

MDPMI Provisional Report

ANNEXURE 6

DIGITAL ADVERTISING TECHNOLOGY

PREPARED BY:

Aphiwe Nanto
Kuhle Majola
Donnavan Linley

DATE: FEBRUARY 2025



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1. THE ADTECH STACK

1. Digital platforms play a key role in programmatic advertising as they link both news media (i.e. news publishers) and advertisers including ad agencies and ad brokers. The “AdTech stack” includes the intermediation of advertising space on the website pages of content publishers which is called advertising (“ad”) inventory. Ad inventory falls on the sell-side of the AdTech stack and this includes aggregation services for the aggregated supply of ad inventory which is interfaced with an ad server component. On the demand side of the stack there are advertisers, ad agencies and ad brokers who want to reach users with advertising campaigns with the aim of increasing consumers’ awareness of their brands or inducing a direct response (e.g. a purchase) from consumers seeing the ad, with particular interest in reaching specific or targeted audiences.

2. AdTech intermediaries wish to place advertisements that can engage with advertiser aggregators such as ad networks like Google Ads, demand side platforms (“DSPs”), data management platforms (“DMPs”), and news media publishers to purchase ad inventory to help with the advertiser advisory functions, advert targeting, verification, attribution and evaluation. These demand-side advertiser intermediaries, collectively referred to as demand-side platforms (“DSPs”), then connect with supply side platforms (“SSPs”) and their advertising space through an Ad exchange (“AdX”), similar to a stock exchange, which connects or intermediates sellers of ad space to buyers of ad space. On the supply side the publishers operate websites or apps and want to monetise their services selling digital advertising inventory. The ad server component is the technology that manages the advertising inventory on a website/app and serves ads to that inventory. To have a well-functioning AdTech platform, the intermediation industry must perform the following functions:
   2.1. targeting function – targeting adverts at particular users or groups of users;
   2.2. advertiser advisory function – determining buying and bidding strategies, based on the advertiser’s objective and the available information;
   2.3. publisher sales function – setting the rules for the selling process, contacting potential buyers, collecting and ranking their offers, determining who the inventory is allocated to and the price to be charged;
   2.4. verification, attribution and evaluation – verifying that advertisers received what they paid for and estimating the performance of their campaigns; and
   2.5. delivery – the basic task of serving the ad in real time.

1.1. AD SERVER

3. Ad servers were created to manage, serve, and track the digital properties of ads and provide opportunities for targeting outcomes, such as ad relevance, goals and budget.[1] The ad server displays the best and most appropriate ads taking into account numerous factors and making use of algorithms to choose and display the most relevant content to each user. The set of requirements is established by publishers, advertisers, and the platform itself. The technology employed by ad server processes numerous information in real-time and displays the relevant ads in milliseconds. Ad servers track various metrics including users' engagement, likes, clicks and conversions. When an end consumer interacts with an ad, their behaviour is recorded for further targeting. Ad campaign agents or advertisers can analyse the retrieved consumer data later and make improvements if needed.

4. A user visits a website, and the browser sends a request to the publisher's web server asking for the page's content (i.e. HTML). The publisher's web server returns the HTML and starts rendering the page's content. An ad request is sent to a publisher's ad server to fill the ad slot on the page. The publisher's ad server chooses an ad campaign based on the information obtained about the user. The publisher's ad server sends back the ad markup, which is the code inserted into the ad slot containing a URL pointing, to the advertiser's ad server. The ad markup sends off a request to the advertiser's ad server for the ad markup (i.e. code) and counts an impression. The advertiser's ad server sends the markup to the publisher's site and the ad is displayed to the user.

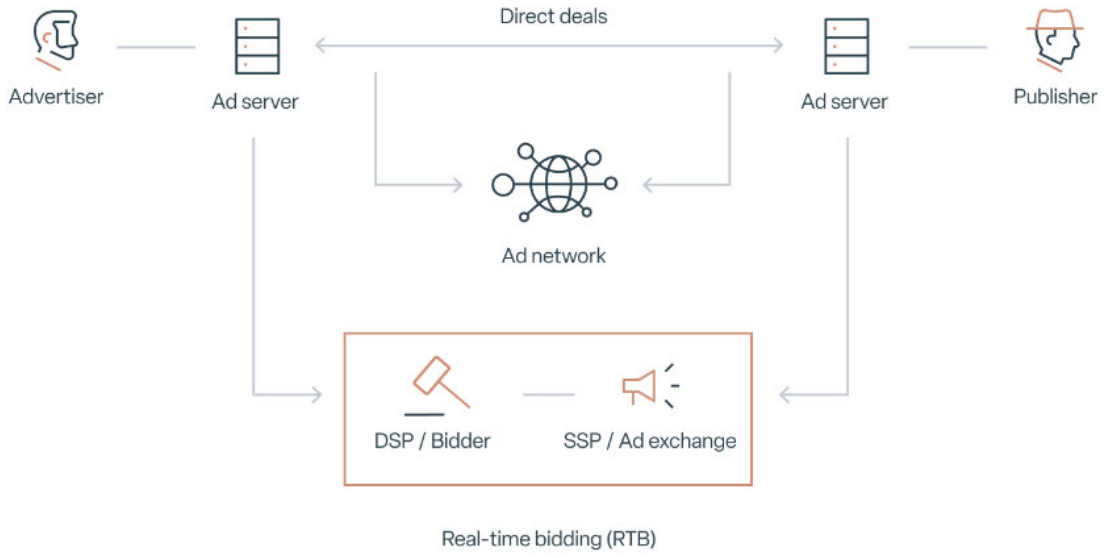
5. In the AdTech stack there are two types of ad servers to cater for advertisers and publishers individually. Advertiser ad servers which are mainly used by advertisers and media agencies to store the ads, deliver them to publishers and keep track of this activity. An advertiser ad server collects data on the domains and URLs where the ads are served, classifies page content into categories, and provide statistics on geo-targeting. Advertiser ad servers have data that helps advertisers to understand the performance of each campaign and the role that specific channels play in conversions. It also implements tracking on advertisers' websites and ecommerce sites to measure ad effectiveness.

6. Whereas publisher ad servers manage publishers' inventory and are responsible for making a final decision on which ads to serve. Such decisions are based on the bids received from different SSPs and the direct deals agreed between the publisher and advertisers. The ad server must interoperate with the SSP to receive programmatic ads along with the appropriate

[1] https://www.theviewpoint.com/insights/the-ad-server-explained-what-role-does-it-play. Date accessed 04 July 2024

creative to serve. Publisher ad servers can compare bids received, together with any pre-existing direct deals between the publisher and specific advertisers, and decide which ad is to be served on the webpage. It can maximise a publisher's revenue by taking into account prices, agreed target volumes and audiences, and frequency caps across different types of deals. Publisher ad servers have the ability to forecast what inventory will be available for sale in the future. It is worth noting that choosing which ad to go for is solely based on pricing and machine learning algorithms and complex data sets. It may also provide additional audience data on the website to inform the bidding by DSPs on the impression being served, which it may gather from the website analytical tools (e.g. Google Analytics) but also its own audience data collection methods. Where 3rd party cookies are in operation, the ad server will also communicate the cookie information for remarketing purposes.[2] Below is an illustration of how the ad-serving process works.

Figure 1: Illustration of how Ad serving process works



Source: Qinshift[3]

7. The ad server revenue model charges a variable fee per advert served and a fixed fee based on the inventory volume of impressions regardless of whether ads are served or not. As the dominant ad server, Google Ad Manager (GAM) integrates ad server, SSP, and advertising exchange services, it is sometimes difficult to distinguish where one service ends, and the other service starts.

[2] See Media24 public hearing presentation slide 27 for an example of the interfaces with the ad server.
[3] https://qinshift.com/insights/techtopics/2024/what-is-an-ad-server-and-how-does-it-work/. Date Accessed 20 July 2024

1.2. SUPPLY SIDE PLATFORMS ("SSPs")

8. SSPs allow publishers to connect with Ad exchanges, ad networks, data management platforms, and multiple sources of demand to sell their advertising inventory programmatically. SSPs initially tended to be separate from Ad Exchanges connecting buyers and sellers and hosting open real-time auctions. The two roles (SSPs and Ad exchanges), however, have to a large extent merged in recent years, to the point that the two terms are often used interchangeably.[4] What this means is that SSPs include Ad Exchange functionalities whereby publishers can use SSPs to manage their available inventory and sell it to DSPs via Real-time bidding (RTB) auctions, rather than having to connect to multiple Ad Exchanges first.[5]

9. SSPs sell a publisher's inventory to DSPs via ad exchanges. SSPs send bid requests to DSPs, receive and rank the bids, determine the winning bidder, and send a bid back to the publishers. They can also provide several other services to publishers to maximise their yields such as determining which ad network to connect to, which will give the highest yield when impressions become available on a publisher's website, while at the same time attempting to attract DSPs to their platform. SSPs can offer publishers the ability to sync their first-party data or to integrate with third-party data providers. Some SSPs also automatically crawl publisher inventory and contextualise it according to the identified keywords, to facilitate contextual targeting.

10. To attract buyers to their platform, SSPs can provide various services to DSPs, including the following:
    10.1. SSPs can decide which DSPs to call for getting bids based on the kind of ad inventory DSPs are looking for and whether they are likely to submit a bid.
    10.2. SSPs can package inventory across publishers in ways that are meaningful to buyers. SSPs can bundle ad inventory of different publishers that fall within a certain content category (e.g. sports, lifestyle) to make it easier for buyers to find the ad inventory they are looking for.
    10.3. SSPs can keep a matching table of their own unique cookie User IDs and DSPs' own cookie User IDs; when submitting a bid request, they send the DSPs' specific IDs.
    10.4. Some SSPs provide a bid shading functionality, reducing the amount of the bid that they pass to the downstream auction on behalf of the winning bidder.

11. SSPs allow publishers the option of selling their inventory through a variety of transaction types, including open auctions, private auctions, preferred deals and programmatic guaranteed

[4] Microsoft Xandr RFI1 submission dated 14 November 2023
[5] Google AdTech RFI1 Tranche1 submission dated 14 November 2023

deals. However, advertisers may also do direct deals for brand advertising and open bidding for performance advertising.[6] SSPs have submitted that preferred deals and programmatic guaranteed deals tend to involve lower take rates than open auctions and private auctions.[7]

11.1. Open auctions - any advertisers can simultaneously submit bids for a publisher's ad inventory. These bids are generally quoted in a cost per thousand ad impressions ("cost-per-mille" or "CPM").[8] A publisher sets a price floor on a CPM basis, and the highest advertiser bidder will win the inventory, assuming the highest bid CPM is higher than the publisher's price floor. Typically, a process called Real-Time Bidding ("RTB") is used in open auctions, which allows advertisers to place bids simultaneously on inventory as it becomes available. In these types of transactions advertisers are more likely to find their best targeted consumers through the wide reach afforded by the Open Auction. It is the most commonly used transaction type representing the majority of programmatic inventory. Publishers and advertisers cannot identify each other and there are no separately negotiated deals with the advertiser interested in bidding on a particular unit of ad space.[9] Therefore, since there is no direct relationship between publishers and advertisers, publishers are able to maximise ad impressions and reach unmet demand.

11.2. Private Auctions - in this type of transaction publishers only invite a selected few advertisers to participate in the auction.[10] Publishers and advertisers can identify each other at the point of sale.[11] The inventory available on the auction is then labelled as premium inventory. However, it is worth noting that publishers get to choose their minimum floor price, and the highest bidder wins the impressions. Advertisers are willing to pay more for premium inventory than ordinary inventory sold in the open auction and some small publishers (who have less than 100k monthly traffic) might not have premium inventory advertisers are willing to buy.[12]

11.3. Preferred deals are not an automated auction process. Publishers offer their inventory to selected advertisers at a negotiated fixed CPM. Publishers provide a preview of advertising inventory to advertisers of their choice. By doing this, advertisers get a first look advantage on inventory which is not available in private or open auctions as yet. Advertisers then get to choose to buy the inventory or not and can negotiate the terms of the deal. However, such negotiations do not guarantee that the advertiser will participate and bid on the inventory. If the deal does not go through, the advertiser does

[6] Taboola RFI1 submission dated 15 December 2023
[7] Google Adtech RFI2 Tranche1 submission dated 27 January 2024 and Magnite RFI2 submission dated 18 January 2024.
[8] Google Adtech RFI2 Tranche1 submission dated 27 January 2024, page26
[9] Magnite RFI2 submission dated 18 January 2024, page2.
[10] Google AdTech RFI2 Tranche1 submission dated 27 January 2024, page26.
[11] Magnite RFI2 submission dated 18 January 2024.
[12] https://setupad.com/blog/types-of-programmatic-deals/ Date Accessed on 11 August 2024.

not bid on the inventory, generally the inventory goes directly to the private or open market auctions.

11.4. Programmatic guaranteed - Publishers and advertisers directly negotiate prices and terms for inventory that is reserved or guaranteed for the advertiser. The publisher then agrees to sell a fixed number of impressions to the buyer for a fixed price. Buyers can preview placements and choose which ones they want to buy. It minimises the failure risk of ad sales but may limit the amount of premium a publisher can generate as there is no advertiser competition/auction mechanism.[13] This type of transaction is regarded as a highly cost-effective method of media selling and ad inventory is still nonetheless typically sold at a higher price, considering that premium ad space is often sold in this manner.

12. The SSP revenue model is to charge a commission fee on the sale of any advertising inventory as a percentage of the advertising revenue. The percentage share retained by an SSP varies depending on the transaction type, with a higher fee for auctions and a lower fee on pre-negotiated deals where the SSP does less work.[14] Moreover, take rates are often directly negotiated between SSPs and publishers, and lower take rates can be agreed with publishers that have a high volume of ad inventory. SSPs contract with websites/apps and the selection of SSPs by the publisher is influenced by the selection of the ad server as GAM is an integrated ad server and SSP. Publishers can select other SSPs to participate in open bidding auctions which must then be capable of interoperating with the ad server and separately contract with the ad server. The selection of those SSPs is based on the fees, the advertising quality based on their DSP relationships, the interoperability with the rest of the AdTech stack, the ability or provide its own data management and technology such as speed, latency, reporting and optimization.[15]

13. Given that the selection of SSPs is in part based on its DSP relationships, SSPs can seek to attract DSPs by requesting bids based on knowledge of the type of inventory that each DSP is seeking. This can include bundling advertising inventory of a similar content type (e.g. travel or health) from different publishers to help specific DSPs locate the inventory they need. SSPs will also provide data to the bidders to enable better targeting which would attract higher bids where the audience matches the DSP advertiser targeting. The data exchanged with DSPs includes the request itself, the device information including the IP address, the GPS location,

[13]Google AdTech RFI2 Tranche 1 submission dated 27 January 2024, page 27.
[14] Google AdTech RFI2. For instance, GAM charges [redacted] for auctions and [redacted] for pre-negotiated deals.
[15] Google AdTech RFI 1 Tranche 1 submission dated 15 November 2023

the date/time, URL and cookie IDs, mobile network and event data. SSPs can integrate audience data and inferred interests from its own data management.[16]

1.3. DEMAND SIDE PLATFORMS ("DSPs")

14. DSPs are used by advertisers, ad agencies and ad brokers to connect with SSPs to programmatically bid on and buy online ad inventory. DSPs have these four main functions namely to create, run and manage a number of campaigns simultaneously across multiple SSPs and ad exchanges and control them from a single, centralized user interface; auto-optimize (via algorithms) the campaigns to increase return on investments; use 3rd-party data from DMPs to improve targeting; and provide real-time reporting via advanced analytics.

15. DSPs help advertisers automate, target and optimise their online advertising campaigns, including across different sources and types of online ad inventory (e.g. static display, mobile apps, video). An advertiser sets up their campaigns in a DSP, including targeting and creatives (ads), then DSPs receive bid requests from SSPs and exchanges and ultimately bid on impressions based on the buyer's objectives and on data received about the consumer.

16. DSPs provide many benefits to advertisers such as:
    16.1. DSPs give advertisers an opportunity to reach their target audience more effectively and reach a much wider audience.
    16.2. They have an ability to access a larger amount of available inventory and display their ad on a larger number of websites by connecting to a variety of ad exchanges and SSPs.
    16.3. They get to have an option to integrate 3rd-party data brokers and data management platforms into the DSP in order to optimize their audience targeting capabilities.

17. DSPs provide advertisers with the ability to target users in real time. Upon receiving the bid request, the DSP then reviews all active campaigns, comparing their targeting settings with the features of the ad opportunity. A potential bid is generated for all the campaigns whose targeting criteria match the information in the bid request. The bid depends, among other things, on the estimated value of the ad opportunity for the advertiser, on the campaign's progress against the pacing goal and on the type of auction. How the process works is that the value of the ad opportunity is determined based on the KPI specified by the advertisers, depending on the likelihood of the action that the advertiser wants to achieve. Then the DSP may calculate an ideal spend so that the advertiser's budget is distributed evenly throughout the day (with more spent during the hours when there are more users online). The DSP applies

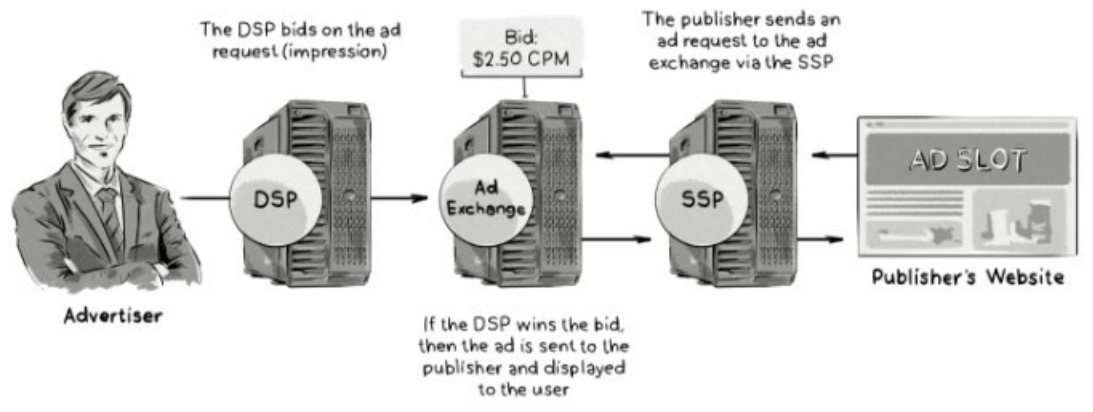
[16] Google AdTech RFI1 Tranche1 submission dated 15 November 2023

a bid modifier to bids to control the amount of spend. In addition, the bid can also be adjusted based on the number of times the user has seen the campaign on the website and every time the user refreshes the page. It is worthy to note that many DSPs have developed machine learning algorithms to shade the bids, in order to avoid overpaying for the impression.

18. The bids generated are ranked based on priority level and price. For instance, some DSPs have submitted that they prioritise private auction bids because they bring incremental revenue opportunities to the publisher and highest take rates to the publisher.[17] DSPs receive multiple bid requests related to the same ad opportunity. This is a result of header bidding, as multiple SSPs simultaneously try to elicit bids for the same impression. While there is currently no way to efficiently de-duplicate such requests, some DSPs have developed systems to reduce the volume of bid requests that reach them, reducing the costs they have to sustain to listen to the bid stream and respond to bid requests.

19. DSPs submit their bids into SSPs on a CPM basis and they typically pass this cost to advertisers on a CPM basis. However, some DSPs allow advertisers to pay on a different basis such a cost-per-click (CPC), Viewable CPM (vCPM, where advertisers pay only if the ad is completely viewed), cost-per-completed-view on video (CPCV), or cost-per-action (CPA). It is worthy to note that in addition to the CPM being charged some DSPs typically charge advertisers and media agencies a percentage of the media spend. This is usually subtracted from the bid before it is sent to an SSP, although some DSPs allow advertisers to add the fee on top of their campaign budget.

Figure 2: An Illustration of how DSPs work



Source: Clearcode[18]

[17] Magnite RFI1 submission dated 22 November 2023
[18] https://clearcode.cc/glossary/demand-side-platform-dsp/, Date accessed on 20 July 2024

1.4. **AD NETWORKS**

20. Unlike large news publishers, small news publishers sell their inventory to an intermediary known as “Ad networks”. This is because using the Ad Server and SSPs requires news publishers to reach a specific threshold in terms of ad spend. Ad networks purchase ad inventory from small news publishers and then sell this inventory to advertisers and are not part of the programmatic ecosystem. Instead, transactions channeled through the ad network are not in real-time. Unlike the ad exchange, the ad network requires human intervention instead of machine learning and algorithms. Given the operational function of the ad network, the floor price at which the ad network purchased the ad inventory from the news publisher may not be the same as the price the ad network may sell the impression to the advertiser. Therefore, in an instance where the ad network sells the impression at a higher take rate to the advertiser, the ad network keeps the difference for itself. The ad network is essentially a reseller of ad inventory and there is no transparency on reselling prices.

21. The function of an ad network is to aggregate ad inventory from sources on the SSP and match them with sources on the DSP for ad slots. Essentially the function of an ad network is to take the collection of ad supplies from news publishers and match it to advertisers' demands pulled from the DSP. The use of ad networks enables advertiser to have greater reach to target audiences. Most ad networks support various banner and native ads. Although, other ad networks have a niche focus on specific formats. Ad networks also facilitate payments and transactions between advertisers and news publishers. Ad networks use different payment models, including revenue share models, cost-per-mile (CPM), or cost-per-click (CPC) models, while others use cost-per-action (CPA). Google AdSense is one of the largest ad networks in the ad tech stack. Google AdSense does not require minimum traffic on the news publisher’s properties and is also a self-service platform. Google AdSense also offers different formats, including display, text, in-feed, in-articles, and personalisation options.

1.5. **AD AGENCIES**

22. Ad agencies propose advertising content to advertisers based on the budget and objectives for advertising and campaigns for products or services requested by advertisers. They undertake advertising and promotion campaigns from advertisers and charge their own fees for the services rendered which include advertising media expenditures and advertising production costs.

23. Ad agencies render planning, executing, and managing advertisements and other promotional material in the advertising market. They do not ordinarily operate their own ad tech intermediaries, instead, ad agencies utilise third-party DSPs and SSPs on their client's behalf. Programmatic advertising contains various methods of transactions, selecting intermediaries that protect them against the high erosion of the CPM/ ad revenue for their clients. Ad agencies are invited to participate in a bid which is advertised by an advertiser, this invitation is known as a Request for Proposal ("RFP"). Here ad agencies would have to submit an RFP setting out which DSPs and other intermediaries would optimise the best ROI. For example, today smart televisions are often pre-installed with applications such as YouTube, which is an application most users are likely to connect to. An ad agency's RFP needs to factor in a DSP that interoperates with YouTube. Ad agencies are then compelled to add the DSP exclusivity into their RFPs where the only DSP that can be interoperable with YouTube is Google's DV360.

24. In addition to selecting the best DSP depending on the advertiser's brief, the ad agency is also required to feed the DSP data that would allow the DSP to select the best SSP for the advertiser's brief. The ad agency is required to identify the most efficient connections, this would be based on factors such as price and location of the ad which is intended to be served. In turn, the ad agency would also consider factors such as reduced CPM erosion when considering the choice of SSP's. A common practice between advertisers, ad agencies and news publishers is that the players prefer to use one or two intermediaries on each level of the value chain. This is despite, the various players that are involved in the stack. The rationale for using a limited number of intermediaries among other reasons is that the function of each intermediary is duplicated, except when the agency needs to access exclusive inventory.

1.6. CAMPAIGN MANAGER

25. The Campaign Manager is a web-based ad management system for advertisers and agencies. It helps advertisers manage their digital campaigns across websites and mobile apps.[19] This includes a robust set of features for ad serving, targeting, verification, and reporting.

1.7. WEBSITE PUBLISHERS AND IN-APP

26. Publishers and advertisers use various products for transacting indirect sales by using web display ad inventory, mobile device app publishers (also known as "developers"). Advertisers likewise depend on several different, distinct, and noninterchangeable products for transacting

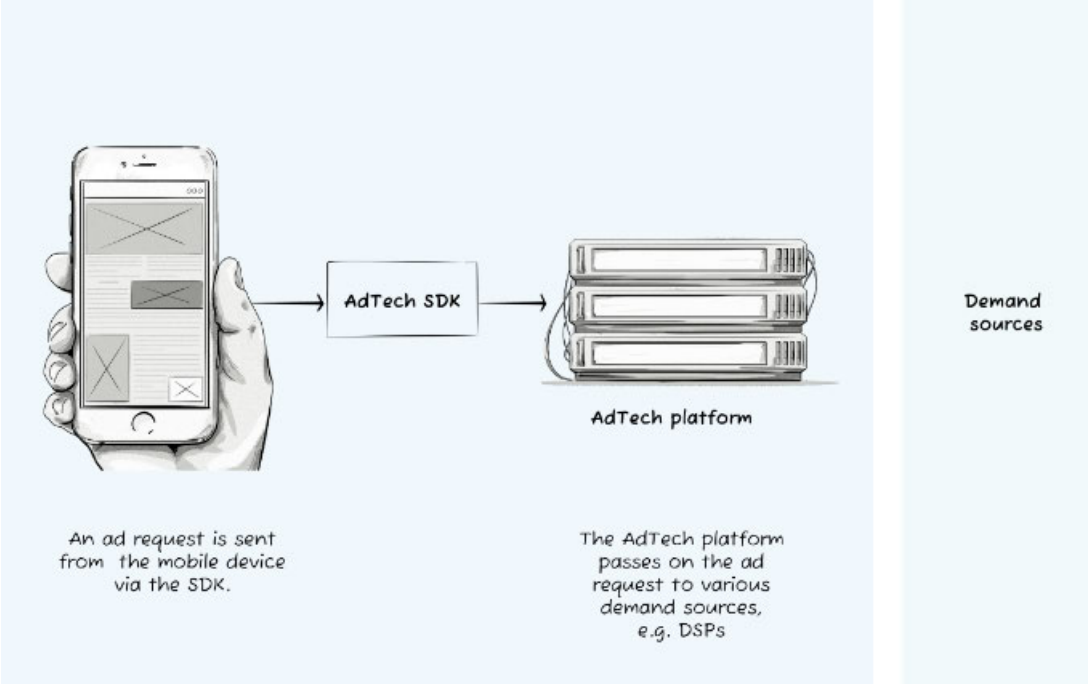
[19] https://support.google.com/campaignmanager/answer/2709362?hl=en. Date accessed on 20 July 2024

indirect sales of display advertising appearing within mobile device apps (called “in-app display ads”). The in-app mobile advertising ecosystem has both the buy-side and the sell-side, with various AdTech platforms playing a key role in the delivery and measurement of in-app ads. The buy-side consists of stakeholders buying the ad space. These are app developers and agencies who are responsible for designing mobile ads, coming up with a campaign strategy, and then launching the ad campaign. The sell-side, on the other hand, is made of apps selling ad space, known as publishers, with app publishers (developers) combining a mediation platform with various ad networks through a software development kit (SDK).

27. These products include (1) mediation tools for in-app inventory (“in-app mediation” or “mediation tools”), which act as the developer’s inventory management system; and (2) in-app display ad networks (“in-app networks”), which purchase impressions from developers and resell them at a markup to advertisers. In-app mediation tools and in-app networks are regarded to be very distinct products where publishers often contract or choose one over the other. In-app mediation tools help developers stay connected with multiple ad networks on a single platform. This then helps developers sell more inventory and increase revenue by making multiple ad networks bid against each other. In-app mediation tools work by utilizing a platform that acts as an intermediary between multiple ad networks and the developers.

28. While publishers manage multiple ad networks, they will be required to integrate individual SDKs for each network. The time required to set up each SDK along with the time and effort required to manage updates and troubleshooting adds up to be a huge delay in the publisher’s ad strategy. Therefore, managing multiple ad networks becomes a tiresome exercise for many publishers. On the other hand, an app mediation tool requires only a single SDK, which in most cases is easy to set up and update. This saves substantial time for publishers and developers. In-app mediation tools help publishers manage and track multiple ad networks, all in one place. With one centralized platform, publishers can control their mobile ad strategy through ad network management, performance tracking, campaign reporting, bidding solutions, and much more. It is worth noting that such tools may solicit and select the winning bids, however, they are limited when it comes to buying impressions from the developers. Developers sell their app inventory through an in-app mediation tool by separately contracting with one or more in-app networks. The networks are the ones that submit bids for individual impressions through the mediation tools.

Figure 3: How In-app ads are served



Source : Clearcode blog[20]

29. In-app mediation tools ensure that developers can maximize their revenue by automatically selecting the ad network offering the best eCPM (effective-cost-per-mille) for a particular ad slot at any given time. Through this process, in-app mediation tools automatically solicit bids from multiple sources and selects the winning bid, benefiting both advertisers in reaching their ideal audience and publishers in efficiently monetizing their content. These tools offer multiple features that make the lives of app publishers and developers way easier when it comes to their ad strategy.

30. Probably the most important reason for any publisher to use an ad mediation platform is to increase their revenue. Since these platforms are connected to multiple ad networks, your ad inventory is up for bidding with increased demand. This increased demand brings higher bids, increasing your ad space's worth and bolstering revenues.

31. To make the most of their application's ad strategy, publishers need to be in control. Before efficient ad mediation platforms came into play, the process of selling and buying ad inventory was chaotic. With these platforms, publishers have total control over how they can sell their ad

[20] https://clearcode.cc/blog/what-is-in-app-mobile-advertising-and-how-does-it-work/#toc-label-2. Date accessed 22 July 2024

inventory, and to whom. However, not all mediation platforms offer total control, as they may give undue advantage to specific ad networks. Therefore, it is critical for publishers to choose the best ad mediation platform.

32. There is quite a variety of ad networks that publishers can choose from each with a pool of features and multiple limitations. Such limitations are a result of sophisticated technical requirements involved when soliciting bids. In-app networks require a specialised SDK from the developers so that ads can be displayed correctly. Therefore, developers are limited to accepting bids from quite a small number of in-app networks. Further, developers integrate and solicit bids from far fewer in-app networks due to the in-app sophistication in technical requirements. To ensure that advertisers and ad agencies maximize the outcome of their ad spaces, the ad mediation platform should support plenty of ad networks. In-app networks ensure that advertisers and ad agencies can get a network that has the correct target audience and price. The more networks are supported, the better rates one can get. Thus, publishers mainly use in-app networks as an exclusive distribution channel for their ads and seldom use direct deals. In-app networks purchase impressions directly from developers and they provide support to ensure functional interoperability between the network and the app.

33. In the in-app ad network space Google AdMob operates as an ad network and an ad mediation platform. Incorporated in 2006, it has become one of the top ad mediation platforms for publishers and advertisers alike. The platform has been noted to make the process of managing multiple ad networks in one place easier. Providing in-app ads, highly detailed insights, and powerful tools to grow the application, AdMob helps publishers increase their revenue seamlessly. The platform supports a large number of ad networks spread across the globe, enabling it to fill ad requests with the highest bidder from anywhere in the world.[21] AdMob also supports multiple ad formats to help publishers retain and grow their user base, including banner, video, interstitial, reward, and native ads.

1.8. GOOGLE'S DOMINANCE ACROSS THE STACK

34. Google operates as a gatekeeper and controls major flows of online ad revenues, information, and publisher, user, and advertiser data. Evidence submitted to the Inquiry suggests that the AdTech market is very concentrated, where Google is effectively a super-dominant player. This view that Google is super-dominant is consistent with markets abroad where Google has been under competition authorities' scrutiny for AdTech. In the South African AdTech market, Google

[21] https://developers.google.com/admob. Accessed on 17 February 2025

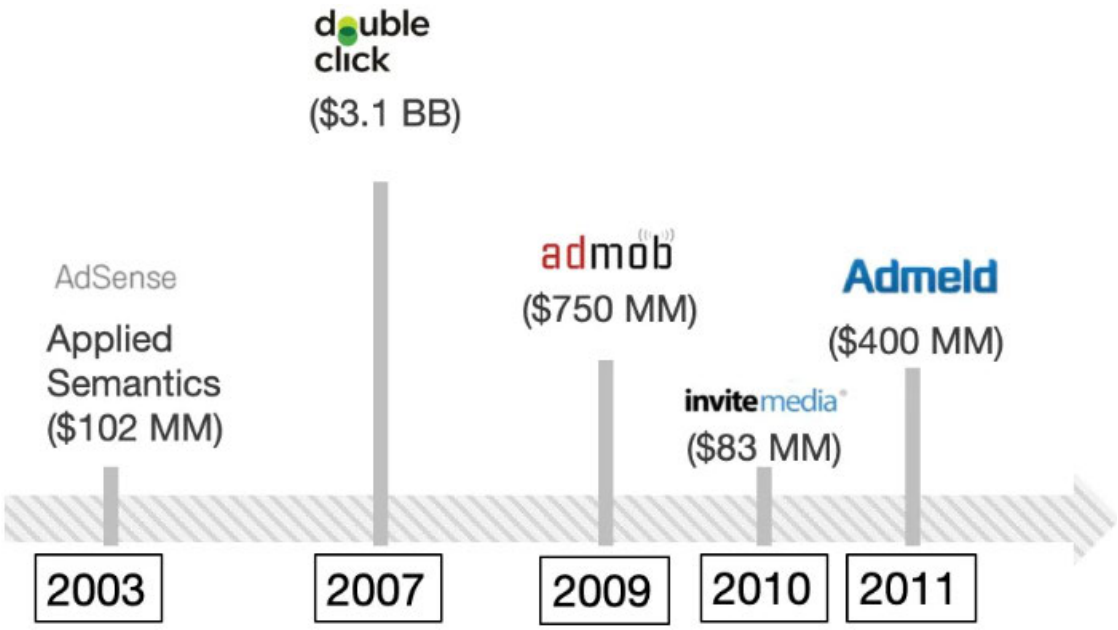
is the only AdTech provider that supplies services across the entire AdTech chain[22] for open exchanges. According to the Inquiry's observation of how the market is structured, it seems like there are no providers in the AdTech market who have the same scale and magnitude as Google. It is worth noting that Google offers AdTech services and acts as a publisher in the sale of inventory for many of its own websites/apps, including Search, YouTube, Maps and Gmail (owned and operated inventory) within the space.[23]

35. Through multiple and strategic acquisitions Google has managed to gain a very strong position in the AdTech market. Competition authorities have found that Google's market power has allowed it to drive out competitors, control how the buying of ad inventory takes place and prevent and limit publishers, advertisers, and ad agencies to interact effectively with its competitors. Google has had the ability to lock in and offer compelling benefits to publishers and advertisers including advanced technological benefits. There are other large tech players in the AdTech space such as Meta which is a significant supplier of display ad inventory on its own properties (e.g. Facebook and Instagram), however, Meta does not sell its inventory via open display channels or through the AdTech supply chain. Rather Meta uses its own walled gardens which is a closed system to sell ad inventory on its own platforms directly to advertisers. As such Meta doesn't compete against Google and smaller third-party AdTech service providers[24] in the open exchange market.

36. Google's position in the AdTech stack happened through a number of significant acquisitions as shown by the figure below.

[22] The exception includes walled garden AdTech services such as Meta's.
[23] Google RFI1 Tranche1 submission dated 15 November 2023
[24] These include Microsoft Xandr, Outbrain, RTB House, Taboola, Adform and Magnite, etc.

Figure 4: Google's acquisition in the AdTech market



Source: Sparrowone[25]

37. In 2007, Google acquired Double click at $3 billion which was a premier provider of digital marketing technology and services. DoubleClick was used by the world's top publishers and agencies in ad serving, rich media, video, mobile, search and affiliate marketing.[26] The deal came with Google acquiring the DoubleClick for Publishers ad server and the DoubleClick Ad Exchange platform, where the newly merged company captured a 60% share of the ad server market at the time.[27] The deal also ultimately resulted in Google's dominant exchange, namely AdX[28]. In 2018, Google integrated DFP and Ad Exchange into GAM which is the server and ad exchange platform for publishers. The acquisition allowed Google to position itself to function as a one-stop-shop i.e. being a buyer, seller, exchange and auctioneer of digital ads. The DOJ alleges that the DoubleClick acquisition enabled Google to gain market power and engaged in anticompetitive behaviour using its dominance on both publisher and advertiser sides of the market to prohibit effective competition throughout the AdTech stack value chain.[29] The merger has given Google a monopoly position on the ad server part of the AdTech stack and is the dominant player ad exchange. Google also obtains unparalleled data advantages in

[25] See: https://sparrowone.substack.com/p/revisiting-googles-doubleclick-acquisition.Accessed on 05 August 2024
[26] See: https://googlepress.blogspot.com/2008/03/google-closes-acquisition-of_11.html. Accessed on 03 August 2024
[27] Montoya (2023). How Three Mergers Buttressed Google's Ad Tech Monopoly, Per DOJ. *Tech Policy press*. Available: https://www.techpolicy.press/how-three-mergers-buttressed-googles-ad-tech-monopoly-per-doj/.Accessed on 27 January 2025
[28] Montoya (2023). How Three Mergers Buttressed Google's Ad Tech Monopoly, Per DOJ. *Tech Policy press*. Available: https://www.techpolicy.press/how-three-mergers-buttressed-googles-ad-tech-monopoly-per-doj/. Accessed on 27 January 2025
[29] DOJ Texas case page 33.

that Google can track both a user's internet searches and site visits while also having data on publishers and advertisers.

38. Google acquired Admob for $750 million in 2009 which is mobile ad platform that has been especially popular on the iPhone.[30] This has given Google a prominent position in in-app AdTech intermediation.

39. In 2010 Google acquired Invite Media for an estimated amount of $70 million, which was an ad buying tool designed for large advertisers.[31] Invite Media was an AdTech tool that was mostly used by advertisers and ad agencies to use real time bidding to buy display ad space, and to optimize display ad campaigns, across multiple advertising exchanges, all in a single interface. Advertisers used this product to buy ad space on multiple ad networks at the same time. For instance, the DOJ stated that this AdTech tool enabled large advertisers to compare ad prices as they posted on Google and Yahoo in real time. Invite Media could help advertisers and ad agencies find the best deal at a given time and buy from either platform. Thus, it offered auction pricing to display ads by giving advertisers a mechanism to tailor their bids on an impression-by-impression basis, based on their own data. The DOJ was of the view that Google used this acquisition to its advantage and merged Invite Media with DV360 which gave it access to a much larger network of advertisers. This complemented Google Ads, removed an effective competitor[32], and expanded Google's control over advertiser demand[33].

40. Google acquired a competitor AdMeld for $400 million in 2011 which was an AdTech optimisation tool mostly used by publishers to compare and identify the best ad prices that advertisers were offering on ad exchanges competing with Google.[34] AdMeld allowed publishers to access different ad prices from several ad exchanges that connected to several advertisers outside of Google's ad network. After the acquisition, Admeld was integrated into Googles Double Click Ad exchange to provide publishers a unique platform that combines robust, publisher-centric tools with a massive, global pool of demand.[35] The DOJ alleges that such integration into Google's product was done intentionally to hurt publishers and prohibited publishers connecting to AdX from using any other platform that would force AdX to compete for the best ad prices.

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[30] https://techcrunch.com/2009/11/09/google-acquires-admob/. Accessed on 14 August 2024
[31] https://techcrunch.com/2010/06/03/google-confirms-invite-media/. Accessed on 14 August 2024
[32] It's alleged that Invite Media to reduce its total assets to a low enough level that the companies could avoid submitting their deal for merger review to the Federal Trade Commission. See: https://www.bloomberg.com/news/articles/2020-02-26/google-takeover-target-trimmed-assets-to-avert-ftc-review?sref=ZvMMMOkz , Accessed on 14 August 2024
[33] It was also noted that some AdTech companies who were direct competitors with Google quickly exited the market because they struggled to compete with Google who had captured most of the market.
[34] https://techcrunch.com/2011/06/09/google-acquires-admeld-for-400-million/, Accessed on 14 August 2024
[35] https://www.admeld.com/. Accessed on 16 August 2024

41. Throughout these acquisitions Google has become dominant, presently controlling: (i) the technology used by most website publishers to offer advertising inventory for sale, (ii) the tools used by advertisers to buy inventory, and (iii) the largest ad exchange that matches publishers with advertisers each time ad inventory is available. Google's market power in the AdTech industry has been under scrutiny by many competition authorities and its market power is largely a result of its acquisitions. The DOJ raised concerns that Google has positioned itself to function simultaneously as "buyer, seller, and auctioneer" of digital ads. Google AdTech has become the effective monopoly end-to-end advertising intermediary.

42. The main online advertising technologies sold to publishers include Google's ad server and ad exchange, acquired from DoubleClick for Publishers. Though these two might have been integrated into GAM, publishers can still choose to use the ad server or ad exchange separately[36]. The ad server component allows publishers to program and control the advertising that will appear on their sites. The publisher identifies their pages with ad server (GAM) tags where they want to display ad content, and the GAM interface allows them to decide which ad will appear where, when, and how many impressions will be shown. Unlike AdSense, whose advertising service allows a company to open up its inventory to a large number of buyers and sell it in real-time to the highest bidder, GAM allows a publisher to negotiate the sale of impressions directly to an agency or advertiser, and to program the corresponding campaigns.

43. To optimise the matching of supply and demand for online advertising, marketplaces such as Ad Exchange have been set up. Rather than reserving a volume of inventory for certain buyers at a fixed price, a publisher can also offer it for sale on Ad Exchange. Hundreds of buyers are connected to this marketplace, and they have the opportunity to bid for the right to advertise on the impressions they are interested in. With Google controlling the most critical component of the advertising inventory that provides the leverage to build the sell and buy side of the AdTech market based on close integration that offers own properties an advantage in all parts of the supply chain. However, it is worth noting that there are notionally competitors at each part of the AdTech supply chain and Google products interoperate with these competitors, however, control of the ad server market enables Google products to still dominate the supply chain.

[36] Ad servers and ad exchanges work well together under GAM since they share the same technical infrastructure.

44. Google also offers a range of advertising technologies for advertisers, including the buy/advertiser side platforms (Google Ads and Display & Video 360), publisher/seller side platform (Ad Manager), and the Google Ad Exchange in the middle of the two. These products are now integrated into the Google Marketing Platform, but as with the supply-side offering, advertisers are still able to purchase and use the server and intermediation features separately.

45. Google appears to operate as a monopoly in the South African AdTech market, or is super-dominant at least, with substantial market power, especially at the publisher ad server level. Though there are other alternatives that publishers and advertisers can access, the market participation of these AdTech platforms is minimal and therefore there are no competitive constraints to Google. Several AdTech platforms have submitted to the Inquiry that they only operate either at the DSPs or SSPs level in South Africa, with some operating both, but are not present at the ad server level.[37] Evidence submitted to the Inquiry by the media businesses and ad agencies indicates that Google's GAM is super-dominant in SA, accounting for roughly 90% of ad serving (incl. AdSense and AdMob) for SA websites/apps.[38] All the major South African news media are GAM ad server clients.[39] However, Google has submitted that they estimate their share to be not larger than in the UK, at [50-60%] whereas in the CMA study, it was found that for ad servers Google had [80-90%] of the market even if the CMA found that for SSPs and DSPs this was lower at [50-60%].[40] The ACCC found that Google is by far the largest provider of AdTech services and has an estimated share of impressions which is over 70% at each stage of the value chain.[41] The French Competition Authority ("FCA") found that Google at an ad server level had an estimated share of impressions of more than 60%-70% and its market share is growing.[42]

46. The Inquiry understands that there may be certain business efficiencies which are brought by the acquisition and ownership of multiple digital platforms and related services by the same companies. Such efficiencies include cost savings, efficiencies and technological benefits. Vertical integration can provide scale and better product offerings for instance they may have

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[37] [redacted]

[38] Group M, Daily Maverick and Kagiso Media Public Hearings. This has been ascribed to the GAM ad server being offered for free, initially resulting in it becoming entrenched but also the early focus of Google on smaller markets such as South Africa. [redacted]

[39] Google RFI1 Tranche2 submission dated 05 December 2023

[40] CMA Online Platforms and Digital Advertising: Market Study Final Report (July 2020) at para 63 and Figure 2. Available at https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf

[41] ACCC Digital advertising services inquiry final report (August 2021) at page 54. Available at: https://www.accc.gov.au/system/files/Digital%20advertising%20services%20inquiry%20-%20final%20report.pdf. The ACCC calculated the market shares for Google based on share impressions only.

[42] Autorite de la Concurrence Decision 21-D-11 of 7 June 2021 regarding practices implemented in the online advertising sector. Available at: https://www.autoritedelaconcurrence.fr/sites/default/files/attachments/2021-07/21-d-11_ven.pdf. The FCA calculated the market shares for Google in terms of volume as a proportion of impressions served to publishers.

technological benefit. The Inquiry is of the view that such big scale by vertical integrated providers can make things easier for advertisers and ad agencies who want to implement campaigns and providing vertically integrated services also reduces resources required by advertisers to use them. Vertically integrated providers may be in a position to provide better quality services to customers, such as more accurate reporting and targeting, and that using these services may also reduce set up costs for publishers. There is a lower likelihood that bids from its demand-side platform (DSP) to its supply-side platform (SSP) will fail, that interconnection is easier, that more consistent measurements and metrics can be provided, and that the use of consistent user IDs means it has greater targeting capabilities. Notwithstanding these benefits, a super-dominant vertically integrated company, can create the incentive and ability to engage in anticompetitive conduct.

Network effects, multihoming and interoperability

47. Whilst publishers can bring in third-party SSPs to sell inventory alongside Google's AdX, these SSPs do not have access to all publisher's inventory.[43] It would appear that the vast majority of programmatic advertising inventory sold on Google SSPs/ad networks is through their own SSP. For instance, AdSense and AdMob, which are ad networks rather than SSPs, inventory is sold through the ad network and has historically not been open to rival SSPs until 2019 when open bidding was introduced on AdMob allowing third-party SSPs to bid on inventory. For GAM, rival SSPs may take bids on the inventory sold through open bidding, mediation and header bidding only. Apart from reserved inventory which would constitute direct sales and not be sold through programmatic advertising, the Inquiry estimates that AdX share of programmatic advertising revenues for GAM is [90-100%].[44]

48. It would seem that there are a few reasons for this bias towards AdX.[45] First is that third-party SSPs are only introduced for inventory subject to open bidding, mediation and header bidding, with other sales only being handled by AdX. Second, GAM charges the publisher a 5-10% fee on bids received from third-party SSPs, which effectively reduces their net bid price by 5-10%, making it less competitive with the same bid received through AdX even if the third-party SSP fees are the same or slightly lower than AdX. Third, GAM first takes the best bid from rival SSPs and then passes that to AdX as the floor price for its own auction. So AdX has an advantage in knowing prior to the auction the floor price it needs to beat unlike rival SSPs. This has been remedied in the EU in response to an investigation by the Autorité de la Concurrence

[43] Group M Public Hearing Transcript dated 11 March 2024. Caxton Public Hearing Transcript dated 14 March 2024.
[44] This is based on dividing the share of DV360/Google Ads of AdX revenue by the share of those DSPs for GAM revenue (excl. reserved sales) resulting in a share of [redacted].

("FCA") but not rolled out globally.[46] Fourth, integrated SSPs are likely to have slight performance advantages, have an opportunity to be treated at any priority level unlike pre-set priority for third-party SSPs and the GAM SSP may have easier access to publisher audience and behavioural data through its integration with the ad server component.[47]

49. Coming to the advertiser side, media agencies are seeking to optimise the supply chain insofar as minimising and simplifying the route to the inventory. This results in lower costs and complexity.[48] Media agencies have indicated that they only use a few DSPs as they do not want to duplicate effort, suggesting weak basis for characterising the AdTech market as one with rampant multihoming. Only the more digitally mature clients will specify which DSPs they wish to use. Using only a few DSPs also allows for the benefit of aggregation and the ability to negotiate lower fees.

50. Media agencies and their advertisers can specify the SSPs that they would like to deal with or just leave it to the DSP to optimise across all SSPs that they integrate with. As the majority of SSPs offer similar sets of websites/apps, media agencies are looking to optimise by using a smaller number of SSPs which offer the best inventory to grow their client's share of voice.[49] By integrating and determining where to bid, DSPs will themselves consider the SSP range of ad inventory, the quality of that inventory (incl. invalid traffic and spam levels), the data matching through cookie syncing, the fee levels and the DSPs win rate on that SSP.[50]

51. The advertisers or their media agencies are therefore selecting the DSPs in part based on their ability to deliver on quality inventory from SSPs, and their SSP relationships, and on the other side the publishers are selecting SSPs based on their ability to deliver demand from DSPs with quality advertisers. This represents a strong form of network effects for both sides mediated through the DSPs and SSPs. As a result, both publishers and advertisers are looking through the immediate contracting party in the AdTech stack to understand the full supply chain they are integrated into and the closeness of those relationships. Unsurprisingly, media agencies also indicate that the ease of interoperability between the different AdTech components is a factor which builds loyalty over time.

[46] Google AdTech RFI2 Tranche1 submission dated 27 January 2024
[47] [redacted]
[48] Group M Public Hearing Transcript dated 11 March 2024
[49] Group M Public Hearing Transcript dated 11 March 2024. Taboola RFI1 submission dated 08 November 2023
[50] Google AdTech RFI1 Tranche1 submission dated 15 November 2023

52. The network effects in the AdTech stack resulting from the close integration of the Google products is evident from the high level of self-dealing that reinforces dominance across the AdTech stack.[51]
    52.1. For AdSense, [90-100%] of the revenue spend is from DV360 and Google Ads.
    52.2. For Admob, [90-100%] of the revenue spend is from DV360 and Google Ads.
    52.3. For AdX, two different estimates place the share of DV360 and Google Ads at either [80-90%] or [90-100%].
    52.4. For GAM ad server, [70-80%] of unreserved revenue spend is from DV360 and Google Ads.
    52.5. For DV360, [70-80%] of advertising purchases excluding O&O inventory is from GAM, AdSense and Admob.
    52.6. For Google Ads, it historically exclusively purchased inventory from O&O properties, GAM, AdSense and Admob.

53. Furthermore, network effects are reinforced by the access that publishers have to the full spectrum of potential advertisers, and the access that advertisers have to the full spectrum of ad inventory availability. Or put more simply, the more advertisers a DSP has the more attractive for publishers and the more ad inventory an SSP has, the more attractive for prospective advertisers. Google's strong end-to-end presence along the AdTech stack means that it enjoys unparalleled network effects and there is no evidence to suggest that this position will be challenged in a manner that is likely, sufficient or timely.

Google AdTech's revenue share

54. In relation to revenue, submissions made to the Inquiry do indicate that Google is a leading platform across the AdTech stack. Google generated within the range of [R1 billion- R2 billion] in 2022 through its AdTech services in South Africa.[52] When considering other AdTech service providers including Xandr, Outbrain, RTB House, Taboola, Adform and Magnite, their AdTech revenues collectively accounted for [R200 – 300 million]. Based on revenue share, Google AdTech accounted for [80-90%] of the AdTech market in South Africa in 2022[53] putting it in a super-dominant position.

[51] Google AdTech RFI1 Tranche2 submission dated 05 December 2023 and RFI2 Tranche2 submission dated 07 February 2024
[52] Google generated [redacted] in 2022, third parties generated [redacted] in the same year. These third-party AdTech service providers are all non-South African and submitted their revenues in US Dollars which were converted to Rands using the average 2022 USD/Rand exchange.
[53] Google's market share was [redacted] to be precise.

2. HOW PUBLISHERS AND ADVERTISERS ENGAGE THE STACK

55. To monetise on digital properties, publishers use two business models for their digital sites including paywall subscriptions and/or web or app properties for ad revenues. In terms of the paywall subscription option, consumers pay a recurring fee to access the publisher's content. Very few publishers decide to solely generate revenue from this model alone. Instead, publishers with web and/ or app properties also open their properties and applications (app's) to advertisers. The latter is a popular model used by publishers in South Africa. Selling inventory to advertisers is a primary revenue-generating stream publishers use in parallel to paywall subscriptions. Historically, publishers sold inventory in a traditional direct transaction. Meaning, that the publisher used to sell a specific amount of its inventory, say in a newspaper or magazine, for a specific fixed price to an advertiser. However, in the digital age, the way publishers sell their inventory to advertisers has evolved due to the number of internet access users. The migration to the digital economy has meant users spend more time on the internet, whether searching on popular search platforms, reading content and even browsing on their social media platforms.

56. With the increased number of internet users, the surge has created an opportunity for publishers to increase their monetisation opportunities. To meet the demand, publishers sell inventory using AdTech intermediaries to auction inventory instantaneously when users visit the publisher's webpage. Publishers use advertising as an avenue to garner advertisers and also keep users returning to their properties. To sell inventory, publishers project the amount of inventory that can be made available. To make this determination the publisher will consider two factors, (i) the amount of traffic seen on their website over a period, and (ii) whether the publisher can project whether there is going to be a growth or decline in traffic. This projection can be calculated down to a day, generally the projections are for each quarter of the year. Publishers diversify how to sell inventory, either through direct or indirect transactions [through programmatic transactions] or private marketplaces.

57. The traditional advertising model comprises direct advertising, where the publisher and selected advertiser or ad agencies negotiate and agree to fill a specified amount of inventory for a fixed fee. This type of transaction typically involves an agreement between the news publisher and the advertiser or ad broker, in which they specify the number and type of impressions to be delivered within a specified time frame and the agreed price for those impressions. This type of selling offers advertisers guaranteed placements and audience reach. It also allows publishers to secure high-value deals with major brands. Directly sold inventory is sold in a higher range and takes priority in its sale. However, it has its own shortfalls

in that publishers are not always able to sell all the inventory they have. Furthermore, the volume of available impressions could not be perfectly estimated in an online context, as it depended on the number of visits to the publisher's website. As such publishers had to find a way to sell the unsold and lower-value inventory, hence they resorted to using ad intermediaries to sell unsold inventory through programmatic tools. In this type of transaction, the ad server will be told what it wants to prioritise (i)Premium advertising is prioritised (ii) unsold inventory is then the last priority. GAM can be configured to prioritise the inventory rating.

58. Programmatic advertising refers to the use of automated technology and algorithmic tools for the buying and selling of advertising space in real time.[54] In many ways, it is not too dissimilar to the buying of shares on the stock market, where instead of shares, it is ad inventory. Reports by the Internet Advertising Bureau of South Africa indicate that most digital advertising is being sold programmatically. The use of programmatic advertising adds more players and ad inventory to the open web digital advertising ecosystem. Hence, for direct programmatic sales both the publisher's and the advertiser's ad server would normally facilitate the transaction. Both premium and remnant inventory can be sold programmatically through real-time bidding (RTB) on ad exchanges. This automated process allows advertisers to bid on ad impressions in real time based on specific targeting criteria. Programmatic sales enable publishers to monetize a larger portion of their inventory while providing advertisers with access to a wider range of opportunities.

59. The Inquiry is of the view that facilitating advertising using programmatic tools has its pros and cons. Pros are that advertisers receive a consistent source of revenue and is efficient in selling inventory that would otherwise be unsold. However, as cons publishers tend to face many challenges, such as encountering ad fill rates, ad fraud, ad blockers and privacy settings, declining CPMs, and have challenges properly collecting user data, segmenting it, and making their audiences available to advertisers. While users spend time on the publisher's properties, ad relevance is an aspect that is important for the publisher and the most relevant to them. Ad relevance is created using datafication, a strategy used by vertically integrated ad tech intermediaries, who can collect and create data profiles of each user interfacing with the intermediaries' tools.

60. In terms of private marketplaces, this type of facilitating a sale of inventory is by invitation. It is whereby publishers and advertisers can transact directly, often for premium inventory. This

[54] https://snigel.com/blog/what-is-programmatic-advertising. Accessed on 17 February 2025

provides a more controlled environment for both parties, allowing publishers to maintain brand safety, exclusivity and higher CPMs while advertisers can access high-quality inventory.

61. Seemingly, there are two forms of auctions that dominate the AdTech stack mainly the waterfall auctioning and header bidding. Waterfall auction is a traditional form of advertising where the inventory is passed from one ad network to another ad network, in a descending order of importance cascading down until all impressions are sold.[55] Ad networks are usually ranked according to the average historic yield they have produced for the publisher. This means that an ad network where premium inventory has been sold in the past will then get the first chance on further impressions from the same publisher.

62. On the other hand, header bidding is another channel used by publishers to sell unsold inventory.[56] Instead of the browser contacting the demand sources one by one (i.e. ad networks and ad exchanges), header bidding brings all the demand sources together simultaneously and allows them to bid on the available ad inventory at the same time even before the sale of premium inventory from the publisher's ad server. Those who return a bid in time are considered. The advantage of bringing all the buyers together to conduct a header bidding auction is that publishers can dramatically increase their yield.

3. DATA COLLECTION

63. Data about consumer behaviour whether online and offline is important in the supply of AdTech. Consumers spend most of their time in open web browsing on some websites, playing mobile games and on apps providing reach insights to walled gardens. By walled gardens we refer to a closed-system platform that retains customer data inside its digital ecosystem.[57] Approximately 45.34 million South African's use the internet (i.e. 74.7% of South Africans) while 26 million (or 42.8% of) South African's use social media.[58] Based on the Inquiry's survey, results show that 77% of users indicated that the main platform they access their news is on social media (i.e., Facebook, X, TikTok, YouTube etc).[59] This suggests a large number of users in social media walled-gardened advertising ecosystems. Digital platforms have different functionalities that keep users to their platforms, a relevant example in this case would be in the instance that a consumer visits a web page, the consumer visiting the web page not only

[55] https://clearcode.cc/blog/difference-waterfall-header-bidding/. Accessed on 26 January 2025
[56] https://clearcode.cc/blog/difference-waterfall-header-bidding/#toc-label-2. Accessed on 26 January 2025
[57] https://www.marinsoftware.com/blog/breaking-down-ad-tech-walled-gardens-and-their-impact-on-digital-advertising. Date Accessed on 25 January 2025
[58] Ibid.
[59] CC survey conducted by Redflank (2024) .

consumes the desired search content but also sees adverts which are relevant to the user. Nonetheless, users use multiple platforms, for example, the Inquiry's Focus Group study reveals that users use Google Search to verify news they have seen elsewhere, especially on social media platforms.[60]

64. During the public hearings RTB House indicated that users spend 60% to 70% of their time on the open web.[61] This would therefore imply that 30% – 40% of the remaining time is spent on properties owned within walled gardens. However, when it comes to digital advertising spend approximately 60% is generated by walled gardens of social media and search.[62] Seemingly in terms of advertising budgets what small and big advertisers put in for open web and walled gardens differs depending on their marketing strategies. Big advertisers are said to already have different DSPs, specialised teams that put focus on walled gardens, open web and paid search on search engines that are much more sophisticated and can optimise from them. However, for small advertisers, it is easier for them to have all their budget allocated in walled gardens. Group M in the Public Hearings mentioned that a report done by the IAB together with PWC on South African internet advertising revenue found that total ad spend is skewed to social media and search.[63]

65. Since walled gardens own an array of platforms, they can collect larger data sets and gain valuable insight into user behaviour. Despite access to large volumes of data sets, large technology companies such as Google often limit access to first-party data, revealing only aggregated data or insights.[64] The aggregated data shared by walled gardens consists of anonymised data which includes information such as campaign delivery, demographics, and ad performance. With the increased usage of social media by South Africans, businesses have an opportunity to collect data and allow advertisers to send targeted adverts.[65], Further, it was submitted by one of the intermediaries that data is not only collected and processed by walled gardens; news publishers, intermediaries, and ad brokers/ advertisers also collect data to target audiences in specific segments defined by, for example, behaviour or location.[66] Data can be collected through first-party cookies, but also through data analytics provided by advertising platforms i.e. Google Analytics. These tools assist news publishers to track and

[60] Inquiry Focus Group study, theme 1, 2 & 8.
[61] RTB House Public Hearing Transcript dated 20 March 2024
[62] RTB House Public Hearing Transcript dated 20 March 2024, pg56
[63] Group M Public Hearing Transcript dated 11 March 2024
[64] McInnes K (2024) *South African Digital & Social Media Statistics.* Available at: https://www.meltwater.com/en/blog/social-media-statistics-south-africa . Date accessed on 28 November 2024
[65] Targeted advertising means that different users viewing the same webpage or app at the same time may see different ads most relevant to the user, respectively.
[redacted]

evaluate the success of their campaigns.[67] The data provided through the data analytics tool (collected from search and social media platforms where the news publishers data is being hosted[68]), together with the news publishers or advertisers data metrics enable the publishers, intermediaries and ad brokers or advertisers to target audiences more accurately,[69] and consumption patterns and advertisers looking to target a specific segment audience.[70] The data shared with news publishers is limited and includes the users demographics (i.e. age, gender, and location), where the user is located, and the device or the browser in which the user used to access the content.[71]

66. Despite available data analytics tools combined with that of the news publishers, news publishers in South Africa still experience several limitations on the data retrieved specifically on make it purposeful for commercial use.[72] These limitations may be associated with privacy regulations and platform policies. As such news publishers receive anonymised and aggregated data, protecting user privacy and restrict access to detailed analytics. To this end, the most valuable data to news publishers and any other player would be to access first-party data.[73]

3.1. Data Collection Methods and Tools

67. To collect and process vast amounts of user data, analyse and datafy it, news publishers and other industry players in the digital advertising industry use Digital Management Platforms (DMP's). DMP's organise first party, as well as offer access to third-party data and also facilitates data sharing between publishers and advertisers.[74] The following sections detail methods DMP's use to collect data, and the types of data collected:

67.1. Web tracking (also known as page tracking) is the practice of monitoring users' web interactions, interests, and behaviours when users visit a particular webpage or interact with the internet.[75] When users visit a webpage, the webpage loads built-in web tracking technology. To track and collect user behavioural data, the technologies used is the web cookie, which can be "first-party" and/ or "third-party" cookies.[76] It is worth noting that there

[redacted]

[71] Ibid.
[72] Ibid.
[redacted]
[75] https://www.cookiebot.com/en/website-tracking/#:~:text=Website%20tracking%20(also%20known%20as,again%20when%20they%27re%20browsing. Accessed on 08 January 2025
[76] Ibid.

are three types of data involved in digital advertising such as first-party data; second-party data and third-party data. First-party data refers to data that is developed and placed on the publisher's webpage. The first-party data can be collected through subscription logins of newsletter sign-ups in the form of shared email identifiers.[77] The collection of first-party data is critical to the business of news publishers as it allows them to move beyond just behavioural data and to understand the users beyond the data shared by Google and other social media platforms.[78] Second-party data is data that is collected and shared by a trusted source. This data set is shared through partnerships.[79] Similar to first-party cookies, third-party cookies are developed and placed on an owner's webpage. However, instead of the webpage owner placing the cookies, it is a third-party entity in partnership with the website who places its cookie code and collects the user data.[80] This allows the third-party cookie collectors to not only monitor the users activity on the website but also monitor the user behaviour across every website a user visits that has the third-party cookie code embedded on it.[81] Cookies allow the tracking party to collect data, which in turn can be used to infer the interests, preferences, behaviours, and routines of users based on their activity on the internet. This information is then datafied and is used to target the users with specific and relevant ads.[82]

67.2. Location tracking is used to collect granular location data and forms an integral part of the digital advertising ecosystem. The tool allows for tracking a user's physical movements such as where the user lives, where the user works, the stores and business hubs they frequently visit, and where they spend their free time.[83] This information therefore further provides the data collector with the types of ads that may interest the user. This information may be collected by means such as rideshare applications, GPS signals, cellular network triangulation, Wi-Fi SSIDS, and Bluetooth connectivity. Cross-device tracking refers to cross access to the internet on multiple devices. This type of tracking tool may lead to users seeing the same advertisements on different devices,

[77] [redacted]
[78] Ibid.
[79] https://www.marinsoftware.com/blog/breaking-down-ad-tech-walled-gardens-and-their-impact-on-digital-advertising . [Accessed on 25 January 2025]
[80] https://www.cookiebot.com/en/website-tracking/#:~:text=Website%20tracking%20(also%20known%20as,again%20when%20they%27re%20browsing. Accessed on 28 November 2024
[81] Website tracking guide: how it works and why to do it. (2024). Available at: https://contentsquare.com/guides/website-tracking/. Accessed on 28 November 2024
[82] The Autorite de la concurrence (2018) Opinion no.18-A-03 of 6 March 2018 on data processing in the online advertising sector.
[83] https://www.marketingevolution.com/knowledge-center/topic/marketing-essentials/location-based-marketing#:~:text=Marketers%20can%20use%20real%2Dtime,in%2C%20rather%20than%20generic%20imagery.Date accessed on 29 November 2024

therefore, to curb duplication, the advertising industry developed a cross-device tracking tool that monitors user activity across different devices.[84]

67.3. The final form of data collection is the browser fingerprinting, this a compilation of data about the setup of a user's browser or operating system. In this regard the tool will gather software and device data, typically the information gathered will include user browser provider, browser version, operating system, preferred language, browser plugging, tracking settings, ad blocker settings and time zone.[85] Therefore, data plays a crucial role in targeted advertising, as it fosters the ability to tailor ads to a particular market segment. Without access to data, players [in ad targeting] are forced to rely on educated guesses and hunches.

68. As the digital landscape evolves, there's a growing emphasis on privacy, leading to changes in how third-party cookies are used and regulated. Countries all over the globe are taking measures to protect consumer privacy, for example in South Africa consumers data is protected by the Protection of Personal Information Act. Data collectors are therefore required to collect and process data in a manner that is compliant with the statutory provisions of the POPI Act, further confining data sharing to further restrictions between platforms and news publishers. In 2020, Google announced that it intends to deprecate third-party cookies owing to user privacy concerns and governing legislation different jurisdictions are adopting to protect users. What this actually meant is that third-party cookies would soon be replaced by Googles Sandbox, which would allow websites to access user data without invading their privacy, using tracking cookies.

69. After the decision to deprecate third-party cookies was delayed to 2025[86], it seems that it has been cancelled and abandoned. Seemingly, instead of deprecating third-party cookies, Google intends to introduce a new experience in Chrome that lets people make an informed choice that applies across their web browsing, and they'd be able to adjust that choice at any time.[87] The Inquiry is of the view that such deprecation would have created a serious injury to advertisers and publishers, as the inability to track user behaviours on properties would lead to less effective targeting potentially decreasing advertising revenue and increased dependence on Google AdTech, in respect to publishers. Publishers have indicated to Inquiry the Commission that user data is important for news publishers as it creates trust for advertisers seeking to reach a targeted

[84] Ibid.
[85] Chea E. 2024. Browser fingerprinting explained (+7 top techniques). Available at: https://fingerprint.com/blog/browser-fingerprinting-techniques/#:~:text=Browser%20fingerprinting%20operates%20on%20a,identical%20models%20or%20operating%20systems. Date accessed on 29 November 2024
[86] Pak S. (2024) Google Pauses Plans to Stop Third Party Cookies in Chrome. Available at: Google Pauses Plans to Stop Third-Party Cookies in Chrome - Single Grain
[87] https://www.digitalcommerce360.com/2024/07/24/third-party-cookies-deprecation-google-chrome/. [Accessed on 25 January 2025]

audience.[88] Without access to data, it would further frustrate efforts of publishers and advertisers to enter direct transactions to circumvent dependency on the open auction. Relevant to anticompetitive concerns regarding the Sandbox privacy, the Competition and Markets Authority and the Information Commissioners Office raised that Googles sole control over Privacy Sandbox allows them to unilaterally adjust its operations and data availability, potentially impacting the entire global advertising ecosystem.[89]

70. Google's privacy Sandbox would encompass the following key elements (i) shifting data processing and ad targeting to the local browser environment; (ii) phasing out support for third-party cookies; (iii) introducing new APIs for privacy-preserving alternatives to common web use cases; (iv) providing users with more control over their data and online privacy; and (v) developing open standards for these new technologies in collaboration with the web community.[90]

3.2. THE USE OF DATA BY EACH PLAYER

71. This section seeks to provide an understanding on how players in digital advertising use data to improve their business offering and make themselves more competitive in respect to targeted advertising. The following delves into the data benefit or utilization benefits for news publishers, advertisers and intermediaries.

3.2.1. Data Use by News Publishers

72. In respect to how publishers utilize user data for their publication, large media publishers in South Africa have submitted to the Inquiry that digital platforms generate significant value from having news content placed and shared within their ecosystem.[91] Publishers have also indicated that the presence of news on the platforms properties enables the digital platform to inflate its advertising revenue channels as it is able to collect valuable user data which in turn can be used to improve targeted advertising services[92]. Furthermore, access to user data would assist the publisher in understanding consumer behaviour, preferences and consumption habits. This creates the possibility for media houses to attract advertisers in alignment with their targeted consumers who frequent the news publishers' webpage. Digital advertising platforms provide

[88] [redacted]
[89] Competition and Markets Authority Press release. (2021) CMA to investigate Google's Privacy Sandbox browser changes. Available at: CMA to investigate Google's 'Privacy Sandbox' browser changes - GOV.UK
[90] Pak S. (2024) Google Pauses Plans to Stop Third Party Cookies in Chrome. Available at: Google Pauses Plans to Stop Third-Party Cookies in Chrome - Single Grain
[91] Media24 Public Hearing Transcript dated 5 March 2024.
[92] As mentioned in Annexure 3, the Inquiry estimated that news media attributed [10-15]% to Google's overall AdTech revenues.

access to data analytic tools to publishers, which facilitate performance and customer engagement tracking, however, this data has its limitations in providing sufficient information for news publishers to identify users and advertisers, and their corresponding behaviour. The data analytic tools provided by digital platforms typically contain measurements such as impressions, clicks, conversion rates, click through rates (CTR) and other pertinent performance indicators. Albeit the quality and quantity of the data is subject to the specific goals and strategies of the publisher. The data publishers get from data analytic tools provide limited insight into audience behaviour and preferences.[93] This limits their ability to deal directly with advertisers and achieve higher CPMs.

73. Publishers indicated to the Inquiry that the data received from the data analytic tools is not adequate for its commercial purposes. The data received does not contribute to commercial value for the publishers, however, becomes a means of reporting and gaining business insights. Google has submitted that data is anonymised so that it can be in compliance with privacy protection laws. However, news publishers submitted to the Inquiry that despite the limitation of data privacy regulations, walled garden bid technology companies should create mechanisms that increase the ability for data sharing and which do not undermine data protection governance.[94] In addition, access to more granular data would allow the news publishers to build a more complete picture of their audiences across any platform that contains the news publishers content.[95]

74. Generally, Google provides news publishers with data where a user has been referred to the publisher's webpage via Google's properties i.e. Google Search. The data is then collected via the publisher's ad server which according to the publishers, who made submissions to the Commission, use GAM as their central ad server platform. GAM collects the data and categorises it as anonymous using its Google's Analytics platform. According to news publishers, the information received is anonymized and includes information such as the IP address, browser type, and device information, but not user preferences.[96]

75. The collection of consumer data may affect competition in digital advertising, specifically in the instance that Google enjoys a favourable position of accessing large volumes of consumer data across different business enterprises e.g. Google Search, YouTube, Chrome and Maps. Google's ability to link user activity lets it profile them for ad targeting, enjoying economies of scope. The

[redacted]

problems that are further created by data collection may result in unfair power imbalances as Google may coerce both advertisers and news publishers to rely further on its intermediaries.

76. In its submission, Google indicated that the data it collects may vary based on the identity of the publisher, the user's preferences and the device in question. Ultimately the data collected may include but not be limited to: (i) unique identifiers; (ii) browser type and settings; (iii) device type and settings; (iv) operating system; (v) mobile network information including carrier name and phone number and (vi) application version number.[97] Furthermore, Google also collects information that the publisher website will share with GAM, information is also aggregated and shared through Google's DMP feature. The information shared may include publisher-provided IDs as well as audience data, such as audience lists and lists of cookie IDs with inferred interests.[98] Google submits that publishers can disable the data from being shared with Google.[99] Accordingly, this data is collected to provide and improve the GAM service. As mentioned before, the ability to collect data is skewed, where Google enjoys greater access to data it may also support the point that it is also able to self-preference its own intermediaries in the AdTech market based on the volumes of data it is able to collect and potentially use to support its own business offering.

77. In terms of the type of data Google shares with its intermediaries, Google argued that it does not share GAM data with other Google products or third-parties without the publishers consent, which form part of the terms of GAM agreements and is further in compliance with privacy regulations.[100] Accordingly, Google states that some data settings are turned on by default, this suggests that when turned on Google can collect this data and share it within its business unit.

78. On the contrary, publishers have indicated to the Inquiry that in order to remain competitive in the ad targeting market they would require data such as (i) demographic data; (ii) geographic data; (iii) device information; (iv) engagement rates; (v) conversion tracking.[101] One publisher noted that it supplements the data received from Google Analytics with its own collected [first-party] data, news publishers who have the means to supplement data provided by Google Analytics may potentially be able to enter into direct transactions with advertisers also being able to target ads to the users that visit their web and app properties.[102] However, smaller publishers who do not have the financial ability to collect and aggregate first-party data are left to rely on

[97] Google RFI1 Tranche1 submission dated 15 November 2023.
[98] Google RFI1 Tranche1 submission dated 15 November 2023.
[99] Google RFI 3 Tranche1 submission dated 10 June 2024.
[100] Google RFI 3 Tranche1 submission dated 10 June 2024.
[redacted]

Google's insufficient data collected on the content placed on their properties, putting them at a relative disadvantage to big media.

79. It was also submitted that as means to see inflated revenue for advertising on news publisher platforms, and given that digital platforms such as Google have the infrastructure to collect and process data from their properties, it would be recommendable that digital platforms share relevant data that is generated from content provided by publishers, with publishers in South Africa.[103] Access to more granular consumer behavioural data, including psychographic data[104], would allow publishers to bypass programmatic advertising and substitute it with direct transactions allowing for greater ad targeting and also increase the publishers inventory value. Furthermore, Google does not disclose the identity of advertisers who advertise on the news publishers properties.[105] This not only raises a transparency concern for news publishers specifically on the issue of CPM's, but, news publishers have expressed that in order for them to enter into direct transactions with advertisers marketing their content on their properties, they need to know the identity of the advertiser.[106] It is further alleged by news publishers that Google will anonymise the identity of the advertiser, recording them as "unknown".[107] Therefore, to mitigate and alleviate some of the anticompetitive conduct associated with programmatic advertising or open auctions, publishers require disclosure of the data identity of advertisers.[108]

80. Google has abilities to collect and store data received on a third-party website that uses GAM.[109] It claimed that the data GAM collected and stored from third-party website include [redacted]

[redacted]

[104] Psychographic data is the studying of consumers based on psychological characteristics like values, social status, desires, and goals. Revella (2024). Psychographics and personas: how to get to the truth about why people buy. Available: https://www.hotjar.com/blog/psychographics-in-marketing/ (accessed 29 January 2025.

[105] [redacted]

[106] Ibid.

[107] MoneyWeb Public Hearing Transcript dated 05 March 2024 and Media24 Public Hearing Transcript dated 05 March 2024.

[108] Media24 Public Hearing Transcript dated 05 March 2024

[109] Google RFI3 Tranche1 submission dated 10 June 2024.

[redacted] [110]

81. In addition to the data collected on third-party websites, Google also collects information that the publisher's website shares with GAM.[111] Google argues that the data collected is used to improve the GAM service, enforce its policies, and detect and stop fraud. The information collected by GAM from the publisher's properties includes publisher-provided IDs as well as audience data, such as audience lists of cookie IDs with inferred interests. Google notes that publishers enjoy liberty to stop data sharing with GAM.[112]

3.2.2. Data Use for Advertisers

82. As mentioned earlier, data is an invaluable marketing asset, allowing advertisers and ad agencies to determine who should be targeted with what advertisement. The target audience is selected using a pool of techniques used to collect user data. The advertisers and ad agencies use attributes such as demographics, geography and value interest. The nodes help advertisers and ad agencies to match customers with specific ad content and further assist in allocating budgets for marketing campaigns. It is standard practice that advertisers and ad agencies learn more about users to receive higher returns on their investments.

83. Some ad brokers submitted to the Inquiry that walled gardens have an advantage of using a personalized view of user behaviour based on the user's interactions within the specific platform.[113] The data collected by these walled gardens allows them to build audience segments and tailor advertising on their platforms based on user behaviour. These walled garden platforms do not share their collected user data across platforms using their intermediaries therefore ensuring that they are able to monetise their user data within their respective ecosystem.[114]

84. Similar to the publishers, Google is able to collect user data from advertisers including data such as the advertiser's budget, bid, brand safety requirements and targeting strategies. Google collects the aforesaid data through its DV360 and Google ads intermediaries on the demand side. Google Ads and DV360 can also collect data such as ad creatives uploaded by the advertiser or media agency.[115] Google is also aware of which advertisers buy ad inventory

[110] Ibid.
[redacted]

directly and which employ agencies through its recording of individual advertiser accounts within each agency. Furthermore, Google has various optional features in which it has further means to collect data. Alternatively, advertisers can also upload data to either Google Ads or DV360 to improve targeting of their ads, this may include Google Match. Google Match allows advertisers and agencies to upload data about their customers such as user's names, email addresses, mail addresses and phone numbers.[116] According to Google, this data collected through customer match is used to match Google users with advertisers and ad agencies.[117]

85. In addition, another feature used by Google to further collect user data from advertisers and ad agencies is called 'audience segments".[118] This feature allows advertisers to target based on demographics, interest, habits or past interactions. Google alleges that the data collected from its demand side platforms and shared with its GAM is mainly (i) the ad creative (ii) the ad creative code; (iii) the bid price and information about the ad creative that allows Google to enforce publisher preferences such as click-through landing page and ad height and width.[119] This information according to Google applies to all DSP's bidding on its platforms, thus no one is at an advantage over the other. Google indicated that all AdX buyers (i.e. Google Ads, DV360 and non-Google buyers (both SSPs and DSPs)) broadly receive the same information, therefore complying with GAMs terms and conditions. Google does however indicates that it does reserve granular information for its own platforms for example location data.[120]

86. To support the news industry in 2018, the Google News Initiative launched the News Consumer Insights ("NCI") tool[121]. To help news publishers understand their users and how their data feeds into their business, the NCI tool provides news publishers with real-time content performance metrics. With the NCI tool, news publishers can analyse content performance and user behaviour when users engage the news publisher's properties.[122] The NCI tool allows publishers to segment their audience based on the user's historical interactions with the news publisher's properties across a 30-day period. The user data is segmented into 3 segments; (i) casual readers, these are readers who interact with the site once; (ii) loyal readers, those readers who visit the news publishers' site 2 – 14 times and (iii) brand lovers, those readers who visit the publisher's website more than 15 times.[123] The segmented data is used to assist the news

[116] https://support.google.com/google-ads/answer/6379332?hl=en-GB. Accessed on 07 February 2025
[117] Ibid.
[118] https://support.google.com/google-ads/answer/2497941?hl=en-GB&ref_topic=3122880&sjid=3819084232574254205-EU#zippy=. Accessed on 07 February 2025
[119] Google RFI1 Tranche1 submission dated 15 November 2023
[120] Google News Consumer Insights tool: the need-to-know | The Audiences
[121] This includes Google Search. See: https://newsinitiative.withgoogle.com/resources/stories/nci/
[122] Ibid.
[123] Google News Consumer Insights tool: the need-to-know | The Audiences

publishers see users who have the likelihood of becoming paying subscribers of the news publication. This presumption can be drawn from data that reveals the user's behaviours when interacting with the news publisher's web properties, for example, average sessions in a given time period, average time spent on the properties, and pages per session, combined with industry benchmarks. In addition, to the user insights, the NCI tool provides news publishers with a "Reader Engagement Score ('RES')". The RES allows publishers to make a comparison of how their users engages with the news publishers content as compared to other news publishers. Put together, these tools can assist news publishers to make decisions on which groups they want to target with ads and other campaigns.[124]

87. To optimise the NCI tool, news publishers are required to link their Google Analytics accounts to the NCI tool.[125] The NCI tool merely takes data already in the publishers Google Analytics portal and makes it slightly more useful for the news publisher to make more informed decisions i.e. ad targeting and ad campaigns to specific users. Accordingly, news publishers do not receive new insight/ data specifically on user interests and purchasing intent and therefore may not be a useful tool for news publishers to rely on to turn user engagements into valuable data for their operations.

4. ADTECH AUCTIONS AND VALUE OF ADS

4.1. Drivers of Low Auction Prices

88. Cost-per-mille ("CPM") measures the cost advertisers need to pay per thousand impressions (or views) their ads received on news publisher's properties, and is typically the main source of monetisation for news publishers. The CPM model enables news publishers to monetise impressions viewing ads on their properties and earn stable revenues based on the volume of audience engagement with the displayed advertisements on their properties.[126] The CPM price can be influenced by a number of factors, for example, valuable traffic on the news publishers properties can increase the value of the CPM, this is because advertisers would be willing to pay more for news publishers' premium ad space anticipating greater audience reach.

89. Across the different types of programmatic advertising transactions, news publishers set the floor price on a CPM basis. As mentioned prior, in any ad auction the bid can be awarded to the highest bid CPM, which can be higher than the publishers price floor by a marginal value. The difference between what the advertiser pays for the value of the CPM and what the news

[124] Ibid.
[125] Ibid.
[126] [redacted]

publishers is paid, is what AdTech intermediaries earn along the auction process / transaction. In the case of direct transactions, where news publishers and advertisers directly engage, real time bidding is not involved, and the price is agreed on and fixed.[127] In this scenario, however, Ad Server services are still needed and the AdTech intermediary charges a fee for these services.

90. Generally, direct transactions generate higher yield/ CPM for publishers. According to research conducted by Google, direct ads sell for two to four times higher than programmatic ads, where direct ads average on $10-20 CPMs, programmatic ads average at $1-5 CPMs.[128] This can be further supported by the submissions received by the Commission in which news publishers indicated that approximately 60% to 75% of their inventory is sold through direct transactions.[129] However, Figure 5 below suggests that there may be a gradual increased dependency by news publishers on programmatic transactions to auction ad space in the future.[130] This is inferred by decreasing direct CPMs and increasing open CPMs over time.

91. The increasing dependency may further be exacerbated by advertisers preferring to purchase inventory through programmatic channels in an attempt to avoid the high CPM rates in direct transactions. Inevitably, news publishers would be forced to increase dependency on programmatic channels. The rationale for the increased use in programmatic transactions is reported to be linked to advertisers or media agencies attempting to reduce the costs of advertising campaigns. In this attempt, the advertiser or media agency would opt for programmatic advertising, where they can potentially place an ad on premium inventory at a low-cost CPM.

92. As mentioned above, news publishers can adopt different monetisation strategies to preserve the value of [premium] inventory and to maintain a high CPM. To sell advertising inventory there are two primary ways (i) direct and (ii) programmatic transactions[131]. Publishers can select to use either of the methods, it is however traditional practice to combine programmatic and direct deals to fill ad space and generate a continuous flow of inventory revenue.[132]

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[127] [redacted]

[128] Google. Understand Direct and Programmatic Ad Revenue. Available at: Understand Direct and Programmatic Ad Revenue - Google News Initiative

[129] [redacted]

[130] Media24 – Oral submission from Mr. Ishmet Davidson, date 5 March 2024, page 5.

[131] Programmatic transactions include (i) open auctions; (ii) private auctions; (iii) preferred deals; and (iv) programmatic guaranteed deals.

[132] [redacted]

93. With advertising, two interests bring news publishers and advertisers to contract or participate in advertising in open auctions. Publishers are interested in generating traffic/ audience to their content or properties, in turn advertisers are interested in reaching a wider audience reach and a guaranteed audience for their content. The two interests complement one another, in that an audience who see's relevant content and adverts on the news publisher's properties increases the probability that the interacting user may turn into a subscriber or undertake a transaction. Further, the advertiser is guaranteed certainty of the targeted audience. Ideally, this would lead to either of two outcomes, firstly a higher CPM for the news publishers, but also a potential for the two parties to enter a direct transaction. Again, on the intersecting and complementary interests, the advertiser can capitalise on the publishers returning audiences frequently visiting and interacting with the publisher's properties (including applications, podcasts and radio stations).

94. In respect to programmatic transactions or sales, this form of advertising automates the ad buying/ selling process in real time bidding ("RTB") otherwise done in a direct transaction. The main purpose of this is to sell off publisher inventory that would otherwise remain unfilled, where premium inventory would typically be filled by direct deals. Unlike direct advertising, the CPM is not fixed, therefore, the impressions for each auction could potentially vary. RTB, or selling via the open web, is dependent on forces of supply and demand, and given the abundance of publisher inventory supplied, it often pushes down CPMs. Premium ad space not sold directly could therefore be sold through the open web. .

95. With respect to programmatic transactions, the inventory fill rate for publishers is [almost always] guaranteed, however, the negative impact to news publishers is that the CPM rate may be low, thereby disadvantaging the news publisher who is still required to pay for facilitation costs of each third-party tool used to fill the ad space. Owing to CPM erosion over time, low CPMs on the open web, declining direct CPMs, the high AdTech intermediary facilitation fees, programmatic advertising is not a sustainable business model for South African news publishers. According to some ad brokers, they use programmatic advertising for campaigns that need to deliver a wide reach with a limited budget and time.

96. Most publishers in the South African media market have adopted a hybrid model to sell their inventory, taking a waterfall orderly manner to sell inventory. This includes (i) premium inventory, which news publishers tries to sell through direct transactions, (ii) leftover inventory, which news publishers will auction through programmatic channels. The below table gives comparison of the CPM value when inventory sold through direct sales and through ad tech intermediaries:

Table 1: CPM values

[redacted]

97. Based on Table 1 above, inventory directly sold by web publishers ranges between an average CPM of [R50-R200], however, the average CPM for the open auction (web) ranges between [R10-R30]. When calculating the direct to open auction CPM ratio, direct CPM's are between 4 to 10 times larger than open auction (programmatic) CPM's. In relation to preferred and programmatic guaranteed deals, information submitted indicated that the CPM's for both transactions range between R75 to R130.[137] The above table indicates the appeal of direct inventory sales for news publishers where it can generate revenues several fold for its ad space and incur fewer AdTech intermediary fees at the same time. For the advertiser, however, were it to land premium inventory through open auction, the news publisher could lose approximately 70 – 90% of the true value of the premium inventory and simultaneously pay proportionately higher AdTech fees. The risk is that advertisers start leveraging programmatic advertising to get premium inventory thereby facilitating a CPM race to the bottom while simultaneously undermining the sustainability of news media.

98. With Google's presence across the stack, it is able to earn fees or serving fees across all levels of the value chain resulting in yields or CPM's being eroded, which particularly injures the news publisher's revenue stream. Some South African news publishers have also expressed that while Google is taking service fees across the value chain, news publishers have raised concerns that they in fact do not know the true value of CPMs paid by advertisers and are left with net CPMs, after Google has taken its share.[138]

99. As explained before, inventory placed on the open auction is accompanied by the news publishers floor price. The floor price may either be beaten by intermediaries (which should

[redacted]

[138] Media24 – Oral submission from Mr. Ishmet Davidson, date 5 March 2024.

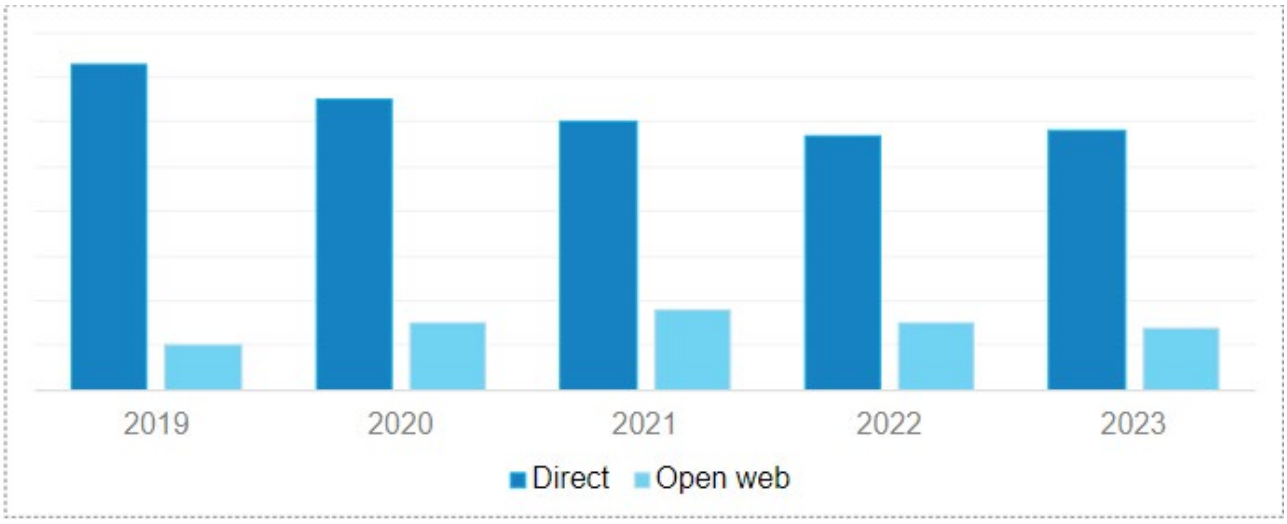
increase CPMs for the news publisher) or can be matched by intermediaries. In the case that the there was an intermediary willing to bid at a higher price for the inventory, then even after removing the serving fees owed to intermediaries, the CPM should return higher to the news publisher. While the latter is likely to occur in an open auction, news publishers would not be in a position to know whether the auction process drove the CPM higher, this is because the bidding process in the open auction is flawed with lack of transparency. News publishers have no ground to prove that the value of the CPM increased during the bidding process and as such are owed a higher CPM return value than the original CPM floor price.

100. Despite the growth of digital advertising, news publishers indicated that they have not been able to sustainably participate due to the [anticompetitive] environment of digital advertising and open web advertising. Traditionally, news publishers took preference to direct transactions over open web auctions. The preference for direct transactions was an effort by news publishers to curb the distortive features of open auction advertising and also protect the value of the CPM and more in particular the inventory [which in some cases is premium].[139] With reference to Figure 5 below, one such publisher, demonstrated the decline of direct CPMs (in dark blue bars) while the light blue bars represent the average yields in open auctions.

101. In fact, the news publishers indicated to the Commission that with the gradual increase of digital advertising in the open web, using ad tech intermediaries has resulted in yields for direct advertising to gradually erode.[140] For the years 2019 to 2021, figure 5 below shows that there is a gradual decline in direct transactions, while there is a gradual increase in the open web advertising. Further on, there is still a decrease in direct transactions between 2022 and 2023. A decline in direct advertising, puts news publishers at the mercy of programmatic deals further compromising the value of the CPM. In addition, news publishers find themselves with less bargaining power when transacting directly with advertisers, in desperation to fill premium ad space with direct transactions. This further puts the sustainability of news publishers at a further jeopardy and increases further reliance on programmatic advertising on the open web where they obtain not only low CPM value but are more susceptive to exorbitant facilitation fees by ancillary service provider such as Google.

[139] Ibid.
[140] Media24 – Oral submission from Mr. Ishmet Davidson, date 5 March 2024.

Figure 5: CPM erosion over time



Source: Media 24 Oral Submission dated 5 March 2024.

102. Turning to the serving of inventory and the CPM erosion, when publishers open their inventory for open auctioning, different intermediaries take a portion of the CPM, known as “ad serving fees”. News publishers express that while they may have the ability to set the prices [or otherwise referred to as the floor price] at each level of the value chain, this however still does not change the low CPM that they will receive at the end of the auction process.[141] According to publishers, the impact may be even more grave for smaller publishers who are dependent on Google’s intermediaries which may be most suitable for their business models.[142]

103. One such news publisher indicated to the Commission that it uses Google Ads to serve its inventory on the open web, in which it alleges that Google retains 32% of the programmatic revenue while it retains only 68% of the advertising revenue. According to news publishers in SA, they are unable to negotiate the commission, which is paid to them by Google, therefore news publishers are forced to succumb to a “take-it-or-leave-it" relationship between Google and news publishers, specifically the small publishers who are already not sustainable in the digital age. MoneyWeb further gave an example of just how a dire effect the high server fee is on its businesses, in which it stated that “*If you look at the split of 68% for Moneyweb and 32% for Google, if you sell a million rands worth of Google ads, Moneyweb will receive R680,000 of that million and Google R320,000. Now that R320,000 relative to Moneyweb’s R680,000 is 47% which is really, really significant. Another way to look at it is that Moneyweb’s direct sales house, their commission is around 20% which is pretty standard in the industry and that 32%*

[141] Ibid.
[142] Media24 – Oral submission from Mr. Ishmet Davidson, date 5 March 2024.

is take it or leave it and I think that is very, very high".[143] The afore illustrates that, not only are the fees retained by Google high in comparison to inhouse programmatic advertising, however, the fee in which is collected by Google is actually forty-seven percent (47%) of the total commission received from the served inventory.

104. Further to the above, Moneyweb took to disclose to the Commission in the public hearings that for the past year it had received about eight rand and fifteen cents (R8.15) per thousand impression from Google's AdSense. Contrary to the CPM of R8.15 it received from the AdSense, the normal direct display advertising rate is worth R100.00, with a percentage difference of 91.85%.[144] Moneyweb further added that, while the CPM rate for direct display advertising is relatively higher than the value of the inventory auctioned on the open web, few marketers would out of own volition prefer not to enter into direct transactions because they cite that direct transactions are expensive.[145] According to the news publishers, advertisers are able to view the value of CPM on AdSense and compare it to what the news publisher will directly charge.[146] News publishers allege that because of this "price comparison practice" transparent to the advertiser, advertisers are then persuaded to by-pass direct deals and purchase ad space through programmatic transactions.[147] This further discourages direct transactional relationships between news publishers and potential advertisers.

105. While some fees are inevitable for the sustainability of the third-party ad tech intermediaries, Ad tech intermediaries such as Google have deployed strategies that are not only anticompetitive but force buyers and sellers to accept the ad tech fee charged on its intermediaries. Thereby giving publishers and advertisers interfacing with these platforms no room to negotiate the fee, which in turn puts their CPM at a lesser value. Unlike direct transactions, parties using ad tech intermediaries rarely contract on the terms of use of the ad tech intermediaries. Either the publisher or the advertiser would be required to sign-up with the intermediary i.e. Google. 5% ad server fee. Further, a study undertaken by the Guardian revealed that when it had purchased its own ad inventory through programmatic buying tools. It came to be that the Guardian received only 30 pence from each Pound spent, was making it back to the publisher. Therefore, suggesting that ad tech intermediaries "*extract up to seventy percent (70%) of the advertiser's money without being able to quantify the value they provide to the brand*." [148]

[143] MoneyWeb – Oral submission from Mr. Ryk Van Niekerk, date 5 March 2024, page 70.
[144] Ibid.
[145] Ibid.
[146] Ibid.
[147] MoneyWeb – Oral submission from Mr. Ryk Van Niekerk, date 5 March 2024, page 70.
[148] Ice B (2016) Guardian Buys Own Ad Inventory , Only Gets 30p to the pound. Available at: Guardian buys own ad inventory, only gets 30p to the pound | Marketing Mag .

4.2. Ad Fraud

106. There is a causal link between low CPMs on the open web and ad fraud, this is because of the misnomer that purchasing inventory through programmatic channels is "cost effective" for advertisers.[149] In fact, attempts to discard direct transactions has the potential to expose advertisers to ad fraud. Digital spending is gradually growing in South Africa, however, not all this money is giving brands and agencies the return they should be receiving. The digital advertising market is susceptible to ad fraud, a scamming strategy used by scammers to defraud digital advertising networks for financial gain. Alternatively, bots can also cause ads to load. This process involves fraudulent inflation of performance metrics such as click rates. In other words, ad fraud occurs when ads being served or clicked on without an actual individual being involved. Such occurrence involves bots generating fraudulent views or clicks. The impact of ad fraud is dire on the businesses of digital news content distribution, the impact includes (i) financial drain for publishers and advertisers; (ii) erosion of trust; and (iii) resource diversion.[150]

107. The result of click fraud can cause a financial dent to the advertiser's budgets, reducing the funds available for legitimate ad placements on reputable news publishers' properties. In fact, a study published by FouAnalytics conducted an analysis across 6 campaigns to assess click quality. The study took to compare clicks which came from humans and those which came from bots. The vast majority for the clicks across all 6 campaigns came from bots, and only 1 – 4% were humans. Therefore, more than half of the ads were being shown to bots. According to the study, to make up for the loss of actual clicks, the advertiser would have to double spend on ad impressions to ensure that the ads are being viewed by humans.[151] Because of this conduct, advertisers unknowingly end up spending double for impressions than they would have had they entered into a direct deal. [152]

108. This behaviour harms publishers as well where news publishers may become susceptible to reduced ad revenue because it undermines trust from advertisers and publishers may potentially incur penalties from ad networks for fraudulent activity [even if its unintentional]. The Interactive Advertising Bureau ("IAB") Report indicates that due to concerns over fraud and invalid traffic, programmatically delivered digital advertising has led to scepticism about where advertisers' ads

[149] https://freestar.com/analyzing-bad-ads-bid-bucket/#:~:text=The%20accepted%20logic%20is%20that%20by%20setting,of%20the%20bad%20ads%20in%20the%20process.&text=Not%20all%20bids%20at%20low%20CPMs%20are,out%20on%20those%20impressions%20ever%20being%20filled. Accessed on 07 February 2025
[150] ClearCo (2023). The Impact of Ad Fraud on E-Commerce Businesses: Protecting Your Brand and Revenue. Available at: The Impact of Ad Fraud on E-commerce Businesses: Protecting Your Brand and Revenue .
[151] Fou A. (2022). You Thought You Saved Money by Buying Low CPM Ads Through Programmatic. Available at: https://www.linkedin.com/pulse/you-thought-saved-money-buying-low-cpm-ads-through-programmatic-fou/ .
[152] Ibid.

are being displayed and uncertainty around real persons actually viewing the content.[153] This has also contributed to the slow growth of digital advertising. In an attempt to kill ad/ click fraud, both advertisers and publishers have to invest in sophisticated anti-fraud measures, thereby resulting in a diversion of resources from content creation, innovation, and enhancing user experience.

109. Google acknowledges that volumes of invalid traffic would create a significant reputation risk for Google.[154] Google notes that it has various measures in place to remedy ad fraud and invalid traffic practices. Google has an Ad Traffic Quality Team made up of engineers and analysts around the world dedicated to its fight against invalid traffic. Google's services have defences against invalid traffic built into them, including automated filters, which are constantly being updated and react to a wide variety of traffic patterns and other indications of invalid traffic. Google has a team of data scientists, engineers, and analysts that use machine learning and deep research to identify and filter newly discovered forms of invalid traffic.[155] Therefore, these services also include features that enable advertisers to determine if an increase in traffic may be related to invalid traffic. Furthermore, Google actively engages and participates with various industry bodies that are working to address and combat invalid traffic.

5. ADTECH FEES AND SHARE OF AD SPEND

110. When digital display advertising inventory is sold and purchased through the open display channel, there are fees that are levied on the initial advertisers' expenditure by the various intermediaries that are involved before it reaches a content publisher. In some cases, these fees are levied as a percentage deduction or commission from the overall expenditure, whereas in other cases they are levied as a specific charge regardless of the CPM. These fees are sometimes referred to as the 'AdTech tax' or 'take rate'. The exact number and scale of the fees will therefore depend on the number and types of intermediaries that are involved in the purchase of advertising inventory, as well as the types of services that publishers and advertisers purchase from these intermediaries. The fees generally include some or all of the following:

110.1. Media agency/trading desk fees – which are fees associated with the planning and execution of digital ad campaigns on behalf of advertisers;

[153] https://iabtechlab.com/wp-content/uploads/2022/05/BestPracticesforAdFraudDisclosures.pdf. Date accessed on 20 March 2024.
[154] [redacted].
[155] https://www.google.com/ads/adtrafficquality/. Accessed on 07 February 2024

110.2. Advertiser ad server fees – which are fees associated with the delivery and monitoring of ads by advertisers;

110.3. Demand-side/DSP fees – fees associated with the purchasing of digital display advertising on behalf of advertisers or media agencies; services provided by demand-side intermediaries include provision of the technology platform to make the purchase, audience targeting and bid optimisation;

110.4. Supply-side/SSP fees – fees associated with the sale of digital advertising on behalf of publishers, with services including provision of the technology platform and ad exchange services;

110.5. Publisher ad server fees – fees associated with the final selection of the ad to be displayed on a website or app, the delivery of the ad creative to the website or app, and the technology to facilitate this;

110.6. Targeting data fees – many advertisers and, to a lesser extent, publishers purchase data from third-party data providers for the purpose of achieving better targeted advertising.

111. Since Google operates throughout the entire value chain, the take-rates for Google will be different depending on which services were provided by the platform. Therefore, Google effectively intermediates between advertisers and publishers in the purchase and sale of advertising inventory. Google can also provide either the intermediation services of the advertiser or publisher, with other being AdTech services provided by third-party intermediaries. These third-party intermediaries are therefore dependent on a Google-owned service along the AdTech stack. Google's take-rate is the difference between the amount paid by advertisers/ad agencies and the amount paid out to the publishers, assuming that only Google AdTech intermediation was used.

112. Google has indicated that publishers on average retain c.68c of every R1 of advertising spend sold programmatically through the AdTech stack.[156] This exercise only considers the DSP and SSP/ad network fees which Google uses to delineate as the AdTech component. On the supply side, Google charges on a basis of revenue share with publishers whereby they keep the portion of the advertising expenditure that is received by the platform based on the closing price of the auction held by each product. Google's take-rate for DSP services ranges between [10-15%] for DV360 and between [10-20%] for Google Ads. Google Ad Manager (Authorised Buyers/AdX) operating as an SSP has an average take-rate of between [10%-20%].[157] AdSense has an average take rate of 20%. AdMob has an average take rate of 20%.

[156] Google Adtech Public Hearing Transcript dated 26 March 2024
[157] Google AdTech Public Hearing Transcript dated 26 March 2024

113. However, as mentioned above there are other costs that publishers are obligated to pay which are unavoidable such as media agency fees that are applicable to the advertisers and the ad server fees on the publisher side which are essential to serve the ads into the sold inventory. Accounting for these fees, namely the GAM ad server fees for large publishers of [0-5%][158] and the media agency fees to large advertisers of [5-10%][159]. This means that AdTech intermediaries including agents absorb between [35-55%] of ad spend of which Google accounts for [30-45%] if it intermediates along the stack. The Inquiry estimates that news publishers receive c.60% of the advertiser's actual media spend.

114. The Inquiry is of the view that the fees charged by Google are not comparable with the average fees charged by other intermediary platform SSPs and DSPs. Further, other issues or concerns have been submitted to the Inquiry from publishers and DSPs relating to the transparency of the fees charged by Google. Publishers have raised that they are concerned when ads are purchased using GAM/AdX because there is no transparency in terms of how much fees get retained by Google and publishers suspect that there are hidden fees they get charged. Publishers submitted that they don't get provided with a breakdown of information that they are supposed to get including the advertiser's spend and the amount retained by Google. This has been addressed in the EU but not rolled out globally.

115. A DSP indicated that display ad exchanges typically earn a percentage of the revenue for ads purchased through their exchange. However, exchanges are generally not very transparent to DSPs/buyers regarding the amount of those fees. AdX is a non-transparent player when one interacts with Google's publisher ad server.[160]The various parties that sit in-between the publishers and advertisers in the AdTech stack take up a lot of the advertising fees, leaving the publishers with substantially less than if they sold their inventory directly to the advertiser.[161]

116. A study published in 2020 by ISBA and PWC examined impression-level transaction data for 31 million impressions across 15 advertisers, 12 agencies, five DSPs, six SSPs and 12 publishers, representing approximately £100 million of UK programmatic ad spend. The study aimed to match transactions across the various levels of the programmatic supply chain and then analyse the AdTech take at each level. The study found that on average publishers receive 51% of initial advertiser expenditure, with 49% of the initial spend absorbed by various

[158] This is estimated to average [redacted] based on the relative size of GAM and AdX revenues (Google AdTech RFI 1) but its financials indicate that GAM's global gross margin is [redacted] which suggests an average fee of [redacted]
[159] Group M RFI1 submission dated 16 November 2023.
[160] [redacted]

intermediaries prior to reaching the publisher. Of this 49%, 15% was classified as an 'unknown delta', which could not be attributed to any intermediary. Given the ISBA/PWC methodology of matching transaction log data from different intermediaries, advertisers and publishers along the supply chain, the unknown delta is likely to occur as a result of instances when they are unable to match what was paid by one party with what was received by another, this suggests a lack of transparency in the stack. An example of this would be when, for a given impression, the payment made by a DSP is recorded in the log data as being higher than the payment received by an SSP[162,163].

117. In 2019 the Department of Media, Culture and Sport commissioned a study whereby it developed indicative estimates based on feedback from a small number of industry experts.[164] The Study found that publishers receive about on average £0.62 (falling within a range £0.43 to £0.72) of every pound of advertiser investment in display (excluding video) in a programmatic open exchange, excluding any hidden fees, discrepancies and ad fraud.

118. Google has also stated that GAM fees overall only constitute 5% of news publishers ad revenue, based on a survey that looked at 100 news publishers globally.[165] Google found that on average news publishers keep over 95% of the digital advertising revenue they generate when they use GAM to show ads on their websites. This includes 75% direct ad sales where GAM took only a 1% fee, and the other 25% programmatic sales where GAM took an 18% fee. However, adjusting for the full supply chain on both, namely adding media agency and ad server fees for direct sales, and applying the 60% take out for programmatic advertising, the Inquiry estimates the result would be c.79% for the instance where 75% of sales are direct. Using the 60:40 split cited by one media agency as their direct to programmatic spend ratio[166], this reduces further to c.75% take out for publishers and 25% for Google, or five times the Google 5% estimate. Using the share of reserved sales on GAM at [40-50%] of revenues[167] as a proxy for share of direct traffic revenue, the publisher take-out would be closer to c.70% across all advertising sales.

[162] The unknown delta could be a combination of limitations in data sets, necessitating occasional estimations; DSP or SSP fees that aren't visible in the study data; post-auction bid shading; post-auction financing arrangements or other trading deals; foreign exchange translations; inventory reselling between tech vendors; or other unknown factors
[163] Programmatic Supply Chain Transparency Study. Available: https://www.isba.org.uk/knowledge/programmatic-supply-chain-transparency-study. Date Accessed on 28 November 2024
[164] Online advertising in the UK, Plum consulting (2019). Available at https://plumconsulting.co.uk/wpdm-package/jan-2019-online-advertising-in-the-uk-final-report-pdf/. Accessed on 11 February 2025
[165] Stewart (2020). A look at how news publishers make money with Ad Manager. Available: https://blog.google/products/admanager/news-publishers-make-money-ad-manager/. Date accessed on 29 November 2024
[166] Group M RFI1 submission dated 16 November 2023
[167] Google AdTech RFI2 Tranche 2 submission dated 07 February 2024

119. There is little reason to expect that the fees within the AdTech stack are competitive given the dominance of Google.

119.1. At the ad server level, the Inquiry has found that Google is super-dominant, and publishers are motivated to use GAM to secure better quality advertiser demand for which compromises on fees will be made. For instance, the GAM fixed fee is based on volume categories of estimated inventory levels and not actual inventory served, resulting in charges for unserved inventory.[168] The practice of charging an ad server fee when using AdX with a 3rd party ad server reinforces their dominance because it hinders switching to an alternative ad server whilst still taking advantage of the AdX relationships with Google DSPs. This has been remedied in the EU as part of the FCA investigation remedies but not rolled out globally.[169]

119.2. At the SSP level, SSPs have submitted that they charge direct percentage attached to revenues passed onto publisher for ads that are sold on their platforms relating to the provision of the technology platform and the execution of the transactions. Third-party SSPs submit that they charge commission fees of c.15% whereas Google charges 20% for GAM. They have also submitted that indicating that in the absence the GAM fee on 3rd party bids it would need to reduce its own fees.[170] The Inquiry found that Google (GAM) charges publishers a 5-10% fee on 3rd party SSP bids which has no credible basis given that interoperability fees are not a feature of any other part of the AdTech stack or 3rd party competitors. The Inquiry is of the view that such behaviour enables AdX to charge a higher fee to its SSP rivals through the artificially inflated GAM charges.

119.3. These fees also mean that 3rd party SSPs are restricted and impeded in their ability to effectively engage price competition and constrain Google AdTech. In fact, it's the Inquiry's view that 3rd party AdTech intermediaries typically occupy a niche service offering, e.g. they have access to niche publisher content and niche advertisers, and are often dependent on some level of Google's AdTech stack. In other words, 3rd party AdTech rivals do not constrain Google AdTech in any meaningful way.

119.4. At the DSP level, through DV360 and having exclusive restriction on YouTube and informational advantages it enables Google to charge a higher fee than would be the case if 3rd party DSPs or performance-based advertising buyers had the same advantages. Submissions made to the Inquiry show that competing DSPs charge fees of 10-15% less relative to DV360.

[168] Caxton Public Hearing Transcript dated 14 March 2024
[169] Google AdTech RFI2 Tranche 1 submission dated 27 January 2024
[170] [redacted]

120. For direct sales, the AdTech stack does less work as these are pre-negotiated and therefore do not require the auction functionality. However, direct sales still attract the same ad server fees as programmatic sales, at [0-5%] ad revenue, and if the creatives are delivered programmatically, which is increasingly the case, then the DSP fees add a further [0-5%] erosion to the advertising spend agree with the news publisher. However, as the direct sales can attract CPMs of up to c.10 times that of programmatic advertising, the implication is that, despite doing less work, the DSP and ad server earn a far higher Rand value for direct sales. This makes little sense in a competitive market context and hence must be the product of market power in the AdTech stack.

121. The Inquiry found the submissions made by Google on take-rates by publishers to be in line with other empirical studies such as the PWC/ISBA. It is worthy to note that the study was later revisited to exclude the unknown and agency fees in 2022, resulting in a higher estimated 65% take out for publishers. However, adding back their estimated agency fee of 7% results in a c.60% take out for publishers.[171] The unknown 15% in the original study has resulted in calls for greater transparency and it appears Google has responded with a global rollout of 'Confirming Gross Revenue' in 2022 which allows GAM 360 publishers to request a revenue verification report.[172]

122. Lack of transparency in open display seems to be a worldwide problem whereby publishers and advertisers heavily rely on AdTech intermediaries in order to manage the process of real-time bidding and ad serving but for some odd reason are fully aware or have the knowledge of how much are they being charged at each level of the AdTech stack. Lack of transparency and asymmetric information can lead to undesirable outcomes for instance, advertisers may decide not to use the AdTech stack services. The main concerns that have come up from ad agencies and publishers are the transparency of fees paid to different intermediaries, data sharing and ad verification. It is evident that where there are these transparency issues the platforms that have market power can exploit such.

123. The Inquiry is of the view that when there is lack of transparency in fees advertisers and publishers might make uninformed decisions as they might not be able to choose which AdTech platforms might bring them the highest yield. Even the ("ACCC") does make mention

[171] https://www.isba.org.uk/system/files/media/documents/2023 01/ISBA%20%20PwC%20programmatic%20supply%20chain%20study%20II%20%28summary%29-%2018%20January%202023.pdf. Accessed on 16 March 2024

[172] https://blog.google/products/admanager/advancing-transparency-for-buyers-and-publishers/. Accessed on 16 March 2024

that how the AdTech functions and its complexities have a contribution to the lack of transparency.[173] The ACCC named the factors that might contribute to the complexity such as:

123.1. *Advertisers and publishers only have visibility of their contracted part of the value chain:* The value chain consists of many intermediaries who make the auction happen therefore publishers and advertisers only have direct relationships with their own AdTech service providers that they interface with. This makes it difficult for them to have knowledge of the pricing paid by advertiser and what has been received by the publisher. In addition, hidden fees can erode the value proposition for both advertisers and publishers. The general lack of transparency can lead to inefficiencies and potential for manipulation within the AdTech supply chain.

123.2. *Auctions are automated:* To facilitate the buying of inventory **AdTech** providers rely on complex and automated systems. Therefore, advertisers and publishers rely on AdTech intermediaries to make a sale of the inventory as they do not get visibility on how these systems work. Further, advertisers and publishers don't understand how AdTech intermediaries make bidding decisions.

123.3. *Reliance in third parties to measure performance:* To **measure** the performance of their ad campaign advertiser heavily rely on DSPs and ad servers.

124. The ACCC found that Google's Unified Auction is opaque and has a potential of enabling Google to engage in self-preferencing and retain undisclosed fees. Publishers are unable to determine the cause of lower advertiser demand for third party DSPs compared to Google DSPs which could lead to Google channelling its DSP demand to its SSP. In addition, publishers might therefore, choose to use Google's SSP over other third party SSPs due to Google's DSPs importance as a demand source. The ACCC also discovered that the open bidding process is opaque compared to auctions run by header bidding. This makes it difficult for publishers to effectively assess the value of header bidding and different SSPs and ultimately determine which one is efficient in selling their inventory. Furthermore, publishers do not see the need to sustain costs of integration with third party SSPs through header bidding. Lastly, publishers cannot verify the amount Google is retaining in AdTech fees is correct.

125. In terms of transparency over pricing of AdTech services the ACCC found that Google's pricing of Google Ads is opaque, and Google has the incentive and ability to retain hidden amounts of advertiser expenditure. Advertisers observe bids they submit on a cost-per-click basis and publishers observe the revenue they receive on a cost-per-mille basis but the price of the

[173] Australian Competition and Consumer Commission. 2021. Digital Advertising services inquiry. Available here: https://www.accc.gov.au/about-us/publications/digital-advertising-services-inquiry-final-report. Accessed on 07 January 2025

conversion and take-rates that Google retains is unknown due to Google converting each bid on a cost-per-impression basis. Therefore, the conversion process (from cost-per-click to cost-per-impression) makes things for advertisers and publishers opaque since how the bids are received and made are different for each party. The ACCC also found that 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 platforms. Advertisers are not aware of how much of their ad spend makes it to publishers. Advertisers need to understand the take-rates across the value chain to enable them to focus their expenditure on efficient service providers. Similarly, there is a need for publishers to get access on the take-rates so that they can optimise the sale of their inventory.

126. To address the above concerns and improve transparency in Australia, the ACCC recommended that industry should work together to develop and implement standards that require AdTech 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 advertisers and publishers 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.

127. As discussed above the Inquiry does take note that Google has taken measures to address the transparency issues which were raised by the ACCC and other competition authorities. Google has implemented the “Confirming Gross Revenue” which is a program that has been rolled out globally that helps publishers and buyers verify that there are no hidden fees in the AdTech supply chain.[174] In this program advertisers and publishers can opt in, and they are not forced to disclose any fee information. However, in response to the DMA Google has introduced new price reports to address issues of transparency.[175] Such price transparency reports are available for DV360, CM360, Google Ads, GAM, AdSense and AdMob. These reports show the price and any fees paid by the advertiser; the remuneration received by the publisher including any deductions and surcharges where the relevant publisher is using Google’s advertising products (subject to certain conditions, including publisher consent); and the measure on which these prices, fees and remunerations were calculated. In addition, advertisers are able to request a file containing daily data from any of the Google products.

[174] Google Public Hearing Transcript dated 26 March 2024
[175] Google RFI3 Tranche1 submission dated 29 April 2024

128. Google further submits that it has launched a new solution in GAM called Regional Data Access which provides non-aggregate data to EEA publishers at no additional cost and resembles Google's existing Data Transfer Files. Google has also enhanced certain data reporting to advertisers. However, the DMA-specific changes mentioned above that relate to Google's advertising service have not been given effect in the South African market but only apply in the European countries.

6. CONCERNS WITH GOOGLE'S STRUCTURAL DOMINANCE

6.1. AD SERVING AND LANGUAGE POLICIES

129. In the AdTech stack market it appears Google has implemented strict policies regarding the content and format of ads.[176] Ads in a vernacular language are not promoted and supported on the Google AdTech platform.[177] Repetitive attempts to use unsupported languages on Google's platforms may result in advertisers being blocked from being able to create any new campaigns, ads, or assets.[178] Advertisers are required to use language targeting to reach their consumers. Language targeting is the process of setting up your ad server to be shown to only users who speak a specific language. To detect a user's language, Google uses machine learning algorithms to determine the language(s) a person uses. Google has adopted signals to identify a user's language for displaying the appropriate Display Network. Google Display Network ads enable Google to evaluate the users page viewing history to detect their preferred languages. For example, if a user has recently viewed web pages in English and later views a web page in another language, then Google may serve them display ads in either historic language detected and their preferred languages.[179] For example, if a user has recently viewed web pages in English and later views a web page in another language, then Google may serve them display ads in either historic language detected.

130. During the public hearings vernacular media houses have stressed that Google only has 49 official advertising languages with English as the most dominantly recognised language, and is the only advertising language used in South Africa. Maroela Media which is an Afrikaans

[176] Rechberg A (2024) Overcoming Common Google Ads Challenges. Available at: https://yourmarketingpeople.com/blog/overcoming-common-google-ads-challenges/#:~:text=Google%20has%20strict%20policies%20regarding,compliance%20with%20industry%2Dspecific%20regulations. Accessed on 29 November 2024
[177] Googles Advertising Policies Help. Available at: https://support.google.com/adspolicy/answer/6088505?hl=en. Accessed on 28 November 2024
[178] Ibid.
[179] Pokorny E (2023) Google ads language targeting: How to target languages effectively. Available at: https://www.weglot.com/blog/google-ads-language-targeting#how-does-google-detect-a-users-language. Accessed on 28 November 2024

community publisher with web and app properties, has submitted that it has one advertising campaign using Google Ads. Maroela Media explained that the reason it has only one campaign with Google Ads is because the other campaigns were not verified owing to the language barrier. For instance, if an advertiser hypothetically wants only Afrikaans speaking consumers to see their Google Ad, which is in Afrikaans, then the advertiser would be required to set the ad's language targeting settings to Afrikaans (this example is hypothetical, Google Ads does not support Afrikaans).[180] In addition, Maroela submitted that it does not have access to Googles Ad Exchange due to the language barrier. Maroela further stressed that Google Ad exchange is used by most ad agencies for their advertising needs and is the industry standard when it comes to programmatic through both online and websites. Therefore, if they had access to Google's AdX, they would get access to major brands.[181] Omnicom Group submitted that it would be recommended if publishers would be allowed to do advertising in their native languages i.e. an Afrikaans publisher to put Afrikaans adverts on their website so that the language could correspond with the content.[182]

131. Other community media publishers also submitted that with the language barrier, they are excluded from enjoying the benefits of AdTech ad spend since they can't compete for advertising.[183]

132. Google has submitted that the reasons for putting such stringent language policies are to prevent misleading content, to ensure there is compliance with the industry rules and specific regulations, and to prevent ad or destination content in an unsupported targeting language.[184] Google's rationale is to protect disinformation and ensure that there are proper policies in place. The Inquiry also acknowledges Google's attempts at considering SA language capabilities given its Google Translate service and the fact that vernacular content is reviewed before screening on YouTube and provided with English subtitles. However, the Inquiry is of the view that more support is required for non-English community media as identified by vernacular media (more especially Afrikaans media) and Google itself.

6.2. **EXCLUSIVITY OF YOUTUBE**

133. In 2015, Google announced that it will stop offering YouTube ad inventory for sale via Google's ad exchange, the Double Click Ad exchange, where third-party DSPs could purchase YouTube

[180] Maroela Media Public Hearing Transcript dated 7 March. Page 17
[181] Ibid.
[182] Omnicom Media Group Public Hearing Transcript dated 20 March 2024, page 13.
[183] Med8 Public Hearing Transcript dated 06 March 2024
[184] Google RFI3 Tranche1 submission dated 10 June 2024, page 19.

inventory.[185] This means that advertisers would have to buy inventory from Google AdWords, or their Double Click Manager which is known as DV360. What this means is that other non-Google DSPs are no longer able to have programmatic access to YouTube inventory. In essence, by removing 3rd party DSP access to YouTube inventory, Google had created further enclosures to its YouTube advertising walled garden.

134. Google submits that such a decision to restrict third party DSPs from buying ads on YouTube was to improve the YouTube advertising experience for its clients and the focus was to put more effort in future development on the formats and channels used by most of its partners.[186] Further, the Ad exchange did not support buying TrueView ad formats whilst YouTube only offered display ads and non-TrueView video ads for desktop computers using the Ad exchange. For YouTube to shift to offer TrueView ad formats requires substantial investments from Google and maintaining third-party DSPs on Ad exchange would have compromised the quality of YouTube's ads.[187] Google further submits that selling via third-party DSPs would make it more difficult for YouTube to maintain a consistent high-quality experience for users. In addition, TrueView formats require complex API integration with YouTube's ad stack and allow third-party DSP integration for YouTube ad formats which only accounted for [10%-15%] of overall YouTube video spend[188]. This would require substantial additional investments.

135. Google implicitly recognises that YouTube exclusivity strengthens its position in the AdTech stack as it offered to end the exclusivity in its discussions with the EU on remedies.[189] This also suggests that the rationale for exclusion in the first place is rather tenuous.

6.2.1. **The importance of Youtube**

136. The Inquiry understands that YouTube has a strong position in video that could not easily be replicated. YouTube has consistently grown and is still growing its user base. Google's purchase of YouTube yields a number of competitive advantages. YouTube is growing in importance relative to linear TV as data costs decline and the penetration of smart devices (TVs and phones) increases. YouTube also has substantially more consumer data on the audience given users are logged in via Google. This has resulted in budgets shifting from linear TV to YouTube. This provides Google with an advantage of scope through the accumulation of data. YouTube provides Google with access to data that can be used to improve the quality

[185] https://www.thedrum.com/news/2015/08/07/google-curbs-third-party-access-youtube-inventory
[186] https://videoweek.com/2015/08/07/google-to-to-prevent-non-google-dsps-from-buying-youtube-inventory/
[187] Google RFI3 Tranche 3 submission dated 10 June 2024, pg20.
[188] [redacted]
[189] https://www.reuters.com/technology/exclusive-google-offers-let-ad-rivals-place-youtube-ads-eu-antitrust-probe-2022-06-13/. Accessed on 29 November 2024

of its ad targeting services provided by Google Ads and by Google's demand-side platform. As advertising inventory on YouTube, since 2015, can only be purchased through Google Ads and Google's demand-side platform, advertisers don't have any other option than to be encouraged to use Google's DSP services. This provides DV360 a material advantage where media agencies seek to reduce the number of DSPs they contract with, as DV360 has to be one of those DSPs simply to access YouTube inventory.[190]

6.2.2. The impact of the restriction on Youtube inventory on competition

137. YouTube serves as a significant source for news-related content, whether from traditional news outlets expanding their digital footprint or from independent content creators and vloggers. YouTube has positioned itself as a delivery channel for video content from traditional news media organisations.[191] Publishers submit that they have millions of hours of video content hosted on YouTube and regard YouTube as a critical partner for content distribution. YouTube provides a very large reach among consumers in terms of followers and likes, increases digital footprint and seems to be the most frequently used video content service. Publishers also submit that posting content on a channel like YouTube allows for a consumer to view at any time.[192] It is worth noting that YouTube was mostly consumed by mobile but now it's also growing through connected TVs.[193] Smart TVs are the leading reach driver and play a big role in distributing content.

138. Other DSPs have submitted to the Inquiry that such limitations on access to YouTube inventory, such restrictions could be detrimental to competition.[194] Another DSP submitted that advertisers who want to purchase YouTube inventory are forced to use Google's DSPs offering. In addition, they have submitted that if such restrictions are put in place that means they must adapt to Google's policy changes to use its service and/or participate in its auction. Therefore, they may need huge amounts of investments or resources to be able to interoperate with the walled garden's proprietary standards. This can result in significant capital expenditure for the DSPs in order to maintain parity with other competitors, as well as divert their resources away from other areas of investment or innovation.[195] Furthermore, other DSPs have stressed that ads on YouTube are regarded by many advertisers as "must have" inventory and that puts Google is in a better competitive advantage than other DSPs.[196]

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190 [redacted]

193 Omnicom Public Hearing Transcript dated 20 March 2024

194 [redacted]

139. This has broader consequences for competing DSPs in the open auction AdTech services market. Effective multihoming is not a feature of the DSP market with advertisers and ad agencies limiting the number of DSPs they facilitate their campaigns through. Because YouTube inventory can only be sold exclusively through DV360, advertisers/ad agencies have incentive to use DV360 for all their ad campaigns, including through open auctions. The "must have" status of YouTube inventory, the corresponding exclusive arrangement between this inventory and Google's own DV360 DSP, and the lack of interoperability with other DSPs not only creates a closed video advertising ecosystem, it distorts competition in the adjacent open auction AdTech services market by tying the closed video ecosystem to this market. Here advertisers/ ad agencies can have their video/open auction one-stop-shop AdTech service needs met.

140. Facebook has a similar structure to Google/YouTube in place whereby no other DSPs for video inventory have access to Facebook's properties. The ACCC found Facebook as the largest publisher operating a closed channel (i.e. it does not use the ad tech supply chain). It sells ads on its properties, such as Facebook and Instagram through its own system, Facebook Ads Manager.[197] 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, Facebook and other sources of video advertising do not impose any competitive constraint on Google in the open auction AdTech market and vice versa.

141. The ACCC also found that there are differences in the way that users interact with content and the way they view ads on social media platforms as compared to YouTube. This means that advertisers are less likely to see the video advertising offered on these platforms as substitutes. For instance, ads on Facebook and Instagram are generally not in-stream video ads. Instead, a consumer can determine if video ads 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.

[197] ACCC Digital advertising services inquiry final report 2021, page 97

142. Google offers incentives for its DSP services to advertisers and advertising agencies to accelerate the adoption of and investment in Google's advertising product.[198] This implies that advertisers are offered incentives based on advertising spend using 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. Furthermore, under Google's Display & Video Incentives Program, Google also offers incentives which will allow advertisers to have access to special inventory, such as YouTube. The Inquiry notes that as much as volume discounts and incentive programs are often used by firms to compete for customers, they may also have a detrimental effect on competition. For instance, advertisers may end up not seeing the value of spending more on other video ads or advertising. 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.

143. Another issue with having YouTube video inventory exclusively for DV360 and subsequent tying with open auctions is the stronger position of DV360 as it is capable of offering advertisers a larger range of quality inventory and subsequently, more publishers select GAM. These network effects positively reinforce Google as the "go to" AdTech intermediary, at the exclusion of rival DSPs.

144. Google submitted that YouTube was focusing on developing newer TrueView inventory, which is a type of ad format that seems to offer better value and a higher quality user experience. Interoperability of other DSPs is still important to access YouTube inventory and effectively operate in the AdTech space.

145. DSPs have submitted that they have systems in place to detect bad ads or ad fraud thereby negating Google's concerns about ad quality.[199] They further note that they have brand safety tools to prevent any ad fraud that may take place. Ad agencies submitted that they prioritise quality of ads over quantity, and they have partnered with certain publishers to be onboarded within the DSP where they rather buy a programmatic guarantee that is a secure placement with the publishers.[200] Therefore, quality of ads is something that is being prioritised by both DSPs and ad agencies. The Inquiry understands that Google has a dedicated Ad Traffic Quality Team across the globe that deals with invalid traffic or inappropriate ads.[201] Therefore, since Google provides third-party access to ad inventory on many publisher websites where

[198] https://support.google.com/adspolicy/answer/141252?hl=en. Accessed on 29 November 2024
[199] [redacted]
[200] Omnicom Media Group Public Hearing Transcript dated 20 March 2024
[201] https://www.google.com/ads/adtrafficquality/how-we-prevent-it/. Accessed on 07 February 2025

publishers utilise Google's ad tech services. The Inquiry is of the view that there is no reason for Google to not deal with inappropriate ads transacted via third parties, as it currently does for other publisher websites.

7. CONCLUSION

146. Google has established a super-dominant position in the entire AdTech stack value chain in South Africa accounting for [80-90%] market share. This has been achieved through acquisitions and entrenchment strategies, many of which are ongoing, with the foundation being control over the supply-side inventory through GAM. The dominant position across the stack now benefits from strong network effects, where websites choose Google supply-side to access quality advertisers and advertisers choose Google demand-side to access quality inventory. These network effects make it difficult for competitors to dislodge Google products even with better performance and/or pricing because it is access to quality advertisers and inventory that are of greater importance. This limits competition from third-party rivals which invariably occupy niched positions and do not provide sufficient competitive pressures to constrain Google's AdTech. Third-party rivals are to some extent dependent on some level of Google's AdTech stack (e.g. the ad server and ad exchange) to provide their intermediation services.

147. The entrenchment strategies currently in place that adversely affect competition include (i) GAM's additional ad server fees to publishers on bids from third-party SSPs, (ii) GAM providing AdX with the winning third-party SSP bid as a floor price, (iii) AdX additional ad server fees to publishers using third-party ad servers, (iv) information sharing and close integration across Google products and (v) YouTube exclusivity for DV360. The result is not just the exclusion of rivals, but also that fees are higher than in a competitive market. Furthermore, there is insufficient transparency on advertising pricing and deductions for SA publishers relative to the EU.

148. News publishers are placed at a user data disadvantage by Google sharing data across its products but not with the publisher websites themselves. News media is further hindered by the asymmetry of data and information being provided with limited programmatic advertiser information to target advertisers for direct sales, yet at the same time, DSPs are able to target the same publisher's website inventory through the AdTech stack at lower CPMs and corresponding AdTech intermediation fees.

149. Vernacular news media are placed at an additional disadvantage by Google not prioritising ad reviews in South African vernacular languages and then self-imposing a complete prohibition on ads in these languages on their AdTech. This undermines the ability of vernacular news media to generate revenue given the dominant position held by Google AdTech.

APPENDIX A: LIST OF SUBMISSIONS RECEIVED

Submission made by	Stakeholder type (e.g., platform, news media business, ad broker, etc)	Submission full name	Submission date
Adform	Intermediary	Response to RFI1 dated 31 May 2024	31 May 2024
Arena Holdings	Mainstream media	Response to RFI1 dated 15 November 2023	15 November 2023
Arena Holdings	Mainstream media	Response to RFI2 dated 26 January 2024	26 January 2024
Arena Holdings	Mainstream media	Response to RFI3 dated 28 June 2024	28 June 2024
Caxton & CTP	Mainstream media	Response to RFI1 dated 15 December 2023	15 December 2023
Caxton & CTP	Mainstream media	Response to RFI2 dated 14 February 2024	14 February 2024.
Caxton & CTP	Mainstream media	Response to RFI3 dated 19 July 2024	19 July 2024
Criteo	Intermediary	Response to RFI2 dated 7 February 2024	7 February 2024
Dentsu	Intermediary	Response to RFI2 dated 29 January 2024	29 January 2024
Google AdTech	Platform	Response to RFI1 Tranche 1 dated 15 November 2023	23 November 2023
Google AdTech	Platform	Response to RFI1 Tranche 2 dated 05 December 2023	05 December 2023
Google Adtech	Platform	Response to RFI1 Tranche 3 dated 09 February 2024	09 February 2024
Google Adtech	Platform	Response to RFI2 Tranche 1 dated 27 January 2024	27 January 2024

Google Adtech	Platform	Response to RFI2 Tranche 2 dated 07 February 2024	07 February 2024
Google AdTech	Platform	Response to RFI3 Tranche 1 dated 10 June 2024	10 June 2024
Google AdTech	Platform	Response to RFI3 Tranche 2 dated 29 April 2024	29 April 2024
GroupM	Intermediary	Response to RFI1 dated 16 November 2023	16 November 2023
Magnite	Intermediary	Response to RFI1 dated 22 November 2023	22 November 2023
Magnite	Intermediary	Response to RFI2 dated 18 January 2024	18 January 2024
Magnite	Intermediary	Response to RFI3 dated 11 June 2024	11 June 2024
Media24	Mainstream media	Response to RFI1 dated 15 November 2023	15 November 2023
Media24	Mainstream media	Response to RFI2 dated 19 January 2024	19 January 2024
Media24	Mainstream media	Response to RFI3 dated 28 June 2024	28 June 2024
Microsoft Xandr	Platform	Response to RFI1 dated 14 November 2023	14 November 2023
Microsoft Xandr	Platform	Response to RFI2 dated 19 January 2024	19 January 2024
MoneyWeb	Mainstream media	Response to RFI1 dated 11 December 2023	11 December 2023
MoneyWeb	Mainstream media	Response to RFI3 dated 28 June 2024.	28 June 2024.
Taboola	Intermediary	Response to RFI1 dated 15 December 2023	15 December 2023
Trade desk	Intermediary	Response to RFI2 dated 26 January 2024	26 January 2024

APPENDIX B: STATEMENT OF ISSUES

Submission made by	Stakeholder type (e.g., platform, news media business, ad broker, etc)	Submission full name	Submission date	Report shorthand Reference
Arena Holdings	Mainstream media	Response to Statement of Issues dated 15 November 2023	15 November 2023	Arena SOI
Caxton & CTP	Mainstream media	Response to Statement of Issues dated 05 December 2023	05 December 2023	Caxton SOI

APPENDIX C: FURTHER STATEMENT OF ISSUES

Submission made by	Stakeholder type (e.g., platform, news media business, ad broker, etc)	Submission full name	Submission date	Report shorthand Reference
Arena Holdings	Mainstream media	Response to Further Statement of Issues dated 26 January 2024	26 January 2024	Arena FSOI

APPENDIX D: PUBLIC HEARINGS

Submission made by	Stakeholder type (e.g., platform, news media business, ad broker, etc)	Submission full name	Submission date
Caxton & CTP	Mainstream media	Public Hearing Transcript dated 14 March 2024	14 March 2024
Google AdTech	Platform	Public Hearing Transcript dated 26 March 2024	26 March 2024
Group M	Intermediary	Public Hearing Transcript dated 11 March 2024	11 March 2024
Maroela Media	Media business	Public Hearing Transcript dated 07 March 2024	07 March 2024
Media24	Mainstream media	Public Hearing Transcript dated 05 March 2024	05 March 2024
MoneyWeb	Mainstream media	Public Hearing Transcript dated 05 March 2024	05 March 2024
Med8	Community media	Public Hearing Transcript dated 06 March 2024	06 March 2024
Omnicom Media Group	Intermediary	Public Hearing Transcript dated 20 March 2024	20 March 2024
RTB House	Intermediary	Public Hearing Transcript dated 20 March 2024	20 March 2024

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