UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

INDEX EXCHANGE INC., Plaintiff, v. GOOGLE LLC, Defendant.	Civil Action No. _____ **JURY TRIAL DEMANDED**

COMPLAINT

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INTRODUCTION

1. Google is an abusive monopolist. This Court, and others, have already made this finding. What began in 1998 as an epitome of American entrepreneurship — a Silicon Valley start-up providing the means to navigate the astonishing new world of online information — became a behemoth, crushing innovative competitors and extracting monopoly profits from its control over essential components of the internet economy.

2. The pattern is unmistakable. Beginning with its unlawfully maintained monopoly over internet search, Google routinely exploited its market power in one sector to establish entrenched dominance in another. Google did this in myriad ways, from coercive tying arrangements, to prohibitions on steering customers to lower-cost rivals, to technological "solutions" that favored Google's own products in adjacent markets, to gleaning critical data about markets it controls while refusing to provide access to competitors on an equal footing. With these actions, Google illegally dominated a market that is both enormous and often invisible to the average internet user.

3. In its landmark digital advertising antitrust case against Google, the U.S. Department of Justice emphasized the scale of market in question, noting that "website publishers in the United States sell more than 5 trillion digital display advertisements on the open web each year—or more than 13 billion advertisements every day."[1] For context, the number of daily transactions for open-web display advertising units outstrips the 650 million daily transactions processed by VISA and 51 million daily trades on the New York Stock Exchange by several multiples.

[1] *United States et al v. Google LLC*, E.D. Va, 23-cv-00108; Dkt# 1, Complaint, at page 5.

4. Many website users are unaware of the sophisticated advertising infrastructure that operates behind the scenes of each visit to help publishers monetize their digital content. Most advertisements appearing on webpages today result from "programmatic sales," meaning transactions that are negotiated and finalized electronically, often through real-time bidding ("RTB") rather than through direct sales. The technology that enables these programmatic sales, known as the "ad tech stack," executes hundreds of billions of individual ad sales every day, engaging with advertisers, website publishers, and users around the world.

5. The ad tech stack connects advertisers looking to sell products with individual website users who may be interested in those products. Advertisers engage with demand-side platforms (DSPs), which connect to supply-side platforms (SSPs, also called ad exchanges, like Index Exchange). In turn, ad exchanges connect to publishers through their publisher ad servers (technology that helps publishers manage their digital ad inventory). At each phase, intricate technology capable of processing millions of transaction requests per second communicates in near-real-time to deliver meaningful ads to interested users. Ad revenue from these transactions helps keep the open web free because publishers do not need to charge subscription fees to users who access ad-supported content.

6. Google maintains a dominant position in every part of the ad tech stack and entrenched its power through anticompetitive conduct rather than fair competition. It has monopoly power in both the publisher ad server market and in the ad exchange market. Google was not the first entrant in either of these markets and did not achieve its market position by developing innovative products. Instead, Google purchased substantial market share by acquiring the leading platform used by publishers to sell ad space (DoubleClick), then leveraged its power in search—and thus its control over an essential pool of advertisers purchasing search-related ads

— to force even more publishers to adopt the platform. Google's efforts have been an unmitigated success. Ultimately, 90% or more of internet publishers adopted Google's publisher ad server. With its power in the publisher ad server market entrenched, Google then used that power to favor its ad exchange, AdX, and quickly established monopoly power in that market as well.

7. Controlling the publisher ad server gave Google influence over the crucial final step in the sale of an ad — the publisher's decision to choose one advertiser's offer over another. Google repeatedly abused its dominant position by manipulating the sale logic within its publisher ad server to favor offers originating from Google's ad exchange. This impeded competing exchanges' ability to secure sales. Google's anticompetitive measures prohibited publishers from steering advertisers to lower-cost platforms and forced rival ad exchanges to engage in expensive and inefficient efforts to develop work-arounds that would have been unnecessary in a fair market, and then to do yet more work convincing publishers and other market players to adopt their solutions. None of this succeeded in threatening Google's dominance or establishing a truly competitive market.

8. Index Exchange has been providing services related to internet advertising since its founding in 2003, about the same time that Google started expanding beyond search into advertising technology more broadly. Index Exchange was founded with a simple but ambitious goal: to bring fairness, transparency, and efficiency to digital advertising. What began as a small, independent ad network has grown into one of the world's leading ad exchanges. From the outset, Index Exchange followed a business model favoring the provision of rich, granular reporting to its customers. In prioritizing such transparent and customer-centric policies, Index Exchange quickly established its reputation as an independent, trusted marketplace committed to driving value for publishers. This approach contrasts starkly with Google's, which guards its advertising sales logic

inside a "black box," and withholds auction-level data from customers by not providing rights to audit auction outcomes.

9. Despite offering better features and lower pricing than Google, Index Exchange has always had to fight a steep uphill battle to generate sales and win customers. Google's exploitation of its monopoly over publisher ad servers to favor its own ad exchange and punish rivals materially harmed Index Exchange. For years, Google intentionally concealed its conduct, making it impossible for rivals to counteract these anticompetitive behaviors. Hidden behind layers of complex technical design, opaque policies, restricted data access, and rigged auction mechanics, Google wove its abusive practices deeply within the fabric of its systems. The harm was real, but the mechanisms were obscured; it was only after years of investigation, expert scrutiny, and compelled discovery that an understanding of these practices emerged. Google's anticompetitive restraints limited Index Exchange's success in the market for ad exchanges to a level that is far below what it would have achieved in a genuinely competitive environment.

10. To remedy these wrongs, Index Exchange brings this suit.

PARTIES

11. Plaintiff Index Exchange Inc. is an Ontario Corporation with its headquarters in Toronto, Ontario. It has offices in New York, San Francisco, and a number of other cities in Canada, Europe, Asia, and Australia.

12. Google LLC is a Delaware limited liability company with its principal place of business in Mountain View, California. Google has offices in New York and other cities throughout the United States and around the world. Google LLC is the primary operating subsidiary owned by the publicly traded holding company Alphabet Inc., which is incorporated in Delaware. The sole member of Google LLC is XXVI Holdings, Inc., a Delaware corporation with its principal place of business in Mountain View, California.

JURISDICTION AND VENUE

13. This Court has jurisdiction over the federal antitrust claims asserted in this case pursuant to 15 U.S.C. §§ 15 and 26, and 28 U.S.C. §§ 1331 and 1337.

14. This Court has personal jurisdiction over Google LLC because it conducts extensive business in interstate commerce, including in this District, and it offers and sells products and services related to the claims at issue in this case, including advertising technology, to customers in this District.

15. Venue is proper in this District under 15 U.S.C. § 22 and under 28 U.S.C. § 1391 because Google transacts business in this District, including business related to the advertising technology at issue in this litigation.

FACTUAL ALLEGATIONS

I. In 25 Years, Open-Web Advertising Has Grown to Become a $100 Billion Business.

A. Technological Innovation Provides Increased Control and Flexibility for Both Advertisers and Publishers.

16. Display ads are "on line ads that engage users with text or image-based content, link to the advertiser's webpage, and often appear in rectangular spaces on publishers' websites." United States v. Google LLC ("Ad Tech Liability Op."), 778 F. Supp. 3d 797, 821 (E.D. Va. 2025). Viewers see display ads when they visit webpages from a browser on a computer or mobile device. *Id.* Open-web display ads are ads that "run on websites that use third-party ad tech infrastructure to match advertisers' ads to publishers' inventory." *Id.* Recent estimates indicate that nearly 60% of users' time online is spent on the open web. Advertising sales on the open web accounted for an estimated $104 billion in 2024 alone.

17. Digital infrastructure developed and implemented over the past 25 years enabled this economy. The data-processing power of this infrastructure creates several advantages for

internet advertising compared to traditional print and broadcast media. An internet advertiser can more precisely target its audience using data on specific demographics, behaviors, interests, and locations; for example, an advertiser may favor users whose recent web browsing history suggests potential interest in its product.

18. An internet advertiser can also tailor its advertising strategy — for instance, capping expenses by limiting the number of actual views of a given internet page, i.e., the number of "impressions," that will include the ad. These capabilities also create opportunities for smaller advertisers to purchase a carefully selected or narrowly targeted series of impressions, keeping their expenses down while maximizing the potential impact of their advertising investments. Perhaps most importantly, publishers can monetize remnant digital ad inventory that does not sell through traditional direct sales models.

19. Open-web display advertising appeared shortly after the world wide web was first introduced in 1993. Initially, buyers purchased ads through direct sales, when an advertiser (or its agency) would contract directly with a website publisher to have its advertisements displayed alongside the publisher's content. By the late 1990s, intermediaries known as "ad networks" developed to facilitate larger and more widely disbursed advertising purchases. Generally, ad networks negotiated with a set of publishers to acquire a large volume of advertising space, then bundled impressions from various publications and sold them, with a mark-up, to advertisers.

20. By the early 2000s, the process became more thoroughly automated, laying the groundwork for modern, programmatic ad sales. Software tools developed to support automated management of an enormous volume of individual advertising transactions on an impression-by-impression basis. Eventually, these tools evolved into what is known as the "ad tech stack," a collection of software products that effectively negotiate for the sale of billions of impressions

daily following pricing and placement guidelines established by publishers, advertisers, and other market participants.

B. Anatomy of the Ad Tech Stack.

21. Programmatic advertising bifurcates into two-sides commonly referred to as the 'buy-side' (advertisers seeking to purchase display ad space) and the 'sell-side' (publishers seeking to sell space for display ads on their webpages). Each side relies on software that supports its ability to engage with the programmatic market where millions of ad sales are transacted every minute.

22. The term "ad tech stack" refers to these programmatic advertising tools that intermediate the transaction between advertisers and publishers, i.e., the process of serving advertisements on web sites and apps. Each function in the ad tech stack is performed by different software. While the components of the ad tech stack must interact and share common parameters, each operates separately and is understood by industry participants to be a distinct product.

Different components of the ad tech stack include:

Buy-Side Technology

Advertiser ad servers: stores files for various advertisements and tracks the performance of different ads served in different publications, including information about whether the user clicked through on the ad to visit the advertiser's website, whether a purchase was made, and similar data.

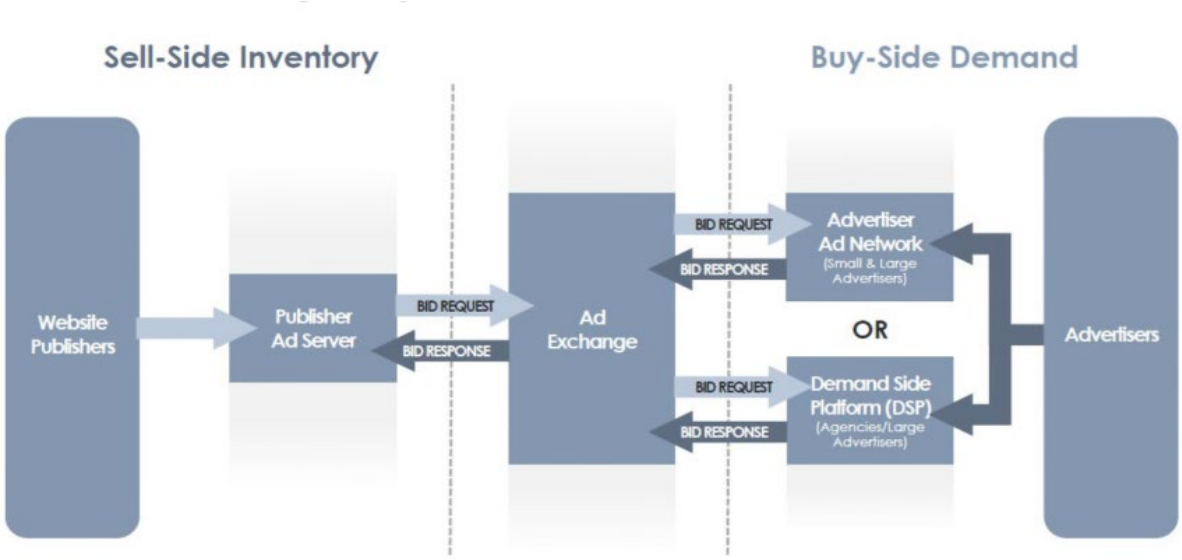
Demand-Side Platforms (DSPs): manages advertisers' interactions with publishers by evaluating the desirability of an available impression and generating bids within parameters established by the advertiser to fulfill the goals of the relevant campaign. Each DSP works with many advertisers so that it has many sources of potential demand for every impression made available to the DSP.

Sell-Side Technology

Ad Exchanges (also known as Supply-Side Platforms or SSPs): receives information about an available impression from publishers, conducts an auction among selected DSPs to identify a winning bid for that impression, communicates that bid to the publisher's ad server along with the corresponding ad.

Publisher ad servers: responsible for making decisions about what ads to show on a website (i.e., filling the ad slots on a website) by managing a publisher's available ad space, including describing the size and placement of an ad opportunity, identifying and communicating with the Ad Exchanges or other sources from which the publisher wants to obtain bids, setting minimum (floor) pricing, and, when there are multiple potential purchasers of a particular impression, determining which of them will win the transaction and therefore which ad will be served.

23. The relationship between these different components is illustrated below:



24. These technological components of the ad tech stack support programmatic ad sales at an almost unimaginable scale. An individual ad sale occurs each time a user anywhere in the world opens a webpage from a publisher who sells ad space using at least a subset of the tools in the ad tech stack. Within the fraction of a second it takes for the webpage to load in the user's browser:

(i) the publisher ad server assembles information about the impression, including the context and characteristics of the ad space and, in many cases, information about the user who is accessing the page;

(ii) the publisher ad server transmits this information to one or more ad exchanges, either sequentially or simultaneously;

(iii) the ad exchanges receive data on the impression and seek bids from multiple DSPs, each of which represents many advertisers;

(iv) each DSP determines which of its demand sources has the highest bid (or should be selected as the winning bid on some other basis) and transmits that information to the ad exchange;

(v) the ad exchange evaluates bids received from different DSPs to determine whether one or more of the bids meets the requirements of the publisher, including meeting or surpassing the floor price for the bid, then selects one such bid as the winner of the ad exchange auction and submits that bid to the publisher ad server; if the publisher ad server sought and obtained bids from multiple exchanges simultaneously, it determines which bid submitted from which ad exchange will win the transaction;

(vi) the publisher ad server delivers the advertising copy and other media for the winning advertisement to the publisher so that it can be loaded on the webpage displayed to the user along with the publisher's content.

25. While direct sales and ad networks continue to play a role in the sale of open-web display advertising, over the last 20 years an increasing number of sales have been executed programmatically using the ad tech stack. Thus, the technology that makes up the ad tech stack is responsible for operating an almost entirely automated market involving tens of billions of transactions every day.

26. This lawsuit arises from Google's use of anticompetitive means to establish, maintain, and exploit market power over multiple components of the ad tech stack. Ultimately, this monopoly over crucial technology has allowed Google to dominate programmatic ad sales, using its market power to punish innovative competitors, such as Index Exchange, while extracting enormous profits for itself.

II. Google Obtains Monopoly Power in the Markets for Open-Web Display Ad Exchanges and for Publisher Ad Servers.

A. Google Leveraged its Early Monopoly in the Market for General Internet Search to Establish Control Over a Crucial Pool of Advertisers.

27. Google's founding in 1998 began with the launch of its general search engine product featuring its PageRank algorithm. Like other search engines at the time, Google's search engine product comprised software that produced links to websites and other relevant information in response to a user query. United States v. Google LLC, 747 F. Supp. 3d 1, 35 (D.D.C. 2024). In the early days, Google users were conducting millions of searches per day. Now, that daily search number is estimated to be in the billions. Google's search product has become the most widely used search engine in the United States, receiving nine times more queries per day than all of its rivals combined across all devices.

28. Google's dominant market share in search — combined with its anticompetitive and exclusionary conduct — led the U.S. District Court for the District of Columbia to conclude that Google was a monopolist in both the general search services and general text advertising markets, and that it maintained those monopolies through anticompetitive conduct, thereby violating Section 2 of the Sherman Act. *Id.* at 187.

29. From the beginning, Google knew that its search product could serve as a boon for advertising revenues, given that search offered companies seeking to market their goods and services a "unique opportunity . . . to place digital ads that matched precisely what an Internet user

was looking for at that moment." *Ad Tech Liability Op.* at 823. But in those early days, Google had no plan to make money outside of licensing its search and indexing technology to other companies. Founders Larry Page and Sergey Brin reportedly expressed discomfort with business arrangements that called for the mixing of search and advertisement.

30. That changed in 2000, when Google introduced "paid search" with its AdWords product. AdWords began as a self-serve advertising platform that allowed companies of all stripes — including small family-run businesses like restaurants and brick-and-mortar retail shops — to buy ads within Google's search platform. Among other things, AdWords allowed its customer-advertisers to bid on search keywords to display text ads alongside search results shown to users.

31. AdWords grew rapidly. According to Google, AdWords' beta version had around 350 customers in the fall of 2000. By 2003, AdWords counted over 100,000 customers and 95% of its nearly one billion dollars in sales came from search-related advertisements. By 2007, AdWords had over one million customers and, together with AdSense, it made up the largest digital advertising network in the world.

32. During this period, other software companies were developing the technology for automated ad placement and sales that ultimately led to the ad tech stack. Observing this trend, Google realized that AdWords could be used not only to sell advertising space on its own search results pages, but also to target advertisements for any other webpage that was seeking to generate revenue. Google thus expanded the AdWords product offerings by allowing advertisers to buy ads across third-party websites, and by growing the number of publishers with which its advertisers could place ads by forming partnerships with popular non-Google content sources.

33. A few years after launching AdWords in 2000, Google launched its AdSense product, which gave website publishers the ability to sell space for ads targeting the website's

visitors or audience. Unlike search advertising, where advertisements were tied to a search-user's query, AdSense provided what Google called "contextual advertising" — that is, the particular ad to be served is selected to match the "context" of the content against which it is displayed. Contextual tools like AdSense scan the publisher's webpage for keywords that identify its content (e.g., a blog about college football will feature sports-related keywords) and then match ads to those keywords (e.g., an advertisement for running shoes or cable sports packages.)

34. Through the success of AdWords, Google developed relationships with a large pool of advertisers. Indeed, AdWords quickly became one of the world's largest and most concentrated pools of advertiser demand, capturing a wide range of advertisers that almost exclusively used Google as their tool to buy ads online. What Google needed was the means to connect these advertisers to third-party publishers that could sell advertising space.

35. Google's unique position atop the majority of the world's search queries and subsequent user browsing activity gave it unparalleled access to information crucial to advertisers and publishers. With AdSense and AdWords, Google was able to leverage its dominant market position in the search market on both the buy- and sell- sides of the open-web display ads market. But AdSense still left a hole in Google's market position. Although AdSense proved useful for selling "remnant" or "long-tail" publisher inventory — leftover ad space that doesn't sell by way of more valuable "direct sold" deals between advertisers and publishers — AdSense had not managed to captivate a stable of premium publishers.

B. Google Used Acquisitions and Investments to Gain Scale on the Sell-Side of the Market and to Neutralize Competitive Threats

1. Google Overpaid for DoubleClick for Publishers, and its Nascent Accompanying Exchange, AdX, Specifically to Thwart Competition.

36. Google did not innovate to earn power in the sell-side of the market. Instead, Google acquired the market-leading technology, and then leveraged its massive AdWords

advertiser base to lock in relationships with publishers, ultimately increasing its market share to over 90%. That dominance allowed Google to gain control over how, when, and to whom ad impressions are sold on the open web.

37. In 2008, Google acquired DoubleClick for $3.1 billion — a price that exceeded Google's own internal valuations of DoubleClick by a billion dollars. The strategic acquisition had two crucial assets.

38. The first was DoubleClick's ad server product, called "DoubleClick for Publishers" or DFP. At the time of its acquisition, DFP was already the dominant publisher ad server in the marketplace with 60% of the publisher ad server market and 9 of the top 10 U.S. websites as its customers. *Ad Tech Liability Op.* at 825. By acquiring DFP, Google acquired direct relationships with the largest sources of premium digital ad inventory — something that Google's AdSense lacked.

39. Google was able to abandon its internal efforts to develop competing technology, while keeping the sell-side control that DFP offered out of the hands of other digital advertising rivals like Microsoft, Yahoo, and AOL/Time Warner. Google's choice was clear; it purchased control over all sides of the market by acquiring pre-existing, rival technology, rather than competing through innovation.

40. Perhaps most importantly, Google understood that the publisher ad server played a crucial role in the ad tech stack because it contained the logic for making the final decision about which advertisement from any group of competing offers would be selected. By acquiring the platform that already had a dominant position in that market, Google began to wield extraordinary power over advertising sales. In the years following the acquisition, Google repeatedly exploited

this power to favor its own products over those of competitors and to increase, and then entrench, its own products' market share.

41. A key second part of the DoubleClick deal was AdX, a "nascent ad exchange . . . that connected the two sides of the ad tech stack by matching advertiser bids with publisher inventory." *Id.* Although Google's acquisition of DoubleClick with its large market share instantly made Google the leader in publisher ad servers, the ad exchange component of the acquisition had no such dominance.

42. At the time of DoubleClick's acquisition by Google, its AdX platform was small, with DFP projecting that AdX would generate only $800,000 in total revenue in 2007. But given Google's established dominance in advertising demand (AdWords) and its newly acquired dominance in publisher inventory via the publisher ad server market (DFP), Google had all the tools to not only make AdX the dominant platform in the advertising exchange market, but to stifle competition in all three markets. Following the success of its DoubleClick acquisition, Google extended and protected its domination of the ad tech stack by acquiring other innovative competitors such as AdMeld and Invite Media, incorporating their technology into Google's products and stifling any threat they posed to Google's market position.

2. Google Forced Publishers to Adopt DFP to Access AdWords Demand.

43. Even though at the time of the acquisition, DoubleClick for Publishers had a dominant 60% market share, Google still faced competition in the publisher ad server market from large rivals like aQuantive, ValueClick, and 24/7 Real Media. It pursued a strategy to crush this competition and fully monopolize the market for publisher ad servers by leveraging its dominance in the buy-side of the market to coerce even more publishers into using DFP and forcing adoption of Google's newly acquired ad exchange, AdX.

44. When Google re-launched DoubleClick Ad Exchange as Google Ad Exchange in 2009 (still "AdX" for short), Google marketed its AdX platform as a tool for integration: AdX would integrate Google's sell-side platform for publishers (AdSense) with Google's buy-side platform for advertisers (AdWords), while also promoting new capabilities AdX had not previously offered: real-time bidding from bids originating within the AdX platform.

45. The advent of real-time bidding was among the crucial developments that allowed the modern economy of programmatic web advertising to flourish. For a real-time bid, advertisers receive information about a specific opportunity on a webpage as the page renders for the user. In milliseconds, the technology allows advertisers to bid for the opportunity to present an ad based on specific details about that impression, frequently including data about the user accessing the page.

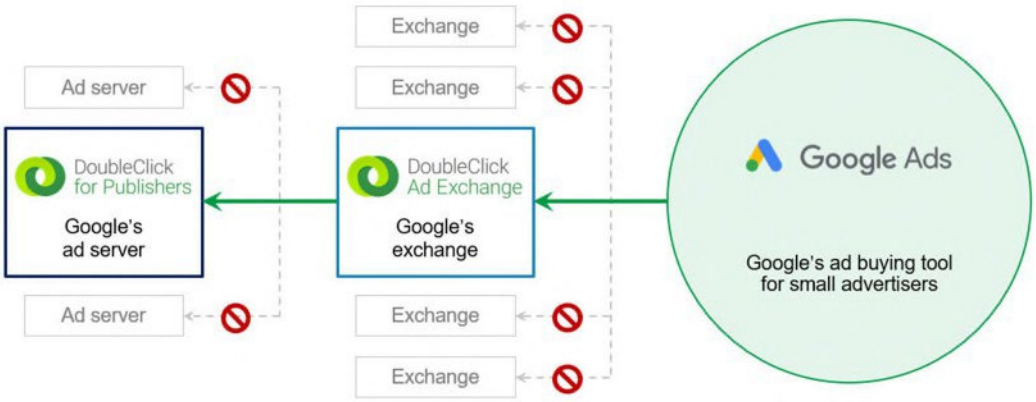
46. With such information, advertisers can gauge how desirable a specific impression would be for the products or services they are trying to sell and adjust their bids accordingly. As discussed below, Google did not adopt true "real-time bidding" that pitted all demand sources, including rival exchanges, against each other; Google's real-time bidding was limited only to those advertisers that submitted bids within the AdX ecosystem. Real-time bidding from AdX became a powerful component of Google's monopolization strategy.

47. When Google launched DoubleClick Ad Exchange, Google did not merely "integrate" its buy-side and sell-side platforms — it bound them together via a tie-in. As this Court previously found:

> After acquiring DoubleClick, Google implemented two policies that incentivized both advertisers and publishers to use AdX. First, with limited exceptions, Google made AdX the only ad exchange into which AdWords advertising demand was permitted to bid. Second, Google required publishers to use DFP as their ad server if they wanted to access real-time bids from AdX.

> Through these two policies, AdX became the "glue that seal[ed] DFP" inventory to AdWords demand.
>
> *Ad Tech Liability Op.* at 825-26 (internal punctuation omitted).

48. Functionally, publishers could sell their inventory using a non-Google ad server and non-Google exchanges. Realistically, this choice was no choice at all because, as Google knew and intended, DFP was the only publisher ad server that could grant publishers access to real-time bidding from AdX and, in turn, to AdWords demand.



49. Furthermore, because managing, customizing, and programming an ad server is a time-intensive and labor-intensive process, a publisher's selection of an ad server is sticky. The costs and investment of time and money to switch are high. This Court noted that, in the words of a former Google and DoubleClick executive, switching publisher ad servers "[t]akes an act of God to do" and is a "nightmare" because "[n]othing has such high switching costs." *Ad Tech Liability Op.* at 851.

50. Few to no publishers use more than a single ad server to manage their ad inventory, meaning the decision to use DFP locked publishers in for the long haul. Google's efforts to force publishers to adopt DFP worked — the platform's 60% market share in 2008 grew to 90% or more world-wide by the late 2010s.

51. In addition to forcing publishers to use DFP, Google's restriction of AdWords demand to AdX severely hampered the development of competing exchanges. A large pool of advertisers willing to purchase web display ads is the source of the "liquidity" essential to the success of any exchange. Because Google dominated and controlled the largest source of liquidity, any competing exchange faced enormous challenges in scaling sufficiently to become a credible market participant regardless of how innovative their technology or how competitive their pricing. Huge numbers of small- to medium- sized advertisers that might provide the necessary liquidity were reliant on Google's AdWords platform, and Google refused to supply any meaningful portion of AdWords demand to any exchange other than its own AdX.

3. Google Exploited DFP's Control Over Publisher's Ad Purchasing Decisions to Favor AdX.

52. Once Google made DFP the required ad server platform for publishers, Google set about further stifling competition in the ad exchange market by giving its own exchange, AdX, a baked-in advantage within DFP over competing exchanges.

a. DFP's Black Box.

53. Google laid the foundation for its anticompetitive campaign against rival ad exchanges by limiting publishers' ability to determine which bid from which exchange would win the sale. After Google assumed control over DFP, the logic for choosing a winner between competing offers became a black box: while Google decided to announce certain principles that the system apparently followed (several of which explicitly favored AdX, as discussed below), many crucial details remained unclear. The DFP black box not only impacted publishers, who were frequently unable to adjust the system to accommodate their preferences for certain advertisers or exchanges, but also harmed non-Google exchanges because they lacked information necessary to

source advertisers' bids in ways that would maximize chances of winning desired impressions and hence improve the overall efficiency of the market.

54. The DFP black box forced rival ad exchanges to undertake significant, and expensive, data analysis efforts in attempts to determine the logic that DFP used to choose between competing bids. At one point, Index Exchange conducted a series of tests by reducing its "take rate," the fee it charged advertisers for a successful ad placement. Reducing the take rate increases the size of the net bid paid to the publisher by a corresponding amount. Accordingly, reducing the take rate should have caused a significant increase in successful sales originating with Index Exchange. That is not what happened. Index Exchange's sales remained essentially unchanged despite material increases in its net bids. Indeed, at one point, Index Exchange went so far as to reduce its take rate all the way to zero, passing 100% of the advertiser's offer through to the publisher. And still, its sales experienced no material increase.

b. DFP's Waterfall Protects Incumbents and Creates the Opportunity for Google to Manipulate Outcomes.

55. When Google acquired DoubleClick, DFP used a process known as the "waterfall" to determine which exchange would generate the winning bid for a particular impression. In the waterfall, DFP would call a pre-determined sequence of ad exchanges seeking a successful bid. If an exchange could not generate a bid from one of its advertisers that met the publisher's floor price and other conditions, then DFP would turn to the next exchange in the sequence and attempt to secure the sale there. As soon as an exchange produced a satisfactory bid, DFP would stop cascading down the waterfall and initiate the process for completing the sale and serving the winning ad to the user.

56. In the early days of programmatic ad sales, a waterfall structure made sense because it was faster and more efficient than a model that obtained bids from all competing exchanges for

every impression. If most impressions were sold to an exchange at or near the top of the waterfall, then resources were not wasted seeking unnecessary bids from a large number of exchanges. In DFP as designed by DoubleClick, publishers had the power to rank the exchanges in any order they chose, for example placing those that historically bid the highest or those that had a particularly desirable pool of advertisers at the top of the waterfall. This functionality represented a reasonable compromise between fast and efficient performance, and the publisher's interest in obtaining the highest price possible.

57. As the programmatic market matured and the internet got faster and more reliable, the inherent inefficiencies in the waterfall became more problematic. In the waterfall, publishers ranked ad exchanges in order of preferred responses, commonly based on average historical CPM bids. The exchange in the top position got the first chance to bid on an impression. If that bid did not exceed the floor price set by the publisher, the opportunity to bid then passed to the second-ranked exchange. A publisher would sell an impression to the first exchange in the sequence that returned a satisfactory bid; other exchanges further down the waterfall sequence may have been able to generate higher bids for the same impression, but the publisher would never know.

58. Thus, the waterfall disadvantaged publishers: it left money on the table. For example, if a publisher set a floor price of $1.50 and its first exchange bid $1.40, DFP would then look to the second exchange. If the second exchange bid $1.50, the waterfall process would stop. In that case, the publisher would never know if its third exchange might have bid $2.00, its fourth $2.10, and its fifth $2.20. The waterfall was thus less effective at maximizing a publisher's yield on a per-impression basis than a true auction process across all exchanges at once. It also impaired the market from the advertisers' perspective by generating sales to advertisers other than those who placed the highest value on a given impression.

59. Despite the benefits Google's publisher customers would have received from a full set of bids involving all exchanges, DFP maintained its waterfall. After acquiring DoubleClick, Google made modifications to DFP and AdX to incorporate real-time bidding from AdWords demand sources, functionality that became the cornerstone for Google's ad tech monopolies. At the same time, it could have replaced the waterfall with a system allowing simultaneous bids from multiple exchanges. It chose not to. There were no ongoing technical limitations that required Google to maintain the waterfall — processing power and network transmission speed had improved, the software for generating bids had matured, and there was significantly less risk that obtaining multiple bids would create unreasonable latency.

60. Certainly by February 2012, when the OpenRTB protocol became the IAB standard for programmatic ad sales communication, the technology could support simultaneous bids from multiple exchanges. Yet, rather than adopt a system that would benefit its publisher customers, Google maintained the sale structure that gave it maximum control over the final transaction. Publishers knew that DFP was costing them revenue. In a competitive environment, undoubtedly many of them would have switched from DFP to a publisher ad server that improved their returns— for instance, one that offered a unified auction for exchanges instead of strictly a waterfall, but Google's tie between AdWords demand and DFP gave them no choice but to stay with DFP to maintain access to this essential demand source.

61. DFP's ongoing use of a waterfall profoundly impacted Index Exchange and other smaller AdX competitors. Exchanges that ranked higher in each publisher's waterfall had materially better chances of securing impressions than exchanges further down in the rankings. Indeed, exchanges ranked further down in the waterfall would often not even have the opportunity to bid on the most desirable impressions because those impressions were sold to a higher-ranking

exchange. This created a paradigm that made the spawning of new exchanges and bringing more competitive players into this market exponentially more difficult.

62. This dynamic had the self-reinforcing effect of protecting established exchanges, including AdX (which also benefitted from additional preferences granted by Google such as First Look, discussed below) over new market entrants because publishers would naturally tend to place exchanges with established win rates higher in the waterfall than untested competitors. Even if competing exchanges, such as Index Exchange, offered superior transparency and data sharing, improved features, or better prices, they faced significant challenges convincing publishers to modify their waterfall rankings to allow those exchanges to compete for bids on a level playing field.

63. In addition to protecting AdX, Google maintained the DFP waterfall because that structure created opportunities for manipulation of the outcome to benefit Google in ways that would not have been possible with open competition among ad exchanges. Sales occurred at the first step where an exchange returned terms satisfactory to the publisher. Because this was a yes/no transaction involving only two parties with a price that was disclosed to AdX, Google maintained control over the final outcome in a way that would have been impossible in a fully competitive market involving multiple simultaneous bids. Google exploited that control through a series of anticompetitive initiatives that established its unrivaled dominance over the entire programmatic ad tech stack.

c. DFP's "First Look" Established Unmitigated Favoritism for Google's AdX.

64. Before 2010, publishers selling inventory through DFP across multiple exchanges faced no built-in biases favoring one exchange over another. Once the publishers ranked their exchanges and established the waterfall sequence, DFP executed the waterfall in accordance with

that ranking. A publisher could rank an exchange high if the publisher favored the specific ads featured by that exchange — e.g., high-quality advertisers or low levels of fraud. Alternatively, a publisher could reward exchanges that returned high prices for its impressions. Or it could demote exchanges whose advertisers' ad quality or bid prices declined. Google abolished this even-handedness and replaced it with a policy that gave strict preference to AdX.

65. In 2010, Google introduced a program called "Dynamic Allocation" that created flexibility to supersede the strict waterfall process under certain circumstances. Although Dynamic Allocation was billed as a way to improve publisher yield by putting upward pressure on the price for a given impression (also called a "CPM"), it ultimately reduced publisher's yield while giving Google a financial and competitive advantage.

66. Although Dynamic Allocation promised higher yields, it was accompanied by Google giving AdX a preference over competing sources of demand, known as "First Look." With "First Look," whenever a publisher's non-guaranteed impression became available, AdX had an initial opportunity over competing exchanges or demand sources to acquire that impression. If AdX could generate a bid that exceeded the publisher's floor price for that impression, AdX won the sale, bypassing any other demand source's ability to participate and compete for the impression.

67. First Look ultimately impacted not only direct sales and sponsorships, but all programmatic ad sales through DFP. With First Look, publishers using DFP had no choice but to allow AdX the first opportunity to generate a bid for each impression, effectively giving AdX a right of first refusal over all impressions. Even if the publisher wished to rank a different exchange higher in the waterfall, DFP would start by seeking a bid from AdX. At that point, if AdX had an

advertiser who was willing to meet the publisher's requirements, the sale would occur and no other exchanges in the waterfall would have the opportunity to bid.

68. Given DFP's enormous market share among publishers, First Look resulted in AdX receiving access to the majority of impressions available for programmatic ad sales across the entire web before any competitor even got to look at the opportunity. In addition to the inherent advantage in this sequencing, AdX obtained an informational advantage because it received real-time bid data associated with the available ad space and the user. With this data, AdX had the ability to cherry-pick the most desirable impressions, favoring its exchange and leaving rival exchanges with the least desirable impressions for their advertisers. And because rival exchanges were not given the opportunity to generate a real-time bid at this step in the process, they were unable to adjust bids as AdX could.

69. Instead of communicating with rival exchanges and generating real-time bids to the benefit of publisher yield and competition, DFP relied on historical estimates of what each rival exchange in the waterfall would be likely to bid and used those estimates as the floor price that AdX was required to meet for its own bid to be successful. In other words, AdX had the opportunity to analyze and submit competitive bids based on real-time data on an impression-by-impression basis but only had to exceed averages of entire blocks of impressions from other exchanges in order to win the impression.

d. Google Refuses to Share User Data with any Exchange Other than AdX.

70. Google also created a built-in advantage for AdX by making it the only exchange that could receive the user IDs generated by DFP for each impression. Such IDs allow ad tech tools to identify characteristics of certain users, such as browsing history, that may suggest that the user is a particularly desirable target for certain advertisements. When available, ad exchanges

and DSPs use this information to adjust bids in appropriate circumstances and are often willing to bid more for what is considered a more attractive impression.

71. Google's "first-party data" about users, including user identifiers, provides exactly this type of targeted ad information. Google shares this data among its own ad tech tools, including its advertiser servers, its publisher ad server, DFP, and its exchange, AdX. As a result, advertisers working with Google's tools have additional information that regularly increases these advertisers' bids. Google refuses to share this data with any other ad exchange, including Index Exchange, which must generate bids based on more limited information. The lack of first-party data tends to depress bid amounts from rival exchanges compared to bids from AdX, causing the rival exchanges to lose additional transactions to AdX.

e. Google's Access to Advertising Data Creates a Self-Perpetuating Market Advantage.

72. Through its dominant market position over each element of the ad tech stack, Google obtains access to enormous quantities of data about advertising sales. Data analytics are essential to programmatic ad sales — more data inevitably supports more sophisticated and accurate analysis. Google's insights into such a large proportion of programmatic ad sales, including ad sales that ultimately occur on other exchanges, entrenched its market power.

73. After obtaining its market power through exclusionary and anticompetitive conduct, Google now extracts an ongoing market advantage from the sheer number of transactions that flow through its exchange and other tools. Index Exchange and other competitors are not competing with Google on a level playing field. As this Court has held, "[t]he unmatched scale that Google has achieved across the open-web ad tech stack helps the company test products more quickly and make higher-quality matches between advertisers and publishers." *Ad Tech Liability Op.* at 832.

III. Index Exchange Brings Transparency and Robust Data Analytics to Programmatic Advertising.

74. Index Exchange was formed in 2003 when the flexibility and power of internet advertising was just beginning to emerge[2]. Founder Andrew Casale developed sophisticated technological tools that allowed publishers to monetize their ad space efficiently and effectively. The business operated initially as an ad network matching publishers' inventory with advertising demand from appropriate buyers. It quickly gained a reputation for offering more complete data on pricing and other ad parameters, as well as control over ad display and creative content that benefited sophisticated publishers seeking to maximize their revenue while controlling the quality of the ads appearing on their pages.

75. In 2010, Index Exchange began development of its own programmatic ad exchange. That exchange was released in 2011 and offered fully programmatic ad sales through real-time bidding. Between 2011 and 2015, Index Exchange worked to scale this product by attracting DSPs, buyers and publishers. By 2015, the ad exchange had sufficient liquidity to become the sole focus of Index Exchange's operations, and the company ceased operations of its legacy ad network.

76. Index Exchange established its ad exchange on the principles of transparency, independence, and quality — its mission is total market efficiency. The company emerged as an unbiased alternative to vertically integrated platforms like Google. Index Exchange quickly gained traction in the market by providing rich data and fully transparent pricing, without the conflicts of interest inherent in Google's control over every layer of the ad tech stack. These commitments allowed Index Exchange to differentiate itself as "the principled ad exchange." Index Exchange equips publishers with unprecedented transparency into how their inventory is valued and sold. It

[2] The business was originally named "Casale Media, Inc." and became "Index Exchange, Inc." in 2015. This Complaint uses the name "Index Exchange" to refer to the business in all periods.

provides detailed pricing information for each sale, including both the clearing price and the amount of the winning bid — data that empowers publishers to optimize yield by managing inventory and adjusting floor pricing to reflect real demand. Advertisers and buyers likewise benefit from Index Exchange's commitment to openness, receiving more complete and verifiable information about where their ads actually serve than typically available in the market.

77. From its inception, Index Exchange invested heavily in technology and infrastructure to develop systems capable of processing hundreds of billions of bid requests per day in milliseconds. Index Exchange expanded its data centers, engineering teams, analytics function, and proprietary algorithms to manage the complexity of high-speed auctions, ensuring both performance and reliability. These sustained investments in infrastructure and innovation enabled Index Exchange to deliver transparency and efficiency at scale — hallmarks of its exchange to this day.

78. Simultaneously, Index Exchange made intentional, ongoing investments in quality and architecture. Industry-leading in exchange hygiene, Index Exchange leverages both human and technological resources to mitigate malware, fraud, and other threats to the integrity of the digital supply chain. Its exchange quality framework became a model for trust and accountability in the open web ecosystem.

79. As Index Exchange's technology and scale matured, the company was able to drive transactional costs down, passing value back to its partners. Index Exchange realized this value from its best-in-class infrastructure that created economies of scale and reinforced its mission to achieve total market efficiency — a state in which every impression is valued honestly, transacted fairly, and executed without bias.

80. Despite these advantages for both buyers and sellers, Google's anticompetitive conduct severely constrained Index Exchange's share of programmatic advertising sales. Publishers were effectively forced to use DFP as their publisher ad server because they could not forgo access to the AdWords demand that was only available to users of DFP. With DFP as their ad server, publishers were also forced to give AdX a "First Look" at all impressions, allowing it to secure transactions for the most desirable impressions before Index Exchange even had a chance to bid on the opportunity. Even if a publisher identified Index Exchange as its preferred, first-in-line exchange, DFP's requirement that AdX have an initial opportunity to make the sale merely by beating a generic bid based on historical averages denied Index Exchange the chance to sell the most valuable impressions.

81. Google's market power in the ad exchange market is clear from pricing alone. AdX's take rate was among the highest in the industry, averaging 20%. Index Exchange offered significantly more transparent pricing models and its take rate was materially lower. Despite these lower costs and despite the clear advantages flowing from Index Exchange's transparency, data-sharing policies, and commitment to quality, AdX continued to dominate programmatic ad sales. This Court has already found that Google's ability to charge prices "significantly above competitive levels" demonstrates monopoly power in the ad exchange market. *Ad Tech Liability Op.* at 856.

IV. Index Exchange Responds to Google's Exploitation of its Market Power by Competing through the Innovation of "Header Bidding."

82. As explained above, Google exploited its control over the waterfall within DFP to advantage AdX over Index Exchange and other rival exchanges. AdX's ability to acquire any impression first, before any other exchange was allowed to see the opportunity, was a monumental advantage. AdX secured transactions merely by exceeding estimated bids calculated by DFP rather

than genuine real-time bids reflecting information about the specific impression on offer. Because the rival exchanges' estimated bids could not, by definition, adjust in response to a particularly valuable opportunity, AdX had the ability to cherry-pick the most desirable impressions merely by beating bids that were priced based on historical averages.

83. To mitigate the effects of Google's self-preferencing of AdX, as is often the case in technology, disruptive innovation found a way to (partially) solve the problem. Index Exchange joined with other non-Google market participants to lead the development of a technological work-around called "header bidding" (sometimes called "pre-bidding" or "tagless bidding.")[3] Header bidding helped publishers by providing the opportunity for real-time bids from multiple demand sources before the publisher's ad server is called. For those publishers who used DFP as their ad server, header bidding allowed the publisher to conduct a real-time auction between multiple exchanges rather than rely on a waterfall in which AdX was always called first.

84. Header bidding uses JavaScript code, called a "wrapper," which publishers add to their websites. When a user opens a page in a browser window, the code "wraps" around the ad server call, making it wait via a timer. While the ad server call is waiting to execute, the wrapper coordinates with various services/vendors (providing impression-related information such as privacy settings, identity, floor pricing, etc.) that add supplemental information before sending ad requests to one or more bid adapter partners, like ad exchanges or ad networks selected by the publisher. The exchanges and other bidding adapter partners return to the publisher one or more bids for the impression(s) available; the wrapper collects all of the bids received and sends the bid information (including bid amount, bid adapter partner name, Deal ID, etc.) via parameters called

[3] The term "header bidding" arose because the code required to implement the process was placed in the header section of the webpage code, between the <head> tags.

"key-values" to the publisher's ad server. For example, the key values could be price = 300 (cents) and bidder = Index.

85. For header bidding, line items in the publisher's ad server that are typically used to oversee demand for direct insertion of display ads (advertiser, targeting, budget, price, creative, etc.) are repurposed to teach the ad server that price = 300 and bidder = Index means "this is a $3.00 bid from Index Exchange" so that the bid can be effectively compared to bids from alternative sources (ADX, other bidders, or direct demand from the publisher.). There are limitations on the number of line items that can be created for a header bid (ultimately determined by Google through DFP), a restriction that is known in the industry as "price granularity." As a result of these limitations, header bidding remains less efficient at communicating information about the bid than AdX given how coarse the line items must be to conform to DFP limitations on line item counts.

86. As an example, DFP may limit each order to 1000 line items. At $0.01 per line item, the header bidding wrapper could only represent fully-accurate information to the ad server about bids from Index Exchange between $0.01-$10.00. A bid above $10.00, say $15.00, is rounded down in the DFP competition to $10.00. ADX could win the impression for $10.01. Although header bidding is an improvement over alternatives that permit no real-time price granularity whatsoever, the line-item setup in DFP forces high bids to be rounded down, negatively impacting both publishers' revenues (when AdX secures a transaction merely by beating the highest header bidding line item rather than an actual bid that is higher) and the volume of sales transacted at exchanges other than AdX.

87. Notwithstanding these detrimental limitations, header bidding benefits rival exchanges because the wrapper's bid requests include information about the specific impression

being sold. As a result, the exchanges can generate real-time bids that respond to the strengths of an individual impression. With a header bid, rival ad exchanges could compete slightly more effectively (notwithstanding the limitations above on price granularity) on price for each impression with AdX because those exchanges could generate real-time bids, as Google had always allowed AdX to do.

88. Header bidding was first introduced in approximately 2014 and grew in popularity and importance over the following years. The integration was popular because it worked. It increased publisher revenue and yields by broadening real-time bid competition beyond AdX, and it significantly increased the share of programmatic advertising transactions sold through rival exchanges.

89. Index Exchange started in header bidding by developing its own proprietary header bidding wrapper (the "Index Wrapper"). Continuing Index Exchange's emphasis on flexibility and transparency, the Index Wrapper provided publishers increased control over their inventory. It was also materially faster than Prebid and other header bidding alternatives, reducing the risk that the page would not load quickly for the end user. Over time, Index Exchange was also one of the first major programmatic exchanges to support the open-source header bidding technology developed by Prebid, a non-profit consortium of digital advertising and publishing firms. Index Exchange engineers contributed to the development of the Prebid software.

90. Using header bidding technology to generate real-time bids for actual impressions, Index Exchange began to strengthen its market position. Index Exchange made sophisticated header bidding the core of its appeal to publishers and advertisers. The Index Wrapper and other features were not only a means of overcoming AdX's First Look advantage to the benefit of publisher yield and revenue, they were also effective at bypassing the weakness of the waterfall

approach to sales generally. Using header bidding, publishers were able to compare the best bids from multiple exchanges simultaneously rather than merely selling to the first exchange in the waterfall that was able to clear the minimum floor price.

91. Despite its strengths, header bidding was still a compromise solution that failed to put competitor exchanges on a truly equal footing with Google. In addition to the ongoing advantages flowing from Google's control over the "black box" final decision logic within DFP, header bidding created burdens for publishers that negatively impacted ad exchanges relying on the technology.

92. Websites evolve over time — publishers change the design and formatting of their pages in ways that are both subtle and dramatic. For an ad exchange to match available ad space with an appropriate ad, the exchange must have accurate information about the dimensions and visual characteristics of the space. Consequently, publishers must update their ad servers to reflect any changes to the website design. Google's actions that caused Index Exchange and others to develop header bidding effectively required publishers to do this work twice: once to update the configuration settings within DFP and then a second time to update their header bidding wrapper. Over time, ad exchanges relying on header bidding found that many publishers were slow to update the wrapper, causing problems identifying an appropriate ad to fill the available space. The need to contend with this "website drift" was the direct result of Google's refusal to allow rival ad exchanges to compete fairly within DFP.

V. Google Exploits Its Market Power to Crush Competition from Header Bidding.

A. Last Look and SSDRS

93. Google recognized the impact that header bidding was having on AdX's dominance. As this Court found, "Google was wary of header bidding, seeing it as a risk to its revenue model that relied upon AdX having a real-time First Look at publisher inventory." *Ad*

Tech Liability Op. at 828. Internally, Google conceded that header bidding was a "no-brainer for publishers to adopt" given the substantial revenue gains it delivered, and, accordingly, senior Google ad executives viewed the technology as an "existential threat" to its ad tech dominance, recognizing that it could diminish AdX's transaction volume and undermine DFP's central position. *Id.* at 828, 830. Rather than competing on the merits by lowering AdX's 20% take rate or simply allowing other exchanges to compete with AdX on a level playing field, Google doubled down on its exploitation of market power over sell-side ad servers to advantage AdX over rival exchanges.

94. Even before header bidding became widely adopted, Google used its market dominance to lobby the primary industry standard organization, the Interactive Advertising Bureau, against endorsing the header bidding standard, Prebid. After those efforts failed, Google used its control over DFP to impose a variation of First Look called "Last Look."

95. With Last Look, Google gave AdX the final opportunity to generate a winning bid for any impression served through DFP. AdX was able to exercise this opportunity after the winning bid from all other exchanges had been determined and the amount of that competing bid was visible to AdX. "In what was otherwise a sealed auction, Last Look let AdX open the envelope for the winning bid, know what the winning bid was and be able to bid after everybody else." *Ad Tech Liability Op.* at 829 (internal punctuation omitted).

96. Thus, even when rival exchanges were using header bidding to generate real-time bids, AdX retained for itself the unique advantage of being able to generate its bid with knowledge of the final and highest bid offered through its competitors. This system "significantly disadvantaged other competitors in the ad exchange space." *Id.* (internal punctuation omitted).

97. Google exploited this information advantage over rival exchanges by imposing a new policy it called "Sell Side Dynamic Revenue Share" or "SSDRS." Under this policy, armed with the information about its competitors' highest bid, AdX would adjust its take rate to manipulate an advertiser's net bid in ways that would advantage Google and disadvantage its competitors and other participants in the market. For example, when AdX had a buyer whose net bid was less than the header bid by a relatively small amount, AdX could lower its 20% commission so that the net bid would increase enough to guarantee that AdX could win the impression.

98. AdX used the same technique in reverse in order to make up for the fees it lost on such sales — when an impression was available for which AdX had a bid significantly in excess of the header bid (or publisher floor price), AdX would increase its take rate, and thus Google's revenue, by lowering the net bid without dropping it below the price necessary to clear. Through this mechanism, Google was effectively overcharging advertisers to subsidize its ability to boost certain bids in different transactions, thereby claiming those additional transactions for AdX.

99. Google concealed both Last Look and SSDRS from competitors and customers. It never explained SSDRS to publishers whose revenue was impacted by the policy, nor did it tell advertisers about the manipulation of take rates. Because of Google's concealment, competitors, including Index Exchange, had a limited ability to formulate effective strategies for challenging Google's dominance. Google continued to conceal these policies from customers and competitors until after they had ceased employing them or until they were disclosed as a result of litigation.

100. The combination of Last Look and SSDRS allowed Google to recapture significant market share that shifted to rival exchanges due to header bidding. As this Court found, "[t]hrough the advantages provided by Last Look and sell-side dynamic revenue share, Google helped

mitigate the risk that header bidding posed to its ad tech products and enabled AdX to remain the world's largest ad exchange." *Ad Tech Liability Op.* at 830.

B. Project Poirot

101. Google also exploited its significant control over buy-side ad tech tools to manipulate the ad exchange market in favor of AdX and away from header bidding. In 2017, as Google employees were expressing concerns about the increasing threat posed by header bidding, Google introduced "Project Poirot." This initiative, which Google, once again, concealed even from its impacted customers, relied on discrimination between bids that Google's DV360 ad platform generated for certain rival exchanges and bids that it would have generated for the same impression offered through AdX. By lowering the bids on rival exchanges, Project Poirot provided yet another means for Google to force a shift in advertising sales away from Index Exchange and other rival exchanges in favor of AdX.

102. Project Poirot relied on the distinction between two different auction models, first-price auctions and second-price auctions. At times, ad exchanges used both auction models for programmatic display ad sales. While the winner in either auction is the highest bidder, the determination of the amount that winner will pay differs between the two models. In a first-price auction, that winner pays the amount of its own winning bid regardless of how that bid compares to any of the other bids. In a second-price auction, the winner pays not the amount of its own bid, but the amount of the second-highest bid, sometimes plus one cent or another small increment.

103. Each type of auction has advantages for certain situations. A first-price auction incentivizes bidders to try and estimate bids of other participants in order to avoid overbidding, i.e., paying more than necessary to win the auction. A second-price auction eliminates the risk of overpayment and allows bidders to focus only on their own preferred price, which is a more efficient and straightforward process for buyers. In addition, of course, a second-price auction

generates a final price that is lower than a first-price auction — a benefit for buyers. However, a first-price auction becomes more attractive to buyers when the auction is only one round in a series of successive auctions for the same item. In that case, a first-price auction will pass along the full amount of the winner's bid to the next round, increasing the bid's ultimate chances of success.

104. Prior to header bidding, most ad exchanges ran second-price auctions. The winner would pay for the impression not based on its own bid, but based on the amount of the second highest bid plus one cent. Header bidding changed this paradigm. Because the winner of a header bid auction did not directly acquire the impression, but instead had its bid submitted to another auction round at DFP, a first-price structure made it more likely that the winner of the header bidding auction would also prevail within DFP. AdX itself, because it had the opportunity to win the impression outright with a successful Last Look bid, avoided the need to shift to a first-price model and continued to win impressions based on the second price auction framework.

105. Google employees understood the implications of header bidding for the auction model and knew that exchanges participating in header bidding were very likely to be conducting first-price auctions. In Project Poirot, Google undertook a massive analysis of pricing data from rival exchanges to discern which were employing a first price model and were therefore presumably engaged in header bidding.

106. When Google identified such an exchange, it used its control over the bidding behavior at DV360, its popular DSP, to discriminate against the target rival exchanges. Without informing its advertiser clients who were relying on DV360 to manage their advertising purchases, Google caused the platform to "shade," or materially reduce, bids that it generated for any ad exchange that had been identified as holding first-price auctions. When the same impression was subsequently offered through AdX, DV360 would submit a full-price, not "shaded," bid. Of

course, this price discrimination shifted sales that would have occurred on a rival exchange to AdX, further harming the rival exchanges by impeding their ability to compete for advertising transactions. To illustrate, since AdX received a full-price bid, and rival exchanges received a shaded bid, AdX, with the advantage Last Look provided, was almost always guaranteed to trump rival exchanges' bids.[4]

107. Project Poirot succeeded in moving a significant number of advertising sales to AdX and ultimately threatened the viability of competing exchanges. The number of transactions on rival exchanges was reduced by an average of 10% as a result of this initiative. Google was so pleased with the success of these efforts that it introduced "Poirot 2.0," which employed the same discriminatory bidding technique with substantially amplified parameters, reportedly shading bids through first-price exchanges by as much as 90%. As a result, the number of DV360 transactions occurring on rival exchanges decreased, on average, by 15%, causing a significant economic shock to a number of those businesses, as this Court has found. *Ad Tech Liability Op.* at 830.

108. Index Exchange operated a first-price model because its business focused largely on header bidding. After seeing a boost following the initial launch of the Index Wrapper, Index Exchange began losing sales to AdX again. Because Google concealed its anti-header bidding countermeasures such as Sell-Side Dynamic Revenue Share and Project Poirot, Index Exchange was unable to determine why its business was suddenly faltering. It was compelled to invest substantial resources in data analysis and testing of various bid optimization techniques (including the take rate reductions described above at ¶ 54) in an attempt to identify and solve the problem.

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[4] Identical bids submitted by the same advertiser for the same impression on both a rival exchange and on AdX might clear on the rival exchange for a number of reasons, including that the take rate charged by rival exchanges was generally lower than the 20% Google charged on AdX and the net bid that would be paid to the publisher was therefore higher if the sale occurred on the rival exchange.

None of this work succeeded in identifying the actual explanations, which were ultimately only revealed when Google was compelled to disclose its internal policies and conduct in litigation discovery.

C. Open Bidding.

109. In 2018, Google publicly launched a new feature initially called "Exchange Bidding," later renamed "Open Bidding." Open Bidding allowed publishers using DFP to obtain real-time bids for an impression from multiple exchanges. AdX would then be given the opportunity to exceed the amount of the winning bid from the Open Bidding round and win the impression.

110. Because Open Bidding generated simultaneous, real-time bids from multiple exchanges, Google promoted it as an alternative to header bidding. Many publishers adopted it because it allowed them to avoid the work required to configure and maintain multiple header bidding wrappers. Open Bidding was not, however, equivalent to header bidding; to the contrary, it was yet another attempt by Google to create a system that favored its ad tech over competitors' and undermine the advantages that true header bidding created for rival exchanges.

111. In addition to effectively providing AdX with a "Last Look" opportunity to bid on the impression after competing bids were already generated, Open Bidding extracted a fee of at least 5% from any transaction that closed on any non-Google exchange. Because this fee was not charged for sales occurring on AdX, it had the effect of lowering bids from competing exchanges and reducing their opportunity to win impressions. Open Bidding also favored Google by providing it with yet more data on ad sales and bidding behavior, including all of the data concerning rival exchanges bids that, with header bidding, would not have been provided to DFP or AdX.

D. Unified Pricing Rules

112. By 2019, Google knew it was beginning to face significant antitrust scrutiny related to its dominance over multiple components of the ad tech stack. Internal communications between Google employees acknowledged that the advantages afforded to AdX through the combination of Last Look and SSDRS might be seen as anticompetitive. Google then announced that it would end Last Look, claiming that DFP would place all bidders for ad space on an equal footing. At the same time, however, Google used DFP to impose a new policy that superficially sounded pro-competitive, but, in practice, again favored AdX.

113. Google designated the new policy "Unified Pricing Rules." Under this regime, publishers using DFP were prohibited from offering a lower floor price to rival ad exchanges than they offered to AdX for the same impression. Although Google called this "unified" pricing, in truth, the policy did not require uniformity because publishers were allowed to configure DFP to offer a lower floor price to AdX than they offered to rival exchanges; publishers were only prohibited from doing the reverse. In effect, Unified Pricing Rules acted as a "most favored nations" clause requiring publishers to offer each impression to AdX for a price that was no higher than the price offered to any other exchange.

114. Given DFP's ongoing dominance of the publisher ad server market, Unified Pricing Rules effectively guaranteed AdX that it would receive the most favorable pricing available from the vast majority of publishers. Previously, publishers used price discrimination to prioritize (often lower cost) rival ad exchanges over AdX as a means of, among other things, diversifying their revenue sources and dependence on AdX. Publishers' ability to set a higher floor for AdX than for rival exchanges put downward pricing pressure on AdX because the lower floor on rival exchanges created an inducement (lower cost) for advertisers to choose those exchanges over AdX. In other cases, publishers might favor rival exchanges because of factors other than price.

115. Indeed, Unified Pricing Rules had a particularly pernicious impact on Index Exchange because it differentiates itself from AdX through features not available on Google's exchange, such as transparent pricing and rich reporting, as well as a lower take rate. Many publishers expressed a preference for Index Exchange and its features by setting a lower floor price for Index Exchange than for AdX. Google's new pricing rules eliminated this option and had the effect of shifting yet more business to AdX and away from rival exchanges like Index Exchange: "Unified Pricing Rules increased the number of impressions AdX won and the revenue it received, while decreasing impressions won and revenue received by third-party exchanges." *Ad Tech Liability Op.* at 831.

VI. As this Court Held, Google Exercises Monopoly Power in the Global Open-Web Display Ad Markets for Both Ad Exchanges and Publisher Ad Servers.

116. Google's anticompetitive conduct occurred in two markets that facilitate the placement of open-web display ads. Google's monopoly power in the markets for ad exchanges and publisher ad servers is beyond dispute because this Court, after a three-week liability trial, found Google to be a monopolist with dominant power in each market. See *Ad Tech Liability Op.* at 852-856 (finding that Google possesses monopoly power in both the "ad server for open-web display advertising" market via DFP and "ad exchange for open-web display advertising" market via AdX). Google's abuse of its monopoly harmed Index Exchange as a competitor offering open-web ad technology. Because Index Exchange competes directly with Google in one of the two markets that this Court has already addressed and because Google's anticompetitive conduct in the second market has also harmed Index Exchange, the same market definitions should apply here.

A. Both the Publisher Ad Server and Ad Exchange Markets are Worldwide.

117. A worldwide geographic market for publisher ad servers and ad exchanges flows naturally from the borderless nature of internet publisher content and open-web display ads in that

content. As this Court determined in the *Google Ad Tech* trial, "the relevant geographic market for both the open-web display publisher ad server market and open-web display ad exchange market" is worldwide. *Id.* at 848. "Many U.S.-based advertisers target international Internet users, and many international advertisers target U.S.-based users, including by advertising on U.S.-based publishers' webpages. Similarly, advertisers bid to target international users who visit U.S.-based publishers' pages, and Americans consume digital content from international publishers. Ad tech providers, in turn, built global infrastructure and often manage, price, sell, and track performance of their products globally." *Id.* In the consolidated antitrust cases concerning Google's digital advertising business, the District Court for the Southern District of New York found that, as a result of this Court's prior decision, Google is precluded from re-litigating the geographic scope of these markets. *In re: Google Digital Advertising Antitrust Litigation*, S.D.N.Y., 21-md-3010, et al., Dkt #1291, Oct. 27, 2025, at 32 ("*MDL Op.*.") Index Exchange markets and sells ad exchange services globally and, therefore, is a participant injured by Google's anticompetitive conduct in the same worldwide market.

B. Publisher Ad Servers Are a Distinct Product Market.

118. Publisher ad servers facilitate the management and allocation of publisher inventory in the open-web display ad ecosystem. As this Court held, "[p]ublisher ad servers for open-web display advertising are uniquely suited for managing ad inventory for large web publishers, are priced differently than other ad tech tools, and are recognized as a distinct product by ad tech industry participants." *Id.* at 834. As a result of their unique use in the online publishing arena, "other ad tech tools are not reasonably interchangeable with publisher ad servers." *Id.*

119. Publisher ad servers operate differently and have different price mechanisms than other open-web ad technologies, including ad exchanges. *Id.* ("Publisher ad servers, which charge publishers a flat fee per impression sold, are priced differently than ad exchanges, which charge

publishers a percentage-based fee per impression sold, and demand-side platforms, which charge advertisers a percentage-based fee per impression purchased.") Publisher ad servers also uniquely serve the needs of web publishers, including "allocating ad inventory between direct sales and programmatic sales; placing ad exchange bids in competition with bids from header bidding, programmatic direct sales, and other ad exchanges; rendering an advertisement on the publisher's webpage for each impression; billing for ads rendered; and providing inventory and revenue analytics." *Id.* at 834.

120. Google itself identified its publisher ad server, DFP, as a unique product until 2018, when it rebranded it under the Google Ad Manager suite. *Id.* at 835. Industry observers and participants also recognize publisher ad servers as unique products. *Id.* During the *Google Ad Tech* trial, Google's own market definition expert "agreed that publisher ad servers are 'components' of the ad tech stack that 'serve different purposes' from buy-side tools, ad exchanges, and in-house ad tech used by social media companies." *Id.*

121. Publisher ad servers for open-web display advertising are unique from other digital ad technology because they are "capable of performing ad-serving functions for websites, which are essential components" of publishers' revenue streams. *Ad Tech Liability Op.* at 835–36. This is because open-web publishers must monetize their content where the content and users are present and cannot sufficiently do so through other channels like social media or mobile phone applications, which take a substantial share of the revenue for themselves. *Id.* at 836.

122. Revenue derived from monetizing content through open-web display ads is crucial to a publisher's ability to pay staff and fund the creation and distribution of further content. Open-web display advertising also affords publishers greater control and independence because accessibility of their content is not subject to the conditions and algorithms that third-party

platforms (i.e., social media) apply to filter and moderate content. Open-web display ads are therefore not reasonably interchangeable with social media, app-based, and instream video advertising and the same holds true for the publisher ad servers that facilitate those ads. *Id.* at 836.

123. In the consolidated antitrust cases concerning Google's digital advertising business, the District Court for the Southern District of New York found that, as a result of this Court's prior decision, Google is precluded from re-litigating the existence of an antitrust market for publisher ad servers. *MDL Op.*. at 32.

C. Google Possesses Monopoly Power in the Worldwide Market for Publisher Ad Servers.

124. As this Court held based on evidence submitted at the *Google Ad Tech* trial, Google's publisher ad server, DFP, has a presumptively monopolistic 91% share of the worldwide market for publisher ad servers. *Id.* at 852. Such a dominant market position allows Google to impose monopoly rents from customers and stifle competitors without fear of losing market share or price control.

125. Google's ability to impose its monopoly power is demonstrated not only by its 91% market share, but also by the significant barriers to entry that support the durability of its position. Notable barriers to entry in the publisher ad server market include the technical and practical difficulties of convincing publishers to switch ad servers or use multiple ad servers and the enormous capital and labor costs needed to develop, manufacture, and maintain publisher ad servers. See *Ad Tech Liability Op.* at 850-1. Through the above-described anticompetitive conduct, Google abused these conditions in an attempt to drive competitors from the market, thus maintaining its monopoly power and rendering publishers with no viable alternative to DFP. *Id.* at 851.

126. In the consolidated antitrust cases concerning Google's digital advertising business, the District Court for the Southern District of New York found that, as a result of this Court's prior decision, Google is precluded from re-litigating the issue of Google's market power in the market for publisher ad servers. *MDL Op.*. at 32.

D. Ad Exchanges for Open-Web Display Ads Are a Distinct Product Market.

127. As this Court previously determined based on admitted evidence at trial, "ad exchanges for open-web display advertising constitute a distinct relevant product market." *Id.* at 837. Ad exchanges are distinct from other services and products in the ad tech stack because they connect "publishers using publisher ad servers with advertisers using programmatic buying tools such as demand-side platforms and ad networks" while utilizing "their unique ability to collect and rank ad bids from multiple buying tools in mere milliseconds[.]" *Id.* Ad exchanges are therefore "the only ad tech tool through which publishers can auction their ad inventory at scale and in real-time to the largest sources of programmatic advertising demand" and there is no substitutability with other ad tech. *Id.* at 837-38. For these reasons, "the majority of programmatic ad spending flows through ad exchanges." *Id.* at 838.

128. The unique nature of ad exchanges is further supported by open-web display market participants like publishers and third-party ad tech developers categorizing them separately from other tools in ad tech stack. *Id.* Google itself "regularly identifies ad exchanges as a distinct product that differs from publisher ad servers, ad networks, and demand-side platforms." *Id.*

129. Nor are ad exchanges that provide a platform for the sale of instream video, mobile apps, or social media ads a reasonable substitute for open-web display ad exchanges. Just as in the analysis of publisher ad server markets, walled garden ads of that nature are not substitutable for publishers that need to "monetize their open-web display inventory" and therefore ad exchanges that facilitate their sale are not substitutable for open-web display ad exchanges. *Id.* at 839. As this

Court plainly put it, "the only other products that are reasonably interchangeable with an ad exchange that facilitates the sale of open-web display ads are other ad exchanges that facilitate the sale of open-web display ads." *Id.* at 840.

130. In the consolidated antitrust cases concerning Google's digital advertising business, the District Court for the Southern District of New York found that, as a result of this Court's prior decision, Google is precluded from re-litigating the existence of an antitrust market for ad exchanges. *MDL Op.*. at 32.

E. Google Possesses Monopoly Power in the Worldwide Market for Open-Web Display Ad Exchanges.

131. As this Court observed, "Google possesses monopoly power in the ad exchange for open-web display advertising market" and "Google's AdX has long been the dominant exchange for facilitating open-web display advertising" with a "a market share roughly nine times greater than that of its next-largest competitor." *Id.* at 852.

132. As direct evidence of Google's monopoly power in this market, AdX for "over a decade" has charged a durable monopoly price of 20% on open-web display ad transactions. *Id.* This is materially higher than the take rate typically charged by Index Exchange. Despite lower-priced offerings by exchanges attempting to compete, AdX's take rate and market share remained constant over the relevant period. *Id.* This speaks directly to high barriers to entry for true competitors in the open-web ad exchange market resulting from "Google's scale and network effects across the open-web display ecosystem." *Id.*

133. Google's refusal to even negotiate with publishers over its 20% take rate, despite its own employees acknowledging that the service was "no longer worth 20%," is further direct evidence of its monopoly power. *Id.* at 853. Despite a price materially higher than that of entities attempting to compete, AdX maintains a market share "between 54% and 65% of the market's

total transactions" that has "has remained durable over time[,]" a feat unheard of without monopoly power. *Id.* at 855.

134. Google also shows its monopoly power through its ability to use "its market power in adjacent segments of the ad tech ecosystem to make it more difficult for customers on both sides of the ad exchange market to switch to rival exchanges." *Ad Tech Liability Op.* at 854. This is particularly so on the buy-side by enacting policies that made AdX the exclusive source for AdWords demand. *Id.* Google made AdX the de facto exchange for AdWords, "despite internal recognition that allowing AdWords to bid on other exchanges would be valuable for AdWords' advertiser customers." *Id.* Because of the essential nature of AdWords demand for web publishers, Google's actions "helped Google maintain the power to keep charging AdX publishers a 20% take rate." *Id.*

135. Google also restricted AdX so that it could only send real-time bids to DFP. This eliminated a desirable AdX feature for non-DFP publishers and entrenched Google's monopoly power in the publisher ad server market. Google took this action "despite requests by customers of other publisher ad servers to access AdX's real-time bids." *Id.* This policy therefore forced publishers to use DFP to access AdWords' unique demand through AdX. *Id.* at 855. As the Court concluded, such conduct is "evidence that Google could set its terms of dealing with its customers 'without considering rivals[,]' and constituted behavior that is 'difficult to explain unless' Google had monopoly power." *Id.*

136. In the consolidated antitrust cases concerning Google's digital advertising business, the District Court for the Southern District of New York found that, as a result of this Court's prior decision, Google is precluded from re-litigating the issue of Google's market power in the market for ad exchanges. *MDL Op.*. at 32.

VII. Google Abused Its Monopoly Power Through the Implementation of Anticompetitive Policies.

137. In its post-trial order, this Court held that "Google's monopolies in the publisher ad server and ad exchange markets, enhanced by the AdX-DFP tie, have enabled Google to introduce a series of anticompetitive policies, practices, and technology changes to its sell-side ad tech tools that were not in its publisher customers' best interests." *Ad Tech Liability Op.* at 864. Index Exchange brings this complaint to redress harm resulting from Google's same policies, which impaired its ability to compete effectively in the same markets. As described above, each of these policies further entrenched Google's monopolies and thwarted competitors' attempts to gain market share. See Section II. B. 3. And Section V., *above*.

138. The specific policies held by this Court to have been actions abusing its monopolies were:

(i) The tying of AdX with DFP to further leverage the exclusive demand of AdWords. *Id.* at 859-64;

(ii) First Look, "which required publishers using DFP to offer AdX a first right of refusal for each impression" which "exacerbated the anticompetitive effect of the unlawful AdX-DFP tie by artificially advantaging AdX within DFP's auction logic at the expense of Google's publisher customers." *Id.* at 864;

(iii) Last Look, "another anticompetitive policy that entrenched Google's monopoly power, disadvantaged Google's publisher customers, and harmed the competitive process" by giving "AdX the ability to see competing exchanges' bids in an otherwise sealed auction [on DFP] before AdX would bid" thereby harming "publishers, rival ad exchanges, and advertisers using non-Google ad buying technologies." *Id.*;

(iv) The implementation of SSDRS, the primary purpose of which "was to outbid rival exchanges by using AdX's anticompetitive Last Look advantage." *Id.* at 870; and

(v) Unified Pricing Rules, "another example of Google exploiting its monopoly power and tying arrangement to restrict its customers' ability to deal with its rivals, thereby reducing its rivals' scale, limiting their ability to compete, and further compounding the harm to customers." *Id.* at 865.

139. In the consolidated antitrust cases concerning Google's digital advertising business, the District Court for the Southern District of New York found that, as a result of this Court's prior decision, Google is precluded from re-litigating whether the following anticompetitive conduct to willfully obtain and maintain its market power in the ad exchange and publisher ad server markets: unlawful tying, First Look, Last Look, SSDRS, and Unified Pricing Rules. *MDL Op.*. at 32.

140. In addition to polices already found by the Court to have been anticompetitive, Google has engaged in the following conduct that unlawfully protected and further exploited its market power:

(i) Project Poirot, a direct attack on the competitive threat of header bidding offered by exchanges like Index Exchange which, although the Court held occurred outside the two defined markets and had pro-competitive justifications in certain situations, still "enhanced AdX's market power by adjusting some of DV360's bids in a way that preferenced AdX over third-party ad exchanges." *Ad Tech Liability Op.* at 865 fn 29.

(ii) Open Bidding, a feature that Google claimed to be equivalent to header bidding but that in fact advantaged Google by imposing additional fees on bids generated from

rival exchanges and by providing Google with additional data about sales occurring on such exchanges.

(iii) Tying AdX to AdWords demand, prohibiting competing exchanges from accessing this substantial source of market liquidity and further coercing publishers to favor DFP and AdX over ad tech products created by competitors such as Index Exchange.

(iv) Maintaining DFP's use of a waterfall to engage competing exchanges successively rather than simultaneously, prejudicing competing exchanges particularly if they were not already established market participants.

(v) Refusing to share first-party data about users accessing publishers' webpages with publishers or competitor exchanges, unfairly advantaging AdX and Google's other ad tech tools when generating bids for specific impressions.

(vi) Maintaining black-box secrecy over the logic used by DFP when deciding among competing bids for an impression, impairing Index Exchange and other competitors' ability to maximize the efficiency and effectiveness of advertiser's bids.

(vii) Refusing to share data generated by the enormous volume of advertising transactions that are forced to pass through Google's ad tech technology as a result of Google's anticompetitive conduct. The advantage Google receives from this data has created a self-perpetuating, persistent advantage for Google in its interactions with all aspects of programmatic ad sales on the open web.

CLAIM

Monopolization of the Ad Exchange Market in Violation of Sherman Act §2.

141. Index Exchange incorporates by reference each of the allegations set forth in paragraphs 1-140, above.

142. As this Court has found, "Google has violated Section 2 of the Sherman Act by willfully acquiring and maintaining monopoly power in . . . the open-web display ad exchange market." *Ad Tech Liability Op.* at 810.

143. There is a global market for ad exchanges for Open Web display advertising. *Id.* at 837. There is also a United States market for ad exchanges for Open Web display advertising.

144. Google has monopoly power in both the Global and the United States' markets for ad exchanges for open web display advertising.

145. Google unlawfully monopolized both the Global and the U.S. ad exchange markets through the course of exclusionary conduct and anticompetitive acts described in this Complaint. Each of Google's actions increased, maintained, or protected its ad exchange monopoly. Google's anticompetitive conduct includes:

(i) Google's tying of real-time bids from AdX to the use of Google's publisher ad server;

(ii) Google's tying of AdWords demand to AdX;

(iii) First Look;

(iv) Last Look;

(v) Sell-Side Dynamic Revenue Share;

(vi) Project Poirot;

(vii) Open Bidding, including the additional fee charged to non-Google exchanges under this policy;

(viii) Unified Pricing Rules.

146. Google's conduct serves no legitimate or pro-competitive purpose that could justify its anticompetitive effects.

147. Google's conduct violated Section 2 of the Sherman Act, which prohibits "monopoliz[ing], or attempt[ing] to monopolize, or combin[ing] or conspire[ing] with any other person or persons to monopolize any part of the trade or commerce among the several States, or with foreign nations . . ." 15 U.S.C. §2.

148. Index Exchange is a competitor in both the Global and United States markets for ad exchanges for open-web display advertising. Index Exchange began operating its own ad exchange competing directly with Google's AdX in 2011 and ultimately pivoted the business to exclusively serve as an ad exchange in 2015. Index Exchange has also developed and implemented header bidding technology for the purpose of competing with Google's programmatic ad sales technology, including AdX.

149. Google's exclusionary conduct materially harmed Index Exchange's ability to compete in the market for ad exchanges for open-web display advertising. Index Exchange was harmed by Google's anticompetitive conduct in a manner that the antitrust laws were intended to prevent. In particular, Google's conduct has:

(i) impaired Index Exchange's growth by limiting the volume of its business and thus its revenues and opportunities to levels materially lower than they would have been in a genuinely competitive market;

(ii) forced Index Exchange to invest in development of technology, such as header bidding, that would not have been necessary absent Google's abuse of its market

power, distracting the company and consuming investment resources that could been allocated to more valuable innovation;

(iii) required Index Exchange to engage in sales and marketing efforts and customer maintenance efforts (including maintenance of technology such as header bidding wrappers) that far exceed what would have been required in a competitive market;

(iv) forced Index Exchange to expend efforts to develop liquidity for its ad exchange that would have been unnecessary absent Google's restrictions on access to advertisers through its AdWords product;

(v) created the need for Index Exchange to research factors influencing programmatic auction results, which were frequently fully- or partially- concealed by anticompetitive policies implemented by Google.

150. As an injured rival in the ad exchange market, Index Exchange's harms flowed from the same conduct that inflicted harms on consumers. Index Exchange suffered and will continue to suffer substantial damages and irreparable injury, and such damages and injury will not abate until Index Exchange is awarded damages and an injunction ending Google's anticompetitive conduct is issued.

REQUEST FOR RELIEF

151. For the reasons set out above, Index Exchange respectfully requests that the Court enter judgment in favor of Index Exchange and against Google awarding the following relief:

i. Issuing an injunction prohibiting Google's anticompetitive conduct and mandating that Google take all necessary steps to cease such conduct and restore competition;

ii. Awarding a declaration that the restraints complained of in this pleading are unlawful;

iii. Awarding, as monetary relief pursuant to 15 U.S.C. § 15(a), compensatory, consequential, and punitive damages, including treble damages, for injuries directly and proximately caused to Index Exchange by Google, as proved at trial, as well as the costs of suit, including attorney's fees;

iv. Awarding any other equitable relief necessary to remedy Google's anticompetitive conduct and prevent future anticompetitive conduct; and

v. Granting such other relief as the Court deems appropriate.

REQUEST FOR A JURY TRIAL

152. Pursuant to Federal Rule of Civil Procedure 38(b), Index Exchange demands a trial by jury on all of the claims asserted in this Complaint that are triable to a jury.

Date: December 17, 2025

Respectfully submitted,

/s/ Emily Portuguese

Ian Crosby (*pro hac vice forthcoming)*
Edgar Sargent (*pro hac vice forthcoming)*
Steve M. Seigel (*pro hac vice forthcoming)*
SUSMAN GODFREY L.L.P.
401 Union Street, Suite 3000
Seattle, WA 98101
Telephone: (206) 516-3880
Facsimile: (206) 516-3883
icrosby@susmangodfrey.com
esargent@susmangodfrey.com
sseigel@susmangodfrey.com

Davida Brook, (*pro hac vice forthcoming)*
SUSMAN GODFREY L.L.P.
1900 Avenue of the Stars, Suite 1400
Los Angeles, CA 90067
Telephone: (310) 789-3100
Facsimile: (310) 789-3150
dbrook@susmangodfrey.com

Emily Portuguese, (NY 5920327)
Tom Boardman, (NY 4838074)
SUSMAN GODFREY L.L.P.
One Manhattan West, 50th Floor
New York, NY 10001
Telephone: (212) 336-8330
Facsimile: (212) 336-8340
eportuguese@susmangodfrey.com
tboardman@susmangodfrey.com

Attorneys for Plaintiff