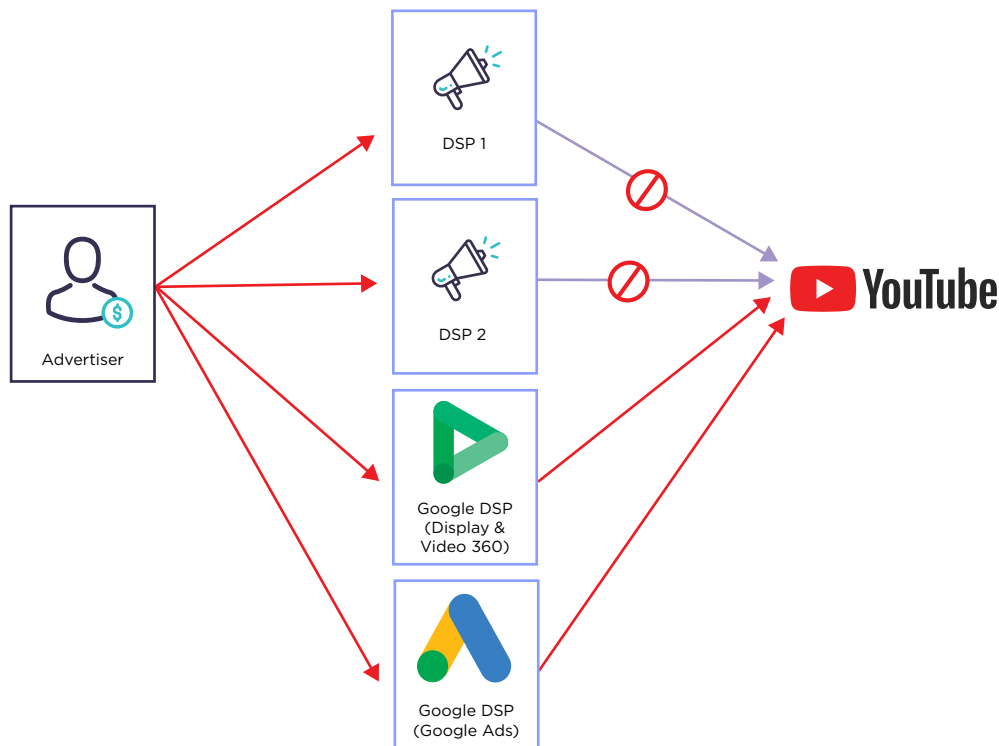
4.4 Google has restricted purchase of YouTube inventory to its DSPs

In this section, we discuss our concerns that Google has leveraged its strong position as a provider of programmatic video ad inventory through YouTube to provide its DSPs (Google Ads and Google Display & Video 360) with a competitive advantage and limit the ability of rival DSPs to compete on their merits.

4.4.1 YouTube ad inventory can only be purchased programmatically through Google's DSPs

The only way that advertisers can purchase YouTube inventory through the ad tech supply chain is via Google's own DSPs (Google Ads or Display & Video 360). While YouTube inventory was previously available to third-party DSPs, Google removed this access at the end of 2015. Since then, advertisers who want to buy YouTube inventory through the ad tech supply chain have no alternatives to using Google's DSPs.

Figure 4.2: The availability of YouTube inventory through the ad tech supply chain



Outside of the ad tech supply chain, advertisers can purchase YouTube inventory through direct negotiations with Google representatives or with select YouTube partners, who run premium YouTube channels and are approved by Google to directly sell advertising on their YouTube content.¹⁹¹ However, these alternative avenues for purchasing YouTube ad inventory are not widely used, and together made up a very small percentage of total impressions sold on YouTube in Australia in 2020.

We consider that these alternative channels are unlikely to be a practical route for purchasing YouTube inventory for many advertisers. First, these channels are not viable options if advertisers are looking to make full use of the benefits of programmatic advertising (such as being able to purchase and edit ads on a real time basis). This is because they sit outside the ad tech supply chain. Separate and additional

¹⁹¹ Google, [Google Ads Help: About reserved media placements on YouTube](#), accessed 3 December 2020; Google, [Google Ads Help: How ads show on videos you monetize](#), accessed 3 December 2020.

negotiation with a Google representative, or a YouTube partner, for YouTube ad inventory in addition to the use of ad tech is also unlikely to be practical for many advertisers.

Secondly, there are a number of benefits to advertisers in limiting the number of platforms used to purchase advertising (such as being able to more consistently measure and manage ad campaigns, as discussed in chapter 3).

Thirdly, publicly available information suggests that there is a relatively small volume of inventory available via these alternative channels, and that it is generally more premium or unique ad inventory. It is therefore likely to be more difficult to access in comparison to purchases through Google's DSPs and may be more expensive for many advertisers. For example, direct purchases through YouTube ad sales appears to be for limited inventory such as the YouTube homepage, and pricing is 'based on pre-determined spend with higher cost commitments'.¹⁹² Similarly, Google indicates that YouTube has allowed only 'a few partners' to directly sell ads to advertisers for their content on YouTube.¹⁹³

As such, direct negotiations with Google representatives or select YouTube partners are likely to be only used by a small number of larger and more sophisticated advertisers. This means that most advertisers looking to purchase YouTube ad inventory will have to use one of Google's DSP services.

4.4.2 Restrictions on YouTube inventory impact competition for DSP services

We consider that the restrictions on how YouTube ad inventory can be purchased limits the scope for rival DSPs to compete with Google.

The importance of YouTube provides strong incentives for advertisers to use Google's DSPs

YouTube inventory is very important for many advertisers. This means that Google's DSPs are 'must have' services for many advertisers as it is nearly the only way to access this inventory. YouTube is important to advertisers due to the large group of consumers YouTube reaches, and the unique purpose of video advertising in comparison to other forms of display advertising.

YouTube has a wide reach and is a significant source of video inventory

One factor that makes YouTube important for advertisers is that it provides the opportunity to advertise to a large consumer base through the ad tech supply chain. We estimate that advertising expenditure on YouTube represents a significant proportion of advertiser expenditure on ad inventory sold programmatically.

A number of stakeholders (including the Australian Association of National Advertisers (AANA), Daily Mail Australia, Free TV and Oracle) submit that YouTube is typically seen as a 'must have' for advertisers given its unique scale and reach among consumers, resulting in the need for advertisers to use Google's DSPs.¹⁹⁴ For example the AANA submits that YouTube is:

'by far the dominant ad-funded video platform in Australia' and that 'most major brand advertisers and many direct response advertisers use YouTube as a core part of their video marketing strategy. It provides reach and scale across all demographics and advanced targeting capabilities and is a 'vital part of the advertising mix'.¹⁹⁵

This is also supported by information from ad tech providers, with one provider stating that YouTube is the 'most frequently used video on demand service in Australia'.

192 Google Ads Help, [Google Display Network and YouTube on computers, mobile devices, and tablets](#), accessed 13 July 2021; Google Ads Help, [About reserved media placements on YouTube](#), accessed 12 August 2021.

193 Google, [YouTube Help: How ads show on videos you monetize](#), accessed 29 June 2021.

194 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, pp. 11, 15; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 21; Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 10; Oracle Corporation, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, pp. 88–89; Oracle Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 10.

195 AANA, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 8.

While YouTube inventory does not make up a large proportion of overall display advertising inventory (which includes social media, as well as publisher websites and apps),¹⁹⁶ we do not consider that this means YouTube is not important inventory for advertisers. There are many different types of display advertising which meet different needs of advertisers and are of differing value.¹⁹⁷

A factor that distinguishes YouTube ads from other forms of display ads and video ads is the unique reach of ads on YouTube. This is due to YouTube's significant size compared to other sources of video advertising, which suggests that a significant number of users only watch video ads on YouTube's platform. Therefore, if advertisers want to deliver programmatic video ads to this group, they must use Google's DSPs. Advertisers wanting to deliver video ads to these users may have limited alternatives to YouTube. This provides advertisers with additional incentives to use YouTube, and therefore Google's DSPs.

Another attractive feature of YouTube inventory for advertisers is the ability to target ads using data from Google's consumer-facing services. As discussed in chapter 3, Google uses its first-party data to target advertising on its owned and operated inventory including YouTube. This means that, in addition to having access to unique scale and reach among consumers, users of YouTube advertising are also able to make use of Google's first-party data.¹⁹⁸

Additionally, a number of DSPs have commented on the importance of accessing YouTube ad inventory. One DSP stated that YouTube inventory is particularly important, and that the lack of access has a significant impact on their business. Another DSP indicated that a lack of access to YouTube inventory limited its ability to deliver its services, while another described it as a big problem for their service. Further, one DSP indicated that DSPs' exclusive access to certain inventory, such as Google's access to YouTube, can stifle competition.

Some internal documents indicate YouTube is considered to be an important selling point of Google's DSPs. While documents identify a range of selling points for Google's DSP, examples showing the importance of YouTube include:

- an internal Google document indicated that the biggest unique selling point of Display & Video 360 is the availability of YouTube inventory
- another Google document which stated that exclusive access to YouTube inventory is part of the core value proposition of Display & Video 360.

Video advertising on social media has limited impact on advertisers choice of DSP

While advertising spend on Facebook, which includes video advertising on Facebook, makes up a significant portion of total display advertising spend in Australia, we do not consider that this means that access to video ad inventory on YouTube is any less of a 'must have' for many advertisers.

If advertisers are choosing between DSPs for video inventory, the availability of video inventory on social media platforms such as Facebook, Instagram, Twitter, and Snapchat would not affect their choice of DSP. This is because the video ad inventory on these platforms is not available via any DSP. As such, the competitive constraint these other sources of video advertising place on Google's DSPs is likely limited.

Further, there are differences in the way that users interact with content and therefore view ads on social media platforms as compared to YouTube. This means that advertisers may be less likely to see the video advertising offered on these platforms as substitutes. For example, ads on Facebook and Instagram are generally not in-stream video ads. Instead, a consumer can determine if video ads

196 ACCC, [Digital Platforms Inquiry Final Report](#), 26 July 2019, p. 98.

197 For example, a key factor that distinguishes video ads on YouTube from other forms of display advertising is that video ads on YouTube are all 'in-stream' video ads. In-stream video ads play as part of video content that users have clicked to watch. Out-stream video ads typically play in non-video environments such as on news publisher websites, where a video ad may play as users scroll through an article. All video ads on YouTube are currently in-stream video ads. Video ads on broadcaster video on demand (BVOD) services are also in-stream. Differences in prices show that there is a distinction between ad formats, with in-stream video ads commanding higher fees than out-stream video ads and more traditional display advertising, and there may also be differences in ad performance (see Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, pp. 2, 15 and chapter 2 for more information on pricing for video and other display advertising).

198 See chapter 3 for further discussion on Google's data advantage.

are played or not, and can also scroll past ads they don't want to view. This is in contrast to in-stream video ads on YouTube which play at the start, during, or after users watch videos, and often cannot be skipped or can only be skipped after a certain time period has elapsed.

Advertisers' ability to multi-home does not alleviate competition concerns

As discussed in chapter 3, it is possible for advertisers to multi-home across multiple DSPs. This means that advertisers who want to access YouTube ad inventory will need to use a Google DSP, but can also use other DSPs for purchasing non-YouTube ad inventory. However, we consider that this does not mitigate the competition concerns relating to the restriction of nonGoogle DSP access to YouTube inventory, for a number of reasons.

First, as discussed in chapter 3, in practice there are a number of factors that can lead advertisers to single-home for DSPs. This includes the downsides associated with multi-homing, such as difficulties in consistently measuring and managing ad campaigns, and the complexities involved with multi-homing. These factors can also mean that advertisers which multi-home may still be inclined to run a large proportion of their advertising spend through one DSP (a primary DSP).

Further, DSPs, including Google (via its Display & Video Incentives Program), commonly offer volume discounts or other incentives as part of their strategy to encourage advertisers to increase spend on their platform.¹⁹⁹ While volume discounts and incentive programs are often used by firms to compete for customers, they may also harm competition in some instances. Under Google's Display & Video Incentives Program, some advertisers in Australia are offered incentives based on ad spend via Google's DSPs. This could result in advertisers moving portions of open display advertising spend away from other DSPs that they may potentially be using. Additionally, under Google's Display & Video Incentives Program, Google also offers incentives for some advertisers in Australia to increase their spend specifically on YouTube. Advertisers may then spend less on other video ads or advertising in general. Where alternative ads are purchased via third-party DSPs, it could result in advertisers spending less on these platforms or even ceasing to use these platforms.

Given the downsides of multi-homing and advantages of single-homing, we consider that advertisers who want to purchase YouTube inventory will either:

- single-home on Google's DSP, or
- if they multi-home, use Google's DSP as their primary DSP (that is, predominantly allocate their advertising spend to Google's DSP) or at least use Google's DSP as one of their key DSPs.²⁰⁰

We consider that this disadvantages Google's rivals such that they are less able to compete on their merits. The majority of the advertisers we spoke with over the course of the Inquiry indicated that they single home on one of Google's DSPs. While some ad agencies, and a small number of advertisers indicated that they multi-home on DSPs, Google's DSPs were the only DSPs that were used by all of them. The CMA also found that this was the case for the selection of advertisers it surveyed during its market study into online platforms and the digital advertising.²⁰¹

Other exclusive inventory does not mitigate competition concerns

Google's DSPs are not the only DSPs which provides access to exclusive ad inventory. However, we do not consider that exclusive ad inventory offered by other DSPs mitigates the competition concerns of Google's restrictions on access to YouTube ad inventory. For example, we understand that The Trade Desk is the only DSP selling TikTok ad inventory and Amazon sells exclusive access to Twitch.²⁰² However, there are some differences between the sale of exclusive TikTok and Twitch ad inventory, and YouTube ad inventory.

199 For example see Google, [About advertising incentives](#), Advertising Policies Help, accessed 5 December 2020.

200 Larger advertisers or agencies are more likely to have sufficient resources and capability to multi-home.

201 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M104.

202 The Trade Desk, [The Trade Desk and TikTok Launch New Advertising Partnership in Asia Pacific](#), accessed on 23 November 2020; P Murphy, [The Trade Desk launches advertising partnership with TikTok in APAC](#), 19 March 2020, accessed 23 November 2020.

First, while The Trade Desk is the only DSP through which TikTok ad inventory is available through open display channels, TikTok ad inventory can also be purchased through a 'self-serve advertising solution', meaning that advertisers are able to access TikTok ad inventory through a platform that is not The Trade Desk's DSP.²⁰³ This is different to Google, which does not offer an alternate platform for advertisers to use to buy YouTube ad inventory.²⁰⁴

Secondly, it appears unlikely that access to ad inventory on Twitch is as important to advertisers as YouTube ad inventory.²⁰⁵ For example, in 2019 Twitch advertising revenue was estimated to be \$300 million, whereas YouTube's was USD\$15 billion.²⁰⁶ Additionally, Twitch likely appeals to narrower audience than YouTube, as it is a live streaming platform predominantly covering video games. Further, we have not heard from stakeholders that TikTok is a 'must have' for video advertising in the same way as YouTube.

Generally, publishers should be free to determine how they sell their own ad inventory, including selling it exclusively through their own systems. However, we consider that Google's exclusive sale of YouTube inventory differs from other closed systems where inventory is sold directly to advertisers (for example, Facebook and Snapchat). This is because Google's DSPs compete with rival ad tech services more broadly and facilitate advertisers purchasing ad inventory from third-party publishers. This therefore raises competition concerns, as Google is able to leverage its position as a seller of valuable ad inventory into the supply of DSP services.

4.4.3 Google does not have strong reasons for restricting access to YouTube

Google has provided a number of reasons for its decision to restrict access to YouTube. If such reasons were strong, it is likely we would have fewer concerns about the potential competitive impact of the conduct. However, we are not convinced that it is necessary for Google to restrict access to YouTube.

In a blog post published at the time that Google stopped making YouTube ad inventory available through third-party DSPs, Google suggested it was restricting access to improve the way that YouTube ads were sold programmatically.²⁰⁷ More recently, Google provided the ACCC with a number of reasons for restricting access to YouTube inventory.

First, Google notes that sales to third-parties through its ad exchange was 'never a significant distribution channel for YouTube' and that these low volumes did not justify the cost of maintaining third-party access. Additionally, Google submits that YouTube was focusing its finite resources on developing the newer TrueView inventory (a type of ad format which Google states offers 'better value and a higher quality user experience').²⁰⁸ While we acknowledge that the amount of YouTube ad inventory sold using third-party services may have been low when the restrictions were put in place, we consider that this does not lessen the competitive impact this conduct has since had on the supply of DSP services, as YouTube has substantially grown its audience. YouTube inventory appears to be considered more important by many advertisers today, and therefore it is important for third-party DSPs to provide access to such inventory.

It is also submitted by Oracle that it is doubtful that significant technical resources would have been required by Google to maintain a programmatic selling route for third parties on YouTube, given the programmatic selling route for Google's own DSP (Display & Video 360) remained.²⁰⁹

203 See P. Murphy, [TikTok launches self-serve ad solution](#), AdNews, 9 July 2020, accessed 26 August 2021.

204 As discussed in section 4.4.1, YouTube ad inventory can be purchased via direct negotiations with Google representatives and some YouTube partners but these avenues are unlikely to be practical for many advertisers.

205 Amazon, [Reach new audiences with Twitch and Amazon Advertising](#), 8 September 2020, accessed 13 October 2020; R Shields, [Amazon Opens Twitch's Ad Inventory to Programmatic Buyers](#), *Adweek*, 11 September 2020, accessed 13 October 2020.

206 M Perez, [Report: Amazon's Twitch Not Meeting Ad Revenue Expectations](#), *Forbes*, 8 January 2020, accessed 23 November 2020; T Bennett, [YouTube is a \\$15 Billion Ad Business, Google Reveals](#), 4 February 2020, accessed 23 November 2020.

207 N Mohan, [Focusing investments to improve buying on YouTube](#), *DoubleClick Advertiser Blog* (Google Blog), 6 August 2015, accessed 27 November 2020.

208 Confidential submission from Google (published with consent).

209 Oracle Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 10.

Secondly, Google submits these restrictions are a way to ensure ads appearing on YouTube are of a 'consistently high quality', and that third-party access could make it harder to scan for 'bad ads'. Further, it submits that all web property owners, such as Facebook, Twitter, LinkedIn and Snapchat, make decisions on how to sell ad inventory in order to preserve the quality of first-party inventory.²¹⁰ However, we consider that many publishers of high quality inventory allow the sale of their inventory across a range of DSPs, and that these DSPs also have systems in place to scan for 'bad ads'. Additionally, Google itself provides third-party access to ad inventory on many publisher websites where publishers utilise Google's ad tech services. Oracle submits there is no reason Google could not scan for inappropriate ads transacted via third parties, as Google already has the capability to scan for inappropriate ads at scale and currently does this for other publisher websites.²¹¹

Finally, Google submits that privacy laws restrict it from 'sharing the level of user-identifiable data that would likely be required for a third-party DSP to be able to target effectively against YouTube inventory'. Google adds that if third-party DSPs were given access to YouTube ad inventory, it would allow them to 'build profiles of users based on their viewing history, without the user's knowledge or ability to control'.²¹² However, we consider that other DSPs regularly help advertisers buy inventory from publishers on the internet, without infringing privacy laws. While the collection and use of data can raise privacy concerns as discussed in chapters 2 and 3, Google's argument here suggests that other DSPs cannot be used to buy inventory in a privacy safe way. The ACCC also notes that while Google has expressed a concern about protecting user privacy, Google already collects a large amount of data on users visiting non-Google sites to 'build profiles of users, without the user's knowledge or ability to control'.²¹³

4.4.4 Google's restrictions on access to YouTube ad inventory are likely to have lessened competition in the supply of DSP services

We consider that restricting access to YouTube ad inventory to Google's DSP services is likely to have lessened competition in the supply of DSP services by limiting the proportion of advertiser spend rival DSPs can compete for, which may deprive rival DSPs the scale necessary to be fully effective competitors.

This is due to the following factors:

- Google's DSPs are the only way to access YouTube inventory for most advertisers.
- YouTube ad inventory is seen by many advertisers as 'must have' as it offers large reach and represents the largest supply of video ad inventory available for purchase via the ad tech supply chain. YouTube ad inventory is also differentiated from many other forms of display advertising.
- Despite advertisers having the ability to multi-home on DSPs, there are a number of downsides to multi-homing and conversely a number of benefits to single-homing which leads many advertisers to single-home on Google's DSPs. Further, where an advertiser multi-homes and wishes to access YouTube inventory, it is likely to predominantly allocate ad spend to Google's DSPs.

We consider that Google's restriction of access to YouTube inventory to Google's DSPs has likely lessened competition in the provision of DSP services, and contributed to Google's strong position in supplying these services.

210 Confidential submission from Google (published with consent).

211 Oracle Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 11.

212 Confidential submission from Google (published with consent).

213 ACCC, [Digital platform services inquiry – September 2020 interim report](#), September 2020, p. 47.

4.5 Google has channelled demand from its DSPs (particularly Google Ads) to its own SSP

In this section, we examine whether Google's DSPs (Google Ads and Google Display & Video 360) are channelling demand from their services to Google's SSP, limiting the ability of rival SSPs to compete with Google's SSP.

'Channelling demand' refers to a deliberate decision to design Google's ad tech services in a way that directs a disproportionate volume of high value bids from Google's DSPs to Google's SSP. This demand may be available to non-Google SSPs, but only in limited circumstances (for example, for the purpose of 'retargeting'). The bids sent from Google's DSPs to non-Google SSPs may be of lower value and therefore less likely to win or provide publishers with as much revenue.

We consider that this is particularly the case for Google Ads, which is considered by publishers to provide them with 'must-have' advertiser demand. In contrast, while it is easier to access Display & Video 360 demand when using Google's SSP, it is less clear that this constitutes channelling.

4.5.1 Google's SSP has unique access to Google Ads demand

We consider that Google has leveraged the strong position of its DSP, Google Ads, into the supply of SSP services. This is because Google Ads demand is important to publishers and is primarily available through Google's SSP.

Google Ads demand is primarily available through Google's SSP

The majority of Google Ads demand is channelled through Google's SSP. This means that to access the full demand from Google Ads, publishers must use Google's SSP.

Google submits it is not correct that third-party SSPs cannot access Google Ads demand in real time; or Google has sought to drive Google Ads demand through its ad exchange to compel publishers to use its publisher ad server. It states that third-party SSPs are able to access Google Ads demand for specific targeting purposes and certain advertising campaigns (remarketing, similar audience, interest category marketing and keyword campaigns). Google also submits that the Google Ads user interface is designed with a focus on ease of use and simplicity, which means that advertisers cannot select different ad exchanges for bidding.²¹⁴

We consider that while it may be technically correct that Google Ads demand can be accessed by third-party SSPs, our analysis of data demonstrates that, in practice, Google Ads demand is not available through these SSPs to a comparable extent.

We note that it is possible for third-party SSPs to access Google Ads demand for specific targeting purposes. This is likely because some advertisers will place a high value on the ability to target some inventory that is not available on Google's SSP. Google's decision to allow Google Ads demand to be sent to third-party SSPs in these circumstances appears to be intended to prevent these advertisers from switching to another DSP. However, while Google Ads will purchase inventory from third-party SSPs it does so to a very limited extent, and the vast majority of Google Ads demand is sent through Google's SSP.

Data analysed by the ACCC shows that:

- For a sample period in 2021, the overwhelming majority of Google Ads' winning bids on display inventory went to Google's SSPs and ad networks. Only a very small percentage of Google Ads' winning bids went to third-party SSPs.
- Several major SSPs do not receive any demand from Google Ads.

214 Confidential submission from Google (published with consent).

This indicates that demand from Google Ads is primarily available through Google's SSP and ad network services, and bids sent from Google Ads have a much greater likelihood of winning auctions held on Google's SSP compared to auctions on third-party SSPs.²¹⁵

Importantly, it also appears that many publishers were of the understanding that Google Ads demand is only actually available through Google's SSP.²¹⁶ Further, we understand that Google has, in the past, promoted this. For example, Google has previously stated online that its SSP allows publishers to 'Connect inventory to unmatched global demand..Only [Google's SSP] connects you to millions of [Google Ads] advertisers, plus a worldwide pool of top networks, trading desks and DSPs. Increase competition for every impression with unparalleled global demand'.²¹⁷ In addition, the Autorité de la Concurrence (the French Competition Authority) found that any competitive advantage that other SSPs may have from being able to access Google Ads demand is limited, because while other SSPs can receive demand from Google Ads, Google prohibits these other SSPs from advertising this fact.²¹⁸

While it is technically possible to access demand from Google Ads via non-Google SSPs, the ACCC considers that it is not significant for most publishers due to the very low percentage of demand that is available through non-Google sources.

Restrictions on access to Google Ads demand impacts competition

We consider that the channelling of Google Ads demand to Google's SSP's is likely to lessen competition by limiting the publishers rival SSPs can compete for, and by depriving many rival SSPs of the scale necessary to be fully effective competitors. This is primarily because publishers consider Google Ads demand to be a 'must-have'.

The ability for publishers to access Google Ads demand is important as it represents a large proportion of demand accessible by SSPs in programmatic display advertising. This is supported by the large market share of Google Ads, which has a 30-40% share of revenue and a 50-60% share of impressions in Australia in 2020. This means that it represents a significant volume of advertiser expenditure that publishers seek to access in order to maximise their revenue.

Multiple stakeholders submitted that access to Google Ads is very important to publishers.²¹⁹ For example, Daily Mail Australia states that most publishers consider access to this demand to be a 'must have'.²²⁰

Further, the ACCC notes that bids from Google Ads make up a significant proportion of the winning bids for impressions made available through Google's SSP in Open Auctions.²²¹ The ACCC considers that access to Google Ads bids is a significant factor in a publisher's decision to use Google's SSP. A publisher submits that within Google's SSP, Google Ads is an important demand source, accounting for 45% of its revenue and 70% of its impressions through Google's SSP.

215 This is consistent with evidence considered by the CMA. It stated that '[i]t is clearly the case that a lot of the demand from Google's DSPs, and particularly from Google Ads, is channelled through [Google's SSP]', and that the aggregate value of ads won by Google Ads through Google's SSP was several times that of impressions won through third-party SSPs, see Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M109.

216 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 5, 25; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, pp. 13-14; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 30-31.

217 DoubleClick by Google, *DoubleClick Ad Exchange*, Retrieved from <https://web.archive.org/web/20170810192643/https://www.doubleclickbygoogle.com/solutions/revenue-management/ad-exchange/> 10 August 2017, accessed 26 August 2021.

218 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 52.

219 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 5, 25; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, pp. 13-14; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, p. 31.; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 30.

220 Daily Mail Australia, [Submission to Interim Report](#), February 2021, p. 17.

221 Google Ads does not compete for other deal types on Google's SSP, such as private auctions or programmatic guaranteed.

Another reason that Google Ads demand is important to publishers is that it is unique. Google Ads is Google's 'self-service' DSP service, accessible to smaller advertisers that have fewer resources to devote to using a more complex DSP service. Data analysed by the ACCC shows that between 90,000 and 100,000 Australian customers used Google Ads in 2020, giving it significantly more customers than any other DSP or ad network. This suggests many advertisers are only using Google Ads. This in contrast to other DSPs, where some of their customers will also buy programmatic advertising from other DSPs.

Further, in the same period, the average amount spent by Australian customers for the use of Google Ads is significantly smaller than all other DSPs. Together this shows that Google is the main DSP used by small advertisers. Many smaller advertisers are more likely to use Google Ads as their only DSP due to its relatively simple self-service interface, lack of minimum spend and monthly platform fee requirements, and its ease of use. This means that the only way for publishers to access demand from these small advertisers is through Google Ads.

Access to the unique advertisers that use Google Ads is important to publishers, as increasing the volume of bids increases the level of competition for their ad inventory. This may therefore lead to them to receive higher prices for their ad inventory or to sell inventory that they would not otherwise sell.

Therefore, we consider that publishers are likely to use Google's SSP in order to access Google Ads demand. This means that they will either:

- single-home on Google's SSP, or
- if they multi-home, use Google's SSP as one of their SSPs.

This access to Google Ads demand has likely contributed to Google's position in the supply of SSP services discussed in chapter 3, and has likely lessened competition in the provision of SSP services.

Google submits that looking at Google Ads in isolation is an artificial means of constructing a narrative that Google pushes demand to its own ad exchange for anticompetitive reasons. It ignores the fact that Google also offers advertisers a product – Display & Video 360 – that is specifically designed to buy across many SSPs and many advertisers use this product.²²²

However, the fact that Google's other DSP service, Display & Video 360, is available through third-party SSPs does not remove the competitive disadvantage to other SSPs from not having full access to Google Ads demand. This is because access to Display & Video 360 demand is unlikely to be a complete substitute for Google Ads demand for many publishers. Based on our analysis and feedback from stakeholders, we consider it unlikely that most Google Ads users will also use Display & Video 360.

4.5.2 Google's SSP may have greater access to Display & Video 360 demand

Demand from Google's other DSP, Display & Video 360, also appears easier to access through Google's SSP, albeit to a lesser extent than the channelling of Google Ads demand. We consider that this highlights Google's ability to preference its own services and the uncertainty this can raise for stakeholders.

Display & Video 360 demand may be easier to access through Google's SSP

A number of stakeholders have submitted that Google is preferencing its own SSP by sending more advertiser demand from Display & Video 360 to its own SSP than non-Google SSPs.²²³ Google disputes this, and submitted to the CMA that Display & Video 360 submits a bid for a bid request according to parameters set by the advertiser.²²⁴

222 Confidential submission from Google (published with consent).

223 Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 6; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 55.

224 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M108.

Data analysed by the ACCC shows that during a sampled period in 2021, the majority of Display & Video 360 winning bids went to Google's SSP and Google's ad networks as compared to third-party SSPs. Data also indicates that Display & Video 360 sent a significantly higher proportion of bids to Google's SSP, compared to non-Google DSPs from which the ACCC was able to obtain data.

We have also heard from stakeholders that, while Display & Video 360 demand can be accessed through non-Google SSPs, until recently the activation of certain targeting features in Display & Video 360 by advertisers resulted in Display & Video 360 channelling their demand to Google's SSP.²²⁵

The Autorité de la Concurrence (French Competition Authority), recently found that Display & Video 360 directs client purchases to Google's SSP. The Autorité also noted that when specific features within Display & Video 360 are enabled, Display & Video 360 restricts purchases to Google's SSP.²²⁶

A similar claim is made in the Texas Attorney General's case against Google, where it was submitted that, 'Google makes many of the features in [Display & Video 360] (e.g., affinity audiences targeting) unavailable to advertisers if they [use SSPs] other than Google's, which results in many advertisers using Google's [SSP] even though they would not do so in a competitive market.'²²⁷ The ACCC understands that there is evidence that this conduct is continuing, and is not disclosed to advertisers using Display & Video 360. This means that advertisers may unknowingly make selections that would direct Display & Video 360 to only buy ad impressions through Google's SSP.

Based on the above, the ACCC is of the view that it is easier to access demand from Google's Display & Video 360 demand through Google's SSP. However, it is not clear to the ACCC that demand from Display & Video 360 is necessarily being channelled by Google to its SSP.

Potential impact of Google's SSP having greater access to Display & Video 360 demand

To the extent that Google's SSP has greater access to demand from Display & Video 360, the impact of the conduct may be less significant than the channelling of Google Ads demand to Google's SSP. This is because third-party SSPs have a greater ability to access Display & Video 360 demand. However, this concern does highlight issues around Google's ability to preference its own services, and the uncertainty this can create for stakeholders. This is evidenced by stakeholder concerns regarding the risk of self-preferencing conduct.

In relation to the ability of rival SSPs to access demand from Display & Video 360 when certain targeting categories are selected by the advertiser, we understand that there may be technical or efficiency reasons why this targeting is only able to take place using Google's SSP. However, we are concerned that Google may not be disclosing the impact of selecting certain targeting criteria to advertisers. That is, advertisers may not know that this will result in Google's DSPs only buying ad impressions through Google's SSP.

4.6 Google's publisher ad server has given preference to its SSP over time

In this section, we discuss our concern that Google has used its publisher ad server to preference its SSP over time. This was to the benefit of Google's SSP and to the detriment of publishers who use Google's services. This conduct is less relevant today than it has been in the past, due to recent changes in how Google's ad tech auctions operate. However, the cumulative effect of such conduct over time appears to have been to provide Google's SSP with a competitive advantage while limiting the ability of other SSPs to compete, and has likely lessened competition amongst SSP services.

225 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), February 2021, p. 20.

226 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 53.

227 Complaint of the State of Texas et al. v. Google LLC, Case No 4:20-cv-00957-SDJ, [redacted version](#), paragraph 111.

In particular, we consider the ways in which Google has given preference to its SSP through:

- Google's introduction of Dynamic Allocation in the late 2000s and changes to this system in 2014.
- Google's refusal to participate in industry-developed header bidding in 2015.

DoubleClick's publisher ad server was recognised as having a leading position at the time of Google's acquisition of the company.²²⁸ While data relating to market shares in Australia is unavailable for the years immediately following Google's acquisition of DoubleClick, other sources indicate that the leading position of Google's publisher ad server has been maintained and its share has grown since the acquisition.²²⁹ We estimate that, in 2020, Google's publisher ad server had a share of impressions of 90-100% in Australia and we consider that Google is likely to have been able to leverage its position of strength in publisher ad servers to preference its SSP.

4.6.1 Google's Dynamic Allocation gave its SSP a unique opportunity to submit real-time bids

In the late 2000s, Google's publisher ad server implemented a function called Dynamic Allocation.²³⁰ Google then introduced changes to these functions in 2014, called Enhanced Dynamic Allocation. The following explains how these functions likely provided Google's SSP with a competitive advantage that limited the ability of competitors to compete. We understand that the competitive advantage that Enhanced Dynamic Allocation provided Google became less relevant in 2018, when Google changed the way its publisher ad server operated as part of the introduction of Open Bidding.

Dynamic Allocation and Enhanced Dynamic Allocation let only Google's SSP submit real-time bids

Before Dynamic Allocation was introduced, publishers sold their ad inventory through a 'waterfall' process conducted on the publisher ad server.²³¹

228 European Commission, [Google/DoubleClick: The first test for the Commission's non horizontal merger guidelines](#), accessed 26 August 2021; Federal Trade Commission, [Statement of Federal Trade Commission concerning Google DoubleClick FTC File No. 071-0170](#), accessed 26 August 2021; Federal Trade Commission, [Economics at the FTC: The Google-DoubleClick Merger, Resale Price Maintenance, Mortgage Disclosures, and Credit Scoring in Auto Insurance](#), accessed 26 August 2021; The American Antitrust Institute, [Google Acquisition of DoubleClick: Antitrust Implications](#), accessed 26 August 2021; Google, [News from Google - Google to acquire DoubleClick](#), accessed 26 August 2021;

229 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), pp. 70-71; News Corp Australia, [Submission to the ACCC Digital Platforms Inquiry Issues Paper](#), pp. 36, 52.

230 This function was first developed before Google acquired its publisher ad server and SSP from DoubleClick.

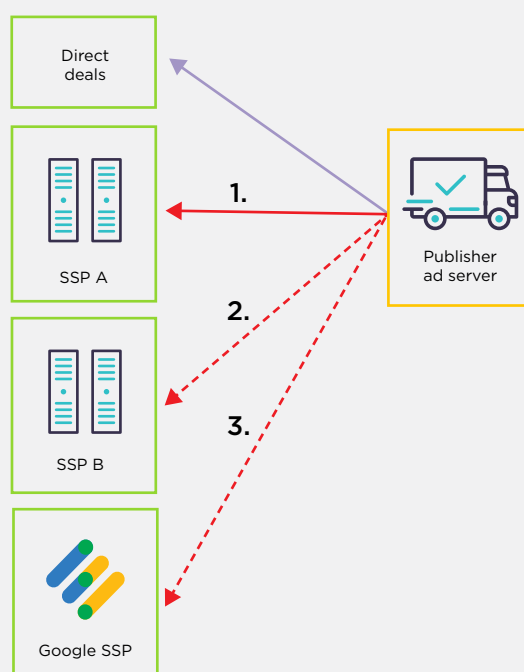
231 This waterfall system is still used in publisher ad servers in some circumstances.

Box 4.2: Waterfall process in publisher ad servers

Under this process, the publisher ad server would first check to see if there were any direct deals in place that needed to be fulfilled if an ad impression was available. If there were no direct deals or if they had already been fulfilled, the publisher ad server would then offer the ad impression to SSPs, one at a time, in a set order determined by the publisher (as shown in figure 4.3 below). Publishers set the order of SSPs based on what they estimated the SSP would bid (based on its historical bids). The publisher ad server would then call each SSP in sequence, with each having the ability to submit a real-time bid for the ad impression. This process would continue until an SSP purchased the ad impression (generally when an SSP submitted a bid higher than the price floor set by the publisher) or no SSPs were left to bid.

In the following example in figure 4.3, the publisher ad server would first fulfil any direct deals in place. If there were no direct deals, the publisher ad server would then seek a bid from SSP A. If SSP A returned a bid higher than the price floor set by the publisher, then the process would finish and SSP A's bid would win. If SSP A did not return a bid or if the bid was not high enough, the publisher ad server would seek a bid from SSP B, and so on, until an SSP's bid won the inventory.

Figure 4.3: The waterfall allocation process occurring on a publisher ad server



This was an inefficient system as the publisher would potentially miss out on revenue that it could have earned. For example, in figure 4.3, SSP A would win the auction if it was able to bid higher than the price floor. However, it is possible that SSP B could have submitted a higher bid if it were called to bid. The publisher would then lose out on potential revenue by virtue of SSP B having been ranked lower, based on historical bids, even though in this instance it was willing to bid higher.

In the late 2000s, Google's publisher ad server stopped operating in this way and introduced a new system called Dynamic Allocation.

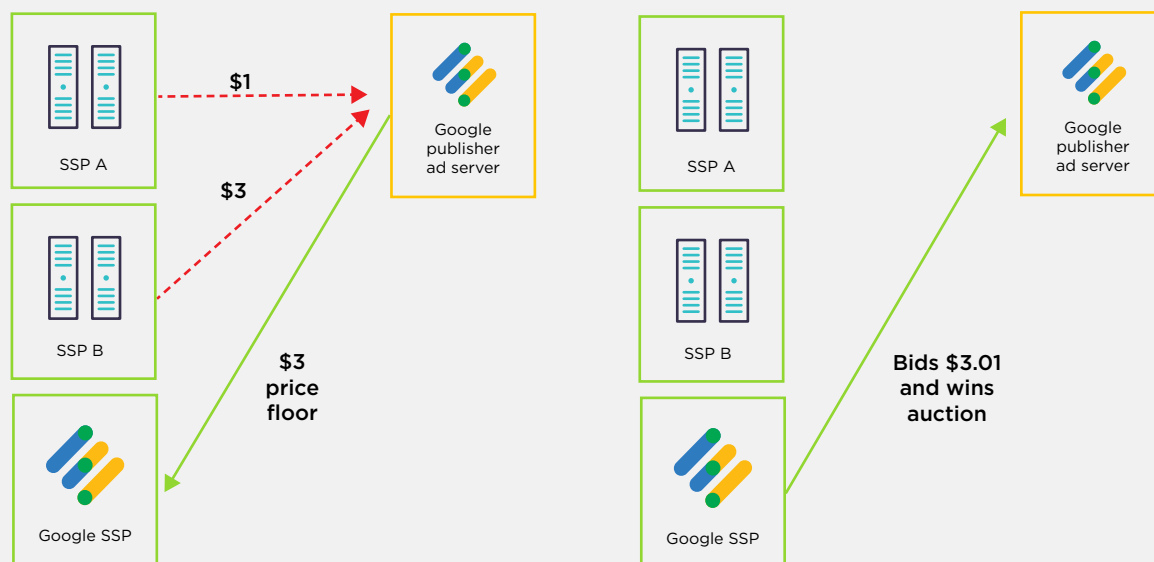
Box 4.3: Dynamic Allocation in Google's publisher ad server

Under Dynamic Allocation, Google's publisher ad server would allow Google's SSP an opportunity to submit a real-time bid outside of its usual order in the waterfall process. It would do this by taking the estimated bids for each SSP (based on their historical bids), and sending the highest estimated bid as a price floor to Google's SSP, which was given the opportunity to run an auction and submit a real-time bid for the ad impression before the other SSPs were called.²³² Google's SSP could win the auction as long as it was willing to bid \$0.01 higher than the price floor (that is, the highest estimated bid of a competitor SSP). No other SSP was provided this opportunity, and other SSPs would only be called to bid if Google's SSP did not win the ad impression. This process is illustrated in figure 4.4 below.

Figure 4.4: Dynamic Allocation on Google's publisher ad server

1. Google's publisher ad server sends the highest estimated bid from third party SSP as a price floor

2. Google's SSP can then submit a bid higher than the price floor and win the auction immediately before any other SSP is called



²³² See, e.g., G. Sloane, ['WTF is dynamic allocation?'](#), *Digiday*, 14 April 2016, accessed 26 August 2021.

In 2014, Google introduced changes to Dynamic Allocation, called Enhanced Dynamic Allocation, which not only continued to provide its SSP with the opportunity to submit real-time bids for ad impressions over other SSPs, but additionally over direct deals.

Box 4.4: Google's introduction of Enhanced Dynamic Allocation

Under Dynamic Allocation, direct deals would be fulfilled before Google's SSP (or any other SSP) was given the opportunity to bid for the ad impression. However, under Enhanced Dynamic Allocation, Google's publisher ad server would now take the prices of any direct deals, as well as the estimated bids from non-Google SSPs, and set the highest priced direct deal or estimated bid as a price floor. Third-party SSPs could win the ad impression if their estimated bid was higher than the direct deal (and Google's SSP had not submitted a bid), but only Google's SSP could run an auction to submit a real-time bid to beat the price floor.

Google's Dynamic Allocation harmed publishers and rival SSPs

Bitton and Lewis, in their report for Google, submit that Dynamic Allocation solved for 'inefficiency in the waterfall process' and resulted in higher yields for publishers.²³³ They explain that Dynamic Allocation allowed publishers to determine in real-time whether there were ad buyers willing to pay a price for ad inventory that was higher than the publisher's estimated bids from each SSP.²³⁴ Additionally, they submit that the introduction of Enhanced Dynamic Allocation increased competition between different demand sources, generating more revenue for publishers, and that third-party SSPs also benefited as they gained the opportunity to compete against guaranteed deals.²³⁵

While Google's Dynamic Allocation may have addressed some of the inefficiency in the waterfall structure, we consider that it gave unique advantages to Google's SSP by allowing it to compete on a real-time basis while other SSPs were unable to. Put simply, it limited competition between SSPs on Google's publisher ad server. This was to the benefit of Google's SSP and to the detriment of publishers and rival SSPs. That is:

- under Dynamic Allocation, Google allowed its SSP to bid on a real time basis before any other SSP was called by its publisher ad server
- under Enhanced Dynamic Allocation, Google allowed both Google's SSP and third-party SSPs to potentially win impressions ahead of direct deals, but it only allowed Google's SSP to submit a real-time bid.

The introduction of these functions by Google's publisher ad server gave Google's SSP an increased ability to bid on and therefore win ad impressions over other SSPs on Google's publisher ad server. This unique advantage is likely to have limited the ability of third-party SSPs to compete with Google's SSP. This is because rival SSPs only had the ability to bid on ad impressions offered by Google's publisher ad server, after Google's SSP had already had been given the opportunity to do so. As such, this is likely to have left a smaller portion of ad impressions for non-Google SSPs to bid on.

This view is supported by a number of stakeholder submissions.²³⁶ For example, Daily Mail Australia submits that through Dynamic Allocation and its modifications over the years, Google used the key function of the publisher ad server (determining how ad inventory is sold) to favour its own SSP, with the result of allowing Google to 'win more inventory at the lowest price possible'.²³⁷ Similarly, the Autorité de la Concurrence (the French Competition Authority) found that even after the introduction of Enhanced Dynamic Allocation, Google's SSP was the only SSP able to offer a bid for each ad

233 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 15-16.

234 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 15.

235 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 16-17.

236 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 23-24; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 17-18; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 37-41.

237 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 17, 23.

impression, with other SSPs only being solicited if Google's SSP did not submit a bid about the floor price.²³⁸

Further, while addressing some of the inefficiencies in the waterfall structure through Dynamic Allocation and Enhanced Allocation may have increased publisher revenue in the short term, it may be that publisher revenue would have increased by even more if these features enabled third-party SSPs to compete on a real-time basis. For example, rival SSPs may have submitted higher bids if given the opportunity to compete on a real-time basis with actual, rather than estimated, bids. An estimated bid does not take into account characteristics of users and their influence on the value of ad impressions.²³⁹ As a result, by limiting the level of competition on Google's publisher ad server, Google likely benefited at the expense of publishers.

The introduction of Unified Auction by Google in 2019 changed the way the Google's publisher ad server operates auctions, making the advantages afforded to Google's SSP under Dynamic Allocation and Enhanced Dynamic Allocation less relevant. Nonetheless, we consider it likely that the advantage given to Google's SSP by Google's publisher ad server from the late 2000s to 2019 contributed to Google's current strong position in the supply of SSP services.

4.6.2 Google's refusal to participate in header bidding gave it a 'last look' advantage

In 2015, to increase competition for their ad inventory, publishers adopted a new technology called header bidding, which provided other SSPs an opportunity to submit bids to compete for inventory on a real-time basis.²⁴⁰ However, Google's SSP did not (and still does not) participate in header bidding. The result of this is that Google's SSP gained a unique 'last look' advantage over rival SSPs when publishers were using header bidding.

238 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 30.

239 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 38.

240 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 24; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, p. 42; Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 12.

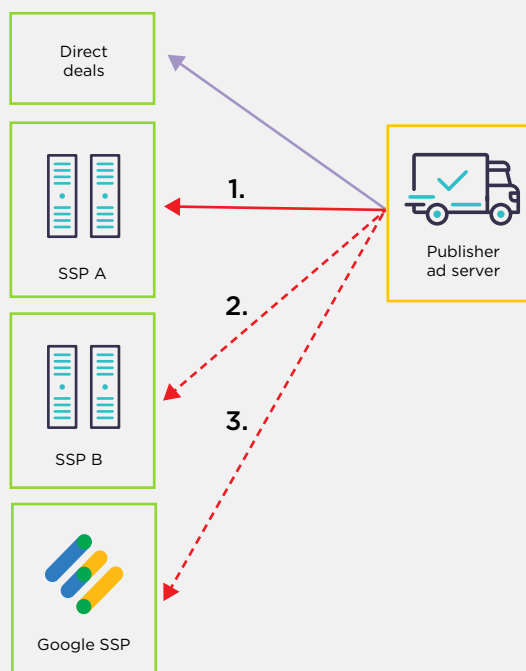
Box 4.5: How header bidding works

Header bidding is a process that allows multiple SSPs to bid on the same ad inventory at the same time (that is, to compete against each other in real-time), with the winning bid selected via auction. The auction is generally run on the consumer's web browser, before the publisher ad server is called to serve the ad, but it can also be run on a third-party server or publisher ad server.

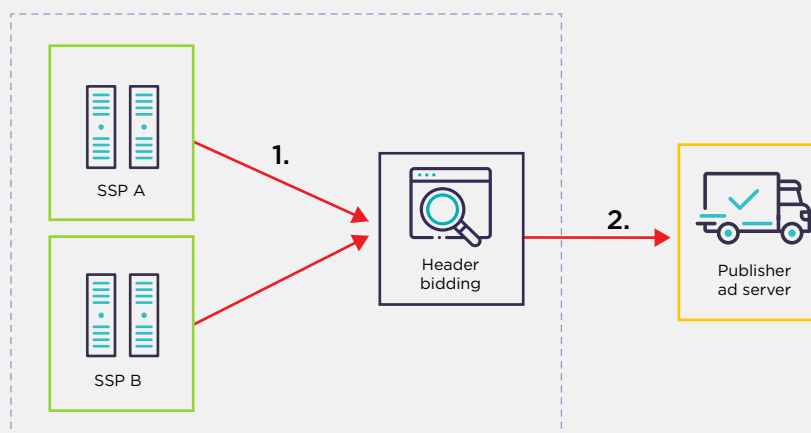
This allowed each participating SSP to submit its actual real-time bid for every auction run using header bidding. This is in contrast to the 'waterfall' process where the publisher ad server would call each SSP in a sequential order based on their historical bids.

Figure 4.5: Difference between 'waterfall' process run by a publisher ad server, and header bidding

Waterfall system: SSPs are called in a sequential way to submit bids on ad impressions



Header bidding system: SSPs submit bids in a real-time auction run by header bidding. The winner of the header bidding auction is then sent to the publisher ad server



The introduction of header bidding meant that third-party SSPs could compete for publishers' ad inventory more often. Publishers' ad inventory was exposed to more competition, as all chosen SSPs would compete at the same time in one auction as opposed to the waterfall process where SSPs were called individually in a sequential way. This meant that the SSP with the highest real-time bid would always win the ad impression, rather than being beaten by an SSP with a higher ranking in the waterfall but a lower real-time bid.

Header bidding therefore helped address this inefficiency associated with the waterfall process and, as a result, it is reported that many publishers saw increases in revenue for their ad inventory as they were more able to realise the full value of each ad impression sold.²⁴¹ Additionally, data analysed by the ACCC shows that sales of ad inventory via header bidding is a significant source of revenue for a number of major publishers in Australia. Further, some publisher data indicates that the average revenue per impression is higher for ad inventory sold via header bidding compared to open auctions on Google's SSP.²⁴²

However, Google's decision to not participate in header bidding meant that it continued to have an advantage over rival SSPs where Google's publisher ad server was used.

Box 4.6: Google's 'last look' advantage over header bidding

While all other SSPs were now competing with one another on a real-time basis in header bidding auctions, this auction occurred first and the winning bid was sent to the publisher ad server. If Google's publisher ad server was being used, the winning bid from header bidding would then be used in calculating the floor price sent to Google's SSP as part of the Enhanced Dynamic Allocation feature. Google's SSP then had the opportunity to submit a real-time bid to beat this price (determining if any buyer is able to submit a bid higher than the floor price). This advantage is often referred to as Google's 'last look' advantage.²⁴³ The information that Google received about the header bidding price may have allowed Google to submit a lower bid than it would otherwise submit if it was in direct competition with other SSPs through header bidding and could not see any of these prices.²⁴⁴ In particular, by knowing the winning header bidding price, Google's SSP only had to pay \$0.01 more in order to win the ad impression.

Additionally, the recently published decision by the Autorité de la Concurrence found that without Google having this 'last look' advantage, third-party SSPs would likely have won a significantly higher percentage of impressions.²⁴⁵

241 P. Chambers, [Ad Tech 101: Header Bidding Unwrapped](#), *AdNews*, accessed 26 July 2021; N. Maxwell, [Header Bidding: Not Just For Publishers' Benefit](#), *AdExchanger*, accessed 26 July 2021; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, pp. 3, 21; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 25; FreeTV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 12.

242 However, we note that the publisher data reviewed by the ACCC did not enable a detailed assessment of the factors driving the differences in average revenue per impression.

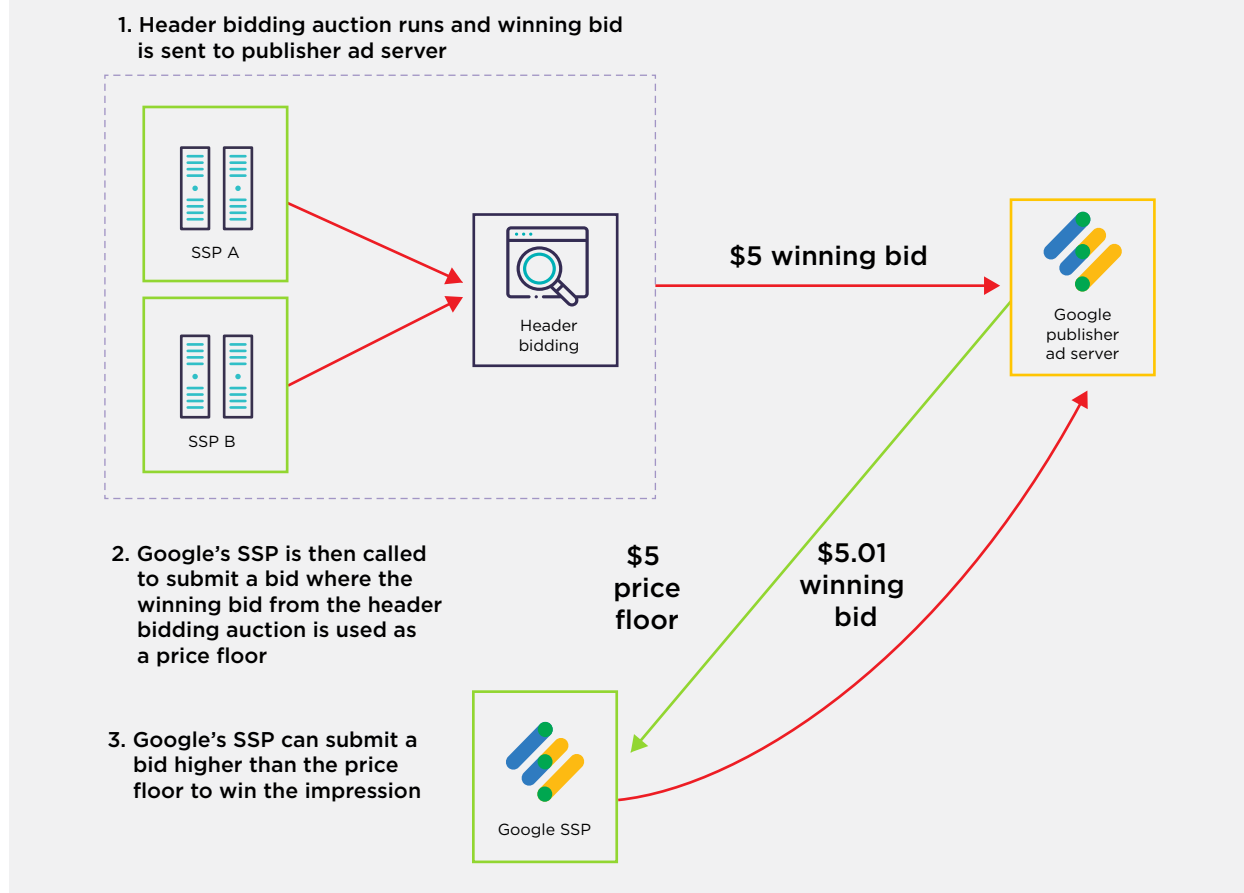
243 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 17; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 24-25.

244 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) pp. 39-43.

245 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) pp. 42-43.

In the below example, the winning header bidding bid is \$5. Google's publisher ad server then sends Google's SSP this \$5 bid as a price floor, as a result of the Enhanced Dynamic Allocation function. Google's SSP then has the opportunity to outbid the header bidding winner by \$0.01 for the impression.

Figure 4.6: Google's 'last look' advantage with header bidding



Google's reasons for not participating in header bidding

Google submits that there are legitimate reasons why it does not participate in header bidding. Most of these reasons, such as concerns about latency and transparency, purport to be in publishers' interest. However, many publishers, who themselves have a strong vested interest in ensuring advertising is operating effectively and efficiently on their sites, do not support these concerns.

For example, Google submits that the implementation of header bidding can create latency issues which impacts user experience, which can ultimately impact publishers' potential revenue.²⁴⁶ However, publisher stakeholders either express no concerns about this issue or submit that there are ways to manage any issues that arise.²⁴⁷ As noted above publishers have a vested interest in the user experience of their websites and their revenue is likely to be impacted if loading or using their website is too slow. Additionally, there are a number of measures publishers can put in place to resolve any latency issues that may occur. For example, they can limit the number of SSPs they allow to participate in the header bidding auction, set strict time-outs for the auction, or not utilise header bidding entirely.²⁴⁸

Google also submits that header bidding is not transparent, because 'although the publisher "accepts" the ad impression at a certain price, the Header Bidder may not actually pay the sum indicated in its

²⁴⁶ Confidential submission from Google (published with consent).

²⁴⁷ Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 3; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 24-25.

²⁴⁸ Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 3.

offer. Unlike Ad Manager, which counts/reports impressions, sends bills and collects/makes payments for publishers, when publishers use Header Bidding, publishers do not obtain this.’²⁴⁹ However, publishers do not share these concerns, and we note that they are free to choose alternatives if header bidding is not sufficiently transparent to meet their needs. Additionally, a number of sources consider that header bidding is actually more transparent compared to Google’s Open Bidding (Google’s proprietary solution that operates in a similar way to header bidding, discussed in more detail in section 4.7.1).²⁵⁰

We note that many publishers consider that header bidding is valuable to use, which is evidenced by its popularity among publishers, as discussed above.

Google also submits that header bidding creates trust and privacy concerns. Google states that it would not be able to ‘guarantee to buyers that data collected by the Header Bidding tag would be adequately protected since the data flow would be primarily controlled by the third-party Header Bidding service.’²⁵¹ It is not apparent to the ACCC why third-party header bidding services raise more significant concerns than Google’s own supply side ad tech services and associated privacy policies. Similar to the discussion above, we consider that the significant uptake of header bidding by other SSPs (noting that all other major SSPs appear to participate in header bidding) indicates that the privacy risk is likely not as significant as suggested by Google.

The ACCC considers that Google’s decision to not participate in header bidding was likely, at least in part, due to concerns that header bidding would decrease the strength of Google’s position in the supply of publisher side ad tech services. An internal Google document from 2018 relating to its Asia Pacific business stated that:

‘Exchange bidding is our response to the threat from header bidding and disintermediation, with competitors like Amazon and Facebook active in this space. Header tags threaten both 1) our position as ‘decision engine’ as RTB [real time bidding] decision starts outside the ad server and 2) our ability to ensure AdX has a fair look at the inventory in real-time. This is almost an existential risk on our sell-side business as it can hamper two of three product strategy pillars...’

Additionally, evidence provided as part of the recent Texas Attorney General’s antitrust case against Google, reveals that Google did indeed consider the header bidding innovation to be a significant competitive threat to its business.²⁵²

A number of stakeholders also submit that Google made this decision to shield itself from competition. For example, News Corp Australia submits that Google’s decision not to participate in header bidding is driven by ‘the fact that header bidding posed a credible threat to Google’s market power across the ad tech supply chain.’²⁵³ Similarly, Daily Mail Australia submits that the fact that Google is the only vendor not supporting header bidding comes as ‘little surprise, considering that Google viewed header bidding as a threat which it had to quash.’²⁵⁴

Google’s refusal to participate in header bidding gave its SSP an advantage through its ‘last look’

Google’s decision not to participate in header bidding allowed Google’s publisher ad server to continue to give its SSP a competitive advantage, making it difficult for rival SSPs to compete. We consider that Google’s decision not to participate in header bidding had the effect of giving Google’s SSP a ‘last look’ advantage, which gave it the opportunity to outbid any winning SSP bid from the header bidding auction, ensuring Google’s SSP was better placed to win ad inventory.

249 Confidential submission from Google (published with consent).

250 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 22; Special Broadcasting Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 7; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 9, 63; Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, pp. M115–M116; Publifit, [What is Header Bidding and Why Should You Care?](#), accessed 26 August 2021.

251 Confidential submission from Google (published with consent).

252 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 22.

253 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 25.

254 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 22.

As discussed above, the Autorité de la Concurrence found that where third-party SSPs submitted bids, those third-party SSPs would likely have won a significant number of impressions which were won by Google's SSP, were it not for Google holding a 'last look' advantage.²⁵⁵ The Autorité also stated that a Google employee mentions the unfairness of the right of 'last look' enjoyed by Google's SSP in an internal Google document.²⁵⁶

While Google's SSP has not benefited from a 'last look' advantage in relation to header bidding since the introduction of Google's publisher ad server's Unified Auction in 2019,²⁵⁷ Google's decision not to participate in header bidding and the resulting 'last look' advantage has contributed to the current state of competition in the supply of SSP services. The presence of Google's 'last look' advantage is likely to have meant that rival SSPs won significantly less impressions than would have been the case without the 'last look' advantage, as found in France.²⁵⁸ The ACCC considers this is another example of how Google's conduct may have lessened competition for SSP services.

4.7 Google restricts how its SSP works with third-party ad servers

In this section, we discuss our concerns that Google has continued to engage in self-preferencing in the way it operates its publisher side services, limiting the ability of rivals to compete. In particular, we consider how Google's continued refusal to participate in header bidding has meant that Google's SSP can only be accessed effectively through Google's own publisher ad server. This means that many publishers are essentially locked into using Google's publisher ad server where full functionality of Google's SSP can be achieved. This has likely contributed to, and helped Google to maintain, its strong position in publisher ad server services.

4.7.1 Google's decision not to participate in header bidding means that its SSP can only be accessed effectively through its publisher ad server

In 2019, Google's publisher ad server started running a Unified Auction in which all demand sources (including Google's SSP) bid for ad impressions at the same time. This meant that Google's SSP no longer had a 'last look' advantage in Google's publisher ad server.

However, Google's ongoing decision not to participate in header bidding likely protects its publisher ad server from competitive pressure from rivals. This is because it is very difficult for publishers to access demand from Google's SSP effectively unless they use Google's publisher ad server.

255 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) pp. 42-43.

256 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) p. 43.

257 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 48; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 17-18; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, p. 36.

258 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) p. 43.

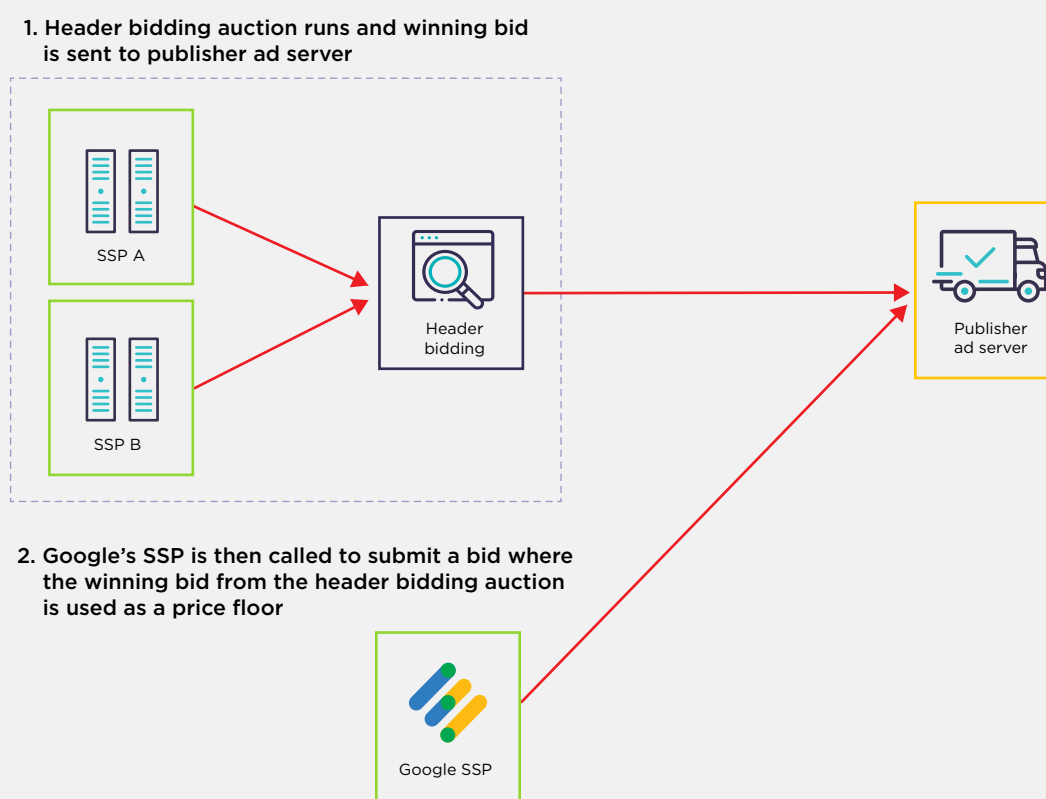
Box 4.7: Accessing Google's SSP when using a third-party publisher ad server

When a publisher uses a third-party publisher ad server and wants to run an auction between SSPs, the publisher will generally do so via header bidding (described in more detail in section 4.6.2 above). Google's SSP however does not participate in header bidding.

If the publisher uses a third-party publisher ad server, but also wants to receive real-time bids from Google's SSP, they may be able to develop ways to do so.

Figure 4.7 shows an example of how a publisher may access bids from Google's SSP while using a third-party publisher ad server. In this example, once the header bidding auction is complete, the publisher can configure their publisher ad server to call Google's SSP to see if it wants to submit a real-time bid. The winning bid from the header bidding auction would then be sent to Google's SSP as the price floor, and Google's SSP then has an opportunity to bid for the ad impression.²⁵⁹

Figure 4.7: Example of a publisher using header bidding and a third-party publisher ad server



As outlined in box 4.7, it is possible for a publisher to access demand from Google's SSP when using a third-party publisher ad server. However, we understand that there are a number of inefficiencies and downsides associated with this process:

- First, we understand that, compared to the ease of using Google's publisher ad server to call demand from its SSP, it is technically complex to configure this set up in the publisher ad server.
- Secondly, this workaround does not actually put Google's SSP in direct competition with other SSPs. Instead, Google's SSP only interacts with the one winning bid from header bidding. Google's SSP is provided the opportunity to beat this winning bid from header bidding if it is able to submit a bid just \$0.01 higher. As a result, this set up has the same effect as the 'last look' advantage which Google's publisher ad server used to give to Google's SSP over other SSPs (as discussed in section

²⁵⁹ Competition and Markets Authority, Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, pp. M109–M110.

4.6.2 above). Furthermore, the information that Google receives about the header bidding price may allow Google to submit a lower bid than it would otherwise submit if it was in direct competition with other SSPs through header bidding and could not see any of these prices.²⁶⁰ This is to the detriment of publishers as it results in lower competition generated for its ad inventory and therefore lower revenue.

A number of stakeholders have submitted views in support of the difficulties associated with this option, indicating that there are significant downsides associated with accessing Google's SSP via a third-party publisher ad server as opposed to Google's own publisher ad server.²⁶¹ For example, Daily Mail Australia submits that while it is possible to receive demand from Google's SSP using a third-party ad server, there are 'severe limitations' due to Google not participating in header bidding. It considers that the workaround (described above) is technically complex and highly inefficient. Additionally, it is not possible to place Google's SSP in real-time competition with other SSPs even with this set up.²⁶²

If Google participated in header bidding, publishers would not have to configure a technically complex set up and give Google a 'last look' advantage in order to access Google's SSP. Rather, they would be able to easily use a third-party publisher ad server to receive real-time bids from Google in direct competition with other SSPs.

In contrast, publishers that use Google's publisher ad server can utilise Google's own Open Bidding function (which performs a function similar to header bidding) to put Google's SSP in auctions against other SSPs without having to deal with these inefficiencies.

260 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) pp. 39-43.

261 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 27, 31; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 61-62; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 5-6; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 21; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 14.

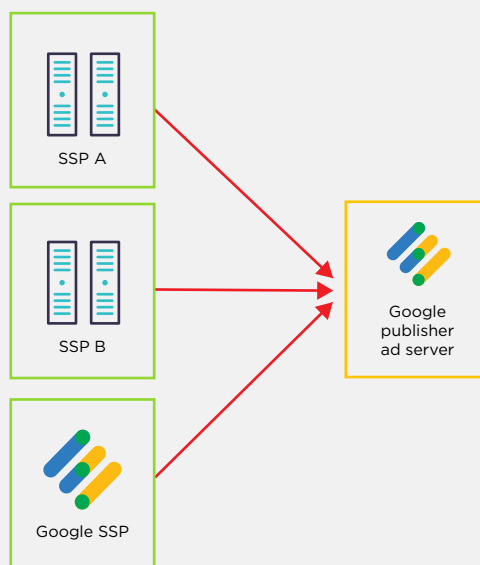
262 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 21.

Box 4.8: Using Google's Open Bidding and Google's publisher ad server to access Google's SSP

In 2018, Google introduced its own proprietary solution called Open Bidding,²⁶³ which allows multiple third-party SSPs to directly compete against one another in a single real-time auction. While Open Bidding is also an auction between multiple SSPs, it differs to header bidding as it is run in Google's own publisher ad server. Additionally, while Google's SSP does not compete in real time against SSPs that participate in header bidding, it does directly compete in an auction against other SSPs when publishers use Open Bidding.²⁶⁴

When a publisher uses Google's publisher ad server, it can choose to sell its ad inventory using Open Bidding. Under this system, all SSPs, including Google's SSP, submit bids at the same time to Google's publisher ad server, which then selects the winning bid.

Figure 4.8: Example of a publisher using Open Bidding on Google's publisher ad server



In contrast to using a third-party publisher ad server, publishers that use Google's publisher ad server can use Open Bidding. This puts Google's SSP in direct competition with other SSPs of the publisher's choosing. Utilising Google's publisher ad server to access Google's SSP is also significantly less technically complex than the workaround required if using a third-party ad server. This is because it can be configured relatively simply using Google's publisher ad server. Further, under Open Bidding, Google's SSP will have no 'last look' advantage. This means that Google will not be able to lower its bid using information about the header bidding price, and must submit a bid without this information. This results in greater competition for publishers' ad inventory and may result in higher revenue for publishers.

As a result, the effect of Google not participating in header bidding is that, if a publisher wishes to receive bids from Google's SSP in an efficient way and have it compete directly against other SSPs, they must use Google's publisher ad server.

²⁶³ Open Bidding was previously called Exchange Bidding, before it was renamed to Open Bidding in 2019.

²⁶⁴ Google, [Google Ad Manager Help, Learn the basics - Introduction to Open Bidding](#), accessed 15 December 2020. As described by Google: 'Open Bidding allows [publishers] to invite third-party demand partners to compete for your inventory in a single auction with real-time, server-to-server bidding'. Only third-party demand partners, which Google terms as 'Open Bidding partners', can be selected by publishers to compete in Open Bidding. Publishers can however choose not to utilise Open Bidding. See also, J. Hercher, '[Google's Answer To Header Bidding Is Now Generally Available](#)', *AdExchanger*, 4 April 2018, accessed 15 December 2020 (note that Exchange Bidding was renamed to Open Bidding in August 2019).

While efficient access to Google's SSP can be achieved via Google's publisher ad server, this also means that publishers are effectively locked into using Google's Open Bidding function if they want Google's SSP to compete directly with other SSPs. There are also a number of downsides of using Open Bidding. For example, third-party SSPs participating in Open Bidding are charged a fee when Google's SSP is not. This affects third-party SSPs' ability to compete with Google's SSP (discussed further in section 4.8.2). Additionally as discussed in section 4.6.2, a number of stakeholders have stated that Google's Open Bidding function is less transparent than header bidding.

Box 4.9: Google's proposed changes to the way publishers can access Google's SSP when using third-party publisher ad servers

The Autorité de la Concurrence's (the French Competition Authority) investigation into Google's publisher-side ad tech services similarly found that Google's SSP is only partially interoperable with third-party publisher ad servers. In response, Google made a number of commitments, including that changes will be made to allow publishers using third-party publisher ad servers to be able to access Google's SSP demand in real-time.²⁶⁵ As such, these differences between accessing Google's SSP via third-party ad servers and Google's own publisher ad server may be lessened. However, Google's SSP will still not participate in header bidding.

Further, it is not yet clear when such changes will be implemented and whether they will be applied globally. Additionally we consider that this conduct by Google has already likely contributed to a lessening of competition in the supply of publisher ad servers over time. This is also likely to have contributed to Google's now dominant position in the supply of this service.

4.7.2 Google's continued decision not to participate in header bidding has likely limited competition for publisher ad servers

The ACCC considers that Google's decision to not participate in header bidding and instead introduce Open Bidding has resulted in Google creating a tie between its SSP and publisher ad server. This is likely to have helped entrench Google's dominant position in the supply of these services. As discussed in section 4.5.1, Google's SSP is a 'must have' for many publishers because it is the primary way that publishers can access demand from Google Ads. Further, Google's SSP is most efficiently accessed, and only competes in a real-time auction with other SSPs, when publishers use Google's publisher ad server. This means that many publishers are effectively locked into using Google's publisher ad server as switching to another provider would inhibit their access to Google's SSP.

The ACCC notes that currently there are few publisher ad servers operating in Australia, and that Google has a very high share of impressions for these services. However, the ACCC considers that this conduct is likely to have increased already high barriers to entry and expansion for publisher ad servers. In this way, Google has leveraged its strong position in SSP services to strengthen and reinforce its dominant position in the supply of publisher ad servers.

As discussed above, while Google submits a number of reasons why its SSP does not participate in header bidding, we do not consider that these reasons are strong and do not consider that any claimed latency, transparency or privacy benefits outweigh the competitive detriment of Google's decision. We also consider that it is more likely that Google's decision to not participate in header bidding was due to the threat it provided to its competitive advantage in the provision of publisher ad server and SSP services. Additionally, we note that an internal Google document suggests that at least part of the reason for developing Open Bidding was to respond to the threat from header bidding and disintermediation.

Our findings are consistent with the recent findings of the Autorité de la Concurrence's investigation into Google's publisher-side ad tech services. The Autorité similarly found that Google's SSP was only partially interoperable with third-party publisher ad servers, and that publishers are unable to have Google's SSP and rival SSPs compete together, leading to inefficiencies for publishers. Google did

²⁶⁵ Autorité de la concurrence, [Cases No 19/0030 F, 19/0056 F and 19/0057 F – Commitments offered by Google under Article L.464-2, III of the French Commercial Code](#), pp. 7–9.

not contest this and other facts contained in the Autorité's findings. Additionally, Google has made a number of commitments in response to the investigation. These include changes to allow publishers using third-party publisher ad servers to access Google's SSP demand in real-time.²⁶⁶ However, this has not changed the fact that Google's SSP does not participate in header bidding.

4.8 Google has used its control over auction rules in its publisher ad server to advantage its other services

In this section we discuss our concerns that Google, through its strong position in publisher ad servers, uses its control over auction rules to give its other services a competitive advantage. This also illustrates Google's conflicts of interest that arise from its vertically integrated position.

4.8.1 Google's control of auction rules through the Unified Auction

Google's SSP's unique access to demand from Google Ads, combined with the tie between Google's SSP and its publisher ad server, means that Google's publisher ad server is considered a 'must have' among publishers. As discussed in chapter 3, Google has a dominant position in the supply of publisher ad servers with an estimated 90-100% share of impressions in 2020. Google's dominance in publisher ad server services gives Google significant control over the auction rules that determine how ad impressions are sold in the Unified Auction it operates on its publisher ad server.

Box 4.10: Google's Unified Auction

Google currently runs a single supply side auction in its publisher ad server, which it calls a 'Unified Auction'.²⁶⁷ This is a first-price auction between all potential buyers for an ad impression, including DSPs and SSPs. Google's Unified Auction is the last auction in the sequence before the final winning buyer of an ad impression is determined. Publishers select which buyers participate in the Unified Auctions for their ad inventory, which may include:

- DSPs bidding into Google's SSP, including Google's DSPs
- third-party SSPs participating in Google's Open Bidding
- the winning bid from third-party SSPs participating in header bidding.²⁶⁸

Previously, Google ran an auction between DSPs bidding into its SSP, and then a separate auction between SSPs (including its own SSP) bidding into Open Bidding in its publisher ad server. However, in 2019 it combined these auctions into one Unified Auction as described above.

4.8.2 Google charges third-party SSPs fees for using Open Bidding

The first example of Google using its control of publisher ad servers to preference its own services is through the fees it charges third-party SSPs. We consider that Google has used its vertically integrated position as both (the dominant) publisher ad server and SSP to preference its SSP through its publisher ad server fees.

266 Autorité de la concurrence, [Cases No 19/0030 F, 19/0056 F and 19/0057 F – Commitments offered by Google under Article L.464-2, III of the French Commercial Code](#), pp. 7-9.

267 Google Blog, [An update on first price auctions for Google Ad Manager](#), 10 May 2019, accessed 17 December 2020. This unified first price auction takes place in Google Ad Manager (which includes Google's SSP and publisher ad server). Google Blog, [Rolling out first price auctions to Google Ad Manager partners](#), 5 September 2019, accessed 11 August 2021).

268 Google's Unified Auction may also include direct deals.

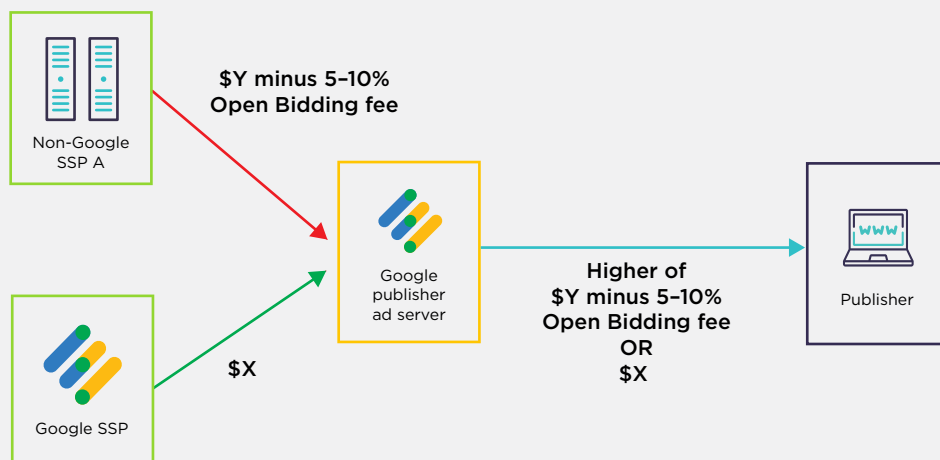
Google charges a 5-10% fee for Open Bidding

For Open Bidding, which is part of Google's Unified Auction, Google's publisher ad server charges publishers 5-10% of the value of winning bids when a non-Google SSP wins an auction.²⁶⁹ However, publishers do not have to pay this fee when Google's SSP wins the auction. This fee is charged in addition to the fees publishers already pay non-Google SSPs for use of their services.

Box 4.11: Open Bidding fees

In Open Bidding, non-Google SSPs compete based on their net bid; that is, their bid minus Google's 5-10% Open Bidding fee. In contrast, bids through Google's SSP compete based on the DSP's actual bid.²⁷⁰ For example, if non-Google SSP A bids 100 cents for an impression, and Google's SSP bids 96 cents, Google's SSP will win the bid, as its bid beats SSP A's net bid of 95 cents (SSP A's bid minus the 5% fee). Because the publisher has to pay an Open Bidding fee, SSP A must offer to pay 5-10% more than Google's SSP to win the bid.

Figure 4.9: Open Bidding fees



There is scope for Google's Open Bidding fees to harm competition between SSPs

We consider that there is scope for Google's Open Bidding fees to harm competition between SSPs. This is particularly the case as Open Bidding fees are unavoidable where publishers seek to have Google's SSP compete in an auction with rival SSPs. To the extent that these additional fees mean SSPs must raise their bids to account for the Open Bidding fee charged to publishers and to remain competitive with bids from Google's SSP, this would reduce the returns they earn and potentially their ongoing competitive position. Alternatively, SSPs that do not adjust their bids in response to this fee would be less likely to win. This may make them less attractive to publishers, and would likely place less pricing pressure on Google's SSP.

Importantly, while these SSPs may be required to lower their commission rates in order to remain competitive in the Open Bidding auction, this benefit will not flow to publishers as it will be offset by the size of the Open Bidding fee. As such, Open Bidding is unlikely to lead to publishers gaining significant improvements in their revenues. This is supported by submissions from stakeholders, including publishers.²⁷¹

²⁶⁹ The exact amount charged depends of the type of inventory being sold.

²⁷⁰ We note that publishers will also be subject to either Google's SSP revenue share or a third-party SSP's revenue share fee, which is separate to the Open Bidding fee. See: News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p 47; D Geradin and D Katsifis, 'Trust me, I'm Fair': Analysing Google's latest practices in Ad Tech From the Perspective of EU Competition Law, TILEC Discussion Paper No. DP 2019-2020, p. 39; S Luis, '[3 Auctions Rule Digital Advertising. Here's A Guide to Navigating Them](#),' *AdExchanger*, 20 November 2019, accessed 24 August 2021.

²⁷¹ News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 47, 53; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 62-63; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), pp. 13-14.

Google states that the 5-10% fee for Open Bidding accounts for the cost of the implementation and continued service provision Google maintains to provide its Open Bidding service and to avoid risks inherent with many header bidding solutions. Google also notes that it is publishers, not SSPs that are charged the fee, and that where publishers win an auction with a third-party SSP, they are not charged Google Ad Exchange's standard revenue share (which is generally 20%).²⁷² However, we understand that publishers will either be subject to Google Ad Exchange's revenue share or a third-party SSP's revenue share fee, which is separate to the Open Bidding fee.

The ACCC notes that other providers, such as Amazon, also charge fees for the header bidding services that they offer to publishers. Amazon's fees are substantially lower than Google's Open Bidding at \$0.01 CPM.²⁷³ Other SSP's fees for using header bidding are generally slightly lower than Google's Open Bidding fees. However, these other SSPs can be accessed through alternative header bidding services (or header bidding set up directly by the publisher, which is at no cost to publishers),²⁷⁴ unlike Google's SSP which can only be accessed through Open Bidding.

4.8.3 Google provides unequal access to 'minimum bid to win' information

The second example of Google preferencing its own services through its control of publisher ad servers is its decision to provide minimum bid to win information to Open Bidding participants and not header bidding participants.

Google provides minimum bid to win information to participants in its Unified Auction

Google provides information on the minimum bid price that was required to win ('minimum bid to win' information) to some of the participants in its Unified Auction.²⁷⁵ This information informs the unsuccessful bidders how much they needed to bid to win the auction, and for the winners of the auction, the lowest they could have bid and still won. Stakeholders, including other DSPs, consider that 'minimum bid to win' information is a valuable input for informing future bidding strategies.²⁷⁶

272 Confidential submission from Google (published with consent).

273 Amazon, [Amazon Publisher Services, Transparent Ad Marketplace](#), accessed on 21 August 2021.

274 Publishers generally do not pay for header bidding, if they set this up themselves using code on their websites. However, this may require significant technical and operational expertise.

275 J Bigler, [Rolling out first price auctions to Google Ad Manager partners](#), *Google Blog*, 5 September 2019, accessed 21 December 2020.

276 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 53; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p 18; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, p. 71.

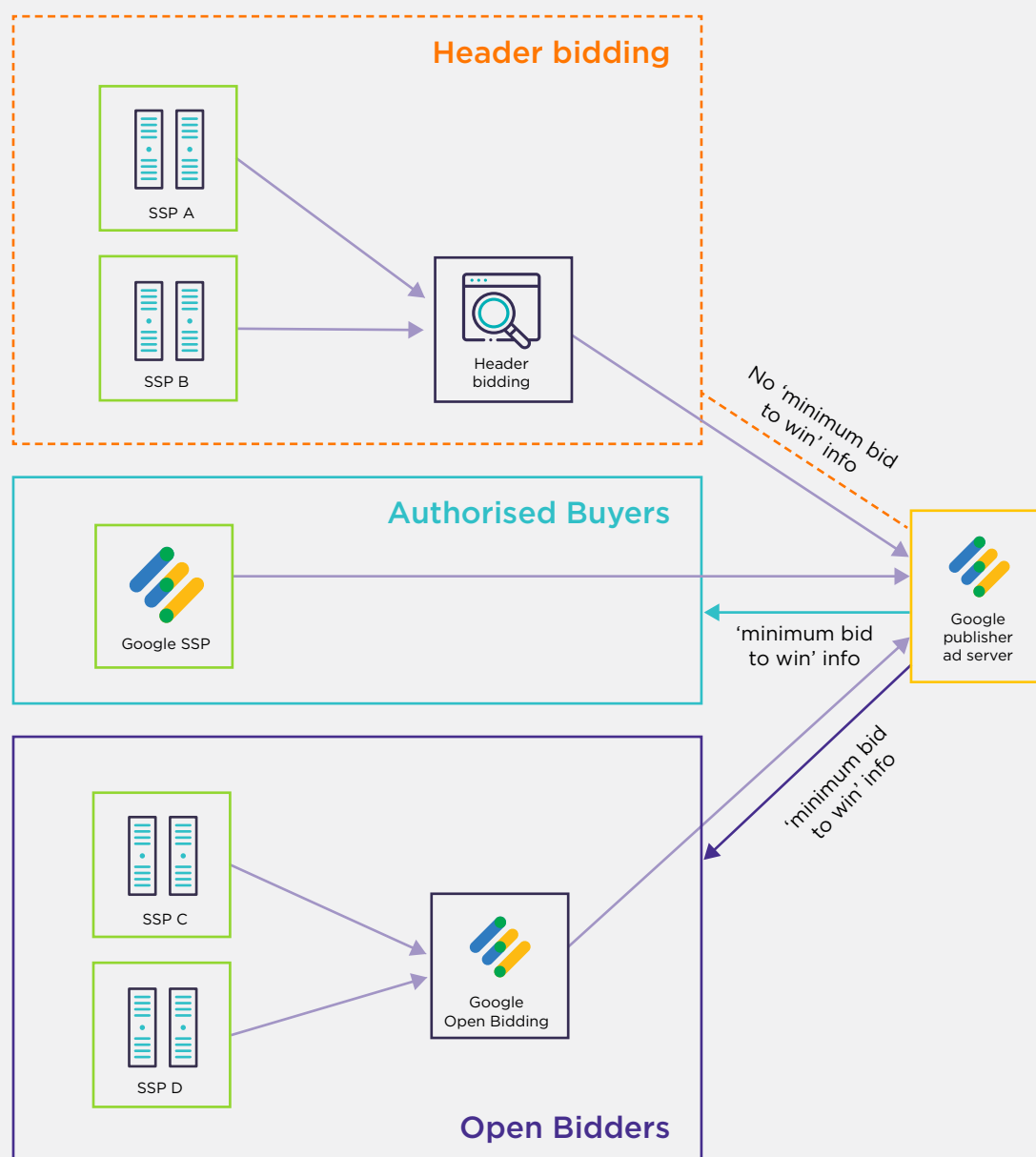
Box 4.12: Unequal provision of minimum bid to win information

Google's Unified Auction is the last auction in the sequence before the final winning bidder of an ad impression is determined. It takes place on Google's publisher ad server and participants in Unified Auctions include:

- Authorised Buyers: DSPs bidding in to Google's SSP, including Google's DSPs.
- Open Bidders: third-party SSPs participating in Google's Open Bidding.
- The winner of the header bidding auction: if the publisher uses header bidding, the winning SSP's bid from the header bidding auction participates in the Unified Auction.

Once the auction is complete, Google provides Authorised Buyers and Open Bidders with minimum bid to win information. However, SSPs who participate in the auction via header bidding, are not provided with minimum bid to win information.

Figure 4.10: Flow of 'minimum bid to win' information



Minimum bid to win information disadvantages header bidding compared to Open Bidding

We consider that the unequal provision of ‘minimum bid to win’ information places ad tech providers participating in header bidding auctions at a disadvantage compared to providers participating in Open Bidding auctions. Making ‘minimum bid to win’ information available to a limited group of bidders may cause advertisers to select ad tech providers using Google’s services rather than header bidding alternatives. In addition, it may provide an incentive for SSPs to use Google’s Open Bidding, rather than header bidding, so that they are able to access this information.

However, because SSPs are then subject to the Open Bidding 5–10% fee, they may be placed at a disadvantage in the Unified Auction (discussed above). Therefore, publishers and SSPs may face a choice between using Open Bidding, where SSPs receive ‘minimum bid to win’ information but face a disadvantage in the Unified Auction, or using header bidding, where SSPs do not receive the information but do not pay the Open Bidding fee. This view is supported by submissions from stakeholders.²⁷⁷

Feasibility of providing minimum bid to win information to header bidders

A report submitted to the inquiry by Daniel Bitton and Stephen Lewis on behalf of Google suggests that Google is not able to provide ‘minimum bid to win’ information to ad tech providers participating in header bidding auctions, as Google does not know their identities because they are not directly using Google’s service.²⁷⁸ Further, the report notes that Google provides ‘minimum bid to win’ information to many non-Google bidders and that, given that the information is provided after an auction takes place, it cannot provide bidders with an advantage during the auction.²⁷⁹ Google also notes that publishers receive data from all bids submitted to their auctions, and if they choose to, publishers can share this information with any buyer, including header bidders.

The ACCC notes the practical difficulties in providing all possible bidders with minimum bid to win information, as Google may not know the identity of the SSPs that are participating in header bidding.

The CMA examined this issue and found that, based on the information it received, Google’s decision to provide ‘minimum bid to win’ information was based on a genuine intention of making Open Bidding auctions more efficient and was not intended to be exclusionary.²⁸⁰ However, the ACCC notes that as part of an agreement with the Autorité de la Concurrence (French Competition Authority), Google has made a series of commitments regarding its ad tech services, which includes providing minimum bid to win information to header bidders.²⁸¹ This means minimum bid to win information will be provided to bidders who do not use Google’s Open Bidding. Google’s commitment to provide minimum bid to win information indicates that it may be possible in a technical sense for Google to provide this information.²⁸²

Impact of minimum bid to win information on DSPs

The ACCC understands that a standard may not yet have been established for the sharing of this data from SSPs and to DSPs, and that as a result, minimum bid to win information is only provided directly to DSPs using Google’s SSP (Authorised Buyers).²⁸³ As a result, Google may currently be the only SSP that is able to take full advantage of ‘minimum bid to win’ information.²⁸⁴ This may distort DSPs’ decision making, leading them to favour bidding into Google’s SSP over other SSPs.

277 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 52; ‘Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, p. 71.

278 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 29.

279 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 29–30.

280 Competition and Markets Authority, [Online platforms and digital advertising market study: final report](#), 1 July 2020, Appendix M, p. M124.

281 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 99.

282 M. Gomri, ‘[Some changes to our ad technology](#)’, *Google Blog*, 7 June 2021, accessed on 26 August 2021.

283 Competition and Markets Authority, [Online platforms and digital advertising market study: final report](#), 1 July 2020, Appendix M, p. M124.

284 Competition and Markets Authority, [Online platforms and digital advertising market study: final report](#), 1 July 2020, Appendix M, p. M124.

Other DSPs have commented on how they consider the provision of minimum bid to win information has affected DSP services. One DSP considers that DSPs bidding through Open Bidding may be at an advantage compared to DSPs that use header bidding, as the information allows DSPs to better optimize auction strategies. They state that advertisers may therefore be incentivized to shift spending away from header bidding DSPs towards Google's DSP and third-party DSPs that ultimately bid through Open Bidding. Another DSP states it has not integrated minimum bid to win information into its bidding behaviour because it could bias spend away from platforms that do not have this information (and bias towards platforms that directly benefit Google). They also suggest that Google may decide to stop providing this information, and that there is uncertainty regarding the reliability of Google's information.

Minimum bid to win information from other ad tech providers

Finally, the ACCC understands that some other ad tech providers do provide information similar to minimum bid to win information and about auction results. For example, Index Exchange provides information on the required bid to have won an auction.²⁸⁵ However, the ACCC considers that the effects of Google's limitations on minimum bid win are likely to have a more significant effect on the efficiency of ad tech services given Google's strong position in publisher ad servers and SSPs. In addition, Google's provision of minimum bid to win information may be used to push spend into Open Bidding where Google then extracts a fee from third-party SSPs.

4.8.4 Google's Unified Pricing rules prevent publishers setting different price floors

The third example of Google's control of publisher ad servers being used to preference its own services is through the introduction of Unified Pricing rules as part of its Unified Auction in 2019.²⁸⁶ Under these rules, publishers can only set one price floor across the Unified Auction on Google's publisher ad server. Previously, publishers were able to set different price floors for different SSPs in Open Bidding, and for different DSPs for auctions in Google's SSP. The ACCC understands that some SSPs allow publishers to set differential price floors when selling their inventory. This is determined by the publisher depending on their particular circumstances.

Stakeholders have expressed concerns that Google's Unified Pricing rules limit publisher flexibility to manage the sale of their ad inventory.²⁸⁷ Further, publishers consider that they should be able to set high price floors for strong bidders, to maximise their revenue.²⁸⁸ News Corp submits that Google's DSPs may be stronger bidders due to Google's information advantage, and that Google is likely to keep the surplus if it is able to win auctions with lower bids, rather than this benefit flowing to advertisers.²⁸⁹

Google submits that the Unified Pricing rules ensure a 'non-discriminatory approach that means all auction buyers compete based on the same price floor' and that 'allowing different floors means a buyer with a higher valuation could lose to a buyer with a lower valuation because it faces a higher floor,' which could result in an allocative inefficiency.²⁹⁰ Google further suggests that 'publishers could use discriminatory floors to take advantage of buyer self-competition to inflate bids' which may undermine ad buyer trust and reduce ad buyer participation.²⁹¹ Google also submits that the introduction of Unified Pricing Rules was welcomed by many publishers and ad buyers, citing survey results that 30% of publishers found the Unified Pricing Rules changes appealing and experienced growth, while only 4% publishers expressed negative sentiments.²⁹²

285 Index Exchange, [Data dictionary](#), accessed 26 August 2021.

286 J Bigler, [An update on first price auctions for Google Ad Manager](#), *Google Blog* 10 May 2019, accessed 4 November 2020.

287 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 85–86; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 10.

288 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 85–86; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 18; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 10.

289 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 85–86.

290 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 35.

291 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, p. 35.

292 Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, pp. 35–36.

However, the ACCC has reviewed information from a number of publishers which indicates that the share of impressions won by Google's SSP has increased since the introduction of Unified Pricing Rules, although this has not necessarily resulted in corresponding increases to Google's SSP's share of revenue. In particular:

- One publisher states that the percentage of impressions won by Google's SSP increased considerably because they could no longer set different price floors for it, however, they did not see much of a change in the percentage of revenue Google accounted for.
- Another publisher submits that, since the introduction of Unified Pricing Rules, Google has been able to win the majority of available inventory while paying less.

The CMA also recently examined this issue and found that one of Google's main motivations for introducing Unified Pricing rules was to increase the competitiveness of its SSP and improve the win rate of its DSPs. While the CMA found limited evidence that this change has harmed publishers in the short term, it also stated that it seemed clear that restricting publishers' ability to set different price floors was not in publishers' interests. The CMA therefore considered that the introduction of Unified Pricing rules was 'a clear example of Google leveraging its market power in publisher ad serving' to benefit its DSPs, to the detriment of publishers.²⁹³

The ACCC agrees with the CMA's conclusion, and considers that Google's introduction of Unified Pricing rules illustrates the conflicts of interest that arise where an ad tech provider operates multiple services. Here, Google's interests as the operator of a DSP and SSP conflict with the interests of publishers who use its publisher ad server. If Google was not providing both publisher services (SSP and publisher ad server) as well as advertiser services, it may be less likely that its publisher ad server would restrict the ability of publishers to set differential price floors. Further, Google may be able to engage in this conduct due its dominance in the supply of publisher ad servers, with there being few alternative options for publishers to use if they are not satisfied with their own ability to set differential price floors. This conduct has broader implications, as publishers submit that Unified Pricing rules inhibit their flexibility in managing the sale of their ad inventory.

4.8.5 Google's restriction on vertically integrated DSP providers purchasing Open Bidding ad inventory

The fourth example of Google using the dominance of its publisher ad server to preference its own services is through the restriction it places on other vertically integrated ad tech providers who may seek to purchase ad inventory available via Google's Open Bidding.

We understand that Google does not allow third-party DSPs to bid for Google's Open Bidding inventory through the rival's vertically integrated SSP. Therefore, if a rival vertically integrated ad tech provider wanted their SSP to access Open Bidding, the rival would have to eliminate all bids from its own DSP before bidding into Google's Open Bidding. Vertically integrated providers would only be allowed to submit bids from other DSP buyers, and not their own DSP.

This conduct has the effect of disadvantaging third-party SSPs (operated by rival vertically integrated providers) competing with Google's SSP in Open Bidding. Restricting these SSPs from including demand from their own DSPs removes the opportunity for vertically integrated providers, other than Google, to take advantage of technical efficiencies that can arise from the integration of a DSP and SSP (e.g. reduced latency).

Additionally, we agree with the finding noted by the CMA that the inability of third-party DSPs to purchase Open Bidding ad inventory via their vertically integrated SSP also reduces the risk of SPs bypassing Google's SSP.²⁹⁴

The Autorité de la Concurrence and the CMA note that Google says the purpose of the restriction is to ensure Open Bidding is used by actual SSPs, and not DSPs, trading desks or ad networks, and

293 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, pp. M118–M123.

294 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M117.

protects publishers from malicious ads that might be offered by DSPs.²⁹⁵ However, the Autorité de la Concurrence references an internal Google document which states that the goal of this restriction is to 'ensure that the request an AdX [Google's SSP] buyer makes through AdX is not transferred to Open Bidding'.²⁹⁶

4.8.6 Google's control over auction rules raise concerns about its conflicts of interest and harms competition

The conduct discussed above highlights Google's significant control over auction rules harms competition among SSPs. This conduct also illustrates the conflicts of interest that arise from Google's vertically integrated position.

The ACCC has not yet reached a view on whether any one of the above instances of conduct substantially lessens competition and breaches provisions of the CCA. However, we are concerned about the cumulative impact of the conduct that Google's dominance in publisher ad servers has enabled. This conduct is likely to have the overall impact of harming competition, and have a detrimental impact on the ability of other DSPs and SSPs to compete on their merits with Google's services. Further, we are concerned about the potential for conflicts of interest to adversely affect outcomes for publishers and the real risk that Google could engage in conduct that preferences its own services in the future. This is because:

- Google's interests as an SSP and the interests of a publisher using Google's publisher ad server may not align.
- It is difficult, if not impossible for advertisers, publishers, and other SSPs to detect whether such conduct is taking place. This opacity has also the potential to increase the incentives for Google to engage in such conduct (this is discussed further in Chapter 5).
- Even if it were possible for publishers to detect conduct by Google that is not in their interests, there do not appear to be realistic options to enable publishers to switch away from Google's publisher ad servers.

We also note that Google has made commitments overseas to not engage in some of the conduct discussed in this section, which may be rolled out more broadly.²⁹⁷ However, it is currently unclear how these commitments will be implemented, and what conduct will be covered by the commitments. While it is possible that Google's commitments may mean that it no longer engages in the specific conduct outlined in this section, the ACCC notes that the conduct has already contributed to Google's strength in ad tech services.

4.9 Google's position in browsers may advantage its ad tech services

In this section, we discuss our concern that Google has the ability to use its position in the supply of web browsers to advantage its ad tech services. This is illustrated by its current plan to remove support for third-party cookies on its Chrome browser, and replace them with its Privacy Sandbox proposals late 2023.

295 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M116; Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#), p. 47.

296 Autorité de la concurrence, [Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector](#) p. 47.

297 Autorité de la concurrence, [Commitments offered by Google under Article L.464-2, III of the French Commercial Code](#), 15 February 2021.

4.9.1 Google's Privacy Sandbox proposals

One of the many consumer-facing services Google provides is its web browser Chrome. Chrome is one of the largest web browsers both globally, and in Australia. In Australia, it is estimated that Chrome has had a market share in browsers above 60% across desktops since 2017,²⁹⁸ and a market share on mobiles of between 30% and 40% since 2017.²⁹⁹ As a result, Chrome is an important way for publishers to reach, and show digital display advertising to, Australian consumers across mobile and desktop devices.

In 2019, Google announced its plans to remove support for third-party cookies on Chrome browsers, and replace the functionalities of third-party cookies with its Privacy Sandbox proposals. Google is in the process of developing these proposals, and recently announced it was delaying their rollout until late 2023, to provide more time for industry to consider the proposals, and avoid jeopardising businesses that rely on ads.³⁰⁰

Google has said that the aim of its Privacy Sandbox proposals are to 'create web technologies that protect people's privacy online' but which also 'ensure publishers and developers can provide content funded by advertising'.³⁰¹ Google further submits that the aims of the Privacy Sandbox proposals are to:

- prevent tracking as users browse the web, by removing commonly used tracking mechanisms like third-party cookies and 'block covert techniques' such as fingerprinting
- enable publishers to build sustainable sites that respect users privacy, by 'developing privacy-centric alternatives for key online business needs, including serving relevant ads'
- preserve the vitality of the open web.³⁰²

As discussed in chapter 2, third-party cookies are important for the functioning of ad tech in a number of ways. For example, they are one of the key ways ad tech providers deliver targeted advertising to consumers, and measure the success of their ad campaigns (i.e. ad attribution services). Box 4.13 outlines how Google is proposing to replace the functionalities provided by of third-party cookies.

298 Source: ACCC analysis. The browsers with the next largest market shares are Safari and Internet Explorer, which have each had market shares of between 10% and 17% since 2017.

299 Source: ACCC Analysis. Safari has had a market share of around 50% in mobile browsers since 2017. The browsers with the next largest market shares are below 1%.

300 V Goel, '[An updated timeline for Privacy Sandbox milestones](#),' *Google Blog*, 24 June 2021, accessed 10 July 2021.

301 Google, '[Supplementary submission 1 to Ad Tech Inquiry Interim Report](#)', 2 July 2021, p. 4.

302 Google, '[Supplementary submission 1 to Ad Tech Inquiry Interim Report](#)', 2 July 2021, p. 4.

Box 4.13: Google's Privacy Sandbox proposals

Google is currently developing a number of proposals to replace the functions provided by third-party cookies. These include:

- **Federated Learning of Cohorts (FLoC):** This will replace the interest targeting functions which are currently enabled by third-party cookies, and will enable interest-based targeting on Chrome. Currently, third-party cookies are used to track a consumer's browsing history to target ads based on their interests. Under FLoC, Chrome will use a clustering algorithm to assign the browser to a cohort based on the user's browsing history. Users with similar browsing histories will be assigned to the same cohort. Advertisers will be able to target users based on their cohort IDs.
- **Turtledove and FLEDGE:** These proposals will replace the retargeting functions performed by third-party cookies. Currently, advertisers can 'retarget' ads to users. They do this by collecting information on the user's behaviour on their website (e.g. products looked at or the items added to a cart) with a first-party cookie, and can then recognise and target ads based on such behaviour to that user on a third-party website using third-party cookies. This will be replaced by allowing advertisers to create interest groups that customers will be placed in, but that will not allow the advertiser to link this to other information about the user. The advertiser will then be able to bid to retarget ads to users that fall into their interest groups in an auction run on Chrome.
- **Attribution Reporting API:** This will replace attribution functions currently facilitated by third-party cookies. The attribution reporting API will record a conversion event, and send a report to the publisher and advertiser that a conversion occurred which can be attributed to a click on an impression, without any information about the user. Google is also exploring an aggregated reporting API, which would enable multi-touch attribution.
- **Trust Token API:** This will replace the use of cross-site tracking across Chrome to identify whether a user is trustworthy or engaged in spam or fraud. Under this proposal, website owners will be able to access tokens for users to determine if the user is a bot or a real person.
- **Privacy Budget, GNATCATCHER, Web ID:** Google is also introducing a range of proposals to prevent fingerprinting, which it is concerned market participants might engage in if cross-tracking with the use of third-party cookies is not available.

A number of other web browsers have introduced restrictions on the use of third-party cookies:

- Apple's feature to block cross-site and app tracking, Intelligent Tracking Prevention, is now switched on by default in both its web browser Safari and on apps. This means consumers are given the choice to either actively opt-in or opt-out to cross-site and cross-app tracking.³⁰³
- In 2020, privacy-focused web browsers Mozilla Firefox and Brave both introduced features to block third-party cookies by default.³⁰⁴ In addition, Microsoft's Edge browser gives consumer a choice between three levels of third-party cookie blocking.³⁰⁵

Key differences with these changes compared to Google's are that, firstly, these browsers do not have ad tech services that participate in the ad tech supply chain. In addition, Google will be phasing out third-party cookies *altogether*, whereas on these other browsers, consumers can choose to opt-in to the use of third-party cookies.

303 T Peterson, '[WTF is Apple's ITP 2.3 update?](#)', *Digiday*, 27 September 2019, accessed 17 December 2020; L O'Reilly, '[Apple's latest anti-tracking changes present fresh headache for publishers](#)', *Digiday*, 21 September 2020, accessed 17 December 2020; A Hern, '[Apple iOS 14.5 update includes 'app tracking transparency' feature](#)', *The Guardian*, 27 April 2021, accessed 20 July 2021.

304 Mozilla, '[Latest Firefox rolls out Enhanced Tracking Protection 2.0; blocking redirect trackers by default](#)', *Mozilla Blog*, 4 August 2020, 17 December 2020; Brave Help Centre, '[How do I use Shields while browsing?](#)', accessed 17 December 2020.

305 A Chaudhry, '[How to use Edge's tools to protect your privacy while browsing?](#)' *The Verge*, 13 February 2020, accessed 17 December 2020.

A number of stakeholders have raised concerns about the impact that the removal of third-party cookies will have on the ability of ad tech providers to continue supplying their services. One ad tech provider submits that the removal of third-party cookies is of significant concern to most ad tech industry participants, and that the Google Chrome phase-out is particularly acute as it is the dominant web browser. Another noted the impact of Chrome phasing out cookies will have a much greater impact than other browser changes to cookie defaults, and that it will have a negative impact on its business. A third provider has said that absent a viable, scaled industry alternative Google's deprecation of third-party cookies is likely to substantially impair the ability of competitor DSPs and advertisers to bid effectively and measure success through attribution.

4.9.2 The Privacy Sandbox raises competition concerns

Given the importance of third-party cookies to the way ad tech services operate, and the importance of Chrome as a method for publishers to reach advertisers, we consider Google's Privacy Sandbox proposals will have a significant impact on the way the ad tech supply chain operates. We are concerned that Google's strength in browsers, coupled with the influence Chrome will have over how ad tech operates through the Privacy Sandbox proposals, will give Google greater control over a number of aspects of ad tech supply chain. This will provide it with opportunities to self-preference and advantage its ad tech services, and distort competition in the supply of ad tech services.

Google submits that its ad tech services will not have an advantage

Google submits that following the roll out of its Privacy Sandbox proposals, its ad tech products will not have an advantage over its competitors because:

- Google will also lose access to data collected by its third-party cookies, and it will not develop an alternative identifier to replace third-party cookies for cross-tracking, or use them in its products.³⁰⁶
- Google's use of first-party data from individual consumers when targeting ads on third-party display inventory is already 'extremely limited,' and Google will not use individual-level user data after the removal of third-party cookies from its consumer-facing services.³⁰⁷ Google's use of data once the Privacy Sandbox proposals are implemented, and measures needed to address this are discussed in chapter 3.
- Each of the Privacy Sandbox proposals goes through a rigorous, multi-phased public development process, including extensive discussion and testing periods.³⁰⁸

Google also submits that it developing and controlling the standard, and being in competition with the ad tech providers that will use the standards, is not of concern because the Privacy Sandbox proposals, are being developed as open standard and as open source, meaning they can be adopted by competitor browsers, so will not be exclusive to Chrome.³⁰⁹ Further, the proposals are being developed in collaboration with 'the wider web ecosystem' including ad tech competitors.

There is a real risk the Privacy Sandbox proposals will advantage Google in ad tech

As noted in the section above, the Privacy Sandbox proposals will determine how the functions that ad tech services provide, such as targeting, verification, and attribution, will operate. There is an inherent conflict of interest between Google's position as developer and controller of the standards, and a competitor to ad tech providers that will be required to use those standards. As a result, we are concerned that there is a real risk that Google's will be able to use its control over Chrome, and the Privacy Sandbox proposals to advantage its own ad tech services when these are rolled out.

Submissions and information provided to the ACCC have raised strong concerns about the proposals. In addition to the concerns outlined above regarding the impact on competitor ad tech providers, a number of participants have said that under the proposals, Google could provide itself with this competitive advantage. Some stakeholders have provided examples of how they consider Google could provide itself with a competitive advantage:

306 Google, [Supplementary Submission 1 to Ad Tech Inquiry Interim Report](#), 2 July 2021, p. 13.

307 Google, [Supplementary Submission 1 to Ad Tech Inquiry Interim Report](#), 2 July 2021, pp. 14-15.

308 Google, [Supplementary Submission 1 to Ad Tech Inquiry Interim Report](#), 2 July 2021, p. 15.

309 Google, [Supplementary Submission 1 to Ad Tech Inquiry Interim Report](#), 2 July 2021, p. 15.

- Google could manipulate and/or use FLoC audiences to benefit its ad tech services and its inventory.³¹⁰
- Google could continue to use first-party cookies to collect data from non-Google websites that use Google Analytics.³¹¹
- Google could provide the information it receives about competitors' bidding algorithms in its FLEDGE proposal to its DSPs, who could use this to understand competitors' bidding strategies.³¹²

Submissions to the interim report also questioned the extent of transparency Google is providing in the development process, and whether Google will ensure full market consensus before the Privacy Sandbox proposals roll out. One stakeholder submits that Google has not provided any information about how it will generate the FLoC cohorts, and that it has not been transparent about how the trusted server element of the FLEDGE proposal would operate.³¹³ In addition, Daily Mail Australia considers that, based on its experience with Google's implementation of its Accelerated Mobile Pages format, it is unlikely that Google will ensure full market consensus prior to the introduction of the proposals.³¹⁴

In addition, an ad tech provider told us that while philosophically, the W3C is an open forum where tech companies work together on proposals, this is not the case for Google's Privacy Sandbox proposals. While other proposals to replace third-party cookies on Chrome are being made and discussed in these forums, the majority of meaningful discourse is based on Google's proposals, and the industry use the forum to get answers from Google about how they will work. Finally, another stakeholder submits that Google has not yet provided much detail into precisely how the replacement system will function, and what access to data it will have under the Privacy Sandbox.

Significantly, we are also concerned about the impact of the proposals given to the CMA's recent findings about the Privacy Sandbox. On 7 January 2021, the CMA launched an investigation into suspected breaches of competition law by Google arising from the Privacy Sandbox proposals.³¹⁵ On 11 June 2021, the CMA announced that following its investigation, it had a number of concerns with the proposals.³¹⁶ In particular, The CMA found that, without sufficient regulatory scrutiny and oversight, the Privacy Sandbox proposals would:

- distort competition in the market for the supply of ad inventory and in the market for the supply of ad tech services, by restricting the functionality associated with user tracking for third parties while retaining this functionality for Google
- distort competition by the self-preferencing of Google's own advertising products and services and owned and operated ad inventory
- allow Google to exploit its apparent dominant position by denying Chrome web users substantial choice in terms of whether and how their personal data is used for the purpose of targeting and delivering advertising to them.³¹⁷

Google has offered the CMA a number of commitments to address these concerns, which the CMA intends to accept, subject to a consultation process.³¹⁸

The Privacy Sandbox proposals are still in development, and as a result it is difficult to determine the impact the proposals will have on the ad tech supply chain. However, we consider that the significant

310 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 5.

311 Confidential Party 2, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 1.

312 Confidential Party 2, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 1.

313 Confidential Party 2, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 1.

314 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 25 February 2021, p. 5.

315 The investigation has been conducted under chapter 11 of the *Competition Act 1998* (UK); Competition and Markets Authority, '[Investigation into Google's 'Privacy Sandbox' browser changes](#)', GOV.UK, 8 January 2021, accessed 20 July 2021.

316 Competition and Markets Authority, '[CMA to have key oversight role over Google's planned removal of third-party cookies](#)', GOV.UK, 11 June 2021, accessed 20 July 2021.

317 Competition and Markets Authority, '[Notice of intention to accept commitments offered by Google in relation to its Privacy Sandbox Proposals](#)', GOV.UK, 11 June 2021.

318 Competition and Markets Authority, '[Notice of intention to accept commitments offered by Google in relation to its Privacy Sandbox Proposals](#)', GOV.UK, 11 June 2021.

risks posed by the Privacy Sandbox proposals highlights further the importance of the sector specific rules proposed in recommendation 2 (described below), including powers to introduce data separation or a data access regimes (as discussed in chapter 3), and obligations and prohibitions that can manage Google's self-preferencing behaviours and conflicts of interest in ad tech services.

Part 3: ACCC recommends rules to apply to Google to address the effects of its dominance and vertical integration in ad tech services

Google's dominance in key parts of the ad tech supply chain, as well as its strong position in other ad tech services and in related markets, has allowed Google to engage in conduct that has advantaged its own related business across the supply chain and lessened the ability of its rivals to compete. Google's vertical integration also means that advertisers and publishers can be harmed where Google faces conflicts of interest. We consider that these harms to competition will persist without regulatory reforms that address its ability to engage in this conduct.

To address these issues, we recommend that Google's supply of ad tech services should be subject to ex-ante or upfront regulatory rules. These regulatory rules should include obligations to manage Google's conflicts of interest, prohibit anti-competitive bundling or tying of services, ensure rivals can compete on their merits by having non-discriminatory access to Google's services, and address transparency concerns. This is for the benefit of advertisers, publishers and ultimately consumers.

At this stage, we expect the rules would only apply to Google. However, the rules would be capable of applying more broadly, and whether other ad tech providers are subject to them in the future, would depend on market developments and other ad tech providers' conduct.

Recommendation 2: The ACCC should be given powers to develop sector specific rules to address conflicts of interest and competition issues in the ad tech supply chain. The rules would apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position

The ACCC should be given powers to develop sector specific rules to address current competition issues arising in the supply of ad tech services. These rules should apply to ad tech providers that meet certain criteria linked to their market power and/or strategic position in the ad tech supply chain. The ACCC should have powers to develop rules to manage conflicts of interest, prevent anti-competitive self-preferencing, ensure rivals can compete on their merits by having non-discriminatory access to certain services, and address transparency concerns.

Rules should be:

- developed in consultation with industry
- proportionate to the competition issues and conflicts of interest issues they are aimed at addressing
- enforceable by the ACCC, with penalties for non-compliance.

The exact criteria to determine which ad tech providers the rules would apply to would need to be developed. Given current concerns arising from Google's dominance and vertical integration across the ad tech supply chain, the ACCC expects the rules would apply to Google. However, rules should be capable of being applied to other ad tech providers in future, if they meet the criteria.

Effective competition in ad tech services is important for advertisers, publishers and consumers. A competitive supply chain enables advertisers to reach consumers on their websites, and for publishers to sell their space to advertisers, to generate revenues and funding for content.

Many publishers rely on sales generated through the ad tech supply chain to fund their online content, and as such, a competitive ad supported web is important to maintaining the quality and variety of online content. Consumers benefit when publishers provide online content that they value for free or at a lower cost, or when they see ads that are more relevant to their interests. In addition, consumers benefit when a cost effective ad tech supply chain reduces costs for advertisers, which in turn could be expected to lower the costs of goods and services to consumers.

Box 4.14: Ad tech rules could form part of a broader regulatory regime for digital platforms

The set of ad tech specific rules proposed in recommendation 2 could form part of a broader regulatory regime applying to digital platforms that have market power and/or a strategic position in the supply of relevant services, or which otherwise meet certain criteria.

The ACCC intends to commence consultation in early 2022 in regards to potential proposals, including whether such ex ante rules are necessary, appropriate and proportionate, as well as the form of any such rules.

This regulatory approach closely aligns with the regulatory proposals being developed and implemented in other jurisdictions, including the United Kingdom, the European Commission and Germany (see box 4.15 for further detail). These proposals reflect the global nature of the large digital platforms and the shared concerns of competition and regulatory agencies with the size and influence that these platforms have on competition. The ACCC recognises the significant advantages that arise from promoting alignment with other jurisdictions regarding these global concerns.

The following outlines the ACCC's reasons why a set of rules should be put in place to govern the ad tech supply chain, the content of the proposed rules, and how they could be implemented.

4.10 Why regulation is required to address Google's position in ad-tech

4.10.1 Google's dominance and vertical integration impacts competition in ad tech services

The discussion in this chapter shows that Google has engaged in conduct which has had the cumulative effect of restricting or limiting the ability of its rivals to compete in the supply of ad tech services. Google has also engaged in conduct in the supply of ad tech services that promotes its own interests ahead of the parties it serves (advertisers and publishers). Google has been able to do this given its dominance in key parts of the ad tech supply chain, and its control of key services.

We consider that the cumulative effect of Google's conduct over time has been to lessen competition in the supply of a range of ad tech services, and allow Google to entrench its dominance or strong position in particular services. This is likely to have harmed rivals' ability to compete, and resulted in harm to advertisers, publishers, and ultimately Australian consumers. In addition, as discussed in section 4.2.2, we are not satisfied that Google has sufficient arrangements in place to manage conflicts of interest arising from the vertical integration of its ad tech operations.

We consider that additional regulatory tools are needed to address this conduct, as the existing competition enforcement provisions in the CCA are not sufficient to address and prevent these harms, and promote competition in ad tech services.

4.10.2 Existing enforcement provisions are not sufficient

The ACCC is continuing to consider the specific allegations that have been made against Google over the course of this Inquiry under the competition provisions of the CCA. A number of other jurisdictions are conducting, or have conducted, investigations into Google's conduct in the supply of ad tech services, including the United States,³¹⁹ France,³²⁰ the United Kingdom,³²¹ Italy,³²² and the European Commission.³²³

However, we do not consider that the tools currently available to the ACCC are sufficient on their own to address the systemic harms identified in this chapter that have resulted from Google's dominance and vertical integration in ad tech services, and that are likely to continue to occur in the future. As recognised in the Hilmer Report, there are some industries where there is a strong public interest in ensuring that effective competition can take place without relying on general competition law provisions.³²⁴

While existing provisions in the CCA are important to promoting competition for ad tech services by targeting specific instances of conduct, they are not, on their own, capable of promoting competitive outcomes in ad tech services. There are a number of reasons for this.

Firstly, competition investigations take many years to conclude, and only result in findings and remedies after harms have occurred. This means that, by the time an investigation has concluded, a digital platform's behaviour or position may have become even more entrenched and significant, and caused significant harm to the competitive process. This is especially a concern in ad tech, where markets are fast-moving and dynamic and where competition law enforcement is expected to take considerable time. In contrast, new sector specific rules which prohibit certain types of conduct, impose obligations, and include powers to investigate and impose interim measures, would enable problematic conduct to be addressed more quickly, before significant harm occurs.

Second, the nature of enforcement action is that investigations must focus on a very specific breach of the CCA. This means enforcement action is unable to efficiently address the breadth of problematic conduct that a dominant firm is able to engage in.

Further, competition law is also only able to address harms that fit within those specific provisions. In contrast, new sector specific rules would be able to address concerns that may not fit within existing competition law provisions, but that still have a significant adverse effect on markets. For example, the conflicts of interest discussed in this chapter may not always occur in a way that contravenes existing competition law. Nevertheless, such conflicts can still lead to inappropriate market outcomes for publishers and advertisers, for example through the inefficient pricing of ad tech services.

Finally, it is likely to be difficult to use enforcement action to obtain remedies that address the underlying cause of the problems identified in ad tech services, or provide sufficient penalties to deter very large global digital platforms from engaging in similar conduct in the future.

Sector specific regulation also presents additional benefits that are not available through enforcement action. For example, new sector specific rules could be tailored specifically to the relevant services, and developed in consultation with designated providers, industry and other jurisdictions. This is particularly important in ad tech due to the complexity of the services and the rapid changes that occur in these markets.

319 R Brandon, '[Texas attorney general announces ad tech antitrust probe against Google](#)', *The Verge*, 16 December 2020, accessed 26 August 2021.

320 N Lomas, '[France fines Google \\$268M for adtech abuses and gets interoperability commitments](#)', *Tech Crunch*, 7 June 2021, accessed 26 August 2021.

321 Competition and Markets Authority, '[Investigation into Google's 'Privacy Sandbox' browser changes](#)', *GOV.UK*, updated 30 July 2021, accessed 26 August 2021.

322 Euronews, '[Italian regulators investigate Google over advertising market abuse](#)', updated 28 October 2020, accessed 26 August 2021.

323 European Commission, '[Commission opens investigation into possible anticompetitive conduct by Google in the online advertising technology sector](#)', press release, 22 June 2021, accessed 26 August 2021.

324 Commonwealth of Australia, '[National Competition Policy Review Report](#)' (The Hilmer Report), August 1993, p. 248.

4.10.3 Regulation is used in other contexts to address similar issues

Sector-specific regulation is used in a number of other key areas of the economy. For example:

- In telecommunications, the regulatory regime includes anti-competitive conduct provisions specific to telecommunications and an access framework that provides for services to be declared and for access obligations to apply to declared services.³²⁵
- In financial services, similar conflicts of interest can arise where firms act on behalf of both buyers and sellers of financial products. Financial services firms are subject to regulation that contains various obligations and prohibitions to manage these conflicts, including best interests obligations and prohibitions on use of inside information.³²⁶
- Operators of financial exchanges that are monopoly providers of other services used by competitor exchanges (such as the ASX) may be subject to requirements to provide access to these services on a transparent and non-discriminatory basis with terms and conditions, including pricing, that are fair and reasonable.³²⁷

Google submits that comparisons between its services and financial exchanges cannot be made.³²⁸ While we acknowledge the differences raised by Google, we consider that there is utility in considering other sector-specific regulation to inform our understanding of the issues and make recommendations, given that both ad tech and the sectors describe above face similar overarching problems of conflicts of interest and lack of competitive constraints.

4.10.4 Promoting alignment with ad tech regulation internationally

Finally, we consider that the sector specific rules we are recommending closely align with those being considered overseas, and that this will enable the ACCC to contribute to, and benefit from, the global effort currently underway to drive effective competition in relation to ad tech services.

As Google's ad tech services are provided globally, many other competition regulators have investigated similar behaviour, and are in the process of developing regulatory interventions to address the same issues that have been identified in this report. The United Kingdom, European Union, Japan and Germany are introducing or proposing to introduce regulatory regimes for digital platforms, all of which would likely apply to Google's provision of ad tech services (described in box 4.16 below).

In developing recommendation 2, we have had regard to the specific issues with the supply of ad tech services in Australia. However, as many of the issues are global, we have also considered how the regulatory framework can be developed so it aligns with other jurisdictions and enables Australian regulators to work closely with other jurisdictions. This would offer many benefits, including to:

- enable Australian consumers and businesses to benefit from regulation to improve competition being implemented globally
- reinforce the ability of Australia and other regulators to enforce the rules as they apply to ad tech providers' global businesses
- ensure regulatory rules in Australia do not deter the entry of new ad tech providers, due to the additional burden complying with Australia's rules in addition to those in other jurisdictions
- provide regulatory certainty to designated ad tech providers (and ad tech providers more broadly) about the standards of behaviour that apply to them.

325 Part XIC of the *Competition and Consumer Act 2010* (Cth).

326 *Corporations Act 2001* (Cth) ss 912A(1)(aa), 961B(1), 1043A; ASIC Market Integrity Rules (Securities Markets) 2017 s 3.8.

327 Council of Financial Regulators, [Application of the Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia](#), October 2020.

328 Google, [Submission to Ad Tech Inquiry Interim Report](#), 8 July 2021, p. 4.

Numerous stakeholders emphasised the importance of any regime that is implemented in Australia being consistent with overseas regulation.³²⁹ Google, Facebook, Twitter and Oracle all submitted on the importance of any regulatory solutions that the ACCC recommends being consistent with solutions being implemented globally, and the ACCC working with other regulators.³³⁰

Box 4.15: Regulation of ad tech in the United Kingdom, European Union, United States and Japan

United Kingdom

In its market study into online platforms and digital advertising, the UK's CMA recommended that the government should legislate to introduce enforceable codes of conduct to govern the behaviour of platforms funded by digital advertising that are designated as having 'strategic market status.' The purpose of the codes would be to meet three high-level objectives: fair trading, open choices, and trust and transparency.

On 27 November 2020, the UK government announced that it accepted this recommendation, and that a Digital Market Taskforce had been established to provide advice on the design of the codes, and the designation of firms with strategic market status.³³¹

On 8 December, the Digital Markets Taskforce, led by the CMA, also provided its advice.³³² It recommended that the codes be based on high level objectives to be set out in legislation and supported by related principles and guidance. The objectives are the same as those put forward in the CMA Digital Advertising Market Study ('fair trading', 'open choices' and 'trust and transparency') and that the Digital Markets Unit (DMU) (to be established in the CMA) would determine the principles and guidance. If the DMU identifies a breach of the codes, it could open a formal investigation and subject to the finding, require behavioural changes or impose substantial penalties.³³³ It is also recommended that the DMU can issue interim code orders.

On 7 April 2021, the DMU was established within the CMA. On 20 July 2021, the UK government opened consultation on 'a new pro-competition regime for digital markets', which is based on the advice of the Digital Markets Taskforce, and includes consultation on the proposal for codes of conduct.³³⁴

329 See: Google, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 21; Facebook, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 3; Twitter, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 2; Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 16 April 2021, p. 2.

330 See: Google, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 21; Facebook, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 3; Twitter, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 2; Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 16 April 2021, p. 2.

331 Department for Business, Energy & Industrial Strategy (United Kingdom) and Department for Digital, Culture Media & Sport (United Kingdom), [Response to the CMA's market study into online platforms and digital advertising](#), November 2020.

332 Competition and Markets Authority, [Digital Markets Taskforce](#), update from the Competition and Markets Authority, GOV.UK, updated 21 March 2021, accessed 26 August 2021.

333 The advice recommends that the Digital Markets Unit can impose penalties up to a maximum of 10% of worldwide turnover if the breach was intentional or negligent.

334 Competition and Markets Authority, [A new pro-competition regime for digital markets](#), GOV.UK, 20 July 2021, accessed 20 July 2021.

The Comisión Nacional de los Mercados y la Competencia (the Spanish National Authority for Markets and Competition) recently conducted a study on the competition conditions on the online advertising sector in Spain, in which it endorsed this proposal.³³⁵

Japan

On 27 May 2020, the Japanese legislature passed The Act on Improving Transparency and Fairness of Digital Platforms (TFDPA). The Act requires that 'specified digital platform providers'³³⁶ improve fairness and transparency by disclosing terms and conditions, voluntarily developing procedures that ensure fairness and reporting on the measures that they have implemented.³³⁷

On 17 February 2021, the Japan Fair Trade Commission (JFTC) published its Final Report Regarding Digital Advertising, which focused on trade practices in the digital advertising sector. The report raised concerns regarding the preferential treatment given by digital platform operators, and considered that this may undermine competition and unfairly disadvantage rival businesses.³³⁸ The JFTC therefore committed to a number of initiatives, including enforcing Japan's Antimonopoly Act, collaborating with the Headquarters for Digital Market Competition, as well as specifically expanding the application of the TFDPA to digital advertising markets.

Germany

On 19 January 2021, the 10th Amendment to the German Competition Act (GWB Digitalisation Act) came into force in Germany. The Act introduced changes adapting German competition law to better address digital platforms. The Act now stipulates that access to data, and whether a platform has the power of intermediation is also relevant when making an assessment of a firm's market power.³³⁹

The amendment also introduces a new legislative provision, Section 19a, which gives the Bundeskartellamt the power 'to intervene at an early stage in cases where competition is threatened by certain large digital companies.'³⁴⁰ The Bundeskartellamt can prohibit specific types of conduct by companies which are of paramount significance for competition across markets, due to their strategic position and resources. This includes conduct such as self-preferencing, or preventing third parties from entering the market by processing data relevant for competition.³⁴¹

The amendment expands the 'essential facilities doctrine' by adding access to data to the list of potential essential facilities. The doctrine prohibits a dominant company from refusing access to a network or infrastructure that is needed to compete.³⁴²

335 Comisión Nacional de los Mercados y la Competencia (CNMC), '[Executive Summary: Study on the competition conditions in the online advertising sector in Spain](#),' accessed 31 August 2021.

336 Ministry of Economy, Trade and Industry (METI) Japan, '[Towards sound development of markets surrounding digital platforms](#),' updated 21 July 2021, accessed 26 August 2021.

337 Ministry of Economy, Trade and Industry (METI) Japan, '[Towards sound development of markets surrounding digital platforms](#),' updated 21 July 2021, accessed 26 August 2021.

338 Japan Fair Trade Commission (JFTC), '[Final report regarding digital advertising](#),' Fact-finding Survey Report on Digital Platform Operators' Trade Practices, February 2021, p. 153.

339 Bundeskartellamt, Amendment of the German Act against Restraints of Competition, Press release, 19 January 2021, p. 2.

340 Bundeskartellamt, '[Amendment of the German Act against Restraints of Competition](#),' p. 2.

341 Bundeskartellamt, '[Amendment of the German Act against Restraints of Competition](#),' p. 2.

342 Concurrences, '[The German Parliament publishes its Act against Restraints of Competition's 10th amendment introducing a new regulatory framework for access to commercial data under antitrust law](#),' 19 January 2021, accessed 26 August 2021.

European Commission

The European Commission has submitted a legislative proposal to the European Council and European Parliament for the introduction of a *Digital Markets Act* to address competition issues in these markets (in addition to a *Digital Services Act* that focuses on broader issues associated with digital services). This draft legislation will apply to a range of services found to have ‘gatekeeper’ status, including advertising services, such as ad networks, ad exchanges (SSPs), and other intermediation services. The draft legislation will, among other things, require ‘gatekeeper’ platforms to refrain from engaging in self-preferencing conduct.³⁴³ Specifically, the legislation requires a gatekeeper platform to refrain from treating its own services more favourably in ranking services, and must apply fair and non-discriminatory conditions to such ranking.³⁴⁴ The European Commission has stated that this prohibition, ‘would aim at ensuring open and fair trading online, especially when these practices are potentially market-distorting or entrenching economic power of the large online platforms’.³⁴⁵

United States

On 11 June 2021, members of the House Judiciary Committee outlined a bipartisan legislative agenda aimed at ‘holding unregulated Big Tech monopolies accountable for anti-competitive conduct.’ The Committee introduced a suite of five bills which covers a broad range of digital platform services. The proposed agenda is not specific to advertising services, but includes bills which could apply to ad tech.

For example:

- the American Innovation and Choice Online Act proposes to prevent platforms from engaging in self-preferencing conduct, as well as making it unlawful for platforms to restrict or impede the ability of another business to interoperate with services operated by the platform³⁴⁶
- the Ending Platform Monopolies Act would eliminate conflicts of interest arising from a dominant platform’s concurrent ownership or control of an online platform and certain other businesses
- the Augmenting Compatibility and Competition by Enabling Service Switching (ACCESS) Act proposes interoperability and data portability measures to lower barriers to entry and switching costs for businesses and consumers.

The proposed bills were passed by the House Judiciary Committee on 21 June 2021, but are yet to be voted on by the full House of Representatives.³⁴⁷

343 The Digital Markets Act will only apply to ‘core service platforms’ designated as ‘gatekeeper’ platforms. Broadly, a platform will be designated as a gatekeeper if: it has a significant impact on the internal market; operates a core platform service which serves as an important gateway for business users to reach end users; and enjoys an entrenched and durable position in its operations or it is foreseeable that it will enjoy such a position in the near future: See European Commission, Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act), 15 December 2020, article 3(1)(a), p. 36.

344 European Commission, Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act), 15 December 2020, article 6(d), p. 40.

345 European Commission, Inception Impact Assessment - [Digital Services Act package: Ex ante regulatory instrument for large online platforms with significant network effects acting as gate-keepers in the European Union’s internal market](#), 2 June 2020, p. 4.

346 The American Innovation and Choice Online Act, p. 2.

347 Bloomberg, [Antitrust Bills Not Ready for House Floor Vote, Hoyer Says](#), accessed on 26 August 2021.

4.11 Application and content of ad tech specific rules

4.11.1 Principles and obligations to only apply to ad tech providers with dominant position

Given the purpose and scope of the proposed regulation, the rules should only apply to providers who have the ability to engage in conduct that impedes competition, or where harms arise from conflicts of interest. As discussed in part 1 of this chapter, we consider that ad tech providers will generally only be able to do this where they have market power and control key services.

While the exact criteria for the application of the rules is yet to be determined, we consider that Google is likely to be the only ad tech provider that the sector-specific rules would apply to. This is due to its dominant position in the provision of multiple ad tech services and its vertical integration across the ad tech supply chain and as a publisher of key advertising inventory.

However, while unlikely, there is the potential for other ad tech providers to reach a similar position in the ad tech supply chain, and so we consider that the ACCC should be given the power to decide whether the rules should apply to any other ad tech providers, if and when they meet the threshold requirements. The criteria for determining which ad tech providers should be designated should be clearly set out and linked to the providers market power and/or strategic position in the ad tech supply chain.

As discussed above at box 4.14, we consider that the ad tech specific rules could form part of a broader regime that would apply to a range of digital platform services. There are clear benefits to having a consistent threshold for designating platforms under such a regime across services.

4.11.2 Types of prohibitions and obligations the rules should include

The exact content of the rules and how they apply to particular ad tech providers would be determined by the ACCC. However, we consider that the ACCC should be able to impose rules that are capable of managing conflicts of interest and addressing particular types of self-preferencing and other competition issues that are evident in the supply of ad tech services.

Consequently, the rules should include the potential for:

- prohibitions on anti-competitive bundling or tying of services
- obligations to provide non-discriminatory or equivalent access to ad tech services
- requirements to manage conflicts of interest
- transparency requirements.

The rules developed would need to be effective and proportionate to address the competition issues and conflicts of interest identified in this report.

The ACCC should be able to determine the specific obligations and prohibitions that would apply for each specified ad tech provider, based on an assessment of the competition concerns relating to conduct the ad tech provider has engaged in, or the potential for that provider to engage in the conduct in future. This would also involve an assessment of how the obligations and prohibitions could address the specified ad tech providers' conduct.

The ACCC would also need to consider the impacts on efficiency of applying particular obligations and prohibitions to each specific ad tech provider. This could include considering whether the conduct proposed to be subject to the rules has any efficiency benefits to market participants and consumers, and whether any rules imposed would reduce or limit these benefits.

This section describes the content of the rules, and how they could address the competition issues arising from Google's conduct identified in this chapter.

Prohibitions on anti-competitive bundling and/or tying of services

The rules should, in specific circumstances, prevent ad tech providers subject to the rules from unreasonably restricting the purchase of exclusive inventory to their ad tech services, or making use of one of their ad tech services contingent on integration with their other ad tech services. However, this should only apply where the inventory or service that is made exclusively available is considered essential or important to advertisers, publishers, or other users.

The rule would aim to promote competition by enabling advertisers and publishers to choose their use of ad tech provider based on their merits, rather than on their exclusive access to publisher inventory or advertisers' bids.

This rule could address the conduct identified in this chapter by:

- preventing Google from making YouTube inventory only available for purchase through its DSPs, which could enable advertisers to purchase YouTube inventory on other DSPs
- preventing Google from making Google Ads demand available only through its SSP, which could allow publishers to use third-party SSP to access bids from Google Ads customers.

Obligations to provide non-discriminatory or equivalent access to ad tech services

The rules should include an obligation for ad tech providers subject to the rules to provide non-discriminatory or equivalent access to ad tech services and associated information.

This could include requirements that the specified ad tech provider applies the same rules regarding access to, and use of, its services by third parties as it applies to its own services. However, there could be exceptions to this rule, such as requiring that third parties meet certain technical or other requirements before being granted access under the rules, or providing for limited circumstances where equal access does not need to be provided.

This would help to prevent the specified ad tech provider from inhibiting competitors by preferencing its own services over rivals' services. This would improve competition by enabling other ad tech providers to compete on equivalent terms with an ad tech provider which benefits from dominance at one or more levels of the supply chain.

Sections 4.6 to 4.8 identified a number of ways that Google has, over time, used its dominance in publisher side services to preference its own services with the effect of limiting the ability of its rivals to compete effectively. An obligation for non-discriminatory or equivalent access could address this conduct in the following ways:

- Requiring Google to take reasonable steps to ensure technical interoperability with third-party ad tech services, such as other SSPs and header bidding. This could address Google's refusal to participate in header bidding.
- Requiring Google to provide equivalent information to auction participants, and not share information preferentially. This could address Google's restrictions on the provision of minimum bid to win information for SSPs using header bidding, and prevent it from providing its own services with additional information about auctions.
- Preventing Google from introducing rules on auction eligibility that discriminate against rivals. This could restrict Google from imposing terms of use in Open Bidding that restrict first-party demand.
- Preventing Google from charging third-party SSPs a fee for using Google's publisher ad server, but not its own SSP.
- Requiring Google to ensure fair sequencing of information pre-auction, which could address concerns about the potential for Google to have a 'last look' advantage. While we note that Google removed this advantage with the transition to the Unified Auction, this rule would ensure that Google cannot enable this practice to occur again.

A number of submissions to the interim report supported the introduction of requirements for interoperability and restrictions on self-preferencing conduct. However, Google, the Asia Internet Coalition and the CCIA expressed concerns about introducing such obligations, submitting that they would make it much slower and more difficult for the specified ad tech provider to bring product improvements to the market.³⁴⁸ Google submits that, as testing is required of features on its products before they are introduced to market, an obligation that requires equivalent access to its services would result in these features being introduced far more slowly, as Google would need to work simultaneously with ad tech providers.³⁴⁹

The ACCC acknowledges these concerns, and notes that a requirement to provide non-discriminatory or equivalent access would be highly unlikely to apply in circumstances where a product is being tested for the market. In addition, such an obligation is not aimed at ensuring that all market participants are given access to features in the market at the same time. Rather, it is aimed at ensuring that the specified ad tech provider does not use their dominance to either apply discriminatory rules to other ad tech providers, or limit interoperability, to preference their own ad tech services.

Requirements to manage conflicts of interest

The rules should include obligations for ad tech providers subject to the rules to put measures in place to manage conflicts of interest that arise because of their position as a supplier of services across the supply chain. These obligations should apply where there is a conflict between the interests of the specified provider's related businesses and the interests of its customers. Rules could also apply where the specified ad tech provider faces conflicts between different classes of customers (for example advertisers and publishers), if required.

Specifically, the obligations could include:

- Requirements that the specified ad tech provider does not use information about the operation of one ad tech product to supply another ad tech product. For example, preventing a publisher ad server from providing its SSP with competitors' bids prior to it making a bid itself, or preventing an SSP from providing its DSP with competitors bidding information to inform its bidding algorithm. There is significant industry concern about Google's ability to share bidding and auction information between its services. While Google has removed its 'last look' advantage, there is little ability for advertisers, publishers or other ad tech providers to verify that this information is not being shared. This could also address concerns that Google could use its control of Chrome under the Privacy Sandbox proposals to provide its DSPs with information advantages in auctions that are run on Chrome.
- Requirements that the specified ad tech provider act in the best interests of advertisers or publishers. For example, requiring that DSPs act in the best interests of their advertiser customers, and SSPs act in the best interests of their publisher customers. This could prevent Google from engaging in the self-preferencing behaviour discussed in this chapter, where that behaviour has resulted in lower revenue for publishers, and higher costs, or the purchase of lower quality ad inventory, for advertisers.

The rules should include measures to ensure that the ACCC can determine if the specified ad tech providers are complying with their conflict of interest obligations, such as reporting and record keeping obligations. Currently, a key issue for advertisers and publishers is that they have little transparency of the operation of ad tech services, which means that, without regulatory oversight, dominant ad tech providers may have a greater incentive to act contrary to their customers' interests.

It is important that advertiser and publisher customers of Google are able to trust that Google is acting in their best interests when performing functions on their behalf. This is particularly important where there is not effective competition, meaning that customers cannot easily switch to an alternative provider, and where customers are unable to observe whether a provider is acting in their interests.

³⁴⁸ See Google, [Submission to Ad Tech Inquiry Interim Report](#), 12 March 2021, Computer & Communications Industry Association, [Submission to Ad Tech Inquiry Interim Report](#), 5 March 2021, p. 8; Asia Internet Coalition, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 4.

³⁴⁹ Google, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 39.

In this scenario, a 'best interests' obligation on Google (for its SSP to act in the best interests of its publisher customers, and its DSPs to act in the best interests of its advertiser customers) could provide advertisers and publishers with greater confidence that the services they use operate in their interests.

Google submits that a 'best interests' obligation would be difficult to apply to a two-sided platform, such as an SSP for example, because their customers are both ad buyers and publishers.³⁵⁰ While we note that both DSPs and publishers are users of SSPs, the SSP is primarily a publisher product. In addition, this obligation would require providers to ensure that their ad tech services operate in the best interest of the class of customers generally (for example, advertisers or publishers). In addition, in its assessment of which rules should apply to the specified ad tech provider, the ACCC would consider concerns relating to the feasibility and practicality of the rules.

Google has also submitted that the interconnected nature of ad tech means it would mean ad tech products could not function properly if there was a complete ban on the sharing of information. However, it is highly unlikely that this rule would prohibit the sharing of information that is necessary for ad tech services to function.³⁵¹ Rather, this rule could be focussed on the sharing of information that is not widely available and has the ability to influence bid prices.

Transparency requirements

The rules should include additional transparency requirements to apply to ad tech providers subject to the rules.

Transparency requirements would help address concerns about Google's conduct discussed in this chapter, and the transparency concerns discussed in chapter 5. For example, the proposed requirements could:

- Increase transparency around the way that Google operates its services. Part of the reason Google has been able to engage in the conduct discussed in this chapter is because its advertiser and publisher customers are unable to see how Google's services are operated, and therefore cannot assess whether Google is acting in their best interests, due to the complexity of ad tech auctions. This means it is difficult for advertisers and publishers to determine if they should switch providers. In particular, the rules could require Google to provide information on auctions in its publisher ad server, such that publishers are able to compare bids from header bidding with bids from Google's Open Bidding and its SSP.
- Require Google to take steps to facilitate independent assessment of its DSP, and to provide the average fees for Google Ads. This would help address issues around the restrictions Google has placed on verification of YouTube ad inventory, and concerns that advertisers and publishers are unable to determine the fees retained by Google Ads.

We have discussed transparency issues in the ad tech supply chain, including issues relating to Google's services, in chapter 5. In chapter 5 we make recommendations for transparency measures to apply to the ad tech industry as a whole to address broader transparency issues, as well as recommending that Google should take actions to improve the transparency of its services.

These industry wide measures would also apply to Google and could assist in addressing specific issues relating to the transparency of its services. However, we still consider that the ACCC should have the option to implement Google-specific transparency requirements under the proposed sector specific rules. This is because recommendations in chapter 5 rely on Google voluntarily participating in industry led solutions, or otherwise taking action. Without the threat of regulatory intervention, we consider that it is unlikely Google would participate in voluntary measures.

350 Google, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 38.

351 Google, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 38.

Monitoring and enforcement provisions

The rules should be directly enforceable by the ACCC, with penalties for non-compliance so that there is a strong deterrent for breaching the obligations. Further, the ACCC should have powers to monitor compliance with the rules and powers to investigate potential breaches of the rules, supported by information gathering powers and record keeping powers. This may also include powers to impose interim measures to prevent or address conduct in a timely manner.

4.12 Implementation of the rules

4.12.1 The ad tech rules could form part of a broader regulatory regime for digital platforms who have a dominant position in Australia

As described above, the rules relating to ad tech services could be incorporated into a potential broader regulatory regime that would apply to digital platforms in Australia.

The ACCC will be exploring whether a broader regulatory regime is required to address the competition and consumer concerns associated with large digital platforms and will inform the government of its views on the need for such regulation and the potential design of any such regulation in the fifth interim report for the Digital Platform Services Inquiry. This report is due in September 2022. More information about this report and the ACCC's proposed consultation process is set out in box 4.16.

In considering potential options for reform, the ACCC will also be informed by the implementation or proposal of digital platform specific regulation in other jurisdictions. As set out above, the ACCC recognises the benefits associated with international alignment given the global operations of the large digital platforms and many of their customers.

Box 4.16: Digital Platform Services Inquiry fifth interim report (September 2022)

The ACCC will give further consideration to the need for broader regulatory changes as part of its Digital Platform Services Inquiry – Interim Report September 2022 (fifth interim report).³⁵² This report will be the mid-term report for the five year Digital Platform Services Inquiry 2020–2025.

The fifth interim report will focus on competition and consumer issues raised in the course of the Digital Platform Services Inquiry to date, as well as issues raised in the Ad Tech Inquiry and Digital Platforms Inquiry 2017–2019, to the extent they cover digital platforms and factors within the scope of the Digital Platform Services Inquiry. The report will consider whether there is a need for changes to Australia's existing competition and consumer regulation to address common issues we have identified in our Inquiries and if so, what such a regime could include.

The ACCC plans to release a concepts paper in the first quarter of 2022 to seek feedback and inform the fifth interim report.

The fifth interim report is due to the Treasurer by 30 September 2022.

³⁵² For more information about this inquiry, and the September 2022 report, see ACCC, [Digital platform services inquiry 2020–2025](#).

5. Transparency of ad tech services

Key points

- The operation of the ad tech supply chain is complex, and advertisers and publishers rely on their ad tech providers for information about the pricing and performance of their services. There are a number of areas where the ad tech supply chain is opaque. This makes it difficult for advertisers and publishers to assess the performance of their ad tech services, and make informed choices about which ad tech services and providers will best meet their needs.
- While some transparency issues exist across the ad tech industry, the greatest transparency issues relate to Google's services. We consider that Google's strong position across the supply chain, and the 'must have' nature of many of its services, contribute to these transparency issues as there is less competitive pressure for Google to be transparent with its customers.
- We have found that there are three key areas where transparency issues can arise.

Operation of ad tech auctions

- It can be difficult for publishers and advertisers to have a full understanding of ad tech auctions. Many ad tech services provide publishers and advertisers with information about auction processes or outcomes. However, publishers are not satisfied about the level of transparency over Google's publisher ad server auctions.
- Auctions that take place on Google's publisher ad server lack transparency. In particular, the operation of Google's Unified Auction is opaque and could enable Google to engage in self-preferencing behaviour and to retain undisclosed fees. Further, Google does not provide publishers with sufficient information about auction outcomes to make informed decisions about how they sell their inventory.

Prices and fees of ad tech services

- Publishers and advertisers generally receive sufficient information from their own ad tech providers about prices and fees. The main exception to this is Google Ads, which does not disclose the fees for using its services.
- Further, publishers and advertisers do not have visibility of fees across the whole ad tech supply chain. This undermines confidence that the supply chain is providing value to advertisers and publishers, and limits the ability of publishers and advertisers to make informed decisions about the purchase and sale of ad inventory.

Performance of demand side services

- Advertisers are able to measure the performance of most demand side services using attribution and verification providers. The key exception to this is measuring the performance of Google's DSPs. This is because Google limits the ability to independently and fully measure the performance of YouTube inventory.
- Further, Google's changes to how it shares Google User IDs has made it very difficult for advertisers to engage in multi-touch attribution and gain detailed insights into the performance of their ad campaigns.

Recommendations

- The ACCC makes three recommendations to address the transparency issues identified in this chapter:
 - Recommendation 4: Industry should establish standards to require ad tech providers to publish average fees and take rates for ad tech services, and to enable full independent verification of demand side platform services. If such voluntary industry standards are not effective in achieving transparency to meet the needs of advertisers or publishers, or if the standard is not made within a reasonable period of time, the ACCC could introduce measures to address transparency issues under the rules proposed in Recommendation 2 (to address Google specific issues) or Recommendation 6 (for industry wide issues).
 - Recommendation 5: Google should provide publishers with additional information about the operation and outcomes of its publisher ad server auctions. If the information provided by Google is insufficient to enable publishers to carry out this comparison, the ACCC could introduce measures to require Google to improve the transparency of its publisher ad server auctions under sector specific rules outlined in Recommendation 2.
 - Recommendation 6: The ACCC should be given powers to develop and enforce rules to improve transparency of the price and performance of ad tech services. The rules would apply across the Australian ad tech supply chain. Measures could include common transaction IDs, or requirements to publish prices and take rates in a standard form.

This chapter examines the level of transparency in the operation, pricing, and performance of the supply chain. The chapter is structured as follows:

- Section 5.1 explains why transparency in the ad tech supply chain is important, and how the complexity of the ad tech supply chain contributes to its opacity.
- Section 5.2 provides an overview of the price and quality measures advertisers and publishers need to make informed decisions, and how they access such information.
- Sections 5.3 to 5.5 discuss the level of transparency over auctions, pricing and performance of ad tech services, and how this is impacting competition and efficiency in the supply chain.
- Section 5.6 outlines our findings about issues around the quality of verification and attribution services, and the industry's response to dealing with scam ads.
- Section 5.7 discusses our recommendations to promote greater transparency in the supply of ad tech services.

5.1 Transparency and complexity in the ad tech supply chain

5.1.1 The importance of transparency

For competition in the supply of ad tech services to be effective, advertisers and publishers need to be able to make informed choices about which services and providers they will use. To do this they need to be able to assess the price and quality of ad tech providers' services. Where the pricing, quality or information about how the supply chain is operating is not transparent, it can make this assessment difficult, and advertisers and publishers may not be able to choose the ad tech providers that deliver them with the greatest value possible. A lack of transparency in the ad tech supply chain could undermine advertisers and publishers trust in the services and could lead to some advertisers and publishers deciding not to use ad tech services.

Information asymmetries caused by a lack of transparency around the performance of ad tech services could also lead to poorer outcomes more broadly for advertisers and publishers, and ultimately for consumers. If quality is difficult for advertisers and publishers to observe, it is difficult for ad tech providers to compete on the basis of quality of the service. The easier it is for advertisers and publishers to assess quality of service, the more likely it is that competition will reward those ad tech service providers who offer the best value for money.

Further, transparency over the ad tech supply chain can be important for helping to address concerns relating to vertically integrated providers' conflicts of interest and the risk of anti-competitive self-preferencing (as discussed in chapter 4).

5.1.2 The complexity of the ad tech supply chain can contribute to a lack of transparency

The ad tech supply chain is inherently complex. While ad tech services enable publishers and advertisers to buy and sell ad inventory in a targeted way, it can be difficult for advertisers and publishers to understand and monitor how ads and ad inventory are being traded in the supply chain. This means they are often reliant on the information provided to them by the ad tech providers, including in some cases third-party verification and attribution providers (who measure the performance of ads for advertisers, see box 5.1), to make informed decisions about the services and providers they use.

There are a number of factors which contribute to the complexity, including:

- **Advertisers and publishers each only have visibility over their contracted part of the supply chain:** The number of levels in the ad tech supply chain, with the potential for many auctions to take place, increases the complexity of the price flows. Publishers and advertisers only have a direct relationship with their own service providers, which means they generally only have visibility over part of the supply chain, making it difficult to determine the relationship between the price paid by the advertiser and the consideration received by the publisher.³⁵³
- **Trading is automated:** The auctions across the ad tech supply chain take place within milliseconds (i.e. the time that it takes for a webpage to load). To facilitate this, ad tech providers' systems are automated and rely on sophisticated and complex algorithms. The complexity and the lack of visibility over the operation of these systems, means that advertisers and publishers are reliant on ad tech providers to make decisions about the buying and selling of inventory on their behalf. It also means that it is difficult for advertisers and publishers to understand and oversee how ad tech providers make these decisions.³⁵⁴
- **Reliance on third parties to measure performance:** Advertisers need to rely on third-party verification and attribution providers, or their DSPs and advertiser ad servers, to measure the performance of their ad campaign and the ad tech services they use (see further discussion below).³⁵⁵ In traditional media, verification of an ad is a simpler process. This is because the advertiser is able to see their ad delivered in the television slot or a section of the newspaper.

353 Ad tech services do not play a large role in facilitating these direct deals. Insertion orders are written contracts detailing an advertising deal between an advertiser and a publisher. They contain information related to an advertising campaign such as starting date, end date, ad type, frequency, rates and fees, and target audience.

354 For example, the CMA has noted that ultimately the granular detail of how DSPs bidding decisions are made is only truly understood by the platforms themselves, and that advertisers cannot observe the algorithms used by a DSP. See Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix M, p. M97.

355 See for example, IAB Australia, [Australian Digital Advertising Practices: 2020 Update](#), pp. 11-20; Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix O.

5.2 Quality and price information required by advertisers and publishers

This section discusses the price and performance measures that are important to advertisers in purchasing DSP services, and for publishers in purchasing supply-side services, and how advertisers and publishers are able to access this information.

5.2.1 How advertisers assess the price and quality of DSPs

When advertisers assess the price and quality of DSP services, there are a number of important factors, including:

- the prices, and costs of the DSP
- the performance of the DSP according to the following metrics:
 - whether the ads are being served to the advertiser’s target audience
 - whether they have been charged for services that have actually been provided (i.e. if they are getting what they paid for)
 - whether it was possible for a consumer to see the ads purchased by the DSP
 - whether the ads purchased are shown on websites and in contexts that are appropriate or ‘brand safe’
 - whether the ads purchased are delivered to, or clicked on by, a consumer
 - whether the consumer took any action after seeing the ad.³⁵⁶

Advertisers are unable to measure a number of the above factors themselves, and consequently rely on **ad verification services** and **ad attribution services** to assess these factors, discussed in box 5.1 below. Additional information about these services is provided in the Interim Report.³⁵⁷

As discussed in chapter 3, there are other factors that advertisers take into account when deciding which DSP to use. In this section we have focused on those factors that can be difficult for advertisers to compare as they relate to the performance of the ads traded through their DSP.

356 See for example, Havas Media, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 4; Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, pp. 13–14; Verizon Media Australia, [Submission to Ad Tech Inquiry Issues Paper](#), April 2020, p. 3; IAB Australia, [Australian Digital Advertising Practices: 2020 Update](#); Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix O, p. 1.

357 Measuring the effectiveness of an ad campaign is very complex, particularly where an advertiser aims to increase their brand awareness instead of leading consumers to make purchasing decisions. Verification and attribution services will help to do this, but advertisers may also use other tools to assess how effective ad campaigns are. See for example, Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 13; IPG Kinesso, [Submission to Ad Tech Inquiry Issues Paper](#), 20 May 2019, p. 13.

Box 5.1: Ad measurement services

Advertisers use two main types of measurement services to assess the quality of ad tech services provided: ad verification services, and ad attribution services.

Ad verification services

Ad verification services provide three key services for advertisers:

- **Measuring viewability:** Measuring viewability involves checking whether an ad was displayed in a way that could have been seen by a consumer.³⁵⁸
- **Brand safety:** Providing brand safety is about taking steps to stop advertisers' ads being displayed in a place or in a context that could harm the reputation of the advertisers' brand.³⁵⁹ It is used to stop ads being displayed on webpages containing unsuitable content (for example, promoting illegal or conducting illegal activity), or next to content that is not a suitable context for the ad.³⁶⁰
- **Ad fraud:** the final element of ad verification is preventing ad fraud, and identifying where ad fraud has occurred. In this context, ad fraud refers to ads being served or clicked on, without an actual individual being involved. It usually involves bots generating fraudulent 'views' or 'clicks'.³⁶¹

Ad attribution

Ad attribution is the process of tracking whether a consumer takes certain actions, such as signing up to a service or purchasing a product, after seeing an advertisement. Accurate and detailed ad attribution information is important to informing advertiser decisions about which service providers to use, which publishers to purchase inventory from, and also the form of advertising which is most effective.

Measurement service providers

Ad verification and attribution services are usually provided to advertisers by specialised providers that are independent of DSPs and the services are supplied directly to an advertiser.³⁶² Some DSPs will enter partnerships with verification and attribution providers so that advertisers are able to easily purchase verification and attribution services, and some DSPs provide their own ad verification and attribution services.³⁶³ For example, Google provides verification and attribution for ads sent through its own DSP.³⁶⁴

358 For further detail see, IAB, AANA and MFA, [Australian Digital Advertising Practices: 2020 Update](#), pp. 11-12.

359 See, Interactive Advertising Bureau Australia, Australian Digital Advertising Practices: 2020 Update, p. 16 and Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix O, p. O9

360 There are two elements to verifying brand safety. First, pre-bid verification which is checking that an ad impression is brand safe before they bid on it. This is important to advertisers as it stops ads being displayed in a way that may damage the reputation of their brand. Secondly, post-bid verification which is checking whether a served ad was shown on an 'unsafe' page or context. This is important so advertisers do not pay for ads that are shown on unsafe pages or contexts.

361 ACCC, Digital Platforms Inquiry, [Final Report](#), June 2019, p. 146.

362 Some attribution and verification providers partner with DSPs (so that an advertiser using their service is able to more easily buy their services). Further, advertisers generally only use one ad server, but this often connects into multiple DSPs. As a result, ad verification and attribution providers usually connect to the advertisers chosen advertiser ad server, so that it is able to measure the performance of all the DSPs the advertiser use.

363 For example, the ACCC understands that Adobe, The Trade Desk, Amobee and Google all offer their own verification and/or attribution services.

364 Verification services are provided as part of Google's DSP services, and include fraud prevention, viewability and verification. See, Google, [Display & Video 360: Features](#), accessed 17 December 2020. Google provides attribution services are provided through two analytics products, Google Analytics and Google Analytics 360. Google Analytics is a free product provided to users of Google's DSP service Google Ads. It provides conversion reports and basic attribution modelling. Google Analytics 360 is a paid product for users of any of Google's DSP services (Google Ads, Google Ad Manager or Display & Video 360). It provides conversion reports but also more advanced modelling. Google Analytics and Google Analytics 360 provide a range of data analysis tools, and are not only used for attribution functions. See, Google, [Analytics 360: Integrations](#); and [Google Marketing Platform: Analytics](#). We understand that Google's products only provide ad verification and attribution services for ads that are delivered using Google's own DSP services, and not for ads sold using other DSPs.

We have not focussed on advertiser ad server services in this chapter. This is because evaluating the quality and price of an advertiser ad service is a simpler process based on the prices charged for the service, usability and the features offered.

5.2.2 How publishers assess price and quality

A key measure of performance of supply-side services is the revenue that publishers receive for the sale of ad inventory on their websites using that service. Further, information about how specific ad inventory is sold is also important to their assessment of the effectiveness of supply-side services, and that this information is also used to inform decisions about how they will sell their inventory in future. This information includes:

- bidding data on all bids made, including the names of all bidders, their bid prices, and whether a bid succeeded or failed
- data about the impression sold, and the price it was sold for
- data about any header bidding that took place
- data provided in bid requests sent to DSPs
- the targeting parameters used by advertisers who participated in the auction
- the participation and win rates of the auction
- data transferred during an auction.³⁶⁵

Unlike advertisers who often rely on third-parties to obtain the information necessary to assess the quality of the DSP they use, publishers are more reliant on their supply-side providers to provide them with the information they require to assess the price and quality of these services.

5.3 Transparency of ad tech auctions

Publishers' and advertisers' ability to understand the operation and outcomes of auctions throughout the ad tech supply chain is important to being able to assess the price and quality of the services provided. Publishers, in particular, consider that detailed information about auction processes is important in deciding which supply-side services to use.

The key issue raised by publishers in relation to auction transparency is that Google's Unified Auction, which takes place in its publisher ad server, is not transparent.

5.3.1 Transparency of ad tech auctions generally

Submissions to the Issues Paper and the Interim Report highlighted that information provided about auctions varies across ad tech providers. However, with the exception of Google's auctions, few specific concerns were raised about the transparency of auctions.

For example, SBS submits that each ad tech provider has a different level of transparency, and there can be a low level of transparency on bid requests. Some advertisers also submit that while there are a baseline of available metrics available to understand auction mechanics, certain providers give more detailed information than others, and the level of transparency varies across providers.³⁶⁶ Daily Mail Australia submits that it can be difficult to understand algorithms used by DSPs and SSPs.³⁶⁷ In contrast, Publicis Groupe, an ad agency, submits that this is not an issue as DSPs provide them with education about algorithms and bid factors.³⁶⁸

365 Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 2; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, pp. 25–26; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 12–13; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 80–82.

366 Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 8; Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 2; Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 25.

367 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), February 2021, p. 28.

368 Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 8.

In order to understand whether advertisers and publishers receive sufficient information about auctions, we sought information from ad tech providers about the types of information they give advertisers and publishers. We have found that while the level of detail varies amongst ad tech providers, at a broad level, advertisers and publishers are able to access a range of information that helps them understand auction outcomes.

Consequently, we do not consider that regulatory intervention is currently required to improve the level of transparency over auction mechanics or algorithms across the ad tech industry. However, as discussed below, given the complexity and information asymmetries of the supply chain, we consider that it is important that the ACCC should have the ability to address industry wide transparency issues, including the transparency of auctions (this is discussed below as part of recommendation 6).

5.3.2 Issues with transparency of the Unified Auction on Google's publisher ad server

While there do not appear to be issues about the transparency of the auctions run by most ad tech providers across the supply chain, including those conducted on Google's DSPs, there are transparency issues with the Unified Auction on Google's publisher ad-server. How the Unified Auction operates is described in box 5.2 below.

Box 5.2: How Google's Unified Auction works

Google's Unified Auction takes place on Google's publisher ad server. The participants in the Unified Auction can include:³⁶⁹

- Authorised Buyers: DSPs bidding in to Google's SSP, including Google's DSPs.
- Open Bidders: third-party SSPs participating in Google's Open Bidding auction (Google's server-side header bidding product).
- The winner of any header bidding auction: if the publisher uses header bidding, the winning SSP's bid from the header bidding auction participates in the Unified Auction.

As described in chapter 4, the reason that header bidders must participate this way in Google's Unified Auction is due to Google's decision to not participate in header bidding. Because Google does not participate in header bidding, publishers can only run an auction between Google's SSP, and other SSPs by using Google's own publisher ad server.

The transparency of Google's publisher ad server auctions is particularly important because of Google's dominance in publisher ad server services and the way it has used this position to preference its own SSP and DSP services (described in detail in chapter 4). In a competitive market, issues with the opacity of a single competitor's auction would not usually be as significant. This is because customers could switch to products that offer them greater transparency if this of high value. However, Google's dominance of publisher ad server services, and the way that it operates its auctions, means many publishers have no choice but to use Google's publisher ad server.

Concerns with the opacity of the Unified Auction in Google's publisher ad server

A number of stakeholders have raised broad concerns about the opacity of Google's Unified Auction with some commenting that it is a 'black box'. Stakeholders consider that this lack of transparency over the operation of Google's Unified Auction enables Google to engage in self-preferencing behaviour and retain undisclosed fees.³⁷⁰

An ad tech provider submits that one effect of the lack of transparency in Google's Unified Auction is that publishers are unable to determine why the amount of advertiser demand from non-Google

³⁶⁹ The Unified Auction may also include direct deals.

³⁷⁰ News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 32–34; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 12–13; Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 7; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 62–63.

DSPs may be lower than Google DSPs, and whether it is a result of Google channelling its DSP demand to its SSP (due to a preferential algorithm) or other factors. The provider submits that, without being able to determine this, publishers may choose to use Google's SSP over other competitors', due to the importance of Google's DSPs as a demand source.

Publishers and other stakeholders also consider that the transparency of Open Bidding (which as described in box 5.2, is an auction within Google's Unified Auction) is poor when compared to the auctions run by other supply-side providers and in particular, header bidding. For example, both News Corp Australia and Daily Mail Australia submit header bidding is far more transparent than Google's Open Bidding.³⁷¹ Another stakeholder told us that the header bidding auctions run by another ad tech provider were more transparent than Google's Open Bidding, and used open source code that can be reviewed by advertisers and publishers who use the service. They consider that this gives advertisers and publishers confidence that the auction was conducted neutrally.

Information provided about auction processes and outcomes

A specific concern raised by publishers with the transparency of the Unified Auction in Google's publisher ad server is that publishers are not provided with sufficient information to assess the value of bids from different sources in auctions.

For publishers to maximise their revenue, and to promote competition among SSPs, publishers need to be able to compare the value of using different SSPs. Currently, Google provides publishers with two types of information about the bidders in, and outcomes of, its publisher ad server auctions (see box 5.3 below).

Box 5.3: Information provided about the Unified Auction

Google provides two key pieces of information about its Unified Auction to publishers who use its publisher ad server. These are:

- **Bid Data Transfer files:** this file includes a record of bids received by Google's publisher ad server, including from Google's SSP, and from other nonGoogle SSPs that participate in Open Bidding. However, it does not include all bids for an ad impression, as it does not include any bids from that came from header bidding auctions. It also includes the bidding data for DSPs who bid through Google's SSP, and of Open Bidding partners, which includes the name of the bidder, bid price, and whether the bid was rejected or won. This file does not include information about the ad impression, such as the price at which the impression was sold.
- **Data Transfer file:** the data transfer file includes information about the price at which an impression was sold, and the bids of header bidding partners.

Prior to 2019, publishers were able to link or match these two files together. This meant that they could compare the performance of all bids made into Google's auction. However, in late 2019, Google made changes to these files as part of its move to Unified Auctions. This prevented these files from being linked together. This meant publishers were no longer able to compare header bidding bids with bids received from Open Bidding and Google's SSP.

Publishers consider that this change has impacted their ability to make informed choices about ad tech services in a number of ways.

First, publishers submit that being prevented from matching these IDs has limited their ability to compare SSPs, and consequently, has limited the ability of rival SSPs to compete with Google. News Corp Australia submits that these changes make it difficult for competitor SSPs to demonstrate their value compared to Google.³⁷² In addition, an tech provider considers that the bid data transfer file changes have undermined competition in ad tech, and protected Google's services from competition on the merits, and reduced customer incentives to consider rival SSP offerings. As described in further detail in the section below, this is because publishers measure the value of SSPs bidding from different

371 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 26; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), February 2021, p. 22.

372 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 52, 70-71.

sources based on the incremental revenue that each SSP provides.³⁷³ News Corp also submits that these changes have limited their ability to measure the value of their first-party data and audiences.³⁷⁴ Similarly, another publisher considers that without the ability to match auction data with the first-party data associated with an impression, publishers are made more reliant on Google, and limited in their ability to build value from their inventory.

A publisher submits that Google rounding time stamps for auctions in the bid data transfer file has prevented them from using bidding data to detect if ad tech providers are complying with their revenue share agreements. This is because publishers would use the time stamps to match buy and sell side data.³⁷⁵ In addition, SBS submitted to the interim report that these changes mean that, in some cases, SBS is no longer able to verify itself if Google's SSP has deducted the correct revenue share. This is because revenue is reported as a net, and bid cost per-mille (CPM), clearing CPMs and total gross revenue information has been removed.³⁷⁶

Another publisher also raised concerns about changes Google is proposing to implement to the bid data transfer file that would remove the names of winning advertisers, which they submit will limit publishers' ability to engage in direct deals with advertisers. A publisher submits that being able to analyse Google Ads bids would be of particular value to publishers, as it is a large source of demand. Currently, while publishers have access to Google Ads' bidding data, they are unable to link it to other files.

Google's views

Google has cited privacy and the confidentiality of buyers as the reasons for making changes to its bid data transfer and data transfer files. Google states that preventing the files being matched was intended to prevent bid data from being tied to individual users.³⁷⁷ In a blog post announcing the changes, they stated that, 'in order to prevent bid data from being tied to individual users, you will not be able to join the Bid Data Transfer file with other Ad Manager Data Transfer files.'³⁷⁸ Google also submits that the changes are necessary to comply with contractual confidentiality obligations it has to buyers concerning lost bids.

In addition, Google states it provides publishers that use its publisher ad server with extensive data, including non-aggregated, raw data about the publisher's inventory. Google also states that the new bid data transfer file product provides publishers with additional transparency, as it shows all losing bids and not just winning bids.³⁷⁹ Further, Google has submitted that publishers are able to sufficiently compare the performance of bids received from header bidding with those from Google's Open Bidding and Google's SSP by running A/B testing (a type of controlled experiment).³⁸⁰

Bitton and Lewis (on behalf of Google) submit that the best way to compare the performance of SSPs (including Google's SSP) is to run a randomised controlled experiment (A/B test). Unlike comparing bids, the A/B test controls for all confounding factors (such as page latency, impression discrepancies, or user experience impacts).³⁸¹ In addition, they submit that facilitating access to this information could raise privacy concerns by enabling publishers to build more detailed consumer profiles. This is because if they had access to how much an advertiser bid on an impression for a particular user (including for losing bids), they could use this information to infer that user's interests.³⁸²

373 Daily Mail, [Submission to Ad Tech Inquiry Interim Report](#), 3 May 2021, p. 4; News Corp, [Submission to Ad Tech Inquiry Issues Paper](#), 25 March 2021, pp. 70-71.

374 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 71.

375 Competition and Markets Authority, [Appendix M to Online platforms and digital advertising market study final report](#), 1 July 2020, p. M128.

376 Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 3.

377 J. Bigler, '[Rolling out first price auctions to Google Ad Manager partners](#)', Google Blog, 5 September 2019 accessed 7 October 2020.

378 J. Bigler, '[Rolling out first price auctions to Google Ad Manager partners](#)', Google Blog, 5 September 2019 accessed 7 October 2020.

379 Confidential submission from Google (published with consent).

380 Confidential submission from Google (published with consent).

381 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 30-31.

382 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 31.

Similar to Google, they submit that the new bid data transfer file provides publishers with more data than previously available. The only difference is that publishers cannot link this bidding data with other data. In addition, Bitton and Lewis submit that these changes were necessary for Google to balance the interests of advertisers, publishers and consumers.³⁸³

Publishers need more information about the operation of Google's publisher ad server

We consider that publishers would benefit from Google improving the information it makes available about its publisher ad server auctions. We consider that this is necessary so that they are better able to understand auction outcomes, the value obtained from different demand sources, and have transparency over the fees Google has charged. This will help publishers to compare SSPs and make more informed decisions about how to sell their inventory.

Currently, a key limitation in the information Google provides publishers about its publisher ad server auctions is that bids from header bidding cannot be compared with bids from Google's SSP and bids from Google's Open Bidding. This appears to make it difficult for publishers to assess the value of header bidding and different SSPs, and consequently determining the most efficient ways of selling their inventory.

It is important that publishers are able to compare the value of bids from header bidding to those from Google's Open Bidding and its SSP. This is because a key way that publishers measure the value of their SSPs is based on the incremental value driven by each provider. Currently, based on the information provided by Google, it is not possible for publishers to compare the winning bid from header bidding with bids received from other sources (like Google's Open Bidding and Google's SSP). This makes it hard for publishers to assess the value they gain from header bidding, and for rival SSPs to demonstrate how they add value to publishers through header bidding. Overall, this can mean that publishers have less incentive to sustain the costs of integration with non-Google SSPs through header bidding. Further, it also appears that the way that Google is providing information means that publishers cannot verify that the amount Google is retaining in ad tech fees is correct.

Google has submitted that publishers can use A/B testing to compare SSPs. However, publishers consider that they are not currently able to make such comparisons, and we understand that there are limitations to A/B testing.

The limitations on the information Google makes available are particularly concerning due to the lack of alternatives that publishers have to Google's publisher ad server. If publishers had effective alternatives to Google's publisher ad server, Google's restrictions on this information would be less likely to raise competition concerns. This is because there would be greater scope for publishers to negotiate between alternative suppliers for this information. However, Google's refusal to participate in header bidding, its dominance in publisher ad servers, and the various ways that it has tied access to its SSP and bids from its DSP to its publisher ad server (discussed in chapter 4), means this is not an option for publishers.

We consider that these issues could be addressed by recommendation 5, or recommendation 2. This is discussed in detail in section 5.7 below.

5.4 Transparency over the pricing of ad tech services

In this section, we have considered two specific issues regarding the transparency of pricing and fees for ad tech services.

First, we have looked at whether advertisers and publisher obtain sufficient information about the prices and fees of the services that they purchase. Secondly, we consider issues arising from the lack of transparency of fees across the supply chain.

383 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 31.

5.4.1 Transparency of ad tech providers' prices

Generally, it appears that advertisers and publishers have sufficient information to assess the fees charged by ad tech providers with whom they have direct contractual relationships. While ad tech providers typically provide little information about the pricing of ad tech services through their own websites or ads, advertisers and publishers appear to obtain sufficient information about the fees and prices of their providers directly from their provider.

The lack of publicly available information is likely due to the fact that prices for ad tech services, at least for larger advertisers and publishers, are reached by private negotiations.³⁸⁴ These price negotiations appear to be informed by ad tech providers' rate cards, but rate cards can also form part of the standard form contract in some cases.

Once they have entered into agreements with ad tech providers, advertisers and publishers are generally able to access sufficient pricing information through the invoices that they receive from ad tech providers or product interfaces that produce customisable reports that cover a variety of metrics about the price and performance of their inventory or advertisement. While there are some differences in the format and type of information that is provided by different ad tech providers, overall advertisers and publishers appear able to assess sufficient information to understand what they are being charged and compare those fees between ad tech service providers.

Advertisers and publishers generally have sufficient information to assess the fees that they are charged by their own ad tech provider.³⁸⁵ However, we consider that the lack of publicly available information regarding the pricing of ad tech services across the supply chain has the potential to limit advertisers' and publishers' ability to make decisions that would allow them to optimise their sale and purchase of ad inventory. Additionally, the lack of publicly available information limits their ability to easily compare pricing of ad tech services and assess whether they are getting a fair rate for the services that they acquire.³⁸⁶

Notwithstanding our conclusion that advertisers and publishers generally have enough information about the ad tech services they acquire, we consider that there are issues with the lack of transparency of pricing for advertisers who use Google Ads. In particular, we are concerned that the lack of transparency regarding the fees that Google retains for ads served using Google Ads may enable Google to retain hidden fees. This issue is discussed below.

5.4.2 Verifying Google's demand-side charges

Stakeholder concerns regarding Google Ads

A number of stakeholders have expressed particular concerns about the transparency of fees charged by, or the costs to use, Google Ads (a Google DSP), submitting that Google's pricing for Google Ads is opaque, which allows Google to retain hidden amounts of advertiser expenditure. These stakeholders, who are primarily publishers, submit that Google can do this because of the way Google Ads converts bids from a cost-per-click charge to advertisers to cost-per-mille basis for participation in the SSP auction, which means that neither advertisers nor publishers can observe the outcomes of the relevant auctions or determine Google's take rate for a particular ad impression.³⁸⁷ A description of how Google Ads' fee conversion currently works is set out in box 5.4.

384 For smaller advertisers, most of whom use Google Ads, prices are not negotiated in this way. Issues relating to the transparency of Google Ads pricing is discussed below.

385 See e.g. Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), 3 May 2021, pp. 28–29; Australian Association of National Advertisers (AANA), [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 9; Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 8. The exception to this is that in some cases publishers are unable to verify the revenue share deducted, this is discussed further in section 5.3.2.

386 Ibid.

387 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 33–34; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 12–13; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 83–95.

Box 5.4: The fee conversion on Google Ads (a Google DSP)

Most advertisers submit bids into Google Ads on a cost-per-click or cost-per-action basis.³⁸⁸ Google Ads does not charge advertisers additional advertiser-side fees.

Once Google Ads receives bids from advertisers, Google Ads then bids into auctions on Google's SSP.³⁸⁹ However, Google's SSP only accepts bids for advertising on a per impression basis (i.e. on a cost-per-mille basis), which is different to the bases primarily used by advertisers on Google Ads.

This means that in the relevant auctions, Google Ads only charges advertisers each time an ad is clicked on (or when an action is taken), but must pay the SSP each time an ad is served. If an ad is served but not clicked on, Google Ads must pay the SSP but will not receive any payment from advertisers.

Because the basis of bids received and made is different, Google Ads has to convert each bid it receives on a cost-per-click basis, to a cost-per-mille (per impression) basis. This conversion will involve Google predicting the click through rate for advertisers' ads.³⁹⁰ We understand that Google also targets an aggregate rate of return for its service as part of undertaking this conversion.³⁹¹

Stakeholders are concerned about the take rate that Google retains as a result of undertaking this conversion, because only Google can observe the outcomes of the relevant auctions and no other party can observe Google's actual take rate, giving Google the ability to retain a hidden fee.³⁹²

Figure 5.1: Illustration of Google Ads retaining a hidden fee

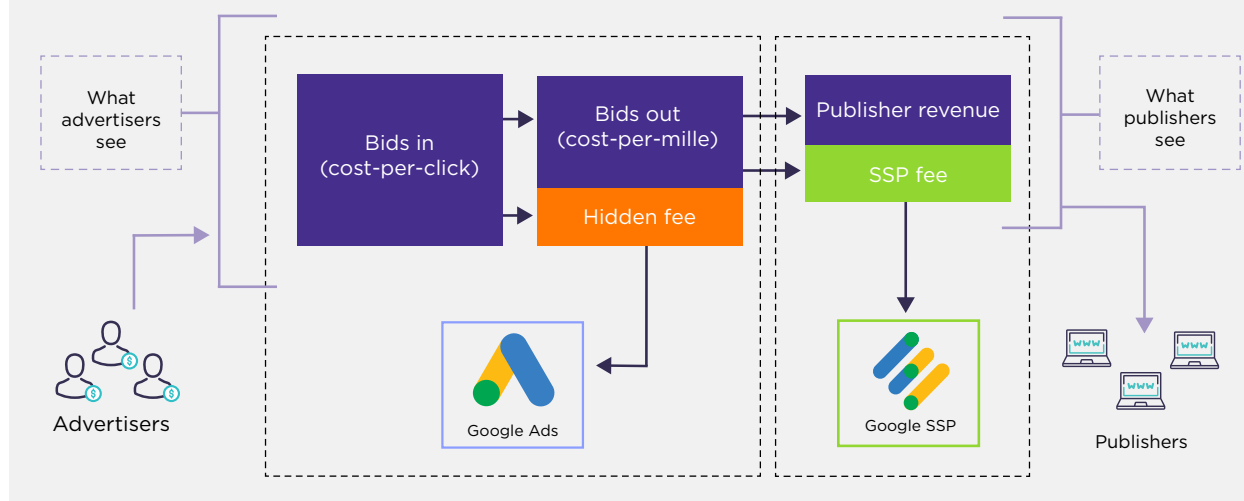


Figure 5.1 shows that advertisers can observe the bids they submit on a cost-per-click basis, and publishers can observe the revenue that they receive on a cost-per-mille basis, but no party can observe the price conversion and take rate that Google Ads retains. The inability of any other party other than Google to observe Google's take rate means that Google could retain hidden fees. The inability to assess the take rates that Google retains for Google Ads means that it is very difficult for

388 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 48-49; Google, [Choose a Bid That Works For You](#), accessed 7 December 2020; Google, [Google Ads Help: Choose a Bid That Works For You](#), accessed 7 December 2020; Google, [Google Ads Help: Set Target CPAs for Ad Groups](#), accessed 7 December 2020; RBB Economics, [Google's ad tech take rates: Analysis of Google's auction level data sets](#), 13 November 2020, p. 8.

389 The ACCC notes that there are some cases where Google Ads bids into other SSPs, but the vast majority of the time it bids into Google's own SSPs.

390 RBB Economics, [Google's ad tech take rates: Analysis of Google's auction level data sets](#), 13 November 2020, p. 9.

391 RBB Economics, [Google's ad tech take rates: Analysis of Google's auction level data sets](#), 13 November 2020, p. 9.

392 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 33-34; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 12-13; Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 83-95.

advertisers and publishers to compare the take rates that Google Ads charges against take rates of other ad tech providers.

A report submitted by Daniel Bitton and Stephen Lewis on behalf of Google argues that this is a pro-competitive system that promotes market liquidity by ensuring that publishers are guaranteed to receive a payment for every impression sold, while advertisers only pay when their ads trigger a click or other specified action.³⁹³ They note that this means Google eliminates risk for both advertisers and publishers by taking this risk on itself as, most of the time, Google pays money to the publisher but does not receive any money from the advertiser.³⁹⁴ As such, they consider that Google is entitled to calculate the price conversion in a way that allows it to earn a profit margin for accepting this risk on behalf of publishers and advertisers.³⁹⁵

Google also submitted a report by RBB Economics, which states that Google Ads targets an aggregate rate of return for the service it provides, and that this business model is evident from its data analysis.³⁹⁶ Further, the report found that Google Ads had a take rate of 13%, in Australia over a one week period in 2020,³⁹⁷ which it notes are in line with the take rates published in Google's June 2020 blog post and found by the CMA in the UK.³⁹⁸ It also replicated findings from the CMA that Google's average winning margin was similar to that of non-Google DSPs.³⁹⁹

The lack of transparency about Google Ads' take rates gives Google the ability to retain hidden fees

Google Ads' business model involves Google Ads selling ad inventory to advertisers at prices such that the amount it receives from advertisers in aggregate is greater than what it pays SSPs for the related ad inventory. Google Ads does not charge advertisers other fees for its service. This is different from how most DSPs (including Google Display & Video 360) operate. Most DSPs charge a percentage of total spend through the platform. This means that while advertisers know how much they are paying Google Ads for their campaigns, they cannot observe the take rate Google Ads is retaining on those transactions. Further, it is not transparent how Google undertakes the cost-per-click to cost-per-mille conversion from case to case, or how this varies for different transactions.

The RBB report provided by Google as well as findings from the CMA suggest that Google Ads take rate is similar to other DSPs. In its market study into online platforms and digital advertising, the CMA found that Google Ads' overall take rate is 10-20% of advertiser expenditure, which is broadly in line with fees charged by other DSPs.⁴⁰⁰ The CMA also analysed the margin between the winning bid and the next highest bid (or floor price) in Google's SSP for Google Ads and other DSPs, to consider whether Google Ads was systematically able to win at a lower margin. If Google Ads could, this might indicate it was using its data advantage to extract larger margins. However, the CMA found that Google Ads' winning margins on Google's SSP was similar to that of third-party DSPs.⁴⁰¹

However, while these general findings allay the most serious concerns, we are concerned that the impact of this opacity makes it difficult for industry to know what the take rate is over time, and the clear risk that the take rate could increase in the future (particularly considering the position of Google Ads in the supply of DSP services). We also consider that the lack of transparency regarding Google's take rates mean that it is difficult for publishers and advertisers to compare competing ad tech providers. This is consistent with the CMA recent findings that while the available evidence suggests

393 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 48-49.

394 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 48-49.

395 Google, Report from Daniel Bitton and Stephen Lewis, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 48-49.

396 RBB Economics, [Google's ad tech take rates: Analysis of Google's auction level data sets](#), 13 November 2020, p. 9.

397 Covering ad requests originating from users in Australia between 17:00 (AEST) on Thursday, 23 July 2020, and 17:00 (AEST) on Thursday, 30 July 2020. See RBB Economics Report, pp. 1-2.

398 RBB Economics, [Google's ad tech take rates: Analysis of Google's auction level data sets](#), 13 November 2020, p. 2.

399 RBB Economics, [Google's ad tech take rates: Analysis of Google's auction level data sets](#), 13 November 2020, p. 3, 12-14.

400 This involved analysing impression-level data from open auctions run using Google's SSP for the period from 8-14 March 2020. Competition and Markets Authority, [Online platforms and digital advertising: Market study final report](#), 1 July 2020, p. 275.

401 Competition and Markets Authority, [Online platforms and digital advertising: Market study final report](#), 1 July 2020, pp. 275-276, R6-R13.

Google is not currently extracting significant hidden fees, Google has retained the ability and incentive to do so.⁴⁰²

Google recently decided to make available figures about Google Ads' take rate in a blog post. This was in response to increased regulatory attention on this issue. However, this does not resolve our broader concerns. First, this is a single figure provided at one point in time across all inventory. This does not provide transparency over how take rates may change over time, or for different inventory. It is also not clear if Google will provide similar figures in the future. Secondly, it is not clear how Google conducted its analysis and it has not been verified by any independent body.

Given these concerns, we consider that Google should be required to publicly disclose average Google Ads take rates for different inventory types, and such figures should be subject to verification by an independent auditor. This could be implemented under recommendation 4 or could form part of future transparency requirements introduced in accordance with the sector specific rules proposed under recommendation 2. Alternatively, this issue could also be addressed through recommendation 6 and the introduction of potential measures such as a common transaction ID, which would enable advertisers and publishers to have visibility over pricing across the entire ad tech supply chain. The ACCC's recommendations are set out in section 5.7 below.

5.4.3 Transparency of fees or take rates across the supply chain

The second price transparency issue raised during the Inquiry is advertiser and publisher visibility over the level of fees or 'take out rates' across the whole supply chain. Neither publishers nor advertisers are able to access information on the fee or take rates across the whole ad tech supply chain for an advertising opportunity which they purchase or sell, leading to potential competition and efficiency concerns.

There is no transparency about fees charged across the ad tech supply chain

Publishers do not have transparency over what advertisers originally bid or pay for their ad inventory, and cannot track the fees charged across the supply chain in relation to advertising space sold on their platform.⁴⁰³

Similarly advertisers do not know how much of their ad spend makes it to publishers.⁴⁰⁴ The AANA also considers that it is difficult for advertisers to audit their advertising spend across the supply chain and that attempts are 'met with confusing approval processes and sometimes refusal to provide data to independent auditors'.⁴⁰⁵ Similarly, Havas Media noted that some DSPs, such as Google's, are not explicit on reporting details across their ad tech services, and the percentage of ad spend retained by their services is not clear.⁴⁰⁶

This lack of transparency in take rates was highlighted on April 2020, when the Incorporated Society of British Advertisers (ISBA) in partnership with the Association of Online Publishers, produced a report on the level of fees across the ad tech supply chain (ISBA Programmatic Supply Chain Transparency Study).⁴⁰⁷ A key finding of the study was that there were a number of challenges to determine the take rates across the ad tech supply chain. The study also found that there were a number of factors which contributed to these difficulties. These included difficulties for ad tech providers in sharing data, the complexity of the supply chain data, a lack of uniformity in data collection, and issues with

402 Competition and Markets Authority, [Online platforms and digital advertising: Market study final report](#), 1 July 2020, pp. 275–276, R6–R13.

403 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 3; Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 17; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, pp. 9–10; Commercial Radio Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 28 April 2020, pp. 6–7; Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, pp. 2–3; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 82.

404 MightyHive, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 4; Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 8; Australian Association of National Advertisers (AANA), [Submission to ACCC Ad Tech Inquiry Interim Report](#), 25 March 2021, pp. 6–7.

405 Australian Association of National Advertisers, [Submission to Ad Tech Inquiry Issues Paper](#), 21 May 2020, p. 3.

406 Havas Media, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 4.

407 ISBA and AOP commissioned PwC to carry out the study.

impression matching.⁴⁰⁸ In the Australian context, the Australian Association of National Advertisers (AANA) submits that a study it conducted with Media Method Intelligence, which analysed around 110 million impressions bought across a small group of advertisers, found similar issues with the ability of advertisers to access the data necessary to analyse the impressions purchased.⁴⁰⁹

Recent measures to increase transparency over fees across the supply chain

Google has recently taken measures which may help to increase transparency over its fees across the supply chain. In 2019, it published a blog post where it stated that when ads were traded using Google's ad tech products, publishers kept 69% of the total amount paid by advertisers.⁴¹⁰ Further, it has provided a public submission prepared by RBB Economics to this Inquiry which presents take rates for some of its main products based on a sample of one week's transactions.⁴¹¹

While Google providing further information about its fees across the supply chain has improved the transparency of its fees, we do not consider that this addresses the concerns regarding take rates across the supply chain. There are a number of reasons. First, advertisers and publishers are interested in understanding the take rates across the whole chain and across the variety of ad tech providers.⁴¹² The figures provided by Google, are only a point in time measure of the average amount of ad spend that reaches a publisher. It is possible that this could change over time and differ for different advertisers and publishers. It also does not break take rates down across the different services.⁴¹³

Secondly, these measures have not been verified by any third-party and require publishers and advertisers to trust the accuracy of these measures provided by Google. Finally, the average figures provided by Google are calculated based on samples of transactions where an ad impression is sold exclusively through Google services, which will often not reflect how transactions occur in the ad tech supply chain.⁴¹⁴

Consequences of a lack of transparency of fees across the supply chain

We consider that greater transparency of take rates across the supply chain would help to improve competition and efficiency in the supply of ad tech services for a number of reasons. Improved transparency of fees across the supply chain would enable publishers and advertisers to better compare and negotiate with ad tech service providers. Additionally, improved transparency of fees across the supply chain would also help individual advertisers and publishers optimise how they buy and sell ad inventory.

First, advertisers and publishers lack visibility over the proportion of advertiser spend that makes it to the publisher, which creates a lack of trust and confidence in ad tech markets. Feedback received during the inquiry indicates that some stakeholders are concerned about the potential for ad tech providers to engage in self-preferencing behaviour, or retain hidden fees when participating in auctions.⁴¹⁵ For example, the Australian Association of National Advertisers submits that:

*The ad tech supply chain is currently opaque and unauditible and whilst it continues to lack transparency, the AANA and its members will be suspicious and guarded about its efficient and effective operation.*⁴¹⁶

408 ISBA/PWC, [ISBA Programmatic Supply Chain Transparency Study](#), May 2020, p. 7.

409 Australian Association of National Advertisers (AANA), [Submission to ACCC Ad Tech Inquiry Interim Report](#), 25 March 2021, pp. 4-7.

410 S Hsiao, [How our display buying platforms share revenue with publishers](#), Google Ad Manager (Google Blog), 23 June 2020 accessed 21 December 2020.

411 RBB Economics, [Google's ad tech rates: Analysis of Google auction level data sets](#), 20 October 2020, provided as a submission to the ACCC Ad Tech Inquiry.

412 See e.g. Daily Mail Australia, [Submission to ACCC Ad Tech Inquiry Interim Report](#), p. 26; Australian Association of National Advertisers (AANA), [Submission to ACCC Ad Tech Inquiry Interim Report](#), 25 March 2021, pp. 6-7; Special Broadcasting Service, [Submission to Ad Tech Inquiry Interim Report](#), 5 March 2021, p. 1; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, pp. 14-15.

413 Daily Mail Australia, [Submission to ACCC Ad Tech Inquiry Interim Report](#), p.26.

414 Daily Mail Australia, [Submission to ACCC Ad Tech Inquiry Interim Report](#), p.26.

415 Daily Mail Australia, [Submission to ACCC Ad Tech Inquiry Interim Report](#), p.26.

416 Australian Association of National Advertisers (AANA), [Submission to ACCC Ad Tech Inquiry Interim Report](#), p 3.

This can lead publishers or advertisers to decide not to buy or sell inventory using the ad tech supply chain, or that they may use these services less. This means they are unable to realise the benefits that ad tech services can offer them.

Secondly, information about the prices or fees charged by providers across the whole supply chain, and not just their direct providers, is important for advertisers and publishers to be able to make informed decisions regarding the purchase and sale of ad inventory.⁴¹⁷

In relation to this, Google submits that the visibility of costs and margins across the supply chain is generally not required for effective competition, and that advertisers and publishers are able to make effective decisions about ad tech providers without knowing fees across the entire supply chain. Google states that from an economic perspective, an advertiser should seek to allocate spend across advertising channels so as to maximise its Return on Investment. Similarly, from an economic perspective, publishers concerned with achieving the highest possible returns should seek to select the SSP (or combination of SSPs) that maximise the revenue generated from the ads displayed on its web pages. Such a publisher will choose to use the services of the ad tech service provider that provides them with the highest revenue, even if there were a higher take rate.

We consider that the fees charged by ad tech providers and the return that advertisers and publishers make on investment are typically the most important factors in deciding which ad tech services to use. However, understanding take rates across the supply chain allows advertisers to focus their expenditure on efficient service providers and also optimise their purchase of inventory and allows publishers to optimise the sale of their inventory.

For example, having access to information about fees across the supply chain may promote competition as it allows advertisers or their representatives to optimise their engagement with platforms ('supply side optimisation') and also enables publishers to select the best ways to sell their inventory. Some stakeholders also submit that a lack of transparency over such fees made it difficult for them to make effective decisions about ad tech services. For example, Free TV submits that not having access to, or not being able to understand, this information increases opacity and limits their ability to make informed choices regarding suppliers, and maximise their profits.⁴¹⁸

Advertisers need to understand the take rates across the supply chain to enable them to focus their expenditure on efficient service providers.⁴¹⁹ The CMA recently found that because publishers decide which ad should be served based on net bids, visibility of SSPs fees could make it easier for advertisers to select the cheapest way to secure inventory and for DSPs to decide where to bid. Consequently, a lack of transparency may result in reduced competition between SSPs in attracting buyers.⁴²⁰

Further, it is difficult for advertisers and publishers to engage in programmatic direct and direct deals without access to information about take rates across the ad tech supply chain. This can make it harder for publishers to work out the most efficient way to sell their inventory.

We consider that these issues which arise from a lack of transparency of fees across the supply chain may be addressed by recommendation 4 (which recommends that industry develop a standard requiring average fees to be published for ad tech services) and recommendation 6 (which would allow the ACCC to introduce other transparency measures, such as common transaction ID), which are discussed in section 5.7.

417 Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, pp. 17–18; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 52; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 12–13; Daily Mail Australia, [Submission to ACCC Ad Tech Inquiry Interim Report](#), p. 26; Australian Association of National Advertisers (AANA), [Submission to ACCC Ad Tech Inquiry Interim Report](#), 25 March 2021, pp. 6–7; SBS, [Submission to Ad Tech Inquiry Interim Report](#), 5 March 2021, p. 1; Free TV Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, pp. 14–15.

418 Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 17.

419 Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, pp. 17–18; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 52; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, pp. 12–13.

420 Competition and Markets Authority, [Online platforms and digital advertising: Market study final report](#), 1 July 2020, p. 335–336.

5.5 Transparency over the performance of demand side services and digital display advertising

As described above, advertisers use verification and attribution services to assess the quality and price of the DSPs they use and the ad inventory they purchase.

Advertisers generally seem to be able to conduct full verification of DSP services they use.⁴²¹ While some publishers have raised issues about the reliability of these services, we have not heard similar concerns from advertisers in response to our findings in the interim report.⁴²² However, the exception to this is the ability of advertisers to conduct verification and attribution of Google's services, discussed in the following sections.

5.5.1 Google restricts independent verification on YouTube

We consider that by removing access to raw verification data on YouTube inventory, Google has limited the ability of advertisers to independently assess the quality of YouTube inventory and to some extent Google's DSPs.

How Google limits verification of YouTube inventory

Prior to 2019, advertisers were able to use third-party verification providers to directly collect raw verification data on ads shown on YouTube. Verification providers did this by placing verification tags or pixels on the YouTube ads they served, and then analysing the information they received using these tags to provide reports to advertisers.⁴²³

However, in May 2020, Google introduced restrictions that mean advertisers are no longer able to use third-party verification providers to fully and independently verify YouTube Ads. Google has removed the ability of third-party verification data providers to use their own pixels and tags to collect raw data on an ad.⁴²⁴

Third-party verification providers are generally only able to access 'event-level data' provided by Google in Google's Ads Data Hub, using Google's Ads Data Hub tools, and they can only export the data in aggregate form. One exception to this is where a consented panellist consents to their event-level data being provided to a third-party verification provider.⁴²⁵ This means verification providers are limited in their ability to analyse data about ads served on YouTube, and must rely on the data that Google has provided.

Stakeholders concerns about these limitation

A number of stakeholders consider that these changes limit the ability of advertisers to fully verify the performance of their ads on YouTube, and for third-party ad verification providers to provide their services.⁴²⁶

Oracle submits that while advertisers are able to engage the services of third-party verification providers via the Google Ads Data Hub, these providers are only able to access aggregated measurement data that is limited to specific metrics, and not any raw data.⁴²⁷ Oracle submits that this

421 We note that the exception to this is where the attribution and verification provider does not have sufficient information due to the platform restricting the way it can perform its functions.

422 ACCC, [Ad Tech Inquiry Interim Report](#), 28 January 2021, p. 181.

423 Google, '[Important changes to third-party measurement on YouTube](#),' accessed 30 August 2021.

424 Google, [YouTube Certified External Vendors](#), accessed 17 December 2020.

425 These are consented panellists, who are individuals who have contracted with, and given their consent to, a third-party measurement provider and Google to have data on their web and other media consumption collected by and shared with Google and/or third-party measurement providers.

426 Oracle Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, pp. 18-19; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 56; Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), February 2021, p. 10.

427 Oracle Corporation, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, pp. 18-19. These include whether the ad was served, whether it appeared on the screen, how much of the ad appeared on the screen, how long the ad was on the screen, and for video ads, whether the ad was played, how long it was played, and whether the sound was on.

means it is not able to determine whether the data provided is accurate and that they are only able to analyse the metrics provided by Google, and make comparisons between YouTube and non-YouTube inventory. For example, Oracle considers that it is not possible to see information about the type of video that the ad appears on or next to, which can create brand safety issues.⁴²⁸

News Corp Australia submits that this change gives Google complete control over advertisers' access to data about YouTube ads, and prevents rival verification providers from producing more sophisticated independent analytics. News Corp Australia considers that this consequently limits other advertiser ad servers and verification providers from competing with Google, and from differentiating their services through innovation.⁴²⁹

Similarly, a verification provider submits that these changes have made it difficult for them to provide their services, and significantly reduced their revenue. Another ad tech provider stated that the result of this change was foreclosure of potential competition, and the creation of a 'walled garden, as it is difficult for advertisers to justify using a rival ad tech provider without the ability to transfer data between platforms.'

However, some stakeholders submit that Google's Ads Data Hub provides better transparency than measurement through pixels. For example, one ad tech provider submits that these changes improved transparency and control, and that they are able to better query data in the Ads Data Hub, compared with the use of pixels, which were often unreliable. Similarly, Publicis Groupe submitted that the Ads Data Hub provides comprehensive detailed about each impression served, which allows for independent verification.⁴³⁰

ACCC's views on these restrictions

We consider that Google has limited the ability of third-party verification providers to measure the performance of YouTube inventory sold using Google's DSPs, and that this is problematic for a number of reasons.

The Ads Data Hub does not allow for full, independent verification

There are a number of limitations on third-party verification providers' ability to fully verify the performance of YouTube's inventory on Ads Data Hub.

As noted above, third-party verification providers are not able to access the raw data (which they previously received from tags and pixels) that is necessary for them to independently assess the performance of YouTube campaigns. Instead, third-party verification providers are generally only able access to data within Google's Ads Data Hub that Google generates itself, which they are also only able to export in aggregate form. While Google enables third-party verification providers to conduct analysis on the data within its Ads Data Hub, it does not enable third-party verification providers to export that raw data. This means that third-party verification providers have no way of collecting the data themselves or determining whether or not the data Google provides in aggregate form to them is accurate.

In addition, a verification provider told us that its agreement with Google regarding Ads Data Hub restricts the rights of the verification provider to report to its clients verification metrics (before or after filtering for invalid traffic), if those metrics differ by more than a small percentage from the metrics determined by Google. The ACCC understands that while other providers of digital advertising, such as Facebook and Twitter, restrict the collection of raw data, they do not restrict verification providers from reporting metrics that differ from the ones provided by the publisher.

Impact on transparency and competition

The restrictions Google has placed on third-party verification of ads on YouTube has meant that the quality and performance of YouTube inventory, and Google's DSPs, are less transparent than for other

428 This is because the page URLs are not made available. See Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 18; Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, p. 14.

429 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 56.

430 Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 11.

suppliers of advertising inventory. This is particularly concerning given the importance of YouTube inventory to both advertisers and Google's DSPs.

Advertisers are typically unable to assess the quality of the ad tech services or advertising inventory themselves and they rely on verification services provided by third-parties. Given this, we consider it is particularly important for advertisers to have the option of effectively independently verifying the performance of the DSP's services. Where DSPs provide their own verification service, the DSP may have incentives to overstate the performance of their services. This has the potential to make accurate comparisons across providers difficult, and decrease competition between DSPs.

As discussed in chapters 3 and 4, YouTube inventory and Google's DSPs are considered 'must have' services by many publishers. The popularity of YouTube means it is important that YouTube advertising can be fully and independently verified by third-party providers. Without such independent verification, we are concerned that Google is able to overstate the performance of its own DSP and ad inventory. This could lead to advertisers overpaying for Google's YouTube ads, or choosing to use Google's DSPs based on inaccurate metrics.

Privacy considerations

In a blog post explaining the reasons for introducing the changes to YouTube, Google stated that third-party pixels (verification tags) lack the privacy controls and user protections of newer technologies and noted pixels could not be used to report on ads appearing in mobile apps. Google stated that Ads Data Hub provides advertisers with the ability to assess the performance of YouTube ads across devices, and ensures a secure and privacy-safe environment.⁴³¹

Google also submits that despite these restrictions, third parties are able to access ad log data, but 'in a privacy centric manner' using the Ads Data Hub:

Third-party measurement providers who are integrated into Ads Data Hub are able to submit queries that result in the processing of ad log data - this enables third parties to evaluate and measure ad log data in a privacy-centric manner. Data can then be exported from Ads Data Hub in aggregated form (for privacy reasons) and third-party providers are able to report on advertising viewers' aggregate age and gender demographic distribution on YouTube, as well as reach, frequency, target rating points (TRPs) and gross rating points (GRPs).⁴³²

We do consider that it is unlikely that the restrictions Google has placed on the ability of providers to verify the quality and performance of YouTube inventory is necessary to protect user privacy. First, most other DSPs enable third-party verification providers to access raw data to verify ads through the use of pixels, whilst also complying with Australian Privacy Law. Google also uses user IDs itself when supplying SSP and DSP services to advertisers.

In addition, we understand that the data needed for the verification of viewability and brand safety does not necessarily need to involve the use of personal data. This is because the data needed for verification for viewability involves information such as: the website on which the ad was served; whether the ad appeared on the screen; how much of the ad appeared on the screen; how long the ad appeared on the screen; and, if it was a video advert, whether the ad played, for how long it played, whether the sound was on etc. Similarly, for brand safety, the key information involves establishing which website an advert has been displayed on and what other content was on that website.⁴³³ It is therefore not clear to us how independent verification could create user privacy issues.

431 N Sowrirajan, '[Investing in the next generation of measurement on YouTube](#)', 16 October 2019, Google Blog, accessed 22 October 2020.

432 Confidential submission from Google (published with consent).

433 Competition and Markets Authority, '[Online platforms and digital advertising market study final report](#)', 1 July 2020, Appendix O, p. O15.

Industry should develop a standard to enable independent verification of DSPs

To address issues with the ability to independently verify ad inventory purchased using Google's DSPs, we consider that industry should develop standards to enable advertisers to conduct independent verification of the DSPs they use to purchase ad inventory (recommendation 4). Such standards should allow advertisers to fully and independently verify ads purchased using DSPs, including Google's. We consider that this would not only help to address issues around verifying the performance of Google's services, but could also be used to ensure that verification continues to be provided effectively by other DSPs.

The ACCC considers that it is reasonable and proportionate for such a standard to be developed and implemented voluntarily by industry and this is the ACCC's preferred approach. However, if a voluntary standard is not agreed within a reasonable period of time or is ineffective in meeting the needs of advertisers and publishers, the ACCC should be empowered to implement measures to address the transparency concerns identified in this chapter as part of sector specific rules proposed in recommendation 2 and recommendation 6.

5.5.2 Google's restrictions on access to data for attribution services

The second area where we consider Google's conduct may have reduced transparency is in relation to limitations Google has placed on the information it makes available to advertisers to conduct attribution (that is, to determine the steps, and advertisements, which led to a consumer action). This is important to advertisers to enable them to assess the performance of their ad campaigns, DSPs and the quality and return associated with their advertisements.

Google's removal of User IDs from impression information limits attribution services

Before 2018, advertisers using Google's advertiser ad server or DSP were able to use third-party attribution service providers, who could deploy tags or pixels that would collect information about each impression sold, including the ID of the user who it was shown to.⁴³⁴ The advertiser's attribution provider could match this data with data received from other DSPs used by the advertiser, and track each time the user was exposed to the advertiser's campaign.⁴³⁵ The large number of advertisers that use Google's DSPs means it is important that attribution providers are able to include in their services the ability to assess the performance of Google's DSPs.

However, from 2018, Google began limiting the user ID information that could be accessed by advertisers and their attribution providers.⁴³⁶ This has already begun in Europe for YouTube inventory, and in 2021, user IDs were restricted globally.⁴³⁷ This means that advertisers and attribution providers are no longer able to extract data from inventory purchased on YouTube for reporting on ad attribution.

434 A Weissbrot, [Google Sharply Limits DoubleClick ID Use, Citing GDPR](#), *AdExchanger*, 27 April 2018, accessed 23 September 2020.

435 Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, pp. 20–21.

436 Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), May 2020, p. 15; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 109; Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 20; Special Broadcasting Service, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 4.

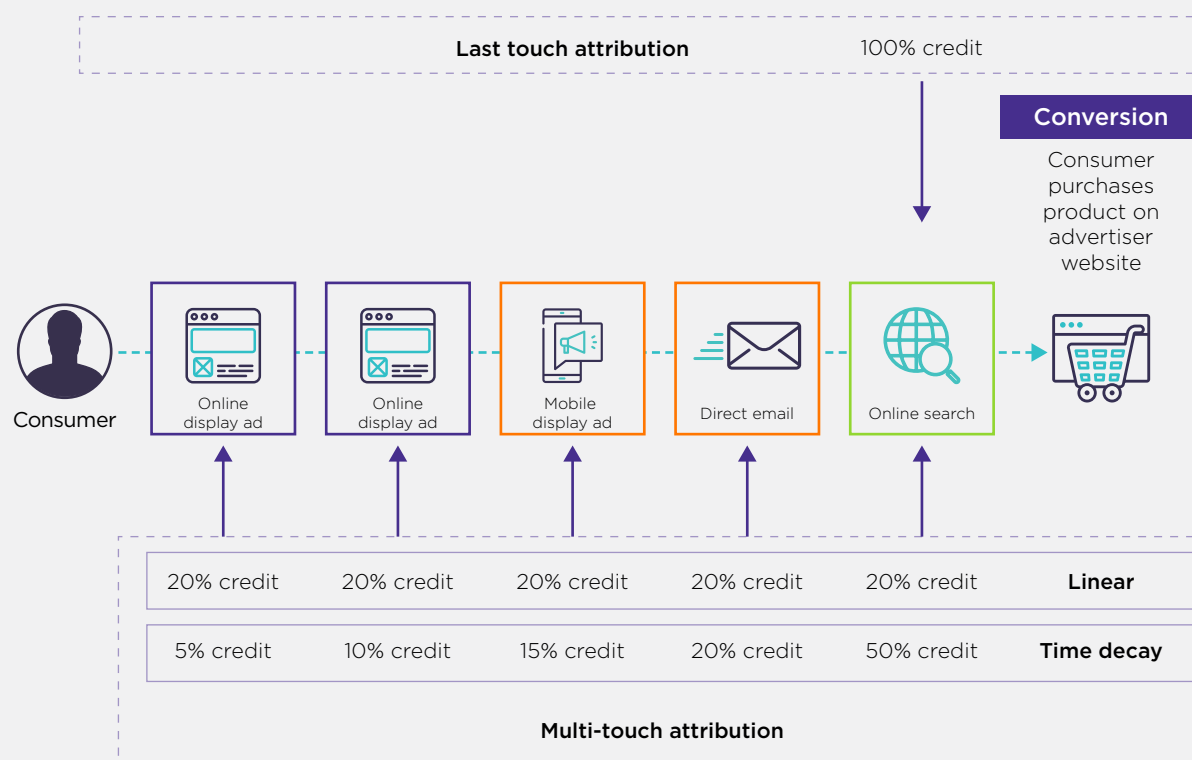
437 Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 20.

Box 5.5: User IDs and why they are important to ad attribution

There are a number of types of attribution services, but two main types are multi-touch attribution and last touch attribution, illustrated in figure 5.2 below:

- **Last touch attribution:** This is where the 'credit' for a consumer's action is only attributed to the last ad the user saw before taking that action.
- **Multi-touch attribution:** This is where the 'credit' for a consumer's action is attributed to the range of ads that they user saw across the internet, and across devices, before making a purchase. Multi-touch attribution is more valuable to advertisers, but also more difficult to carry out (see figure 5.2 below).

Figure 5.2 Last touch and multi-touch attribution



Source: Nielsen, '[How Multi-Touch Attribution Helps Brands Master the Universe](#)', 22 May 2019, accessed 30 August 2021.

Ad tech providers use 'user IDs' to identify a particular user. These IDs are not common across ad tech providers, and each provider will use their own IDs to identify consumers.

In order to provide multi-touch attribution, an attribution provider needs to be able to track each time a user sees an ad. Because advertisers can use more than one DSP to purchase ad inventory, an attribution provider needs to be able to match up the IDs used by the different DSPs so that it can see where a single user has been exposed to the ad campaign.

Stakeholder submissions about user ID sharing limitations

A number of stakeholders submit that these changes mean that attribution of Google's services will not be possible unless accessed through Google, with some suggesting Google will be 'marking its own homework'.⁴³⁸

We have heard concerns from stakeholders about how this impacted attribution services. For example, one stakeholder stated that Google's change negatively affected rival DSPs and their users, and the ability of DSPs to compete with Google. Another noted that the change, 'impaired the ability of advertisers to measure the reach and frequency of Google campaigns against other platforms. It has thus become more difficult for advertisers to obtain an independent view of the data generated from ad buys in Google's ecosystem.'

Oracle submits that this will make it very difficult for attribution providers to provide multitouch attribution services. This is because attribution providers will not be able to take a consumer's exposure to ads delivered using Google's DSP services into account. Oracle submits that as a result of the change, if an advertiser wants to be able to use data from across its campaign to measure attribution (and get a picture of how effective its whole campaign is), they will have two choices. First, they could elect not to use Google's services, which is not an option for many advertisers. Secondly, they could rely only on Google's ad tech products, and its attribution tools.⁴³⁹

ACCC's views on these restrictions

Impact of competition and transparency

We consider that by limiting access to its Google user IDs, Google has increased advertisers' reliance on its own attribution services, and has made it very difficult for advertisers to independently compare the performance of ads purchased through Google's DSPs and other DSPs. This change may have lessened the ability of other providers to compete. As discussed in chapter 3, many advertisers consider the use of Google's DSPs essential for their ad campaigns. This is for a number of reasons, including access to YouTube inventory. If such advertisers also want to be able to use multi-touch attribution and track the performance of their whole campaign, they will have to conduct their campaigns solely through Google's DSP service.

We also consider that this change has had the effect of decreasing transparency over the performance of DSPs. This is because advertisers are unable to carry out independent attribution analysis, or conduct an independent assessment of the effectiveness of an ad campaign. In particular, it has meant that advertisers must trust Google's own reports about the effectiveness of ads servicing using Google's own DSP. Limiting oversight of performance in this way may mean Google is able to overstate the performance of its DSP services. This could prevent advertisers from exercising an informed choice over which DSPs to use, which is based on an accurate assessment of the value they provide. This may give Google the opportunity to raise the price of its advertising, or result in advertisers overpaying for advertising purchased on Google, and not efficiently allocating their advertising expenditure.

Google has said that it has restricted access to user IDs to meet requirements under the GDPR, and because of its 'ongoing commitment to privacy'.⁴⁴⁰ Google has stated that, '[t]he decision by Google to announce that it will deprecate the sharing of individual user IDs with buyers has been driven by privacy principles. Google notes that it is investing in the Google Ads Data Hub which will allow Google to provide data to advertisers and maintain end-user privacy'.⁴⁴¹

438 Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), May 2020, p. 15; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 7.

439 Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 20; Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, p. 15.

440 A Weissbrot, [Google Sharply Limits DoubleClick ID Use, Citing GDPR](#), *AdExchanger*, 27 April 2018, accessed 23 September 2020.

441 Confidential submission from Google (published with consent).

Some stakeholders do not consider that such changes are necessary to protect user privacy or comply with privacy legislation.⁴⁴² For example, Oracle submits that user IDs are not personal information, and that other ad tech providers continue to provide user IDs in compliance with privacy laws.⁴⁴³ In addition, News Corp Australia considers that Google's stated privacy concerns are not consistent with its internal treatment of data, which it makes available on Google's Cloud.⁴⁴⁴ Further, Free TV submits that it is concerned that Google made these changes to ensure that it remains data gatekeeper, and that there is no potential for a competitor to provide competing datasets over time.⁴⁴⁵ An ad tech provider also questioned whether the changes Google made were necessary to comply with the GDPR, and noted that other ad tech providers signed up to the IAB's 'Transparency and Consent Framework' to achieve compliance, which does not require the blocking of user IDs.

We consider that sharing user IDs across many providers can give rise to privacy issues. Therefore, while we consider that the changes in how Google shares its IDs have likely created issues across the supply chain, we do not consider that wider sharing of user IDs is a suitable and proportionate solution to these attribution issues. This is discussed in more detail below.

Changes to attribution as a third-party cookies are phased out

We note that the impact of Google's decision to remove user IDs from the information it shares will not be as relevant in the future, due to Google's plan to remove support for third-party cookies on Chrome by the end of 2021. Currently, attribution services rely on third-party cookies, which allows users' activity to be linked to user IDs. However, when Google removes Chrome support for third-party cookies, third-party cookies will essentially be obsolete because of Chrome's market share, and the limitations other browsers have already placed on use of third-party cookies.⁴⁴⁶

As part of its Privacy Sandbox proposals, Google has developed an API for attribution, which attribution providers will have to use when they are measuring ads served on Chrome. The API that is proposed to replace third-party cookies for multi-touch attribution, the Multi-Browser Aggregation service,⁴⁴⁷ is still in its early stages of development. Consequently, it is not yet clear how it will operate. The other API in development, the Event Measurement API, would only enable last touch attribution. In addition, it is not yet clear to what extent these APIs will apply to YouTube or other Google owned and operated inventory.

However, one ad tech provider raised concerns about how effective the attribution proposals for Privacy Sandbox will be, as Google will be in control of attribution data. In addition, Oracle also submits that under the Privacy Sandbox proposals, if the APIs are private, advertisers will entirely lose their ability to conduct independent attribution.⁴⁴⁸ However, Publicis Groupe submitted that while the changes to Chrome will impact advertisers' ability to perform attribution, these have been issues since other browsers introduced restrictions on third-party cookies.⁴⁴⁹ As discussed in detail in chapter 4, we consider that the Privacy Sandbox proposals raise concerns due to the control they give Google over the operation of the ad tech supply chain. However, it is currently unclear how these will impact attribution services in the future.

442 Damien Geradin and Dimitrios Katsifis, [Submission to Ad Tech Inquiry Issues Paper](#), 3 June 2020, pp. 32–33; News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 107–108; Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020.

443 Oracle, [Submission to Ad Tech Inquiry Issues Paper](#), 13 May 2020, p. 20.

444 News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, pp. 107–108.

445 Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 15.

446 See chapter 4 for a more detailed discussion of Google's remove of Chrome support for third-party cookies and Privacy Sandbox proposals.

447 WICG, [Conversion Measurement API](#), accessed 26 August 2021.

448 Oracle, [Submission to Ad Tech Inquiry Interim Report](#), 30 March 2021, p. 15.

449 Publicis Groupe, [Submission to Ad Tech Inquiry Interim Report](#), 26 February 2021, p. 3, 9.

5.6 Publisher concerns with verification and attribution services

The final issue considered as part of this chapter relates to concerns raised by publishers regarding how ad verification services impact their advertising revenue. While not directly related to transparency issues, we have discussed these here as they involve the operation of the same services discussed in this chapter.⁴⁵⁰

5.6.1 Publisher concerns with verification services blocking their content

In the Interim Report we discussed concerns raised by publishers about how verification services could harm publishers by blocking the serving of ads on legitimate publisher content for brand safety reasons. In summary, The Guardian and Daily Mail Australia submitted that verification providers categorise publisher content in their blocking features, and the brand safety definitions they use. This means that these providers often identify publisher content as unsafe for the advertiser when it is not.⁴⁵¹ They note that this is in part caused by a lack of transparency and consistency in how these brand safety features operate.⁴⁵²

Daily Mail Australia reiterated its concerns in its submission to the Interim Report. It added that verification providers will often take up to 48 hours to classify news content, which means that advertisers using verification technology will be opted out of bidding on publishers' inventory, or declassified afterwards. They consider that this delay can cost them revenue.⁴⁵³ In addition, Daily Mail Australia submits that often verification providers' response to these concerns is for Daily Mail Australia to engage in a paid relationship with verification provider. Daily Mail Australia submits that it is not possible for a publisher to engage in a paid relationship with every verification provider.⁴⁵⁴

Regulatory intervention is not currently required

We acknowledge the existence of concerns with verification providers brand safety mechanisms, which may lead to publishers' content being unnecessarily blocked.

However, the concerns are not widespread and the industry does appear to be taking steps to resolve any issues that do exist. For example, IAB Tech Lab is currently working on solutions for brand safety.⁴⁵⁵ This includes a Content Taxonomy which provides a common standard for ad verification providers and publishers to classify and identify content, and educating advertisers on how to ensure that their verification services are not inadvertently blocking content.⁴⁵⁶ The ACCC encourages the industry to continue to work together and develop solutions to address these issues.

450 These issues were discussed in more detail in chapter 6 of the Interim Report.

451 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 12; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 11.

452 Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 12; Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 11.

453 Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), February 2021, p.31.

454 Ibid.

455 IAB, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 2.

456 IAB Tech Lab, [Content Taxonomy](#), accessed on 20 August, 2020. IAB, [Submission to Ad Tech Inquiry Interim Report](#), 22 March 2021, p. 2.

5.6.2 Measures to prevent scam ads

A second concern identified in the interim report is publishers' reported inability to prevent scam ads being delivered to their websites.⁴⁵⁷ One publisher has said that it has found it difficult to stop the delivery of such scam ads when purchased via the ad tech supply chain, and considers that ad tech providers could be doing more to prevent scam ads being published on its websites. Another publisher agreed with this, and submitted that it had issues in particular with Google's DSPs serving scam ads and ads with explicit content on their websites and apps.

Scam ads can harm publishers because they can damage their reputation and expose them to legal actions. They also have the potential to cause significant harm to Australian consumers who fall victim to the scams. The ACCC reported in June 2021 that Australians lost a record \$851 million to scams in 2020. While we have not made specific recommendations at this stage to address these issues, we consider it is important that the ACCC, other government agencies, and ad tech providers to take action to prevent and disrupt scam ads and educate the public.

A number of ad tech providers told us that have a range of mechanisms in place to prevent scam ads being delivered. These include the use of internal policies, data science models to identify and block suspicious content, and using standards developed by the IAB, the Trustworthy Accountability Group, and the Media Ratings Council.

Further, ad tech providers also told the ACCC they have procedures in place to respond to complaints from publishers about scam ads. Generally, ad tech providers respond to concerns about fraudulent ads quickly, with a number of providers indicating that they respond within minutes or hours, although some providers can take up to a day or longer to address issues. The industry as a whole has also taken a number of steps recently to prevent scam ads. The IAB has recently released its new buy-side transparency standards, which aim to further address these issues, and has the support of the ad tech industry.⁴⁵⁸ The buy-side transparency standard is in addition to a number of other standards the IAB has developed to target ad fraud ads, including `sellers.json`, `ads.txt`, and `supplychain object`.⁴⁵⁹

The ACCC also has a key role in disrupting and preventing scams through Scamwatch. Scamwatch raises awareness about how to recognise, avoid and report scams, and shares intelligence and works with government and the private sector to disrupt and prevent scams. Scamwatch also formulates scam prevention strategies, and implements initiatives to minimise the harms caused by scams. We will continue to monitor issues that publishers are having regarding their ability to block scam ads being delivered on their websites or apps. The ACCC will also encourage them to continue to engage with industry on these issues and report them to the ACCC.

5.7 Recommendations

In the Interim Report, the ACCC made three proposals which could be used to address concerns about the transparency of the pricing and performance of ad tech services:

- Implementation of a voluntary standard to enable full, independent verification of DSP services. This involved industry developing a voluntary standard which would enable advertisers to fully and independently assess DSP services and encourage competition.
- Implementation of a **common transaction ID** to allow a single transaction to be traced through the entire ad tech supply chain. This proposal involved industry implementing a common system in which each transaction in the ad tech supply chain would be identified with a single identifier.
- Implementation of a **common user ID** to allow tracking of attribution activity in a way that protects consumers' privacy. This recommendation involved industry developing and introducing a secure common user ID. Here, ad tech providers would be required to assign to any data used for attribution purposes.

457 For a more detailed discussion of scam ads and ad fraud, see chapter 6 of the ACCC's Interim Report.

458 IAB Australia, [Buy-Side Transparency Standards: An Introduction](#), 7 April 2021.

459 `Sellers.json` and `SupplyChain.object` enable advertisers to verify the identity of the publisher selling the ad inventory, and the intermediaries involved in the sale of the ad impression. `Ads.txt` enables publishers to create a list of companies that are authorised to sell their ad inventory. See IAB Tech Lab, [sellers.json](#), [ads.txt](#), and [SupplyChain object](#).

Following the Interim Report and consideration of further information and submissions from stakeholders, the ACCC makes the following recommendations:

- **Recommendation 4:** industry should establish standards to require ad tech providers to publish average fees and take rates for ad tech services, and to enable full independent verification of demand side platform services. This addresses transparency issues across the supply chain.
- **Recommendation 5:** Google should provide publishers with additional information about the operation and outcomes of its publisher ad server auctions. This proposal is to address Google-specific transparency concerns around the information available about its publisher ad server auctions.
- **Recommendation 6:** The ACCC should be given powers to develop and enforce rules to improve transparency of the price and performance of ad tech services. The rules would apply across the Australian ad tech supply chain. Because the ad tech supply chain is complicated, this recommendation recognises and addresses that other measures may be necessary to address transparency concerns.

The sections below set out each of the three recommendations and also why the ACCC is not making a recommendation for the implementation of a common user ID.

5.7.1 Recommendation 4: Industry standards

There are transparency issues that span across the ad tech supply chain. These issues prevent publishers and advertisers from choosing the best ad tech provider for their needs, limiting effective competition between ad tech providers. The ACCC considers that industry is best placed to voluntarily develop standards to address these concerns.

Recommendation 4: Industry should establish standards to require ad tech providers to publish average fees and take rates for ad tech services, and to enable full, independent verification of demand side platform services

To address the transparency issues identified across the supply chain, industry should, in the first instance, work together to develop and implement standards that require providers operating in Australia to publish average fees and take rates for ad tech services. These industry standards should aim to improve fee and take rate transparency, and enable ad tech customers to meaningfully compare the fees and take rates across different ad tech providers and services. These industry standards should set out the categories of fees to be published, which should be adopted across the industry.

Additionally, to enable advertisers to assess DSP services fully and independently, industry is encouraged to develop and adopt a standard that allows full and independent verification of DSP services.

However, if such voluntary industry standards are not effective in achieving transparency to meet the needs of advertisers or publishers, or if the standard is not made within a reasonable period of time, the ACCC could introduce measures to address transparency issues under the rules proposed in recommendation 2 (to address Google specific issues) or recommendation 6 (for industry wide issues).

Industry should establish standards to enable ad tech providers to publish average fees

The first aspect of this recommendation provides for industry to establish standards that would enable ad tech providers to publish average fees for the ad tech services that they provide, to address the pricing transparency issues set out above. There are two key issues with the transparency of pricing for ad tech services:

- advertisers and publishers are unable to determine the fees retained by Google Ads

- advertisers and publishers have no visibility of take rates of ad tech services across the supply chain, and there is little publicly available price information.

The ACCC also considers that increased transparency of take rates across the supply chain, including Google Ads, is important to ensure trust in the supply chain, and to ensure that advertisers and publishers can make informed decisions about the best way to sell their inventory. This should be addressed by industry developing standards requiring ad tech service providers to publish average fees and take rates for each of the services that they provide. Published figures should be subject to verification by an independent auditor.

While Google submits that this level of reporting is not necessary, the ACCC considers it would assist both advertisers and publishers make more informed decisions about their choice of ad tech provider, leading to greater competition in the supply of ad tech services. This would also address concerns about Google having the ability to retain hidden fees.

Any pricing standard should be detailed enough to allow meaningful comparisons to be made

Any standard developed by industry should be detailed enough for advertisers and publishers to make meaningful comparisons of prices across inventory. To do this, the standard must require ad tech providers to separately report on different types of inventory and potentially deal types.

For example, we understand that fees for ad tech services vary significantly between video or non-video inventory, with video inventory typically attracting a higher premium. Similarly, prices can also significantly vary by deal type and depending on whether they were delivered to apps or browsers. If prices are not broken down for these different types of inventory and ads, it is unlikely that it will be useful to advertisers or publishers.

Implementation of a voluntary industry standard to enable full, independent verification of DSP services

We consider that in order to ensure that advertisers are able to choose DSPs based on an independent assessment of their performance, providers of DSP services should be subject to an obligation to provide third-party ad verification providers with information necessary to provide their services to DSPs. Submissions in response to the Interim Report indicated that stakeholders support a recommendation for industry to develop and implement a voluntary industry standard to enable full, independent verification of DSP services.⁴⁶⁰

We understand that many DSPs already allow full independent verification of their services. Consequently, this proposal would primarily be necessary to address issues with advertisers' ability to fully and independently assess performance where it is not currently available. As discussed above, the key supplier that is not providing full independent verification is Google for its YouTube inventory.

Proposals allowing access to data have the potential to create privacy issues and the solution would need to be carefully considered in order to protect consumers' privacy. However, we think that the privacy risks of this proposal are small for a number of reasons. First, it appears that many DSPs currently offer full and independent verification and attribution of their services, and we are not aware of this creating privacy issues for such providers. Further, the CMA recently found that 'verification of viewability and brand safety does not necessarily need to involve the use of personal data'.⁴⁶¹ In addition, the CMA recently noted in its findings on this issue that it should be possible to put in place contractual arrangements to facilitate the sharing of data necessary for independent verification of viewability and brand safety.⁴⁶²

460 See, for example, [submissions to interim report](#) by Google, 12 March 2021, p. 42, Xandr, pp. 7-8, Guardian Australia, pp. 9-10, News Corp Australia, pp. 4, 15; FreeTV Australia, p. 15, Verizon Media, p. 3, Association for Data-driven Marketing & Advertising (ADMA), p. 4. Music Rights Australia, p. 3 Publicis Groupe, p. 3, Commercial Radio Australia, p. 2.

461 Competition and Markets Authority, [Online platforms and digital advertising: Market study final report](#), 1 July 2020, Appendix Z, p. Z16.

462 Competition and Markets Authority, [Online platforms and digital advertising market study final report](#), 1 July 2020, Appendix O, p. 15.

International alignment

This recommendation is consistent with approaches being taken in other jurisdictions:

- The CMA found that there was a strong case for greater transparency over verification data and that Google should give advertisers access to the tools or information necessary to carry out their own, independent verification of advertising purchased on the inventory owned and operated by Google. Additionally, the CMA proposed that a code of conduct apply to Google that includes a requirement for within-contract fee transparency, which would involve the provision of data on fees, at least at an aggregate level, to a contracted party.⁴⁶³
- The European Commission is requiring specified gatekeeper platforms to provide advertisers and publishers with information concerning the price advertisers pay and publishers' remuneration⁴⁶⁴ and to provide advertisers and publishers, free of charge, with access to gatekeepers' performance measuring tools, and sufficient information to enable independent verification of ad inventory.⁴⁶⁵
- The Japanese Headquarters for Digital Market Competition found there were a number of problems in the quality of verification services provided in digital advertising markets. It found that among advertisers there is dissatisfaction that the 'number of views (which is the basis for billing)' is not objectively measured by a third-party. To address this, it recommended that third parties be given access to platforms to conduct measurement of viewability and reach. It also found that there was a lack of pricing transparency, and recommended that there should be a mechanism that allows advertisers and publishers to ascertain actual purchase and selling prices, and that access to information such as successful tender prices in bidding in an appropriate form should be permitted.⁴⁶⁶

A number of other platforms whose services are not the focus of this inquiry, such as Facebook and LinkedIn, also restrict third-party access to raw verification data, and this may also limit the ability of advertisers to verify the performance of ads. It is possible that a common standard could also help address issues in relation to these other services if it was adopted by digital advertisers more widely.

Options if a voluntary standard is not effective

For these recommendations to be most effective it is important that industry (and especially Google) participates in such industry measures.

If a voluntary standard is not made within a reasonable period of time or if the standard is implemented is ineffective in meeting the needs of advertisers and publishers, the ACCC could introduce rules with transparency requirements to be imposed on those ad tech providers that meet the pre-defined criteria, as outlined in recommendation 2. The ACCC considers this approach would help remedy the key concerns identified, which primarily relate to deficiencies in the level of information Google makes available. The rules developed would also need to be effective and proportionate at addressing the transparency concerns identified in this report.

463 Competition and Markets Authority, Online platforms and digital advertising: Market study final report, 1 July 2020, p. 407.

464 European Commission, [Digital Markets Act](#), art 5(g).

465 European Commission, [Digital Markets Act](#), art 6(g).

466 See Headquarters for Digital Market Competition (Japan), [Interim Report on the Evaluation of Competition in the Digital Advertising Market: Summary](#), June 2020.

5.7.2 Recommendation 5: Google should provide publishers with additional information

Recommendation 5: Google should provide publishers with additional information about the operation and outcomes of its publisher ad server auctions

Google should provide publishers with sufficient information to compare bids received from different SSPs. Specifically, publishers should be able to compare bids received through Google's SSP (Google Ad Exchange) and Open Bidding, to bids received through header bidding. They should also be able to match bid information to the price an impression is sold for.

If the information provided by Google is insufficient to enable publishers to carry out this comparison, the ACCC could introduce measures to require Google to improve the transparency of its publisher ad server auctions under sector specific rules outlined in **Recommendation 2**.

In addition to transparency issues across the supply chain, because of Google's strength in the ad tech supply chain, and in particular, its dominance in publisher ad server services, the ACCC considers that Google-specific recommendations are also required. This is to ensure that publishers are provided with adequate information to understand the outcomes of Google's publisher ad server's Unified Auction, and to verify Google's supply side fees.

While Google provides publishers with a range of information about auctions, we consider that a key limitation is that publishers cannot compare bids from header bidding with bids received through Google's SSP and bids from Google's Open Bidding. It is important for competition in ad tech that publishers are able to compare the value of bids from header bidding compared to those from Google's Open Bidding and from DSPs bidding into Google's SSP, particularly given that many publishers do not consider there are any alternatives to Google's publisher ad server.

Consequently, the ACCC recommends that Google improve the quality of information it provides to publishers about the results of its Unified Pricing auctions. This is to enable publishers to compare the value of using header bidding, compared to Google's SSP.

As discussed above, Google submits that there are privacy concerns in allowing publishers to link the bid data transfer file and the data transfer file. However, other stakeholders expressed doubts about Google's privacy justifications.⁴⁶⁷ For example, News Corp Australia submits that the change is not a requirement of any existing proposed privacy regulation and it is not necessary to protect user privacy.⁴⁶⁸ Similarly, an ad tech provider submits that the changes are beyond what is necessary to comply with privacy regulations, and another publisher stated that Google has not explained why these changes are necessary to protect consumer privacy.

Google also submits that its reasons for implementing this change were due to contractual confidentiality obligations to buyers. We also note that such issues do not appear to arise for other ad tech providers. It is also unclear from Google's submissions why providing information that allows publishers to compare the value of header bidding compared to other bids into Google's Unified Auction would be restricted by Google's obligations to its advertiser customers. However, if it is the case that Google is not able to provide publishers with sufficient information about auction outcomes due to obligations it owes to advertiser customers, we consider this to be an example of publishers being disadvantaged by the conflicts of interest Google faces.

Further, under this recommendation we are not requiring Google to provide information in the same way that it has done previously. Google could provide information that allowed publishers to better compare demand sources in other ways that it considered better protected user privacy.

Consequently, we are not convinced that the reasons Google has provided should be barriers to it providing publishers with this information.

⁴⁶⁷ News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020; Free TV Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 22 May 2020, p. 15.

⁴⁶⁸ News Corp Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 15 May 2020, p. 109.

5.7.3 Recommendation 6: Industry rules

Recommendation 6: The ACCC should be given powers to develop and enforce rules to improve transparency of the price and performance of ad tech services. The rules would apply across the Australian ad tech supply chain

The ACCC should be given powers to introduce transparency requirements which would apply across the Australian ad tech supply chain. These powers would have broader application than the sector specific rules proposed under recommendation 2, but would only allow for measures to improve transparency to be introduced.

Measures could include common transaction IDs, or requirements to publish prices and take rates in a standard form. As is the case with the sector specific rules proposed in Recommendation 2, any transparency measures would be developed in consultation with industry, and would need to be effective at addressing the transparency concerns and proportionate to the harms identified.

The ad tech supply chain is complex, and there are significant information asymmetries between ad tech providers and publishers and advertisers who are acquiring services from them. As a result, we consider that it is important that any framework that is introduced includes the power for the ACCC to introduce other measures to address transparency concerns in the future. These could include obligations on ad tech providers to publish prices or take rates (as discussed above) or a common transaction ID. We have discussed our views on the use of a common transaction ID in more detail below.

ACCC's views on a common transaction ID

In the Interim Report we proposed that one way to address issues regarding transparency in the supply chain was through industry implementing a common transaction ID. A common transaction ID would allow providers across the supply chain, as well as advertisers and publishers, to follow individual ad impressions across the supply chain and better observe the performance of their ad tech services.

Following submissions, the ACCC has decided not to recommend the implementation of a common transaction ID at this time.

While a common transaction ID could help to address issues around the transparency of auctions and fees or take rates across the supply chain, there are two key issues with this proposal:

- a common transaction ID may create a range of potential privacy concerns
- the introduction of a common transaction ID would create difficulties for the supply of ad tech services in Australia if it is not aligned with international jurisdictions.

However, we consider that the ACCC should have the ability to introduce transparency requirements that apply to ad tech providers operating in Australia in the future, including common transaction IDs. Our reasons for this are discussed below.

Benefits of a common transaction ID

A common transaction ID will allow providers across the ad tech supply chain, as well as advertisers and publishers, to follow how a single impression is traded. It would essentially be an identifier that would attach to an impression. This identifier would be passed along the supply chain through ad tech providers to advertisers and publishers. This would help to overcome a number of the transparency issues that have been identified with the ad tech supply chain.

First, a common transaction ID could allow publishers to better understand how their inventory was sold at auction. This would include understanding the bids received for specific inventory by allowing them to match different types of transaction information provided to them by ad tech providers.

For example, where publishers receive information about the bids or the price paid from their ad tech provider, they would be able to match this to the ad space that was sold, regardless of the publisher ad server and SSP they use. While this would require SSPs and publisher ad servers to share information

relating to the transaction with publishers, a common transaction ID may help to facilitate the sharing of such information. It could therefore help to overcome problems in matching bid and impression level data, allowing publishers to better consider the performance of supply side services, and assist publishers to make more informed decisions about the pricing of their inventory.

Secondly, a common transaction ID would allow for easier auditing of an advertiser spend across the supply chain. As discussed above, a key finding of the ISBA study was that PwC found it very difficult to match data across providers, such that fees could be tracked across the supply chain. A common transaction ID could help to facilitate the sharing of such information and would allow advertisers and publishers to better track the total fees that are retained across the supply chain. Enabling such independent auditing could improve confidence in ad tech services, promote greater price based competition and enable advertisers and publishers to make more informed choices about how to buy and sell inventory (as discussed above).

Finally, a common transaction ID could allow advertisers and publishers to engage with each other directly to decide how they buy and sell ad inventory, and how they will use the ad tech supply chain. For example, if advertisers and publishers were able to match prices paid and received for a single transaction ID, they would be able to determine how much ad spend was being retained in the supply chain overall. This could allow them to make better decisions on the best way to buy and sell ad inventory, including via direct deals, or using specific ad tech providers.

Potential privacy concerns relating to the introduction of a common transaction ID

While there are a number of potential benefits of a common transaction ID, there are also a range of potential privacy issues that may be associated with such a proposal.

Common transaction IDs are likely to raise fewer privacy concerns than those outlined in relation to a common user ID. This is because it does not attach to a specific user, rather, it attaches to the transaction. However, a common transaction ID could still raise privacy concerns by allowing publishers and advertisers to create profiles of users and potentially share personal information of users across the supply chain.

The privacy risks that we are concerned about are likely already enabled by third-party cookies, and some ad tech providers (such as Google) are already able to build profiles that mimic what a common transaction ID could do. However, we are cognisant that if a common transaction ID were to be required at the moment, it could entrench the privacy concerns that already exist in relation to the ad tech supply chain at a time when the industry is moving towards greater privacy protections for users. Notwithstanding, we consider that it is possible that a common transaction ID could be introduced in a way in the future which ensures that privacy is protected.

International alignment of common transaction ID

We do not consider that a common transaction ID should be introduced immediately. Importantly, in order for a common transaction ID to be effective, it would need to be implemented in a way that is coordinated internationally. A common transaction ID would likely be costly and technically challenging to implement. If it were only to be used in Australia, it could potentially result in some ad tech providers leaving the Australian market to avoid implementing measures that would only be used in one jurisdiction.

The CMA is considering the introduction of a common transaction ID, and is currently working to assess how a common transaction ID could be designed to avoid privacy concerns.⁴⁶⁹ We consider that by empowering the ACCC to introduce proportionate and effective measures to achieve greater transparency in the ad tech supply chain in the future, such as requiring the implementation of a common transaction ID, will ensure mechanisms could be designed in a way that align better with the work being conducted in other jurisdictions.

⁴⁶⁹ Competition and Markets Authority, Online platforms and digital advertising: Market study final report, 1 July 2020, p. 29.

The ACCC should be able to introduce a common transaction ID, and other transparency measures in the future

A common transaction ID could be an effective way to address transparency issues across the ad tech supply chain. However, while we consider that the privacy risks of introducing a common transaction ID are less than for other proposals (such as a common user ID), we consider that the introduction of a common transaction ID would need to be carefully designed to minimise privacy risks, in consultation with industry.

Additionally, the voluntary measures under recommendations 4 and 5 should be used as a first step to address the transparency issues that have been raised. However, because these measures are voluntary, we consider that it is important that the ACCC should also have the ability to require ad tech providers to introduce certain transparency measures in the future. These could include a common transaction ID, or other measures such as requiring providers to publish take rates or fees.

Requesting that industry develop solutions now, while reserving the ability for the ACCC to intervene in transparency measures in the future has a number of benefits, including:

- allowing industry to develop solutions which draw on their expertise in the area
- ensuring that privacy issues can be considered in detail, and measures designed in a privacy protective way
- allowing the ACCC to take a more co-ordinated approach and align requirements with international regulators.

5.7.4 The ACCC does not recommend the implementation of a common user ID

In the Interim Report, the ACCC identified the introduction of a common user ID as a potential measure to address the issues identified regarding the ability of third parties to provide attribution services for advertisers. A common user ID is different to a transaction ID, in that it allows the tracking of a user rather than the bids for a particular advertising impression.

While some stakeholders supported the introduction of a common user ID, privacy concerns were raised in relation to the proposal.⁴⁷⁰ In particular, concerns were raised that, even if anonymised, it could be matched with other data, including the personal information of users, without their consent, and also enable re-identification of consumers.⁴⁷¹

The ACCC has carefully considered stakeholder responses to the Interim Report and considers that the benefits of such a proposal to ad tech providers, advertisers and publishers are outweighed by the potential privacy risks to consumers.

The privacy risks of a common user ID outweigh the potential benefits

We consider that the privacy risks of implementing a common user ID outweigh the potential benefits of increasing the ability of advertisers to conduct multi-touch attribution of ad tech services.

The privacy risks associated with a common user ID are significant. This is because, even if such IDs are anonymised, it is likely that ad tech providers would be able to re-identify the user ID and attach it to a specific consumer. Ad tech providers could then use this to build a profile of the users' behaviour across the web. In particular, as the user ID would be universal, it would greatly increase the risks of these harms, compared to the current situation where ad tech providers use different kinds of identifiers.

470 See e.g. Verizon Media, [Submission to the Ad Tech Inquiry Interim Report](#), pp. 4–5; Australian Association of National Advertisers (AANA), [Submission to Ad Tech Inquiry Interim Report](#), March 2021; Daily Mail Australia, [Submission to Ad Tech Inquiry Interim Report](#), February 2021

471 See, for example, [submissions to interim report](#) by Office of the Victorian Information Commissioner, p. 3; Office of the Australian Information Commission, pp. 8–9; Centre for AI and Ethics (UoM)p. 2; Google, pp. 42–46; Free TV; Allens Hub (UNSW), pp. 4–5; Reset Australia, p. 7; Computer & Communications Industry Association, pp. 8–9; Australian Institute's Centre for Responsible Technology, p. 16.

While advertisers would benefit from being better able to measure the performance of Google's services through multi-touch attribution, advertisers are still able to effectively engage in single-touch attribution. This helps them to understand the performance of their ads. Advertisers are also able to conduct multi-touch attribution across their other DSP services. Further, the sharing of user IDs to provide attribution services is likely to become obsolete in the near future as third-party cookies are phased out. This means that a common user ID requirement will also quickly become outdated. Instead, the industry will need to develop new ways of conducting attribution which do not rely on third-party cookies. Given these factors, the ACCC does not consider that the potential benefits of mandating the introduction of a common user ID will outweigh the serious privacy risks the proposal raises.

However, this finding does not prevent ad tech providers from continuing to develop and use common user IDs in the ad tech supply chain to the extent that it is consistent with Privacy Laws.

Recommendations 2 and 3 could address attribution issues rather than a common user ID

The recommendations made in chapters 3 and 4 to deal with Google's data advantage and its vertical integration across the ad tech supply chain could help to address the attribution issues we have identified here.

First, under recommendation 3, the ACCC would have the ability to require an ad tech provider to share data with other providers under a data access regime. If implemented, this could allow the ACCC to require Google to provide other ad tech providers with access to user ID, or other information necessary to conduct attribution. The ACCC does not currently consider that this is a viable solution for the reasons outlined in chapter 3. However, it may be possible in future for technology to be developed that enables data access regimes or data sharing to be implemented in a privacy safe way.

Secondly, Google is (at least in part) able to deny other ad tech providers with access to its user IDs. This is because due to its strength in DSP services, many advertisers use Google's services despite the attribution issues that this raises. The measures proposed under recommendation 2 are intended to improve the ability of other ad tech providers to compete with Google, such that it would be more constrained in the way that it provides its services. The ACCC considers that if Google's ad tech services face increased competition, it would likely mean that Google would need to provide more transparency over the performance of its services, or risk losing customers.

6. Advertising agency services

Key points

- Ad agencies perform a key role in the ad tech supply chain. They offer advertisers specialised skills and experience in the management and purchase of digital advertising. While there is a degree of concentration among the largest agency holding groups, we consider the market for ad agency services in Australia to be competitive.
- Conflicts of interests can arise when advertisers use ad agencies. For example, conflicts of interest are present where agencies are incentivised to purchase advertising from particular publishers or use certain ad tech providers, because they offer larger discounts, rebates, or other incentives. Similarly, agencies may encourage advertisers to use particular services owned by the agency's holding group to generate additional revenue.
- Discounts and rebates, and holding group arrangements, can lead to efficiencies and cost savings for advertisers. However, where an advertiser does not have transparency over the operations of their contracted agency, these situations can create problems. For example, agencies may act in ways which benefit them but not their client. We have heard concerns that this may be occurring from some advertisers, but there does not currently appear to be widespread issues across the industry.
- There are a number of factors that can impact the ability of advertisers to gain oversight over the operations of their agency. These include the structure of any agency holding group, the agency remuneration model chosen, and general issues with opacity associated with the ad tech supply chain.
- There are a number of ways in which advertisers and agencies can address transparency issues to help avoid conflicts of interest. For example, industry led frameworks and checklists are available that provide guidance on what advertisers should expect, seek, and ask for in their dealings with agencies. Additionally, these frameworks provide principles of transparency which agencies are encouraged to uphold.

This chapter examines the role of ad agencies in the ad tech supply chain, and discusses issues relating to conflicts of interest and transparency that can arise. It is structured as follows:

- **Section 6.1** – outlines the role of ad agencies, and competition for ad agency services in Australia.
- **Section 6.2** – discusses potential conflicts of interest, and price and performance transparency where advertisers use ad agency services.
- **Section 6.3** – outlines our conclusions and discusses how advertisers and agencies can address transparency and conflict of interest issues.

For the purpose of this report, 'ad agencies' refers to services supplied to advertisers relating to the purchase of digital display advertising services. This does not include the supply of ad creative services or ad agency services for other forms of digital advertising (e.g. search advertising), or print or broadcasting advertising.

6.1 Ad agency services in Australia

The following section covers the role and importance of ad agencies, how they interact with the ad tech supply chain, the major ad agencies in Australia, and discusses competition for ad agency services in Australia.

6.1.1 The role and use of ad agencies

Ad agencies perform an important role in the ad tech supply chain, particularly for larger advertisers.

Advertisers use ad agencies to plan and manage the buying of digital advertising, as they offer specialised skills and are more experienced in managing advertising spend, and purchasing digital advertising across different channels and platforms. Another advantage of using agencies is that they are often better placed to negotiate discounts and deals with publishers and ad tech providers than a single advertiser. This is because they represent many advertisers and can therefore offer larger ad spend to publishers and ad tech providers. Advertisers may contract an ad agency to manage and purchase all of their advertising requirements or, alternatively, purchase a portion of advertising in house with the rest outsourced to an agency.

For these reasons, larger advertisers, are more likely to engage ad agencies to support the development and implementation of their advertising campaigns. Smaller advertisers are less likely to use agencies due to the proportionally greater transaction costs in doing so. This is in comparison to purchasing inventory through self-service platforms such as Google Ads and Facebook Ad Manager. Additionally, smaller advertisers' digital advertising campaigns are likely to be less complex, or contain fewer elements. Accordingly, smaller advertisers may not require the expertise of agencies for their ad requirements, and these can be met through the use of the self-service providers. However, there are a number of agencies which focus on, and tailor their offerings to, servicing small to medium sized advertisers.

6.1.2 The importance of agencies in display advertising

While agencies generally do not represent the large number of smaller advertisers buying display advertising, a large portion of digital display advertising expenditure is spent through ad agencies. This is likely because, as discussed in chapter 3, larger advertisers account for a large proportion of total advertising spend in Australia.

IAB Australia estimates that in the quarter to March 2021, 41% of general display advertising for content publishers' inventory in Australia was bought by ad agencies via insertion orders (direct deals). This does not include the amount bought by agencies using programmatic channels.⁴⁷² We therefore estimate that the total portion of digital display advertising bought using agencies is higher than this.

6.1.3 How ad agencies fit into the ad tech supply chain

While advertisers gain many benefits from using of ad agencies, they add an additional layer of complexity to the ad tech supply chain. How ad agencies interact with the rest of the ad tech supply chain is explained below.

Ad agencies part of holding groups

All of the largest ad agencies operating in Australia are part of the large multinational holding groups which own a number of subsidiaries that perform a range of functions under different names. For example, a single holding group may provide agency, data and trading desk services under separate brands.

Box 6.1: Holding group services

In addition to ad agency services, holding groups can provide other types of services relevant to the purchase of digital display advertising. These include:

- **Trading desk services:** trading desks are specialised proprietary technology, and the teams that manage these technologies, which can be used in the planning, buying and optimising ad campaigns.
- **Data services:** Data services offered by holding groups include data platforms aimed at improving ad campaign performance. These platforms are generally proprietary technology which utilise data owned by the agency, third-party data, advertiser's data, and ad performance data to create data insights which can be applied to the execution of ad campaigns.

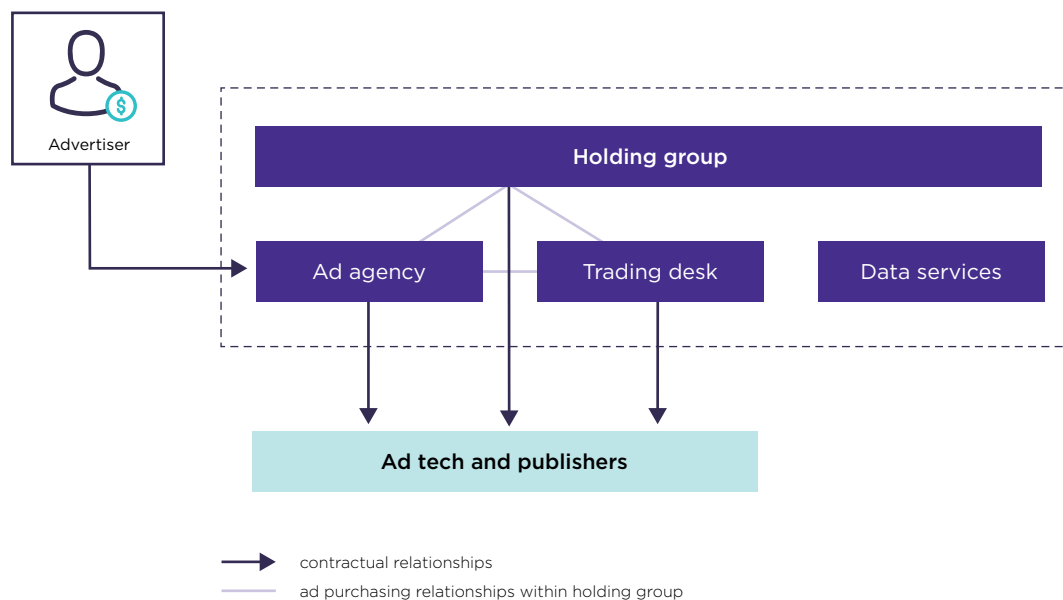
472 IAB Australia, Online Advertising Expenditure Report, March 2021, p. 9.

Where an ad agency is part of a holding group, advertisers typically only interact with the ad agency whom they have a contractual relationship with. However, the ad agency may interact with other subsidiaries within its holding group (such as trading desks and data services) and with ad tech providers in performing its services. For example, trading desks generally act in conjunction with the ad agency, and will interact with ad tech providers to perform more specialised buying and optimisation of digital advertising campaigns.⁴⁷³

In addition to using a trading desk, ad agencies may deal directly with the ad tech providers to buy and optimise the advertising. In some circumstances, there will be no use of a trading desk and all purchase of advertising is done by the ad agencies. The exact arrangements will depend on the requirements of the campaign. Where an advertiser contracts an ad agency that is part of a holding group, the purchase of digital display advertising may be conducted by the ad agency and/or the holding group's trading desk. Additionally, the holding group may pre-purchase advertising inventory from ad tech providers or publishers before selling this to advertisers via the ad agency or trading desk.

Figure 6.1 below highlights these key interactions between advertisers, ad agencies and their related companies, ad tech providers and publishers.

Figure 6.1: Diagram of ad agencies part of holding groups in the ad tech supply chain



Independent ad agencies

There are also a number of independent agencies that are not part of holding groups. They are generally smaller in size and will perform all functions relating to the buying of digital display advertising (e.g. planning, managing, buying and optimising) and have contractual relationships with ad tech providers and publishers. Generally, these agencies will not have additional subsidiaries such as trading desks or data services.

6.1.4 Major ad agencies operating in Australia

There are six major international holding groups that operate ad agencies and trading desks in Australia, as set out in table 6.1. These holding groups can also provide data services and creative services.

473 Clearcode, [What is an Agency Trading Desk \(ATD\) and How Does it Work?](#), accessed 9 November 2020.

Table 6.1: Holding groups, including examples of their agency brands and trading desks

Holding group	Agency brands	Trading desk
WPP	GroupM, Mindshare, MediaCom, Wavemaker	Xaxis
Omnicom Media Group	OMD Worldwide, PHD Network, Hearts & Science	Accuen
Dentsu Aegis Network	Carat, iProspect, dentsuX	Amnet
Interpublic Group	Kinesso, Universal McCann (UM), Initiative, Reprise	Matterkind (formerly Cadreon)
Publicis Groupe	Starcom, Zenith, Performics, Spark Foundry	Precision (formerly VivaKi)
Havas Group	Havas Media	Havas Programmatic Hub

Source: Information provided to the ACCC and public sources.⁴⁷⁴

There are also a number of independent Australian ad agencies. This includes Atomic 212°, Pearman Media, The Media Store, Nunn Media, Involved Media, and Cummins&Partners.⁴⁷⁵ While these agencies are smaller, we understand they play an important role. For example, Mumbrella reports that independent media agencies drive \$2.5 billion worth of ad spend in Australia.⁴⁷⁶ The Media Federation of Australia submits that the industry has a strong mix of non-holding group agencies that compete directly with the holding group agency brands.⁴⁷⁷

6.1.5 Competition in ad agency services in Australia

During the inquiry, we have not heard significant concerns about competition for ad agency services in Australia. While there is a degree of market concentration amongst the six largest agency holding groups, there is evidence of competition for ad agency services in Australia.

For example, there are many ad agencies operating in Australia, and there have also been new entrants to the market. A number of new firms, including large consultancy firms, are providing digital advertising solutions in competition with ad agencies.⁴⁷⁸

There is also evidence that it is easy for advertisers to switch agencies. Advertisers have stated that they are able to frequently put out their agency contracts for tender, and that this process is generally competitive with numerous agency options available. A number of advertisers have indicated that they have previously switched agencies as a result of these tender processes. Advertisers have indicated that, if their current agency is not performing as desired, they are able to go to market and contract with an agency that is more suited for their needs.⁴⁷⁹ We also understand that agency contracts are generally short in duration and that the notice required for termination without cause can be short. We consider this is likely to contribute to the relative ease in which advertisers can move from one agency to another.

In addition to offering solutions that are in competition with ad agencies, large consultancy firms are offering services to advertisers aimed at helping advertisers make more informed decisions

474 Dentsu Aegis Network Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 3; Google Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 1 May 2020, p. 13; Havas Media Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 10; Daily Mail Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 2 June 2020, p. 6; WPP AUNZ, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 2; Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 18 May 2020, p. 3; IPG, [Our Companies](#), accessed 17 November 2020; Publicis Groupe, [Publicis Media](#), accessed 17 November 2020.

475 Media Federation of Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 5; Google Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 1 May 2020, p. 13; Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 18 May 2020, p. 5.

476 B. Rigby, 'Independent Media Agencies of Australia, new industry body for indies, launches with 20 founding members', *Mumbrella*, 20 February 2020, accessed 25 August 2020.

477 Media Federation of Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 7.

478 Media Federation of Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 14; Dentsu Aegis Network Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 2-3.

479 An advertiser also indicated that contractual performance management tools can be used if their current agency is not performing as desired.

when engaging with and ad agencies. We consider these services, which include tender process services, contract review management, and agency audit services, to further contribute to a competitive environment.

Furthermore, as discussed below, advertisers have certain contractual rights that enable them to encourage competition for ad agency services.

6.2 Transparency and conflicts of interest

In the Digital Platforms Inquiry, the ACCC expressed concerns about a lack of transparency in the way ad agencies operate and the potential for conflicts of interest. As advertisers often have little visibility into the advertising supply chain, there may be an incentive for agencies to take actions that they benefit from, but that are not in the best interests of advertisers.⁴⁸⁰ We have examined this issue more closely during this Inquiry.

In the Interim Report we sought feedback from stakeholders about the potential conflicts that arise and whether it was leading to problems for advertisers. We have had limited engagement from industry on these issues, and have not heard evidence of widespread concerns. However, we have seen evidence that there is still the potential for conflicts of interests to arise, because it can be difficult for advertisers to have oversight over their ad agencies actions in some cases.

The following looks first, at how conflicts of interest can arise. Secondly, we look at whether advertisers have visibility over outcomes and decisions in their interactions with ad agencies, and discuss whether this is currently leading to problems.

6.2.1 Potential conflicts of interest

There are two potential ways that conflicts of interest can arise in ad agency arrangements which can lead to poorer outcomes for advertisers.

Rebate, discounts and other incentives

Rebates, discounts and other incentives offered by publishers and ad tech providers to ad agencies to buy display ads on their properties or services, have the potential to create conflicts of interest between the agency and the advertisers they represent.

It is common practice for publishers and ad tech providers to offer agencies or the agency holding group discounts, rebates, or other incentives, if they reach certain levels of spend. Agencies, trading desks and holding groups will generally receive greater rebates, discounts, and incentives from publishers and ad tech providers, as they increase ad spend with those publishers and ad tech providers.

For example, we understand that a major publisher in Australia offers rebate and discount arrangements to ad buyers for increased spend on its platforms/websites. We consider it likely that other publishers may also offer these rebate and discount arrangements. Another example is Google's Display and Video Incentives Program where Google offers incentives to advertisers and agencies to 'accelerate the adoption of and investment in Google's advertising products'.⁴⁸¹

While discounts, rebates and other incentives are not inherently a problem, they can influence how an agency chooses to direct advertiser dollars. For example, as discussed in chapter 4, incentives offered under Google's Display & Video Incentives Program could result in advertisers and agencies moving portions of display advertising spend away from other DSPs that they may potentially be using.

Such incentives can lead to issues if agencies are directing spending towards publishers or certain ad tech services to benefit the agency, but not the advertiser. For example, an agency could use a particular publisher or ad tech service to obtain volume discounts, which does not provide the best

480 ACCC, [Digital Platforms Inquiry Final Report](#), 26 July 2019, pp. 14, 155. See also: McKinsey & Company, [Truth in advertising: Achieving transparency with media rebates to fuel growth](#), 2 May 2018, accessed 19 November 2020.

481 Google, [Advertising Policies Help - About advertising incentives](#), accessed 25 August 2020.

value for their advertiser clients. This may be the case if the chosen publisher does not best suit the advertisers' objectives, or leads to higher costs for the advertisers.

Holding group conflicts

As discussed above, some of the agencies operating in Australia are part of holding groups that offer agency trading desks and data services in addition to ad agency services. Conflicts of interest may arise when an agency uses the services offered by members of its holding group. There may be economies of scope or demand-side efficiencies to an agency having diverse functions, particularly where these services are of a high quality and can be provided at a competitive cost. However, it can lead to problems if an agency encourages clients to use particular services, owned by the agency or holding company, to generate additional revenue where this may not be in the best interests of the client.

Holding groups are also diversifying into services that assess the performance of campaigns. Where the agency is purchasing advertising and also reporting on its performance, this may reduce the ability for advertisers to independently assess the performance of ad agencies' services.⁴⁸²

6.2.2 Transparency in the supply of ad agency services

The above conflicts of interest may be less problematic if advertisers are:

- aware of the rebate and discount arrangements that agencies, and related services within holding groups, have in place
- aware of the ways in which agencies will interact with other services owned by the holding group
- able to monitor the actions of ad agencies, and related services within holding groups (e.g. trading desks and data services), and assess if the agency is purchasing ad inventory in their best interests
- able to switch to a better provider if an agency is not acting in their best interests.

To that end, advertisers' ability to assess the actions of ad agencies, access pricing and performance information, and switch agencies can significantly counteract any risks of harm that arises from an agency's conflicts of interest.

We consider that generally advertisers are able to access a wide range of pricing and performance information in their agency relationships. Based on submissions, we understand that agencies provide advertisers with a large amount of information on campaign performance and various fees are often itemised by cost component.⁴⁸³ Additionally, we are aware that many agency contracts contain audit rights which advertisers can exercise to determine whether their ad agency has been engaging in actions and decisions that are in the interest of advertisers.

However, despite there being some degree of transparency over pricing and fees, we consider there are still a number of factors that can impact the level of transparency over agency services, and advertisers' ability to monitor whether agencies are acting in their best interests. As a result, the level of transparency that can be obtained may vary from advertiser to advertiser depending on their understanding of these factors and their ad agency arrangements. These factors are discussed below.

The impact of agency holding group structures on transparency

Advertiser clients typically have a contractual relationship with their ad agency, rather than with the holding group (if applicable), or other brands/services within the holding group (e.g. trading desk and data services). Therefore, advertisers may not have visibility of the contractual relationships between:

- the agency and the holding group/trading desk, or
- the holding group/trading desk and ad tech providers.

This may be relevant, for example, where ad agency holding groups (either at the holding group level or via the holding group's trading desk) acquire digital advertising inventory from publishers,

482 Dr Nico Neumann, [Submission to Ad Tech Inquiry Issues Paper](#), 21 April 2020, p. 11.

483 Dentsu Aegis Network Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 5; Havas Media Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 4, 6.

and then pass this ad inventory to their agency subsidiaries which then re-sell to clients.⁴⁸⁴ Under this arrangement, the ad agency may not be contractually required to disclose (or in some cases may not have visibility over) cost savings, discounts, and rebates achieved by the holding group or trading desk. While a number of agencies provide contractual rights of audit between an advertiser and an ad agency, we note that these arrangements may not capture arrangements entered into by the holding group or trading desk.

We acknowledge that these purchasing arrangements allow agencies to pre-purchase ad inventory. This may achieve benefits such as volume discounts or rebates which can ultimately be passed on to advertisers. However, the holding group structures can negatively impact the level of transparency in cases where visibility into these arrangements is not contractually available to advertisers.

The impact of agency remuneration model on transparency

We consider that the level of visibility advertisers receive from agencies is partly influenced by the remuneration method agreed upon between the advertiser and the agency, and that some arrangements are less transparent than others. For example, under:

- **An itemised commission based model:** an advertiser will generally be able to see all costs and fees to be incurred by the agency (e.g. campaign costs, third-party platform fees, staffing costs and hours if using a retainer model). Under this remuneration model, advertisers are usually responsible for approving, and therefore have visibility over, the different cost components of the advertising campaign.⁴⁸⁵ This may include visibility over rebates or discount arrangements the agency has in place with ad tech providers and/or publishers.
- **A fixed price guaranteed outcome model:** the agency guarantees a performance outcome and provides a fixed price to the advertiser upfront before any ad inventory is purchased.⁴⁸⁶ The agency then works to purchase advertising at a cost lower than the agreed price in order to earn a margin.⁴⁸⁷ Under this agency fee model, the costs incurred, discounts and rebates provided to the agency (by sellers of ad inventory) are not always shared with the advertiser.

We understand from stakeholders that commission based models are more common than fixed price guarantee outcome models.⁴⁸⁸

We also note though that even where a fixed price model is used, it is possible for advertisers to obtain an itemised breakdown of fees and costs, or have oversight of how their advertising expenditure is used by the agency. For example, Omnicom Media Group says that granular cost component information about the programmatic advertising supply chain is provided to all its clients.⁴⁸⁹ Similarly, Dentsu Aegis Network Australia submits that 'all decisions around what elements of the digital supply chain (technology, data, verification, media)' are made in consultation with advertisers.⁴⁹⁰ Likewise, Havas Media Australia submits that it is fully transparent across paid digital activations and that fees are available for advertiser scrutiny if required.⁴⁹¹

Overall, we consider that an itemised commission model is likely to better guarantee that fees will be transparent. A fixed price model can also be transparent if there is sufficient disclosure, but this may not be the case across agencies and for all advertisers. Therefore, we consider that, for at least some agencies, pricing transparency could be improved.

484 Dentsu Aegis Network Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 2; Havas Media Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 10; Other confidential information provided to the ACCC.

485 Media Federation of Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 20.

486 IPG Kinesso, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 11.

487 Media Federation of Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 20.

488 Media Federation of Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 12 May 2020, p. 20; Dr Nico Neumann, [Submission to Ad Tech Inquiry Issues Paper](#), 21 April 2020, p. 6; IPG Kinesso, [Submission to Ad Tech Inquiry Issues Paper](#), 11 May 2020, p. 11.

489 Omnicom Media Group, [Submission to Ad Tech Inquiry Issues Paper](#), 18 May 2020, p. 10.

490 Dentsu Aegis Network Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 6.

491 Havas Media Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, pp. 4, 6.

6.3 How advertisers and agencies can address transparency and conflict issues

Some stakeholders express concerns that a lack of transparency means agencies can act contrary to the interests of their clients. However, we consider there are a number of ways in which both advertisers and agencies, can address these issues.

For example, we note there are industry led frameworks and checklists that advertisers can utilise in managing and negotiating agency relationships. These frameworks and checklists seek to empower advertisers by providing guidance on what they should expect, seek, and ask for in their dealings with agencies. Additionally, these frameworks provide principles of transparency which agencies are encouraged to uphold. For example:

- The Australian Association of National Advertisers has a form called the 'AANA Media Contract Template.' This form aims to 'equip advertisers with a comprehensive starting point for each element of the contract negotiation.'⁴⁹² Additionally, the 'AANA Media Contract Guidance Notes' supports this template and provides advertisers with a list of 'considerations and questions that should be addressed. This enables (advertisers) to reduce or eliminate non-transparent and non-disclosed practices that relate to their media spend'.⁴⁹³
- The Media Federation of Australia recently released its updated Transparency Framework for Agencies and Advertisers which has been signed by its member agencies. The framework outlines a set of practices for advertisers and agencies to follow with the aim of ensuring transparency in their interactions, and includes four principles of transparency: 'Disclosure, Education, Accountability and Sustainable Contracts'.⁴⁹⁴
- PwC has recently released a paper titled 'A checklist for brands that value transparency and disclosure in media' which we understand may assist advertisers in this area.⁴⁹⁵

The ACCC considers that these frameworks and checklists are important resources for educating advertisers about the importance of transparency and providing practical steps for resolving areas where there may be issues. For example, advertisers should inform themselves, and ask ad agencies for information, about the following issues before entering into contracts:

- whether the ad agency or its relevant holding group subsidiaries are engaging in rebates, discounts and incentive arrangements with publishers and ad tech providers, and whether any subsequent benefits are provided to the advertiser (e.g. whether advertisers are entitled to discounts achieved by the ad agency)
- what remuneration models are available and the potential impact of different models on price and performance information provided
- what purchasing relationships the ad agency may have with the holding group and related holding group entities
- whether contractual audit rights are available and what they cover.

Given advertisers are able to take a range of actions to reduce the risks from potential conflicts of interest in agency relationships, the development of these industry led frameworks and checklists, and the competitiveness of the ad agency industry in Australia, we do not consider government intervention is currently required to respond to transparency and conflict of interest issues relating to ad agency conduct.

492 Australian Association of National Advertisers, [AANA Media Contract](#), accessed 30 August 2021.

493 Australian Association of National Advertisers, [AANA Media Contract](#), accessed 30 August 2021.

494 Media Federation of Australia, [The MFA Transparency Framework for Agencies and Advertisers](#), June 2021.

495 Australian Association of National Advertisers, [News & Resources](#), accessed 31 August 2021.

Appendix A: Ministerial Direction



Competition and Consumer (Price Inquiry— Digital Advertising Services) Direction 2020

I, Josh Frydenberg, Treasurer, give the following direction to the Australian Competition and Consumer Commission.

Dated: 10 February 2020

Josh Frydenberg
Treasurer

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Part 1—Preliminary

1 Name

This instrument is the *Competition and Consumer (Price Inquiry—Digital Advertising Services) Direction 2020*.

2 Commencement

- (1) Each provision of this instrument specified in column 1 of the table commences, or is taken to have commenced, in accordance with column 2 of the table. Any other statement in column 2 has effect according to its terms.

Commencement information		
Column 1	Column 2	Column 3
Provisions	Commencement	Date/Details
1. The whole of this instrument	The day after this instrument is registered.	

Note: This table relates only to the provisions of this instrument as originally made. It will not be amended to deal with any later amendments of this instrument.

- (2) Any information in column 3 of the table is not part of this instrument. Information may be inserted in this column, or information in it may be edited, in any published version of this instrument.

3 Authority

This instrument is made under the *Competition and Consumer Act 2010*.

4 Definitions

Note: Expressions have the same meaning in this instrument as in the *Competition and Consumer Act 2010* as in force from time to time—see paragraph 13(1)(b) of the *Legislation Act 2003*.

In this instrument:

advertiser means a person that places an advertisement.

digital advertising agency services means services supplied to advertisers relating to negotiating, acquiring or managing digital display advertising services.

digital advertising technology services means services that provide for, or assist with, the automated buying, selling and delivery of digital display advertising services.

digital display advertising services means the supply of opportunities for the placement of advertising, by way of the internet, other than:

- (a) classified advertisements; and

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- (b) advertising provided in conjunction with the search results of internet search engines.

Examples: Supply of opportunities to place advertisements that would appear:

- (a) in banners, or in videos, on a webpage; and
- (b) within a software application on a mobile computing device; and
- (c) in conjunction with social media content.

exempt supply has the meaning given by subsection 95A(1) of the Act.

goods has the meaning given by subsection 95A(1) of the Act.

inquiry has the meaning given by subsection 95A(1) of the Act.

services has the meaning given by subsection 95A(1) of the Act.

State or Territory authority has the meaning given by subsection 95A(1) of the Act.

supply has the meaning given by subsection 95A(1) of the Act.

the Act means the *Competition and Consumer Act 2010*.

Part 2—Price inquiry into supply of certain digital advertising services

5 Commission to hold inquiry

- (1) Under subsection 95H(1) of the Act, the Commission is required to hold an inquiry into the markets for the supply of digital advertising technology services and digital advertising agency services. The inquiry is *not* to extend to any of the following:
 - (a) the supply of a good or service by a State or Territory authority;
 - (b) the supply of a good or service that is an exempt supply;
 - (c) reviewing the operation of any Australian law (other than this Act) relating to communications, broadcasting, media, privacy or taxation;
 - (d) reviewing the operation of any program funded by the Commonwealth, or any policy of the Commonwealth (other than policies relating to competition and consumer protection);
 - (e) the supply of creative input for advertising.
- (2) For the purposes of subsection 95J(1), the inquiry is to be held in relation to goods and services of the following descriptions:
 - (a) digital display advertising services;
 - (b) digital advertising technology services;
 - (c) digital advertising agency services.
- (3) Under subsection 95J(2), the inquiry is not to be held in relation to the supply of goods and services by a particular person or persons.

6 Directions on matters to be taking into consideration in the inquiry

Under subsection 95J(6) of the Act, the Commission is directed to take into consideration all of the following matters in holding the inquiry:

- (a) the intensity of competition in the markets, and the efficiency of the markets, for the supply of digital advertising technology services and digital advertising agency services (*those markets*), with particular regard to:
 - (i) how competition in those markets impacts on competition in the market for the supply of digital display advertising services; and
 - (ii) the availability to advertisers, publishers and other market participants of information on activities in those markets; and
 - (iii) the revenue of, and share of an advertiser's digital display advertising services expenditure retained by, each of the suppliers of services referred to in subsection 5(2); and
 - (iv) the concentration of power in the markets amongst and between suppliers of services referred to in subsection 5(2); and
 - (v) auction and bidding processes and other similar processes undertaken in digital display advertising services; and

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- (vi) mergers and acquisitions in those markets; and
 - (vii) the behaviour of any suppliers in those markets, including:
 - (A) the nature, characteristics and quality of the services they offer; and
 - (B) the pricing and other terms and conditions they offer to consumers and businesses;
- Example 1: Characteristics of services offered include the interoperability of systems or software used or offered by different suppliers.
- Example 2: Other terms and conditions include policies relating to privacy and data collection, management and disclosure.
- (b) relationships between suppliers and customers in the markets for services referred to in subsection 5(2), including the extent to which existing corporate structures, or contractual arrangements, have a negative effect on competition in the market or informed decision-making by market participants;
 - (c) whether the services referred in subsection 5(2) are being provided or performed to the satisfaction of all market participants.

7 Directions as to holding of the inquiry

- (1) Under subsection 95J(6) of the Act, the Commission is directed to do the following in holding the inquiry:
 - (a) give to the Treasurer an interim report on the inquiry by no later than 31 December 2020.
- (2) Under subsection 95P(3) of the Act, the Commission is directed not to make available for public inspection, copies of any interim report until the Treasurer, in writing, authorises the Commission to do so.

8 Period for completing the inquiry

For the purposes of subsection 95K(1) of the Act, the inquiry is to be completed, and a report on the matter of inquiry given to the Treasurer, by no later than 31 August 2021.

Appendix B: How ad tech providers compete

Factors which influence the choice of ad tech provider

There are several ways that ad tech providers attempt to differentiate their services and compete to win customers. In particular, we consider that ad tech providers compete based on the following key factors:

- performance and price
- integration with other services and ease of use
- for publishers, the ability of the ad tech services to connect the publisher with a wide range of demand
- for advertisers:
 1. the ability of the ad tech services to ensure that the advertiser's ads are targeted to the particular customers they are trying to reach
 2. the ability for their ad tech services to connect with audiences.

Performance and price

Publishers place a high value on ad tech services that increase and maximise their revenue earned from the sale of their ad inventory to advertisers, for the lowest possible price. Similarly, advertisers place a high value on services that enable their ads to be served to particular audiences, and that achieves the goals of a particular campaign for the lowest possible price. That is, providers which give them the greatest return on their advertising spend. Therefore, ad tech providers compete to meet these goals of advertisers and publishers. Many of the factors below relate to ad tech service providers' ability to meet these goals.

Ad tech providers also compete on the price of their services, as lower fees will mean that advertisers make a greater return on investment, and publishers will receive a greater proportion of ad spend.

In order for competition on these factors to be effective, advertisers and publishers need to be able to accurately assess the performance and pricing of the ad tech services that they acquire. The ability of advertisers and publishers to assess the performance of ad tech services, and the level of transparency that they have over the pricing of the services are discussed in greater detail in chapter 5.

Integration with other services and ease of use

Ad tech services provide value to advertisers and publishers by linking publisher inventory with demand from advertisers for ad space. Therefore, effective integration with many other ad tech services is an important factor for winning customers, as it will increase the demand sources for publishers, and increase the choice of ad inventory available to advertisers (as such, the ad tech supply chain is subject to significant network effects).

Both the number of services an ad tech provider is able to connect to and the quality of the integrations are important. For example, while a publisher ad server may have a connection to an SSP, if it is not able to access bids from that SSP in an efficient manner, it will be less attractive to publishers than an ad server that is able to receive bids more efficiently (for example, at a higher speed/lower latency). Latency issues can impact consumer experience which can ultimately impact publishers' potential revenue.

Further, integrations between ad tech services that are used by both publishers and advertisers can make those services more attractive as they make the services easier to set-up and use, without

the need for additional development work.⁴⁹⁶ Stakeholders indicate that the ease of integration can vary between ad tech providers, and that a convoluted setup process can limit the use of an ad tech service.⁴⁹⁷ Stakeholders indicate that Google products work ‘straight out of the box’ as they have existing integrations with a large number of ad tech services (both Google and non-Google). Integrations with non-ad tech related services can also provide an ad tech provider with an advantage.

A publisher ad server must be able to receive bids for its advertising inventory from SSPs, and therefore the ability for the publisher ad server to integrate with SSPs is critical to its ability to meet the needs of a publisher. Similarly, an advertiser ad server is only useful to an advertiser if it is able to integrate with the DSPs that an advertiser uses. Additionally, the level of integration that an advertiser ad server has with other services can increase the desirability of the advertiser ad server.

By ensuring that the publishers and advertisers are linked, integrations between DSPs and SSPs can reduce the risk of unsold inventory for publishers, and for advertisers, reduce the risk that their advertisements are not placed on inventory.

Advertisers often run campaigns through other services (for example, by purchasing search advertising), and this can influence their decision-making about DSPs. For example, the reliance of an advertiser on advertising through Google Search may push an advertiser to using other Google products in order to integrate with the existing advertising service that they acquire.

Ease of use of the service

In addition, the more easily an ad tech service is to use, the more attractive it will be to advertisers and publishers. The simpler the service, the less down time an advertiser or publisher will need to spend setting up the service or training staff to use it. Additionally, for Australian advertisers and publishers, local technical support is also an important factor in selecting a service.⁴⁹⁸

Access to demand or ad inventory

As noted earlier, publishers want to be able to access a wide range of demand so that they are able to maximise their revenue from their ad inventory. Therefore, SSPs and publisher ad servers compete over their ability to connect publishers to the largest pool of advertisers possible. For example, an SSP which provides access to more advertisers increases the potential demand for the publisher’s ad inventory, which therefore increases the publisher’s potential revenue. This makes an SSP that accesses more advertisers more attractive to a publisher in comparison to an SSP that provides access to fewer advertisers. SSPs may also offer access to exclusive advertiser demand to publishers, which can further increase the attractiveness of the SSP to publishers.

Conversely, advertisers want to be able to connect to the widest range of ad inventory and users possible. Therefore, DSP services compete over their ability to connect to more publishers and inventory as it increases the potential reach of their advertising campaigns, and their ability to target audiences.

There are several ways in which DSPs can improve their access to particular audiences and inventories, which include:

- DSPs entering into partnerships or integrations with SSPs to increase a DSP’s access to publishers and their associated audiences and inventories.
- DSPs entering into arrangements with publishers that provide that DSP with exclusive access to particular inventory.

496 Guardian Australia, [Submission to Ad Tech Inquiry Interim Report](#), March 2021, p. 7.

497 Guardian Australia, [Submission to Ad Tech Inquiry Issues Paper](#), 10 June 2020, p. 7; T. Whitfield and D. Shrivell, [Submission to Ad Tech Inquiry Issues Paper](#), 5 May 2020, p. 6; A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 8.

498 A&A Digital Services, [Submission to Ad Tech Inquiry Interim Report](#), June 2021, p. 8.

Ad targeting

The ability to target ads to consumers is a key feature the ad tech supply chain, and a key way that DSPs in particular compete.

A DSP's ability to provide effective ad targeting is dependent on the range and scale of consumer data that is available to it. Access to a large amount and variety of data accurately linked to a consumer can provide DSPs with a competitive advantage by enabling the more effective targeting of ads to a relevant audience. For example, if an ad tech provider knows that a consumer has visited various clothing websites, it will be able to infer some information about that consumer for ad targeting purposes. However, if the ad tech provider also knows that the consumer has also recently visited websites about running and looked at sports shoes recently, then it can provide more granular targeting based on additional information about the consumer.

Appendix C: Google's acquisitions of ad tech providers or related services

Google's acquisitions of ad tech providers or related services (including YouTube, DoubleClick, AdMob and AdMeld) have assisted Google entrench its position in ad tech, including through expanding into related markets, which may have been a source of possible rivals to Google's ad tech services. This also potentially weakens the constraint from dynamic competition.

Google's acquisitions include:

- **FameBit** (2016) – FameBit provided an online marketing platform that connects advertisers with video influencers on YouTube.⁴⁹⁹ FameBit has since been integrated as part of YouTube and re-branded as YouTube BrandConnect.⁵⁰⁰
- **Toro** (2015) – Toro provided ad campaign optimisation services to app developers to assist with acquiring users through advertising on Facebook.⁵⁰¹ Toro has reportedly now joined the Google mobile ads team.⁵⁰²
- **Adometry** (2014) – Prior to the acquisition, Adometry a leading provider of ad measurement and verification services, including for ads on the Google Display Network.⁵⁰³ Adometry is now integrated into the Google Analytics 360 Suite.⁵⁰⁴
- **Directr** (2014) – Directr provided a mobile app on the iOS operating system providing a way for small businesses to create and publish videos, including ads or promotional content.⁵⁰⁵ Directr is now integrated within the video ads team at YouTube.⁵⁰⁶
- **mDialog** (2014) – mDialog provided technology to media companies (such as broadcasters) to serve video display advertising in their video content across different devices.⁵⁰⁷ mDialog's technology has since been incorporated into Google Ad Manager through DoubleClick's integration with Google Ad Manager).⁵⁰⁸

499 B Jaekel, '[Google's acquisition of FameBit means contextual advertising will see fruition](#)', 2016, accessed 20 November 2020.

500 S Perez, '[YouTube's FameBit Rebrands as YouTube BrandConnect, shuts down its self-service program](#)', *TechCrunch*, 17 June 2020, accessed 20 November 2020.

501 A Ha, '[FarmVille Co-Creators Launch Toro To Help Developers Market Their Apps on Facebook](#)', *TechCrunch*, 6 November 2014, accessed 20 November 2020.

502 A Ha, '[Google Acquires Facebook Marketing Startup Toro](#)', *TechCrunch*, 25 February 2015, accessed 20 November 2020.

503 N Gagliardi, '[Google buys marketing analytics firm Adometry](#)', *ZDNet*, 6 May 2014, accessed 20 November 2020; A McCullough, '[Adometry Dominates the Marketing Analytics Market](#)', *Siliconhills*, 25 March 2014, accessed 20 November 2020.

504 Google Australia, '[Submission to Ad Tech Inquiry Issues Paper](#)', 1 May 2020, p. 17.

505 J Abbruzzese, '[Google Acquires Directr, a Small Business Video Marketing Startup](#)', *Mashable*, 7 August 2014, accessed 20 November 2020.

506 G Kumparak, '[Google Acquires Directr, An App For Shooting Short Films on Your Phone](#)', *TechCrunch*, 7 August 2014, accessed 20 November 2020.

507 A Ha, '[Google Acquires mDialog To Improve DoubleClick's Video Advertising](#)', *TechCrunch*, 20 June 2014, accessed 20 November 2020; A Barr, '[Google Buys Video Ad Tech Startup mDialog](#)', *The Wall Street Journal*, 19 June 2014, accessed 20 November 2020; T Maytom, '[Google Acquires Video Advertising Startup mDialog](#)', *MobileMarketing*, accessed 20 November 2020; N Young, '[Google buys mDialog to beef up its advertising effort: getting the message to the right customer](#)', *The Drum*, 20 June 2014, accessed 20 November 2020.

508 A Ha, '[Google Acquires mDialog To Improve DoubleClick's Video Advertising](#)', *TechCrunch*, 20 June 2014, accessed 20 November 2020; Resolutiondigital, '[The End of the DoubleClick Name – Google Rebrands Its Products](#)', accessed on 30 November 2020.

- **AdMeld** (2011) – AdMeld was one of the few ad tech providers at the time who offered real-time bidding for publishers.⁵⁰⁹ The acquisition built upon Google's real-time bidding capabilities for publishers.⁵¹⁰ The services supplied by AdMeld have since been integrated into Google's ad exchange and subsequently combined as part of Google Ad Manager.
- **Invite Media** (2010) – Invite Media provided ad-buying optimisation technology for the display advertising market. It is now part of Google's main DSP product, Google Display & Video 360, and builds upon its real-time bidding capabilities for advertisers.⁵¹¹
- **AdMob** (2009) – At the time of the acquisition, AdMob was considered a leading provider of mobile advertising networks.⁵¹² AdMob now forms the basis of Google's AdMob product.⁵¹³
- **DoubleClick** (2007): At the time of the acquisition, DoubleClick supplied an advertiser ad server, publisher ad server, and SSP services, with a 58% market share in the supply of publisher ad servers in the US and a number of leading news publishers as customers.⁵¹⁴ DoubleClick's publisher ad server and ad exchange have now been integrated and re-branded as Google Ad Manager.⁵¹⁵
- **YouTube** (2006): YouTube was, at the time of the acquisition, one of the world's fastest growing video-streaming platforms and a competitor to Google Videos.⁵¹⁶

509 *AdExchanger*, 'Industry Reaction: Google Buys Admeld', *AdExchanger*, 14 June 2011, accessed 20 November 2020; J Sears, 'The Real Reason Google Is Paying Up Big For Admeld', *AdAge*, June 13 2011, accessed 20 November 2020; B Popper, 'Why Does Google Want AdMeld So Badly? High Frequency Trading for Online Ads', *Observer*, 21 June 2011, accessed 20 November 2020.

510 Google Australia, *Submission to Ad Tech Inquiry Issues Paper*, 1 May 2020, p. 17.

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Appendix D: Glossary

Term	Description
ACCC	Australian Competition and Consumer Commission
ACL	Australian Consumer Law
Ad agency services	'Digital advertising agency services', which are defined in the Direction as services supplied to advertisers relating to negotiating, acquiring or managing display advertising
Ad attribution	The process of tracking whether a consumer takes certain actions, like signing up to a service or purchasing a product, after seeing an advertisement
Ad impression	One display advertising opportunity displayed to one individual user
Ad inventory or ad spaces	Digital display ad impressions sold by publishers to advertisers
Ad network	A network that purchases ad inventory from different publishers to repackage and sell directly to advertisers
Ad Tech Inquiry or Inquiry	The ACCC's inquiry into markets for the supply of digital advertising technology services and digital advertising agency services, as required by the Treasurer's Direction on 10 February 2020
Ad tech provider	A provider of an ad tech service
Ad tech services	'Digital advertising technology services', which are defined in the Direction as services that provide for, or assist with, the automated buying, selling and delivery of display advertising
Ad verification	The process of checking whether an ad could be viewed by a consumer, was displayed in a brand safe context and webpage, and/or whether ad fraud took place
Ads.txt file	A list of authorised sellers (for example, SSPs or ad networks) for a website's ad inventory
Advertiser	Buyers of ad inventory from publishers, including businesses of all sizes and across all industries, as well as not-for-profit organisations and Government departments
Advertiser ad server	A server used by advertisers to manage and track all ad and campaign information in one location
CCA	<i>Competition and Consumer Act 2010</i> (Cth)
Closed channels	Used by some publishers to sell their own ad inventory (referred to as owned and operated inventory) directly to advertisers using their own systems or platforms
CMA	Competition and Markets Authority, United Kingdom
CMA Final Report	The Competition and Markets Authority's 'Online platforms and digital advertising – Market study final report' published 1 July 2020
Cost-per-action or CPA	A basis for pricing where the ad tech provider charges the advertiser when an ad leads to a specific action by a consumer, such as a purchase or sign-up
Cost-per-click or CPC	A basis for pricing where the ad tech provider charges the advertiser each time an ad is clicked on by a consumer
Cost-per-mille or CPM	A basis for pricing where the ad tech provider charges the advertiser for each ad that is served to a consumer but prices are reported as 'cost-per-mille' (that is, cost per 1000 ads served)
Data management platform	A platform that provides publishers, advertisers, DSPs and SSPs with tools to store, manage and analyse their data stores, which can be used to increase the ability of websites and advertisers to target advertisements and to analyse ad performance and manage ad campaigns
Data practices	The collection, storage, use and disclosure of user data
Demand-side platform or DSP	A platform used by advertisers to help them purchase ad inventory from suppliers of ad inventory as effectively and cheaply as possible, and which utilise various data to provide ad targeting services
Direct deals	Deals in which ad inventory is bought and sold via direct negotiation between advertisers and publishers
Direction	Ministerial direction from the Treasurer to the ACCC on 10 February 2020 to conduct an inquiry into markets for the supply of digital advertising services and digital advertising agency services

Term	Description
Display advertising	'Digital display advertising services', which are defined in the Direction as the supply of opportunities for the placement of advertising, by way of the internet, other than classified advertising and search advertising
DPI	Digital Platforms Inquiry, conducted by the ACCC into digital search engines, social media platforms and other digital content aggregation platforms, and their effect on media and advertising services markets
First-party data	Data collected directly from an individual
Frequency capping	Limiting the number of times an individual consumer is shown a particular ad
FTC	Federal Trade Commission, United States
Google Ad Exchange	Google's supply-side platform, which is part of Google Ad Manager
Google Ad Manager	Google's publisher-facing platform, which includes Google Ad Exchange and Google's publisher ad server
Google Ads	A Google demand-side platform
Google Display & Video 360	A Google demand-side platform
Google's Open Bidding or Open Bidding	Google's proprietary server-side solution which allows multiple third-party SSPs to directly compete against one another in a single real-time auction
Header bidding	A process for conducting auctions between SSPs that allows multiple SSPs to compete against one another in real-time for the same ad inventory, with the winning bid selected via auction
Interim Report	The Ad Tech Inquiry Interim Report provided to the Treasurer on 31 December 2021 and published on 28 January 2021
IP address	Internet Protocol address, a numeric address assigned to each device connected to a local network or the internet via the Internet Protocol
Issues Paper	The Ad Tech Inquiry Issues Paper published on 10 March 2020
JFTC	Fair Trade Commission, Japan
OAIC	Office of the Australian Information Commissioner
Open display channels	Open display channels use ad tech services to sell display ad inventory from a wide range of publishers to advertisers
Personal information	Defined within the Privacy Act as '[i]nformation or an opinion about an identified individual, or an individual who is reasonably identifiable: ■ whether the information or opinion is true or not; and ■ whether the information or opinion is recorded in a material form or not'
Preferred deals	Deals involving a contract between a publisher and an advertiser agreeing for the advertiser to purchase certain ad inventory with a 'first look' advantage before the publisher makes it available at an auction
Privacy Act	<i>Privacy Act 1988</i> (Cth)
Private auctions or private marketplaces	Auctions where multiple advertisers are invited to participate in an invite only auction
Programmatic advertising	Advertising that is bought and sold via programmatic trading
Programmatic trading	The use of automated systems, processes and data to buy, sell and deliver display advertising opportunities
Publisher	Any supplier of online content, mobile apps, or other services that attract consumer attention online and that hosts ad inventory
Publisher ad server	A server used by publishers to organise and manage ad inventory on their website. For example, publisher ad servers typically determine what ads will be shown, serve ads, and also collect information on the performance of those ads
Real-time bidding	Open auctions that take place on a supply-side platform in the milliseconds between a user visiting a webpage and the page loading
Share of impressions	In this report, this refers to an ad tech provider's share of the total revenue earned by the main suppliers of the service in Australia, in relation to digital display advertising served to users in Australia

Term	Description
Share of revenue	In this report, this refers to an ad tech provider's share of the total impressions traded or served by the main suppliers of the service in Australia, in relation to digital display advertising served to users in Australia
Supply-side platform or SSP	A platform used by publishers to set price floors, decide which buyers can bid, and to connect to demand-side platforms (often via programmatic auctions). Historically, a separate ad exchange would run the real-time auctions, but the functions of SSPs are increasingly integrated with those of ad exchanges. For this reason, ad tech providers performing both SSP and ad exchange functions are referred to as supply-side platforms (or SSPs) in this report
Third-party data	Data about an individual person collected indirectly from a separate entity instead of directly from the individual. Common types of third-party data that may be purchased by websites or advertisers include purchasing history, geographic data and sociodemographic data
Trading desk	An entity assisting with coordinating and executing the programmatic purchase of online ads, and controlling how a programmatic advertising budget is spent. Ad agencies often have in-house trading desks



AUSTRALIAN COMPETITION
& CONSUMER COMMISSION