UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

PUBMATIC, INC.,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Case No. 1:25-cv-1482

COMPLAINT

DEMAND FOR JURY TRIAL

COMPLAINT

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Plaintiff PubMatic, Inc. ("PubMatic") files this Complaint and demand for a jury trial seeking relief against Google LLC ("Google") in the form of damages, declaratory relief, and injunctive relief. PubMatic states and alleges the following.

I. NATURE OF ACTION

1. The Internet thrives on the free flow of information, supported by dynamic digital advertising markets. PubMatic was at the forefront of the digital advertising revolution, pioneering breakthrough technologies that enabled website publishers to maximize their advertising revenue and deliver engaging content to users. Then, through a series of anticompetitive tactics, Google stifled innovation, shut out its rivals, and tightened its stranglehold on the industry. This Complaint details how Google's illegal actions specifically impacted PubMatic, undermining its growth and depriving publishers and advertisers of the benefits of fair competition.

2. The harm caused by Google's conduct is not hypothetical. In April 2025, after a multi-week trial, the Honorable Leonie Brinkema found that Google had "willfully engaged in a series of anticompetitive acts to acquire and maintain monopoly power in the publisher ad server and ad exchange markets for open-web display advertising."[1] The Court concluded that Google's exclusionary conduct "substantially harmed Google's publisher customers, the competitive process, and, ultimately, consumers of information on the open web," and also "depriv[ed] rivals of the ability to compete."[2] PubMatic is one of those "rivals" whose competition Google illegally suppressed. PubMatic therefore brings this action to seek damages and injunctive relief to undo the harm to PubMatic and to the market that Google's unlawful conduct has caused.

3. As an early innovator in digital advertising, PubMatic helped major publishers like News Corp. maximize the value of their online ad space. But when Google entered the field, it used its vast resources, immense power, and anticompetitive tactics to push PubMatic—and others—aside. That, in turn, led to real consequences for everyone, including higher costs for

[1] *United States v. Google LLC,* Case No. 1:23-CV-108 (E.D. Va.), Dkt. No. 1410 ("Memorandum Opinion") at 114.
[2] *Id.*

advertisers, reduced revenue for publishers, fewer independent voices online, and less transparency.

4. PubMatic's success in the market despite Google's anticompetitive conduct is a testament to PubMatic's hard work, ingenuity, long-term vision, and experience in the ad tech industry. But PubMatic would have been far more successful if not for Google's repeated monopolistic and illegal behavior. Google's anticompetitive tactics impeded and undermined PubMatic's ability to grow, increase market share, and compete in the very fields that PubMatic helped create.

5. With this lawsuit, PubMatic aims to restore a level playing field in the digital advertising space. This case is not only about recouping the damages PubMatic has suffered; it is also about ensuring that publishers, advertisers, and consumers all benefit from true competition in the digital advertising industry, so that innovation can thrive and the open Internet can remain a source of information and opportunity for all.

A. Digital Advertising Emerges as the Internet Grows.

6. For centuries, advertising has been essential to business—helping companies reach customers and providing critical funding for newspapers and magazines.

7. Today, nearly five billion people carry smartphones, and more than thirty websites attract over a billion visits per month.[3] As people increasingly turned to the Internet for news and entertainment, digital advertising became a crucial and sizable market. In recent years, the size of the global digital advertising market is close to $750 billion. The money advertisers pay to reach online audiences not only supports websites, but also keeps them largely free for users around the world.

B. PubMatic Creates New Model to Assist Publishers to Maximize Their Revenue and Better Pair Publishers with Advertisers.

8. In 2006, Rajeev Goel, Amar Goel, Mukul Kumar, and Anand Das, the founders of PubMatic, saw a significant opportunity in the nascent digital advertising space. They saw that

[3] *Id.* at 5.

there were a lot of start-ups trying to help digital advertisers better target and price their ads, but that few companies were focused on helping publishers get the most value out of their impressions. Rajeev, Amar, and Mukul named their company PubMatic, for "Publisher" plus "Automatic," and launched it at TechCrunch 40 in September 2007.[4] They described their offering as an "ad server that sits between online publishers and online ad networks," helping publishers "maximize their advertising inventory by seamlessly communicating with multiple ad networks to help them find the optimal ad layout and the highest paying ad network."[5] After that announcement, overnight, PubMatic gained over a thousand new accounts. As the first company to launch focused on using software to optimize yield for publishers, PubMatic had identified a significant need.

9. Today, PubMatic runs a popular ad exchange. As PubMatic was the first company to focus on yield for digital publishers, so too was PubMatic one of the first companies to develop the transformative real-time bidding technology that ultimately resulted in today's ad exchanges. PubMatic developed both these technologies because of its focused attention on the needs of market players, and through considerable investments of both time and money.

C. Google Acquires Its Way to a Dominant Position, Which it Then Misuses.

10. While the digital advertising industry was on a rapid upward trajectory, in part because of PubMatic's leadership and innovations, Google was conspiring behind the scenes to monopolize the industry. In contrast to PubMatic, rather than compete through innovation, Google purchased entities that already existed in each area of the ad tech stack. These entities had already achieved success in the industry, so Google's purchases solidified Google as a key stakeholder across the board. After acquiring these pieces of the ad tech stack, Google implemented a plan to illegally tie its various products together to entrench its dominance. Google then took multiple affirmative steps over the years to abuse and further its illegal ties and market dominance. In so

[4] "TechCrunch40 Session 6: Revenue Models & Analytics," *TechCrunch*, September 18, 2007, *available at* techcrunch.com/2007/09/18/techcrunch40-session-6-revenue-models-analytics/.
[5] *Id.*

doing, Google has illegally limited PubMatic's ability to grow and compete in the very technology spaces that PubMatic built.

11. There are numerous examples of Google buying its way into markets that PubMatic helped create. For example, when PubMatic made its announcement at TechCrunch 40 in the fall of 2007, it had no competitors. Competitors began to appear in the next six to twelve months, including a company called AdMeld. Google later acquired AdMeld in 2011. Google did so because it recognized in the fall of 2010 that "Yield Managers"—and specifically PubMatic—"are a threat we need to take very seriously."[6] In fact, Google was deciding between AdMeld and PubMatic for this acquisition, and ultimately chose to purchase AdMeld, and to compete against PubMatic.[7]

12. As another example, when PubMatic created real-time bidding in late 2008, it conducted the first real-time transaction with another company, Invite Media. Google acquired Invite Media in 2010.

13. As a final example, Google obtained the technology that would later underlie its dominant ad exchange via its 2008 acquisition of DoubleClick.

14. Google exploited these acquisitions and its market power in other areas to ensure its dominance across multiple parts of the ad tech stack, building monopolies and creating illegal tying arrangements to make it difficult—if not impossible—for digital publishers and digital advertisers to choose companies *other* than Google for their digital advertising needs. At the same time, Google's various technologies covertly favored—and continue to favor—each other in ways that were impossible for Google's competitors and customers to detect, but which made competition with Google even more difficult.

15. The U.S. government has spent years investigating and prosecuting Google's anticompetitive conduct in the digital advertising space. As a result, Google has been forced to

[6] *United States v. Google LLC,* Case No. 1:23-CV-108 (E.D. Va.) ("*United States v. Google*"), PTX0088.
[7] *Id.* at PTX0112.

produce documents and give testimony that had never before come to light. The culmination of this effort was a three-week trial in front of Judge Brinkema in the fall of 2024. It is now clear, as Judge Brinkema found, that Google undertook multiple actions over the years to willfully acquire and maintain monopoly power, all of which favored its ad exchange, AdX, to the detriment of competitive ad exchanges like PubMatic. These actions include:

- Tying Google's AdX together with another Google product, DoubleClick for Publishers ("DFP").[8] In so doing, Google leveraged the strength of yet another of its products—AdWords.[9]
- Implementing "First Look, which required publishers using DFP to offer AdX a first right of refusal for each impression."[10]
- Implementing Last Look, which "gave AdX the ability to see competing exchanges' bids in an otherwise sealed auction before AdX would bid."[11]
- Implementing Sell-Side Dynamic Revenue Share, which compounded the anticompetitive effects of Last Look by allowing AdX to adjust its take rates so that it could outbid other ad exchanges by as low as 1 cent.[12]
- Implementing Unified Pricing Rules, which eliminated a mechanism by which publishers had been trying to "maintain revenue diversity and … mitigate Google's dominance of the ad exchange market."[13]

16. The above actions, as well as others, constitute multiple distinct steps that Google took over the years to pursue and deepen its dominance in the digital advertising space. Independently and together, these actions stacked the deck heavily and improperly in favor of Google's AdX product. As a result, PubMatic lost significant revenue and growth opportunities. Further, Google's tactics undermined PubMatic's mission of helping publishers maximize revenue and ensuring a fair, competitive digital advertising market.

[8] Memorandum Opinion at 90-98.
[9] *Id.*
[10] *Id.* at 99.
[11] *Id.*
[12] *Id.* at 100.
[13] *Id.*

17. Through this lawsuit, PubMatic seeks to hold Google responsible for its unlawful actions, and to obtain monetary compensation and any other equitable relief for the harm caused to PubMatic by Google's actions.

II. PARTIES

18. Plaintiff PubMatic, Inc. is a Delaware corporation. Its principal place of business is in Redwood City, CA.

19. Plaintiff is a publicly traded corporation, it has no parent corporation, and, to its knowledge, no publicly held corporation owns ten percent or more of its stock.

20. Defendant Google LLC is a Delaware limited liability company having its principal place of business in Mountain View, CA. Google LLC is the indirect primary operating subsidiary of the publicly traded holding company Alphabet Inc. The sole member of Google LLC is XXVI Holdings, Inc., which is a Delaware corporation having its principal place of business in Mountain View, CA.

III. JURISDICTION AND VENUE

21. This Court has subject-matter jurisdiction over PubMatic's federal antitrust claims pursuant to Sections 1 and 2 of the Sherman Act (15 U.S.C. §§ 1 and 2), Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15 and 26), and 28 U.S.C. §§ 1331 and 1337.

22. This Court also has federal question jurisdiction pursuant to 28 U.S.C. §§ 2201 and 2202.

23. This Court has personal jurisdiction over Google. Google engages in, and its activities substantially affect, interstate trade and commerce. Google provides a range of advertising technology products and services that are marketed, distributed and offered to consumers throughout the United States and within this District, across state lines and internationally.

24. Venue is proper in this District under Section 12 of the Clayton Act, 15 U.S.C. § 22, and under 28 U.S.C. § 1391, because Google transacts business in and is found within this

District. Google conducts substantial business in Virginia and this District, including by offering, operating, and profiting from the ad tech products at issue in this litigation. Google operates a data center in Loudon County and has offices in Sterling and Reston, Virginia. As of 2023, Google employed more than 875 individuals full time in Virginia. Given its extensive activities in digital advertising markets existing within this District, Google has harmed Virginia-based publishers, advertisers, and consumers, and has derived substantial revenue from its conduct in this District. Google regularly transacts business in this District and throughout the Commonwealth of Virginia by marketing, distributing, and delivering digital advertising services across state lines and into the stream of interstate commerce.

IV. RELEVANT FACTS

A. History of Digital Advertising Sales

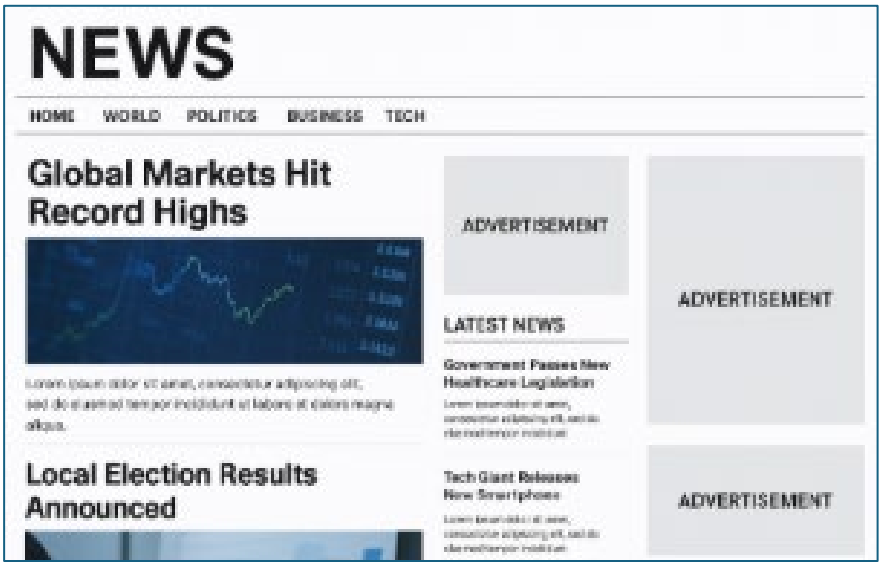
25. PubMatic, founded by Rajeev Goel, Amar Goel, Mukul Kumar, and Anand Das in 2006, is an advertising exchange technology provider, or a sell-side platform ("SSP"), for the digital advertising space. The process by which digital advertising space is bought and sold has gone through a series of transformations over the past couple of decades. PubMatic helped lay the groundwork for a revolutionary system of digital ad sales.

26. On a basic level, digital advertising comprises: (1) publishers who sell space for ads on their websites; and (2) advertisers who purchase the publishers' space to display their advertisements. Digital advertising has several distinct qualities from traditional, non-Internet advertising, creating benefits for all parties involved.

27. Due to the data-rich nature of the Internet, digital advertising allows publishers to better monetize their content and advertisers to better reach their target consumers. For example, digital advertisers can target Internet users based on the demographics of the user (e.g., gender, income, age range, etc.), where they are located, their interests, their recent purchases, and the content they have viewed, among other attributes. Targeting consumers allows advertisers to maximize their returns on advertising expenditures.

28. One of the most prominent forms of digital advertising is the display of advertisements on websites, which is referred to as open-web advertising. For example, websites may display text or images, most commonly in rectangular spaces on websites. Imagine a news website with ad spaces at the top and sides, as shown below. Each space can be sold to a digital advertiser each time a user views the publisher's content, and its value changes depending on who is visiting the site. For example, if a user is identified as someone interested in purchasing a new car, the opportunity to use those ad spaces to show that user an advertisement is far more valuable to a car manufacturer than to a shoe manufacturer. Each time a digital ad is shown to a user, it is known as an "impression."[14]

Figure 1: Sample News Website



29. By displaying open-web advertisements, websites can operate at little to no cost to users of those websites. Many of the world's most popular websites, such as ESPN, CNN, People.com, Reuters, Forbes, Fandom, and Weather.com, are largely free to use because of the revenue those websites earn from digital advertising. This is a significant benefit for consumers, who can view news and entertainment, conduct research, and find answers to innumerable

[14] Paparo, A., Yield: How Google Bought, Built, and Bullied Its Way to Advertising Dominance (Amplify 2025) ("Yield") at Glossary.

questions—all for free. In addition to this benefit for consumers, digital advertising has also provided billions of dollars annually for companies to maintain and develop their websites.

30. Digital advertising was not always as sophisticated as it is today. In the early 2000s, when digital advertising was in its early stages, advertisements were sold through direct deals negotiated between advertisers and publishers and were not tailored towards specific users. Rather, ads were purchased in bulk and displayed on a specific website for an agreed-upon amount of time, regardless of the user accessing that website. Unfortunately, due to the amount of digital space and large number of Internet users, the direct deal process resulted in much digital ad space being left unsold, meaning significant ad revenue and advertising power were left on the table. This unsold digital ad space was referred to as "remnant inventory."

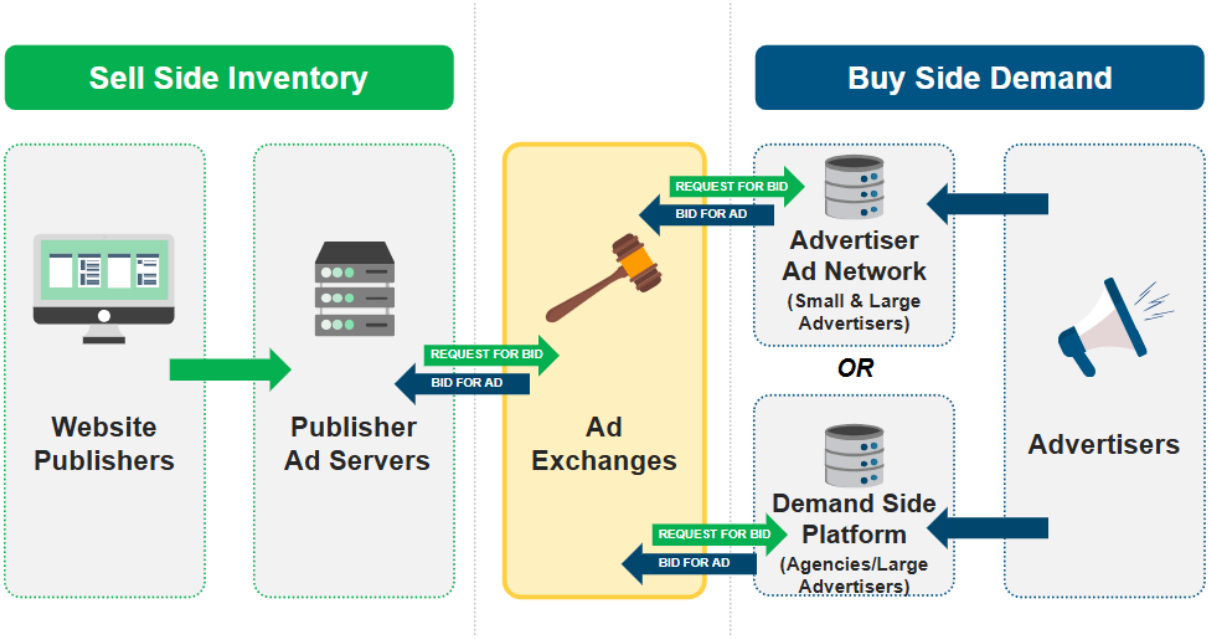
31. Direct deals also proved ineffective at predicting the number and type of users that may visit any particular website at any particular time. For example, an unexpected news event—like the engagement announcement of two celebrities—might drive far more Internet users to news and fashion websites than the direct deals had anticipated for that day. Difficulty in predicting timing hindered the ability of advertisers and publishers to plan direct deals in advance and further risked leaving space unused or undervalued. Direct deals also lacked a system to utilize the highly valuable data about pseudonymous Internet users produced by the Internet, significantly stunting the value of the digital ad space.

32. While digital publishers continued to grow along with the growth of the Internet, the resources needed and lack of customization of direct deals made the direct deal approach insufficient. Moreover, although publisher space was growing (i.e., more websites were being developed and built out), smaller publishers and advertisers lacked the resources and volume to engage in direct deals, which require a high enough volume of impressions to offset the costs of the transaction, as well as the time and resources to negotiate contracts with advertisers. Due to the resources required, direct deals thus left an additional significant segment of the digital advertising space untouched.

33. To try to remedy some of the inefficiencies of direct deals, organizations called advertising technology providers developed programmatic advertising tools that automated the process of matching publisher space with digital advertisers. Before 2007, digital advertisements were primarily sold on "ad networks," which comprised both advertising-facing (or "buy-side") and publisher-facing (or "sell-side") tools. Ad networks would match publishers using that ad network's sell-side tools with digital advertisements on the buy-side. When publishers used ad networks, instead of approaching individual advertisers, the publishers could sell their remnant inventory to ad networks, who would then sell that space to the advertisers in their network.

34. But ad networks operated on an arbitrage model, meaning they bought inventory as cheaply as possible and resold that inventory at higher prices, leaving publishers with limited control over their inventory of ad space and little visibility into the true value of their impressions. This model led to inefficiencies that hindered growth. For large, sophisticated publishers and advertisers who wanted more control over where, how, and to which consumers their advertisements were shown, this system eventually transformed into the modern-day collection of advertising systems, which comprises three distinct platforms: (1) publisher ad servers to be managed and used by publishers; (2) buyer tools to be used by advertisers; and (3) ad exchanges to interact with both technologies. Collectively, all three types of technologies are referred to as the "ad tech stack." Figure 2 shows the different technologies that make up the ad tech stack and the flow of information within the ad tech stack.

Figure 2: Ad Tech Stack



35. Now, instead of having just ad networks sitting between the publishers and advertisers to make digital advertising transactions, there are separate technologies for the publishers, the advertisers, and the exchange that coordinates between the two.

36. As can be seen in Figure 2 above, on one side, publishers use the "sell side" publisher ad servers and tools to sell their digital ad space. On the other side, advertisers use various ad-buying tools, such as: (1) advertiser ad networks to manage and track their ads; and/or (2) "buy side" demand-side platforms (also called DSPs) to buy digital ad space.

37. In between, ad exchanges are separate platforms that liaise with the advertisers and publishers to facilitate digital ad sales. Today's ad exchanges serve "as the critical intermediary between advertisers' ads and publishers' inventory by facilitating real-time auctions in which advertisers can bid on inventory."[15] Ad exchanges aggregate publishers' available inventory, put it up for bid when available, integrate with the advertisers' tools to solicit bids for the space, and evaluate those bids to determine the auction winners. All three technologies work together to place advertisers' ads on publishers' websites.

[15] Memorandum Opinion at 15.

38. Today's ad tech stack is a significant improvement over the direct deals and ad networks of the early 2000s. And PubMatic was a critical player in bringing about that improvement.

B. PubMatic's Innovation Unlocks Millions in Additional Revenue for Publishers.

39. Before PubMatic's entry into the market in 2006, the economics of digital advertising for open-web display were fundamentally misaligned against publishers. Ad networks—dominated by a few entrenched providers—were built for the convenience of advertisers, not for maximizing publisher revenue. As a reminder, in the early days, publishers sold their most valuable impressions directly and were left with vast amounts of remnant inventory, which static integrations with ad networks failed to monetize effectively. This structural imbalance left publishers without the tools, data, or leverage to unlock the full value of their audiences. PubMatic was founded to address that imbalance.

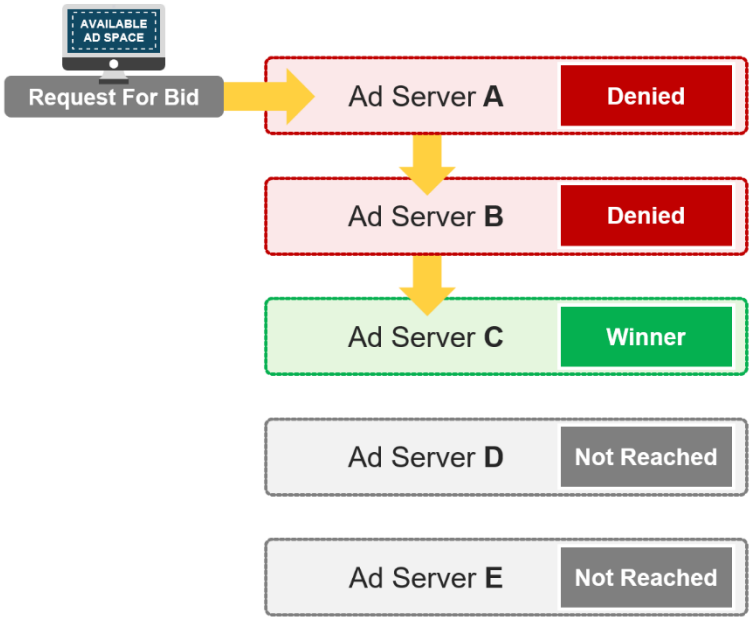
40. The founders of PubMatic were skilled entrepreneurs starting at an early age. In college, the Goel brothers founded a custom-built golf equipment website, Chipshot.com, backed by Silicon Valley giant, Sequoia Capital. Through the Goel brothers' leadership, Chipshot.com earned upwards of $30 million in annual revenue. After Chipshot.com, and after working for other companies for brief periods, the brothers came together to discuss their next venture. After significant research and development, the Goel brothers conceived what turned out to be a disruptive innovation.

41. In 2006, the Goel brothers founded Komli Media. Komli Media housed two separate business lines: (1) an Asia-based ad network; and (2) a business focused on helping publishers optimize their ad sales (a type of business that would later be called "yield management"). Within a year, the businesses split. The ad network portion retained the name Komli Media, and eventually became India's leading digital marketing platform company. The yield management portion became PubMatic, whose name is a combination of the words "publisher" and "automatic."

42. PubMatic was a radical new business concept. PubMatic's founders recognized a significant opportunity to empower publishers through technology. Based on this recognition, PubMatic made it its mission to give publishers something they had never had before: the ability to manage and optimize every impression, increase revenue, and gain unprecedented visibility and control over their inventory—all while maintaining independence and transparency.

43. In short, PubMatic's founders recognized that the 2006 model of selling remnant ad inventory was not working well to get publishers the best prices for their advertising spaces. At the time, an ad operations team at a publisher would use an ad server to offer impressions to ad network partners in a rigid order set in the ad server.[16] For example, the ad server would ask ad network A if it wanted to buy an impression, and then ad network B, and so on. If ad network A purchased the impression at a price exceeding the ad server's price floor for that impression, then ad network A won the impression, regardless of whether ad network B would have paid a higher price. This process was called the "waterfall," and is shown below in Figure 3.[17]

Figure 3: Waterfall Bidding



[16] Yield at 87. An ad server was a software product that helped publishers manage the serving of ads to their websites. *Id.* at 12.
[17] *Id.*

44. Publishers at the time were *trying* to maximize the value of their remnant ad inventory, but the available technology made that difficult. In the ad server, the publishers could prioritize ad networks based on the historical prices paid by those ad networks. For example, if ad network A paid out an average of $3 per thousand ads last month and ad network B was only paying an average of $2.50 per thousand ads, then the publishers would prioritize ad network A, which would get the first chance to bid.[18] What this did not account for was the possibility that newer information might have shown that ad network B was in fact more likely to pay more for that particular impression. But reordering ad network priorities in the ad server was a difficult and time-consuming task. Often, publishers' ad operations teams would not undergo the effort of re-prioritizing the ad networks, even if the data would have indicated that they should. This resulted in a loss of revenue to publishers, whose ad servers were offering "first dibs" to the wrong ad networks.

45. PubMatic transformed the waterfall model by creating software that automated and eased the process of reordering the ad networks in the waterfall. PubMatic used data-driven predictions based on machine learning to dynamically route impressions to the ad networks from which they would earn the highest return. PubMatic's algorithms predicted the highest-paying buyer for each impression based on gathered data and routed inventory accordingly. PubMatic also allowed publishers to manage multiple waterfalls and change sequencing more frequently (hourly instead of weekly or monthly) by automating the pull of pricing data from ad networks. This approach gave publishers unprecedented control over their inventory and higher yields.

46. It was clear from the start that PubMatic addressed a significant need in the digital advertising industry. In 2007, PubMatic launched at the TechCrunch 40 Innovator Conference in San Francisco, for which it had been selected as one of just a few dozen up-and-coming startup companies to be featured. By the time the conference arrived, PubMatic had developed an easy-to-set-up platform on which any publisher could sign up, configure an account, and start earning

[18] *Id.* at 87.

revenue within hours. The market reaction was extraordinary: over 1,000 publishers registered overnight.

47. The immediate influx of publisher registrations was proof that PubMatic had identified and solved a deep, systemic problem in the market. Knowing that its hard work had paid off, from that moment, PubMatic doubled down on a practice that would define its culture—it resolved to never stop engaging directly with publishers to understand what they needed and building features to cater to that need. The technology introduced by PubMatic eventually delivered publishers millions in incremental revenue that had previously been unattainable.

48. Of course, building a new company—and indeed a new type of business in an emerging technology space—was no easy feat. PubMatic raised more than $63 million over several fundraising rounds just to survive, not including the additional capital PubMatic devoted to research and development.

C. PubMatic Revolutionizes the Ad Tech Stack Through Real-Time Bidding.

49. Two years later, PubMatic transformed the ad tech industry again. PubMatic implemented the first-ever real-time transaction between disparate companies using disparate technologies, spearheading a disruptive technology that has become the staple of the ad tech stack, and of ad exchanges in particular. True to form, PubMatic's Rajeev Goel came to the idea of real-time bidding while brainstorming another way to help publishers.

50. In the waterfall environment discussed above, Rajeev noticed that each step in the waterfall caused information about the bid opportunity to be lost. Specifically, bid opportunities were passed to each ad network, which would then pass them back if the ad network chose not to bid, so that they could be passed to the next ad network. Rajeev noticed that every time an ad network passed back an ad opportunity, it passed it back with less information than it had had before. In other words, while ad network A might have known that the ad opportunity was for a middle-aged woman who had recently shopped for shoes, ad network D might not have received the same information by the time its turn to bid came. As a result, ad network D might not bid as much as it otherwise would. Rajeev reasoned that it would be better for publishers if PubMatic

could ask all the ad networks to respond to the same ad request at the same time, with as much information available as possible.[19]

51. PubMatic drafted a plan for how it would like to provide buyers each ad opportunity at the same time, and how they should respond.[20] PubMatic emailed that plan out to several key partners, including connections at MediaMath and Invite Media, who represented advertisers. The first real-time transaction then took place between PubMatic and Invite Media in late 2008.

52. By mid-2009, it was clear that real-time bidding was the future. By sharing rich data with buyers in real time, real-time bidding enabled advertisers to identify and bid aggressively on the exact impressions they wanted, creating a marketplace where price discovery and competition worked in both the publishers' and advertisers' favor. Several different companies began working on ad exchanges with real-time bidding. And PubMatic became, not just a yield manager, but a modern ad exchange.

53. When ad exchanges offered real-time bidding, the entire process of offering an impression and soliciting bids occurred automatically at the time the Internet user loaded the webpage, before the webpage was displayed to the Internet user along with the attendant ad(s). In other words, today, as a result of PubMatic's innovation, each time an Internet user clicks on a website that has ad space, the publisher ad server sends out a new request for bids for that ad space to at least one ad exchange, such as PubMatic. The bid request sent to the ad exchange contains valuable data, including information about the website, ad space, and the Internet user. Once the ad exchange receives the bid request, that ad exchange will add its own data into the bid request, such as information about the Internet user and website. The ad exchange then solicits bids from advertisers' ad-buying tools in an auction. In valuing their bids, advertisers not only evaluate the specific ad space up for grabs, but also the specific Internet user who is visiting that website. They then send bids back to the ad exchange, which determines the winning bid and sends that bid to the publisher ad server.

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[19] Yield at 92.
[20] *Id.*

54. The level of specificity now provided to the buy-side tools allows an entirely new level of impression individualization for each advertiser looking for ad space. When determining what any particular advertising space is worth, an advertiser can value that space on the individual impression level based on, for example, the user's non-personally identifiable data (i.e., the user's pseudonymous identifier), their gender, general location, region, interests, and the like, in addition to the publisher quality, quality of the ad space, and relevance of the space to the advertisement. Stated simply, by offering real-time bidding, ad exchanges such as PubMatic provided publishers with the opportunity to sell their ad space on an individual basis, and the prices they sold for more accurately reflected each impression's actual value.

55. Under this new system, the publisher ad server can receive several bids from multiple exchanges and compare the bids against other demand sources in real time before deciding which bid to accept. All bids that do not meet or exceed the minimum price set by the publisher as what it is willing to accept (i.e., the price floor) are screened out. Once the ad server evaluates the bids from the various exchanges (and sometimes, other advertising sources), the ad server will decide the winning ad and display that ad on the website for the Internet user's viewing. Now, instead of having to take the first price that meets its price floor, publishers can value their space on an individual basis using numerous sources of valuable data and compare bids across multiple sources in real time, thus allowing publishers to obtain the maximum value for their spaces. This entire real-time bidding process occurs in the milliseconds that it takes for the webpage to load for the user.

56. Real-time bidding was a fundamental redesign of how digital advertising transactions occurred on the open web, completely overhauling the imbalance of power in digital advertising. By enabling open, real-time competition for every impression, PubMatic essentially erased the historical disadvantages publishers faced, giving them an increased ability to monetize through improved precision, speed, and data access and revolutionizing an industry that had long favored the buy side in the process. Although real-time bidding was initially proprietary, it soon became subject to an open-source protocol to reduce maintenance costs and foster industry growth.

D. Google Sets Itself Up to Dominate All Three Aspects of the Ad Tech Stack.

57. While the digital advertising space was on a rapid upward trajectory, in large part because of PubMatic's leadership and innovations, Google was conspiring behind the scenes to monopolize the industry. Prior to real-time bidding, Google was an active participant in the ad tech stack. However, Google's offerings were concentrated in the buy side of that stack. Then, right as real-time bidding was about to revolutionize the industry, Google devised a plan to take over the industry at significant cost to its own customers, as well as other stakeholders.

58. Google originally started as a search product in 1998. Google Search became the world's most popular search tool. Indeed, Google has enjoyed an over-80% share of the market for general search services since at least 2009, and a court recently found that Google has monopoly power in the general search services market.[21]

59. Because of the popularity of Google Search, numerous advertisers were attracted to the opportunity to purchase ad space on websites that matched exactly what the Internet user was searching for. Google launched its advertising buying tool, AdWords, later rebranded as Google Ads, in 2000.

60. At launch, AdWords simply allowed advertisers to purchase ad space on the Google Search results page. AdWords was not capable of matching open-web display advertising impressions on websites to Internet users' Google searches. Instead, a third party, called Applied Semantics, developed that technology. True to form, rather than create its own solution to meet the demands of the market, Google simply bought Applied Semantics in 2003 and folded its technology into AdWords, enabling Google to expand AdWords into the digital open-web display advertising industry. By 2007, AdWords was used by more than one million advertisers and was "the largest digital ad network in the world."[22] Google thus held a large chunk of the buyer side demand.

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[21] *See United States v. Google LLC*, 747 F. Supp. 3d 1, 119-24 (D.D.C. 2024).

[22] Memorandum Opinion at 26. A court recently found that Google has monopoly power in the market for general search text advertising, as well, with its market share in the text ads market growing steadily from 80% in 2016 to 88% in 2020. *United States v. Google LLC*, 747 F. Supp.

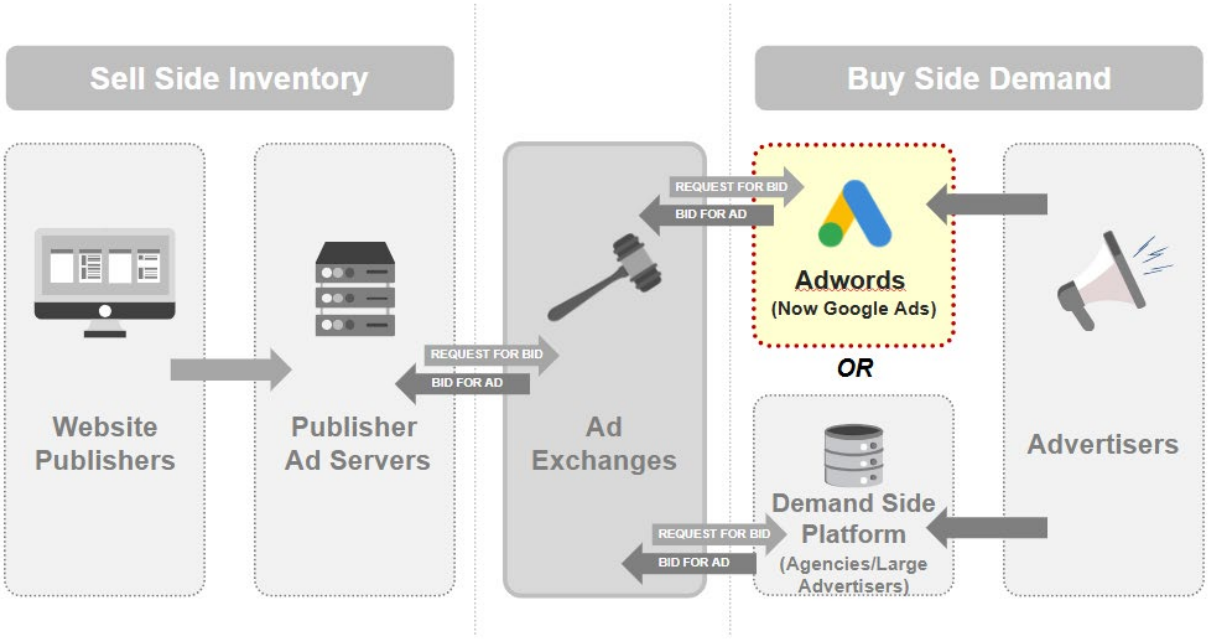
61. Like some other ad networks, AdWords is a self-service bidding tool for ad placement on the open-web display inventory. AdWords caters to millions of small and medium-sized advertisers. Compared to demand-side platforms (DSPs), which are a more complex type of buyer-side tool used by fewer (and generally larger) advertisers, AdWords offers simpler options that are often a "black box" to advertisers, meaning advertisers have limited control over the process by which the ad network bids for impressions. AdWords is attractive to its user base because its simpler offerings are easier to manage, and advertisers can run campaigns on both: (1) third-party, open-web display impressions; and (2) Google's offerings, such as Google Search, YouTube, and Gmail ads.

62. The size of AdWords' user base (and thus the advertising demand AdWords represents) is massive. As of 2020, the total media spend on AdWords was over $12 billion, which was double the spend on Google's DSP, DV360, for the same year. The unique and significant advertising demand represented by AdWords is generated by the popularity of Google's consumer-facing products, such as Google Search, Gmail, and YouTube. Each of these offerings is a significant source of advertising. Advertisers who want to place their advertisements on Google's ad spaces in addition to other websites thus typically do not or cannot switch ad-buying tools, because of the time and resources that would be required to split their advertising campaigns across multiple ad-buying tools. As a result, millions of advertisers use AdWords as their exclusive ad-buying tool, making AdWords a "must-have" source of advertising demand for many online publishers.

63. Figure 4 below shows where in the modern ad tech stack Google initially fit.

3d at 125, 138.

Figure 4: Google's Place in the Pre-2008 Ad Tech Stack



64. Google's strength in the buy-side market was not enough for Google. So Google decided to expand its reign into the other portions of the ad tech stack.

65. Typically, if a company wanted to compete in the digital advertising space, it would need to expend significant resources to create a product that works in the complicated digital ad system and out-shine competitors in a highly competitive and quickly growing industry. Achieving such innovation was expensive and required a high level of skill and expertise. Initially, Google attempted to compete on the sell side of the ad tech stack by developing its own publisher ad server. But despite Google's technological prowess, it quickly realized that significant technological and competitive hurdles prevented it from developing its own ad server. Google quickly pivoted to a new plan that would maximize its power in the market while requiring far less innovation on Google's part. Google resolved to muscle its way into the market through pure buying power.

66. While real-time bidding was being developed, in 2008, Google acquired DoubleClick. With it, Google obtained the industry leading ad server, DFP, and an early-version ad exchange, AdX.[23] When acquired, DoubleClick's DFP held about 60% of display ads by

[23] This ad exchange was an earlier version of today's ad exchanges, one that allowed buyers and sellers to connect, but which did not enable real-time bidding.

revenue and was used by nine of the ten top publishers in the United States. A year later, on September 17, 2009, Google relaunched AdX with the real-time bidding technology that PubMatic helped to develop.

67. Although DoubleClick had value in and of itself, Google significantly overpaid for it. In fact, while Google valued DoubleClick at only $1.8 to $2.2 billion, Google paid **$3.1 billion** for the acquisition. This is an enormous amount of money even by today's standards, but especially so amid the Great Recession of 2008, when the average deal size for M&A transactions was under $200 million. Google's overpayment was not an error. Internally, Google recognized that obtaining DoubleClick's publisher platform would give Google control over a "vital chokepoint" that Google described as the "most strategic battle." Google was explicit: it "[d]idn't buy [DoubleClick] [DFP] for the revenue (& growth) – [Google] bought it for enabling the [Ad] Exchange."[24] Additionally, the acquisition kept competitive tech giants such as Microsoft and Yahoo from controlling the industry. As Google noted internally, if it "los[t] [publisher ad server] platform share, [Google could] build the best GCN [AdWords] in the world but [would] still be at a severe risk of being disintermediated if Y[ahoo] [or] M[icrosoft]" had power over "the publisher page."[25] In short, the additional approximate $1 billion that Google spent for DoubleClick was a calculated and intentional payment to give Google control over the ad tech stack.

68. Shortly after the DoubleClick acquisition, in 2010, Google further expanded its reach on the buy side through its acquisition of Invite Media, the very company with whom PubMatic debuted real-time bidding. Google's acquisition was targeted to Invite Media's demand-side platform (DSP), DoubleClick Bid Manager ("DBM"), which Google later rebranded as DV360. As explained, larger and more sophisticated advertisers typically use DSPs because they provide more control and flexibility than advertiser ad networks, such as AdWords. Advertisers on DSPs often deploy advertising campaigns that spend significant amounts of money on digital advertising placements, sometimes up to hundreds of millions of dollars. Due to the scope, scale,

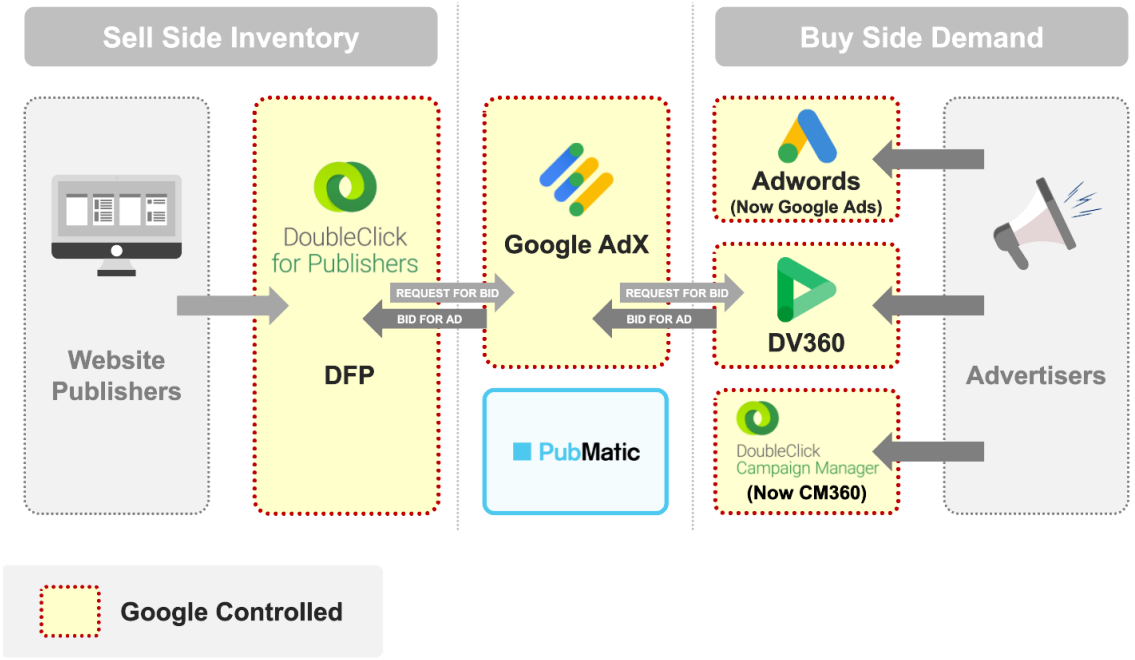
[24] *United States v. Google*, PTX0051 at '726.
[25] *United States v. Google*, PTX0041 at '005.

and number of advertising campaigns run through DV360, DV360 was a significant source of advertiser demand for ad exchanges like PubMatic.

69. By combining its acquisition of DV360 with AdWords, Google expanded its control on the buy side to include advertisers of all sizes.

70. Figure 5 below shows how, through these acquisitions, Google came to dominate every aspect of the ad tech stack as it relates to programmatic advertising.

Figure 5: Google Post-2008 Ad Tech Stack



E. Google Solidifies Its Dominance Over the Ad Tech Stack Through Anticompetitive Ties Between Each Level.

71. Rather than compete through innovation, Google had purchased its way into all three areas of the ad tech stack, acquiring companies that had already achieved success in the industry, and thus solidifying Google as a key stakeholder across the board. Once positioned in this way, Google implemented a plan to illegally tie its various products together to entrench its dominance.

72. Google saw its strong position on both the sell side and the buy side of the ad tech stack as a "virtuous cycle" that could further strengthen both positions. As Google stated internally,

"more pub[lisher]s from DFP mean more attractive to advertisers" and "more advertisers mean more desire for pub[lisher]s to get on DFP." Judge Brinkema summarized Google's plan (and ultimate achievement) succinctly: "Google's ad tech business [] benefited from network effects, as the more advertiser customers Google had, the more publishers wanted to use DFP, and the more publisher customers Google had, the more advertisers wanted to use Google's buy-side services, thereby creating a self-reinforcing positive feedback loop."[26] In summary, as a result of Google's bolstering of its "publisher-facing business through the DoubleClick acquisition," Google "helped [] establish a dominant position on both sides of the ad tech stack."[27]

73. Google sought to "protect [DFP's] position" as the supreme "operating system for publishers globally." To achieve its goal, Google devised a strategy to tie its technology in all three areas of the ad tech stack together, thus forcing publishers to use or work with Google's technology across the stack. Google's plan was broken up into three parts: Access, Aggregate, and Monetize, as follows:

- **Step 1**: Require publishers to use Google's publisher ad server "[p]latform to ACCESS the desired inventory";
- **Step 2**: Use Google's "ad exchange to AGGREGATE that inventory that the platform piece gives"; and
- **Step 3**: Require advertisers on AdWords "to MONETIZE the inventory [Google] aggregate[s] via Ad Exchange."[28]

74. Essentially, Google set out to enact two different tying arrangements that tied all three levels of the ad tech stack together in Google's favor, and particularly in favor of its growing Ad Exchange (AdX). As Judge Brinkema described:

> 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.[29]

[26] Memorandum Opinion at 27.
[27] *Id.*
[28] *United States v. Google*, PTX0032 at '916.
[29] Memorandum Opinion at 28.

Google's ties all but required both advertisers and publishers to use Google's—and only Google's—technology, solidifying Google as the seller (DFP), buyer (AdWords), and auction house (AdX) for the vast majority of digital web display sales. After implementing these unlawful ties to control the ad tech stack in favor of AdX, Google would spend the next decade-plus adopting new, iterative strategies to protect its ties and its dominance and counter any competitive threats that emerged.

75. In 2009, Google began step 1 of its plan. Google made AdX the "nearly exclusive" ad exchange for advertisers on AdWords seeking to bid on open-web display space, thus excluding other ad exchanges, such as PubMatic. As described above, AdWords locked in a large and unique group of "must have" advertising demand that was an essential source of revenue for many publishers. By making AdX the virtually exclusive platform on which its extremely large and unique group of advertisers could bid, Google compelled publishers to use AdX if they wanted to sell their ad space to those advertisers.

76. As Judge Brinkema stated in her opinion finding Google liable, AdWords' "uniquely large and diverse array of advertising demand" was "[a] primary source of Google's monopoly power in the ad exchange market."[30] "By effectively restricting the unique advertising demand offered by AdWords advertisers to AdX, Google has ensured that publishers would lose significant revenue if they did not use AdX."[31]

77. Google's decision to lock both publishers and advertisers into AdX was harmful to all other parties involved.

78. For years, Google's tie between AdX and AdWords severely restricted PubMatic's access to Google's enormous group of advertisers on AdWords by preventing those advertisers from purchasing open-web display ads via PubMatic's exchange. Given Google's power over advertisers looking to advertise on open-web advertising space—which was nearly the largest source of digital advertising demand in the world—PubMatic thus struggled to compete in the ad

[30] *Id.* at 96.
[31] *Id.*

exchange market for open-web display advertising. As a result, PubMatic lost significant revenue, as well as opportunities for growth and scale. PubMatic also struggled to meet its primary mission of helping publishers maximize revenue and fairly compete in the digital advertising market.

79. Equally bad, Google's decision was harmful to its own advertiser customers. Google had prevented its massive group of advertisers from bidding on any ad exchanges other than Google's AdX. AdWords advertisers thus missed out on lucrative advertising space that was higher-quality inventory and/or being sold at lower prices.

80. Google knew that it was harming its own advertiser customers, and even its buy-side tools, to favor its ad exchange. Internal Google documents explicitly stated that its exclusive tie between AdX and AdWords was "purely [a] decision to hold back a set of advertisers ([AdWords] customers) in order to promote [AdX],"[32] even though it "greatly weaken[ed] [AdWords'] position in the market."[33] As Google explained internally: "[W]e appear to be running a buyside-subsidizes-sellside model: we are artificially handicapping our buyside ([AdWords]) to boost the attractiveness of our sellside (AdX). Specifically, we have chosen to limit [AdWords] buying only on AdX, an exclusivity that only makes AdX more attractive to sellers."[34] Google employees even complained that depriving AdWords customers of the ability to bid on other exchanges was akin to sending a "$*3bn* yearly check [to publishers] by overcharging [Google's] advertisers to ensure we're strong on the pub[lisher] side."

81. Despite the detrimental effect on its customers and AdWords, Google persisted in this tie, because it knew that permitting AdWords to bid on rival exchanges would increase competition in the ad exchange and publisher ad server spaces, thus harming Google's AdX and DFP. Again and again over time, Google's buy-side team argued that Google should undo the tie between AdWords and AdX and permit AdWords to bid into independent exchanges. Again and again, Google's leadership refused, reaffirming that tie. They also took affirmative steps, including

[32] *United States v. Google*, PTX183 at '717.
[33] *United States v. Google*, PTX110 at '009.
[34] *Id*.

by implementing Unified Pricing Rules ("UPR") in 2019, to enhance the strength of that tie to the further detriment of other ad exchanges like PubMatic.

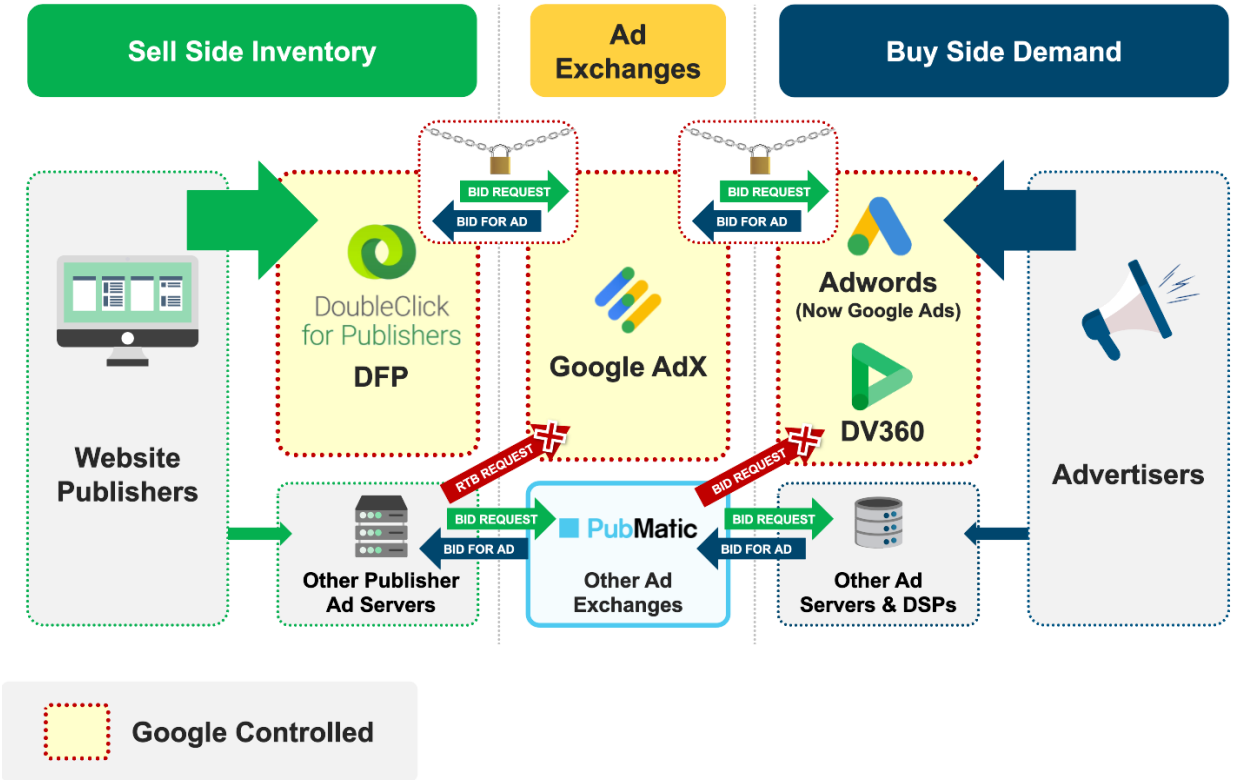
82. Google enacted its second step of the plan in 2009 by tying AdX to DFP. Specifically, Google required all publishers that wished to send real-time bid requests to AdX (and thus, to advertisers on AdWords) to use Google's DFP publisher ad server, refusing to provide access to real-time bids from AdX to any publishers using rival ad servers. This tie between DFP and AdX thus solidified the full chain of Google's ties across all levels of the ad tech stack.

83. Now, if a publisher chose to use an ad server other than DFP, that publisher would not be given access to real-time bidding on AdX. Instead, Google only offered that publisher the ability to send bid requests through a program called "AdX Direct," which used a static price floor with a binary "yes"/"no" response, much like the original waterfall method. For that publisher, its ad space would only be filled by AdX if AdX were willing and able to meet the price floor. As a result, publishers that used any server other than DFP were prevented from accessing via AdX the vital data about how advertisers valued their inventory that was typically provided by real-time bidding. Put simply, Google's AdX Direct product was "not an 'economically viable substitute to accessing AdX through DFP' because it had rudimentary functionality, did not show the price that AdX was offering, did not provide access to real-time bids, increased latency, and did not permit publishers to place bids from AdX into real-time auctions with bids from other exchanges."[35]

84. As shown in Figure 6, Google built a stronghold over the entire ad tech stack. If publishers wanted access to Google's lucrative pool of advertisers, they needed to use Google's publisher ad server and Google's ad exchange. If Google's AdWords advertisers wanted to purchase inventory, they also had to use Google's ad exchange. Google thus used its dominance in the buy-side and sell-side spaces to effectively shut out competitive ad exchanges, such as PubMatic, from a large portion of the digital advertising market, to the detriment of Google's own publisher and advertiser customers.

[35] Memorandum Opinion at 28, n.16.

Figure 6: Google's Unlawful Ties



85. Google "understood the coercive power of the AdX-DFP tie."[36] A Google sell-side manager stated, "AdX can serve as a tool to pull publishers onto [D]FP,"[37] and Google worked to "lock in impressions" by offering DFP with AdX dynamic allocation (as explained further below) to maintain a "key differentiator."[38] In fact, Google explicitly referred to AdX as "the glue that seals DFP to [AdWords]."[39] A senior Google manager aptly analogized Google's control over multiple levels of the ad tech stack to "Goldman or Citibank own[ing] the [New York Stock Exchange]."[40]

86. Once Google established its ties across the ad tech stack, it was ready for the last step in its initial three-step plan. With increasing control over the publisher ad server and ad

[36] *Id.* at 93.
[37] *United States v. Google*, PTX114 at '009.
[38] *United States v. Google*, PTX113 at '804.
[39] *United States v. Google*, PTX41 at '006.
[40] *United States v. Google*, PTX367 at '464.

exchange markets, Google was able to establish "Dynamic Allocation," including its "First Look" feature, which was a program implemented in Google's DFP that required publishers to give preference to AdX over all other ad exchanges, such as PubMatic. Google's First Look forced all DFP publishers to offer AdX a right of first refusal on each impression, essentially reinstating the waterfall method to benefit AdX over other ad exchanges. Of course, this move also worked to the detriment of publishers, which were once more forced to accept the first bid offered, even if other bids might have been higher.

87. First Look, which was built into DFP's auction logic and impossible to turn off, worked as follows: For each new impression processed through DFP, publishers would rank ad exchanges in waterfall-like fashion based on historical bids and other data. However, regardless of AdX's ranking, DFP was rigged to give AdX priority viewing before any other ad exchange, i.e., Google's First Look. AdX would then have the opportunity to accept or decline the impression before any other ad exchange was presented the opportunity. First Look thus gave Google the opportunity to see each and every new impression offered through DFP for any other ad exchange, eliminating any competition Google might otherwise have had from other ad exchanges, such as PubMatic, for the best inventory. "AdX received a First Look at DFP impressions even if the publisher preferred other exchanges and wanted to rank them first."[41]

88. First Look was not the only advantage Google provided itself. Google also rigged DFP to share with AdX all of the publishers' predicted bids for each ad exchange, and thus the publishers' price floors, for every single bid request sent through DFP. Under Google's rejiggered waterfall system, publishers were no longer able to receive real-time information about the value of their ad space. Instead, they had to rank each ad exchange in order based on prior data in the hopes that their price floors would be met by the ad exchanges in their ranked order. For each ad exchange that declined, the publisher would lower the price floor based on historical data, in hopes that the next ad exchange would meet its floor.

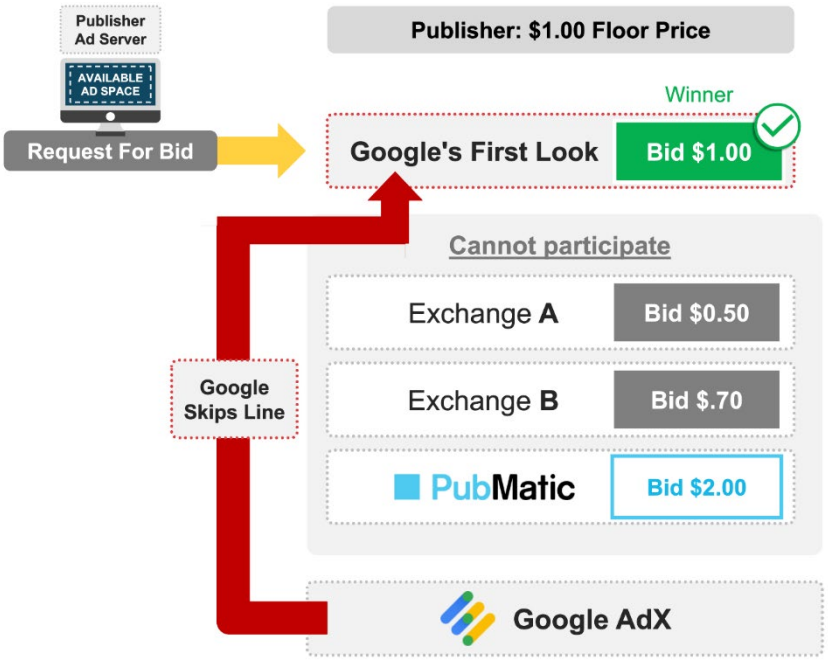
[41] Memorandum Opinion at 30.

89. What that meant for Google was, not only was Google able to view each bid request first, but Google would view that bid knowing just how much that publisher believed that ad space was worth and how much it intended to reduce the price floor by for each subsequent ad exchange. AdX could then decide whether it wanted to meet the initial price floor because, unlike other ad exchanges, it knew what that price floor was and could offer a bid exactly at that price floor—and no higher—despite the fact that other ad exchanges might bid higher. This allowed Google to earn artificially high margins. For example, if a publisher's price floor was $1.00 and the bid from Google's advertiser was $2.00, AdX could choose to bid only $1.01 to win the auction and then pocket the additional $0.99 as ill-gotten gain.

90. Even more, if AdX passed on the first opportunity to receive a first look and the first ad exchange passed as well, AdX would be presented with another opportunity for a "first look" bid. AdX could thus win the ad space based on the predicted bid for the second-highest demand source—the second price floor—because Google knew what that new price floor was. If Google passed, the second ad exchange would be presented with the bid request and the process would repeat until either Google or another ad exchange won the bid. But unlike Google, no other ad exchange knew the price floor, subsequent price floor, or any predicted bids.

91. Figure 7 below demonstrates the First Look process. As shown, Google's AdX received the opportunity to look at the bid before any other ad exchange.

Figure 7: Google's First Look



92. First Look gave AdX a tremendous data advantage over other ad exchanges. Google had more opportunities to bid on the impression and more information about the impression than ad exchanges like PubMatic had, giving Google integral data about the value of the ad space unknown by any other ad exchange. Because DFP was blocked from allowing any other ad exchange to bid in real time, other ad exchanges (including PubMatic) were deprived of a valuable dataset about the ad space, user, and other exchanges. What's more, because Google controlled DFP, AdX alone could view the clearance price of every advertisement. This enabled Google to improve its algorithms and ability to predict pricing far beyond that of any other ad exchange—an advantage that AdX enjoyed even if First Look were unavailable. By hoarding all this information, Google placed AdX in a position of enormous strength unobtainable by PubMatic due to its unique supply of information, to the detriment of the entire market.

93. First Look also increased advertisers' reliance on AdX, reinforcing Google's dominance. For example, if an advertiser placed identical bids for the same impression on both AdX and PubMatic's exchange, AdX would win the auction by exploiting First Look. As a result, advertisers were led to believe that AdX could win auctions with bids placed in that amount, but

PubMatic's exchange could not. This, in turn, made advertisers believe that they must bid on AdX to successfully deliver their advertising campaigns, further entrenching Google's dominant position and funneling advertising transactions away from PubMatic and to AdX.

94. First Look is thus the first of many examples of Google's use of the tie between AdX and DFP to favor AdX. That tie allowed Google to create built-in advantages for AdX within the rules that DFP used to select bids. And whenever other ad exchanges, such as PubMatic, tried to overcome those built-in advantages, Google simply rewrote those rules to favor AdX in a different way.

95. Many publishers complained to both PubMatic and directly to Google about the costs of First Look. Yet, despite requests that Google disable First Look, the functionality remained.

96. Google knew that First Look provided Google an "unfair advantage" and "made it difficult" for other exchanges, such as PubMatic, to compete, thus impeding their entry and growth.[42] With Google's First Look, AdX "could win the auction even when advertisers using rival ad exchanges were willing to pay a higher price for the impression (i.e., when bids from other exchanges offered publishers more revenue for the impression)."[43] Judge Brinkema found that First Look was anticompetitive because it reduced publisher revenue and shuttered competition. Specifically, the Court found that First Look caused an "inherent inefficiency [that] limited the ability and incentive for advertisers using other ad exchanges to compete on price, and resulted in publishers not obtaining the maximum value for their impressions."[44] And while Google awarded itself all of the most valuable ad space at the cheapest price available, ad exchanges like PubMatic had to compete over only those ads that Google deemed not valuable enough for its own demand.

97. Even worse, because the ad impressions presented to other ad exchanges were the least valuable ad spaces, the average prices at which those ad exchanges won bids were necessarily

[42] Memorandum Opinion at 31.
[43] *Id.* at 30.
[44] *Id.*

lower. This caused later price floors for those ad exchanges to lower as a result. Because price floors and rankings were determined on average prices, publishers eventually ended up lowering predicted bids for exchanges ranked further down the waterfall, thus lowering the price at which AdX could win the ad space via First Look.

98. Moreover, because the opportunities PubMatic was given to even see these bid requests substantially decreased, the data PubMatic had to optimize bids vastly decreased, thus severely hindering its opportunity to compete in the marketplace. PubMatic's data disadvantage was compounded by Google's control over DFP (which, as described earlier, gave AdX the ability to see the clearance price for every advertisement and other publisher data) and Google's unified privacy policy. Under Google's unified privacy policy, Google had the ability to use all the data collected from any of its consumer-facing products—Gmail, Google Maps, Google Docs, Google Search, YouTube, and others—to improve its products in the open-web display advertising market. But Google refused to share this data with others, thereby giving itself an insurmountable data advantage.

99. As a reminder, PubMatic was at the forefront of the concept of data sharing as a way to improve efficiency and monetization. Data sharing was thus an industry standard at that point. Not being granted access to the data collected by Google, or even just the additional data AdX had access to via First Look, impacted PubMatic's ability to effectively compete. As Judge Brinkema found, "First Look [] gave Google a data advantage that helped the AdX team train its auction bidding models more effectively" than rivals like PubMatic.[45]

100. Google's efforts to blockade data were not limited to First Look. For example, Google encrypted user IDs to coerce publishers to use AdX. Prior to Google acquiring DFP, DFP allowed publishers to assign unique user IDs to its website visitors and share those IDs with ad exchanges and ad-buying tools. By sharing trackable information about each user, all areas of the market could better identify users and track information about those users, thus improving the

[45] *Id.* at 31.

ability to value ad space and individualize each impression. But Google encrypted those user IDs when provided to non-Google ad exchanges and ad-buying tools, thus preventing publishers and advertisers from mutually recognizing users on non-Google exchanges. Google explained its behavior with the false assertion that encryption was necessary for privacy reasons, when in truth Google did this to coerce publishers to use AdX. As a result, PubMatic was stripped of valuable data about Internet users, decreasing its ability to discern the best match between an Internet user and any particular advertisement. In contrast, DFP did share user IDs with AdX, thus providing AdX with an unparalleled ability to match advertisements and value bids for each ad.

101. As another example of Google's work toward market dominance, in 2011, Google acquired AdMeld, a leading "yield manager" that charged a lower revenue share than AdX for data tabulation and sharing. Google then shut down AdMeld's operations with non-Google ad exchanges like PubMatic, and changed AdX's terms to prohibit publishers from using other yield managers that would force AdX to compete in real time. A Google product manager stated, "Our goal should be all or nothing – use AdX as your SSP [ad exchange] or don't get access to our demand." Judge Brinkema later found that Google's decision to shut down AdMeld's feature of providing real-time bids to third-party exchanges showed that Google was "sacrificing short-run benefits because it was more interested in reducing competition."[46] And indeed, Google executives stated explicitly that the purpose of the AdMeld acquisition was to "reduce [the] risk of disintermediation" by rivals.[47] Additional internal Google documents confirm this, stating that the underlying AdMeld "technology [wa]s irrelevant to [them]," and that the acquisition was primarily about changing the "competitive landscape."[48]

102. To alleviate some of the harm posed by Google's information hoarding, PubMatic unsuccessfully sought from Google on many occasions access to valuable data typically shared in the industry. Specifically, starting in around 2009, PubMatic repeatedly sought API (Application

[46] Memorandum Opinion at 104.
[47] *United States v. Google*, PTX112 at '976.
[48] *United States v. Google*, PTX85 at '726.

Programming Interface) access to Google's DFP to better optimize yield across direct-sold and remnant inventory. Google consistently denied this access, without providing a reason to PubMatic. PubMatic was shocked by Google's refusal, because information sharing was standard, benefited the entire industry, and the technical difficulty required to create the requested integration would have been low to moderate. But each time that PubMatic sought API access to Google's DFP, Google denied access. Google's refusal to share data about the transactions—which did not belong to Google—hindered PubMatic's ability to fully optimize and manage 100% of a publisher's inventory, including direct-sold and remnant inventory, which would benefit publishers by maximizing yield.

103. Even Google recognized the incredible value of data accrued from digital ad transactions. As Google put it internally, "leverag[ing] . . . data signals" can "supercharge targeting via programmatic tech . . . Data is the fuel in the programmatic engine: the technology without best-in-class targeting is a weak value proposition—an enabler of efficient workflows vs. a data lawyer for sophisticated marketing."[49] Along these same lines, Judge Mehta of the United States District Court for the District of Columbia recently acknowledged the value of data in the digital space.[50] Specifically, in ordering that Google "shar[e]" certain "User-side," "Ads," and "Search Index data" with Google's "Competitors" as a remedy for its antitrust violations, Judge Mehta explained that Google's monopolistic activities allowed Google to "access scale that its rivals could not match," that scale provided Google access to a "volume [of data] beyond what it otherwise would receive," and the resulting large volume of data allowed Google to "super-charge its scale advantage into an insurmountable quality and monetization advantage."[51]

104. The impact of Google's actions—many of which have only recently come to light via the *United States v. Google* trial in this District—is undeniable. It is now clear that Google's

[49] *United States v. Google*, PTX0794 at 32.
[50] *United States v. Google LLC*, Case Nos. 20-cv-3010 (APM), 20-cv-3715 (APM), 2025 WL 2523010, at *62 (D.D.C. Sept. 2, 2025).
[51] *Id.*

illegal and anticompetitive actions have severely limited PubMatic's ability to gain scale, compete, and earn revenue.

105. Stunted in its ability to compete in the ad exchange market for open-web display advertising, PubMatic tried to grow in other markets. In 2014, PubMatic launched its own publisher ad server through its acquisition of Mocean Mobile. The acquisition price was publicly reported as $15.5 million. Unfortunately, Google's exclusionary conduct was so pervasive and effective that it foreclosed even major industry players like PubMatic from entering the publisher ad server market. Despite PubMatic's technical capabilities, financial resources, and established publisher relationships, Google's unlawful tying arrangements and anticompetitive practices created insurmountable barriers to entry. PubMatic's publisher ad server venture was ultimately unsuccessful, and was shut down after a couple of years.

106. By holding roles in all areas of the ad tech stack, Google created significant challenges for PubMatic's ability to compete. As Google itself recognized, the "value of Google's ad tech stack is less in each individual product, but in the connections across all of them." As a result of Google's ties, AdX's market power was "enhanced" while "reduc[ing] competition in the ad exchange market."[52] Still, PubMatic was not going to allow Google to drive it out of business without a fight.

F. PubMatic and Other Ad Exchanges Introduce Header Bidding to Counteract Google's Anticompetitive Conduct.

107. To counter Google's "First Look," PubMatic and other participants in the industry developed a technology called header bidding.

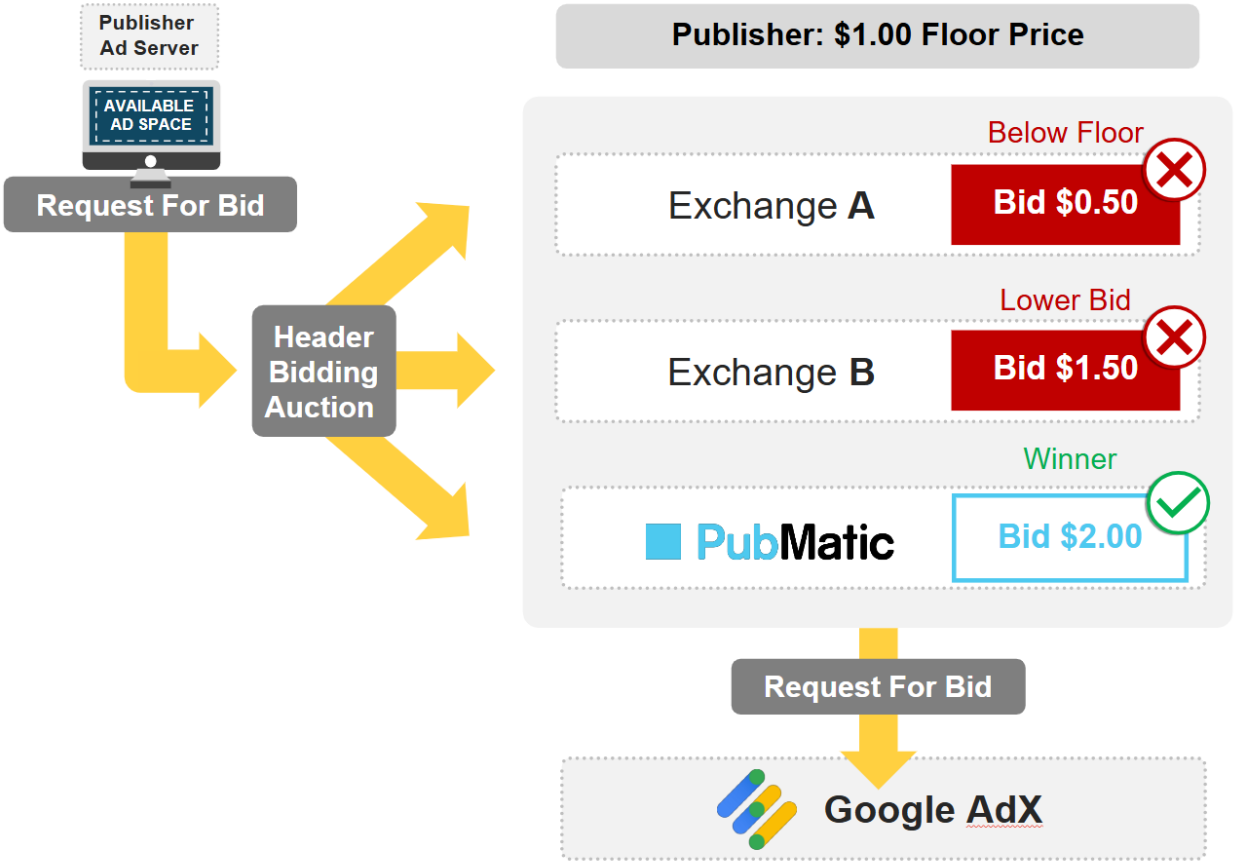
108. Header bidding debuted in or around 2014. The motivation to develop header bidding was straightforward: market participants wished to recover some degree of control over their own advertising transactions. Google itself has recognized this. Its internal emails

[52] Memorandum Opinion at 108.

acknowledge that header bidding "was born" because "[p]ublishers felt locked-in by dynamic allocation in DFP which only gave AdX the ability to compete."[53]

109. Header bidding was an effective, albeit partial, solution to the problems caused by Google's market-tying and "First Look" program. Header bidding enabled third-party ad exchanges to inject a real-time bid into Google's ad server, DFP. To accomplish this, a publisher would include a specific string of code in the header of its webpage that would solicit bids for ad space on that webpage from third-party ad exchanges whenever a user launched the webpage in the user's browser. This is shown below in Figure 8.

Figure 8: Header Bidding



110. This bid solicitation did not involve DFP. After running an auction for that ad space, the third-party ad exchange would submit the winning bid directly to the publisher, and the code

[53] *United States v. Google*, PTX0587 at '794.

that the publisher had inserted into its webpage would then inject that winning bid as a real-time price floor into Google's DFP. To win the ad space, AdX would then need to beat that real-time price floor.

111. Almost overnight, header bidding improved the ability of third-party ad exchanges to submit meaningful bids. And, rather than competing against a static price floor, AdX was forced to compete against a real-time bid. Publishers using DFP were now able to obtain higher bids for their ad space that better reflected the true value of that space, which led them to earn dramatically higher revenues than the artificially depressed revenue that publishers had been earning under Google's First Look. In fact, some publishers saw their revenues nearly double almost immediately after header bidding was introduced.

112. Header bidding also benefited non-Google ad exchanges, including PubMatic. Independent ad exchanges could now conduct real-time auctions and submit real-time bids to publishers before Google's AdX could exercise its First Look. As Judge Brinkema previously found, header bidding "negat[ed] Google's First Look advantage" by allowing real-time competition among ad exchanges for ad space.[54]

113. Header bidding also increased the amount and quality of publisher inventory that was available to PubMatic and other non-Google ad exchanges. Before header bidding, PubMatic could see and bid only on the inventory that AdX rejected (or the inventory that publishers did not make available to AdX at all, which was extremely limited given the significant advertiser demand available through AdWords that Google had illegally tied to AdX). Now, publishers could offer their inventory of ad space to non-Google ad exchanges with a fairer and more competitive auction process. Not only did this result in increased revenue for non-Google ad exchanges, but it also enabled those exchanges to collect additional data on publishers' inventory of ad space, advertisers' pricing preferences, and individual users. As described earlier, that data is immensely

[54] Memorandum Opinion at 32–33.

valuable to ad exchanges like PubMatic, who can use that data to improve their product offerings and more effectively compete with other market participants.

114. After the initial success of header bidding, many ad exchanges—including PubMatic—released their own header bidding solutions. As header bidding took hold across the industry, PubMatic also launched a solution to help publishers take even greater advantage of header bidding. That solution was called OpenWrap.

115. At launch, OpenWrap was the industry's first and only free, open-source header bidding management solution that provided publishers with both transparency into the auction process and greater control over selling their own inventory. This made OpenWrap desirable to publishers suffering the negative effects of Google's illegal ties and ensuing anticompetitive conduct, such as First Look. Dozens of major publishers worldwide adopted OpenWrap within months of its launch. By 2021, OpenWrap had been adopted by more than 200 publishers around the globe, including The Boston Globe, Frankly Media, Complex Networks, RP Digital, and more. Many publishers that adopted OpenWrap saw their programmatic revenue increase dramatically (in some cases by more than 350%).[55]

116. Other market participants, including OpenX, Magnite, and Index Exchange, also developed their own header bidding solutions. The rapid success of OpenWrap and other header bidding solutions highlighted the anticompetitive nature of Google's conduct. That publishers so quickly adopted header bidding reveals that the preexisting order—one that Google controlled through its illegal ties between DFP, AdX, and AdWords—was unnatural and detrimental.

117. Header bidding also benefited advertisers. Because non-Google ad exchanges could now participate in real-time auctions, the highest advertiser bid was more likely to win the ad space, no matter which ad exchange conducted the auction. This improved the quality of the

[55] *See* https://pubmatic.com/case-studies/how-pubmatic-helped-boost-rp-digitals-revenues-by-375-percent/; *see also* https://pubmatic.com/case-studies/?filterCategory=openwrap (client case studies that PubMatic conducted for OpenWrap).

matches between publishers and advertisers by exposing more of publishers' inventory to the open market.

118. Header bidding's expansion of the competitive landscape for open-web display advertising posed a significant threat to AdX's dominance. Google's own executives described header bidding as an "existential threat" to Google's ad exchange business.[56] And a Google engineer admitted that header bidding allowed non-Google ad exchanges to have "more access to inventory," "develop direct relationships with publishers," derive additional value, and "lower[] AdX's differentiated value proposition."[57]

119. Despite its success, header bidding only partially mitigated the anticompetitive effects of Google's illegal ties. Even after the introduction of header bidding, PubMatic and other third-party exchanges were still not on equal footing with AdX. For example, Google still forced the substantial number of advertisers using AdWords to bid almost exclusively through AdX. This significantly diminished the amount of advertising dollars that were available to flow through PubMatic's and other third parties' ad exchanges. Put another way, although header bidding enabled PubMatic to place bids on a wider range of publishers' inventory, PubMatic's available pool of advertisers was still artificially constrained by Google's preferential treatment of AdX through AdX's ties to DFP and AdWords.

120. Header bidding was thus an imperfect solution to Google's anticompetitive conduct. And it became even more imperfect over time as Google implemented new policies that reduced header bidding's effectiveness, further entrenching Google's unlawful ties and enabling Google to acquire and maintain monopoly power over the ad exchange market.

[56] *United States v. Google* Trial Tr. (LaSala) at 95:20–96:2.
[57] *United States v. Google* Trial Tr. (Lipkovitz) at 90:12–95:15.

G. Leveraging Its Unlawful Ties, Google Adjusts Dynamic Allocation in Response to Header Bidding.

121. Google recognized internally that "header bidding . . . emerged as a response to [Dynamic Allocation]," which "everyone in the outside world" believed was "an unfair advantage for google."[58] Even so, Google resolved to counter it.

122. To address the "threat" of header bidding, Google adjusted Dynamic Allocation in two ways: (1) Google replaced First Look with a new policy called Last Look, and (2) Google introduced a mechanism within Dynamic Allocation called Sell-Side Dynamic Revenue Share. Google introduced the second feature—Sell-Side Dynamic Revenue Share—in secret.

1. *Google's Last Look Reinstates AdX's Unfair Advantage.*

123. As explained above, the advantage AdX enjoyed through First Look was being challenged by header bidding. With header bidding, all ad exchanges could compete for an impression through a separate auction, and publishers using Google's DFP could set the highest real-time bid obtained via header bidding as the price floor given to AdX. Even though Google retained significant control via its tying of demand to AdX, it moved to squelch header bidding's success. Google adjusted Dynamic Allocation to turn the features of header bidding into a new advantage for AdX.

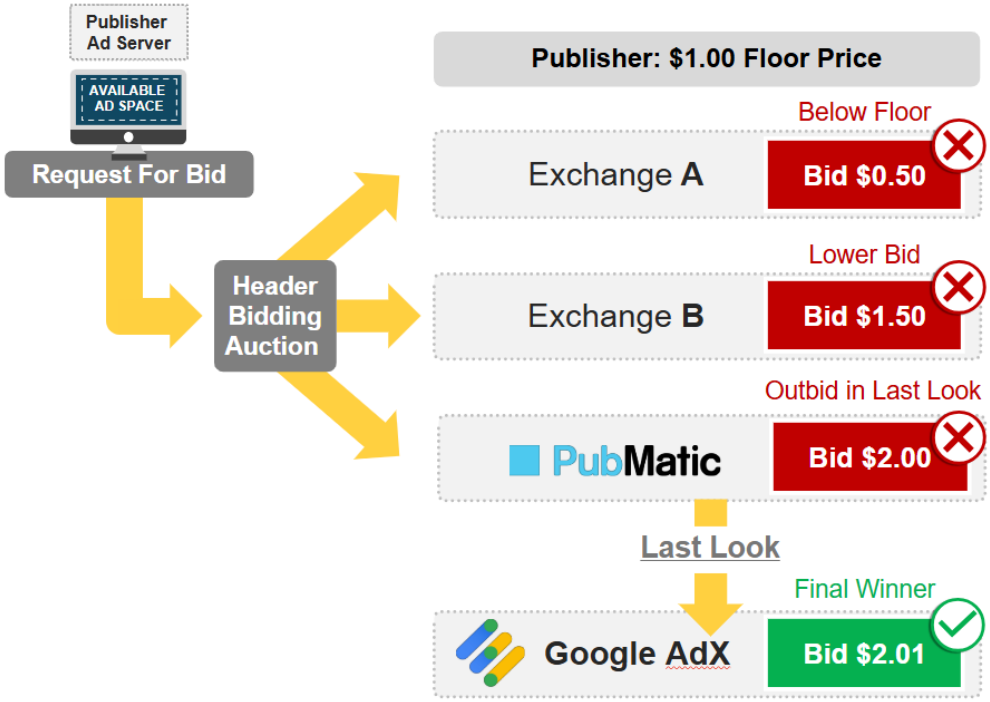
124. Unlike First Look, which gave AdX the opportunity to jump ahead of all other ad exchanges and win the ad space before those ad exchanges could bid, Last Look gave AdX an unfair opportunity on the backend. It worked like this: after a header bidding auction was complete, Last Look—a program implemented within DFP—allowed AdX to view the bids placed by competing ad exchanges during the header bidding auction before AdX placed its own bid. With that information, AdX could then adjust its advertisers' bids to exceed the winning bid by just one cent and win the ad space.

125. The figure below demonstrates the unfair advantage that AdX enjoyed with Last Look. In this example, three ad exchanges—PubMatic and two others—place bids during the

[58] *United States v. Google*, PTX1539 at 3.

header bidding auction. PubMatic's bid is the highest at $2.00, and so the publisher injects $2.00 as the floor price into DFP. With Last Look, AdX is given the opportunity to see PubMatic's $2.00 winning bid and win the auction by bidding $2.01 (even if AdX's advertisers had placed a bid higher than $2.01). AdX alone is given this opportunity. Neither PubMatic nor the other exchanges participating in the header bidding auction can see one another's bids. Nor can they respond to whatever bid AdX submitted.

Figure 9: Google's Last Look



126. Last Look thus gave AdX a new advantage—the ability to see all submitted real-time bids *before* placing its own bid. Beyond the obvious advantage of being able to more efficiently win advertising auctions, AdX's new ability to see competing real-time bids was an informational treasure trove. AdX could use that data—collected from trillions of auctions over time—to improve its algorithm, better identify the most valuable advertising space, and calibrate the bids it submitted. In other words, Last Look "provided Google and its advertising customers with a significant informational advantage that significantly disadvantaged other competitors in

the ad exchange space."[59] That information advantage enabled AdX to scale even further, capturing more and more share of the market at the expense of other ad exchanges like PubMatic.

127. The unfair advantage that AdX enjoyed under Last Look thus harmed PubMatic and other ad exchanges in a new way. Not only could AdX now use Last Look to efficiently funnel advertising transactions away from competing ad exchanges by bidding just one cent more, it could also view the real-time bids that PubMatic and other exchanges were submitting and ingest that data into AdX's algorithms. In doing so, Google deprived PubMatic and other competing ad exchanges of the additional revenue, relationships, and valuable data that would accompany those transactions. And it starved PubMatic and other ad exchanges of additional resources they could use to further improve their products and compete with Google.

128. Last Look also harmed publishers by reducing their advertising revenue. Without Last Look, AdX would have been required to bid on publishers' offerings without first seeing the winner of the header-bidding auction. In that scenario, AdX would need to submit a sufficiently high bid to beat any bids from competing ad exchanges *without knowing what those competing bids were*, thereby increasing the publisher's revenue. Under Last Look, AdX could artificially depress that revenue by adjusting its winning bid to exceed the bids of competing ad exchanges by just one cent. For example, without Last Look, AdX might believe it needs to bid $3.50 to win a particular impression, and so would place a bid in that amount. But with Last Look, AdX places a bid of $3.01 after seeing that the highest bid from the header bidding auction was only $3.00, thereby depriving the publisher of an extra $0.49 it otherwise would have earned if Last Look did not exist. Even Google recognized internally that Last Look gave it "a significant advantage" that "allowed [Google] to beat header bidders (and other remnant line items) as long as [its] bid value is above the header bidder (HB) bid."[60]

129. Last Look also increased advertisers' reliance on AdX. By virtue of Last Look, AdX was able to increase its win rate across all auctions. As individual advertisers or ad agencies

[59] Memorandum Opinion at 35 (cleaned up).
[60] *United States v. Google*, PTX0815.

perceived this, they came to believe that AdX's scale and abilities must far outstrip those of competing ad exchanges, and so they must run more of their advertising campaigns through AdX for the best chance of success. This made deals between individual advertisers or ad agencies and PubMatic (often called supply path optimization or SPO deals) less desirable for advertisers, preventing PubMatic from entering into as many of these deals as it otherwise would have done without Last Look. AdX's increased win rate also affected the DSPs that advertisers used. To appeal to their advertiser customers, DSPs strive to be as efficient as possible. The more that DSPs placed bids on PubMatic that lost due to AdX's unfair advantages, the less likely those DSPs were to bid onto PubMatic's exchange in the future. Instead, the DSPs would focus their bids with AdX because it was winning auctions at a higher rate. This resulted in DSPs allocating less traffic to PubMatic's exchange and more to AdX, reducing PubMatic's revenue and growth rate even further.

130. The only reason Google could successfully implement Last Look and give AdX an unfair advantage is because it could leverage: (1) its unlawful ties between DFP, AdX and AdWords; and (2) its monopoly power in the publisher ad server market for open-web display. As Google later recognized internally, Last Look was "considered as unfair in the industry in favor of AdX buyers."[61] Even though publishers using DFP decried Last Look, they could not switch to a different publisher ad server without also surrendering access to the significant advertiser demand represented by AdWords—demand that could only be accessed through AdX. Publishers were thus forced to accept Last Look even though it resulted in less competitive auctions, lower revenue, and increased dependence on Google. In sum, Last Look "entrenched Google's monopoly power, disadvantaged Google's publisher customers, and harmed the competitive process."[62]

[61] *United States v. Google*, PTX0857 at 2.
[62] Memorandum Opinion at 99.

2. *Google Introduces Sell-Side Dynamic Revenue Share to Further Advantage AdX at the Expense of Fair Competition.*

131. Google further enhanced AdX's anticompetitive advantages by pairing Last Look with a covert mechanism called Sell-Side Dynamic Revenue Share ("SSDRS"). Auctions award ad space based on the highest net bid. A net bid is the gross bid offered by an advertiser minus any fee charged by the ad exchange (i.e., the ad exchange's take rate). For many years, AdX's take rate has been 20%. Thus, for instance, if an advertiser bids $1.00 through AdX, that advertiser's net bid equals $0.80.

132. SSDRS gave AdX another new, and secret, capability. With SSDRS, AdX could manipulate its take rate from one auction to another. After AdX saw the winning bid from a header-bidding auction with Last Look, AdX could reduce its take rate below its usual 20% to increase its net bid and win the auction. Later, AdX would recover the fees it lost when it decreased its take rate by increasing the take rate above 20% during other, less competitive auctions in which AdX's bid already exceeded the winning bid from the header-bidding auction. SSDRS thus enabled AdX to manipulate its take rate from auction to auction, ensuring AdX won more of the most valuable ad spaces and leading publishers to sell those ad spaces through AdX rather than through PubMatic or other competing ad exchanges.

133. The following scenario demonstrates how Google used SSDRS to its advantage: A publisher runs a header-bidding auction, and the winning bid is from PubMatic at $5.50. Because of Last Look, AdX knows it needs to bid $5.51 to win the auction, but the highest bid that AdX's advertisers (who, unlike AdX, cannot see PubMatic's winning bid) are willing to place for this advertising space is $6.00. If AdX extracts its standard 20% take rate, the highest bid AdX could place is $4.80. That would not beat PubMatic's bid, so PubMatic would win. But SSDRS enables AdX to steal that win. Applying SSDRS, AdX adjusts its take rate for this auction from 20% to 5%, resulting in a net bid of $5.70. AdX's $5.70 bid beats PubMatic's $5.50 bid, so AdX wins the auction.

134. To make up for the fees it lost by dropping its take rate, AdX would raise its take rate during a subsequent auction. For example, assume the winning bid from a header bidding auction is $4.50, but an AdX advertiser is willing to bid up to $7.00 for that advertising space. If AdX charges its usual 20% take rate, AdX would place a net bid of $6.60, handily winning the auction. With SSDRS, however, AdX adjusts its take rate higher to recover the fees it lost on the earlier auction. Instead of a 20% take rate, AdX charges a 35% take rate for this auction and thus places a net bid of $4.55, which still beats the winner of the header bidding auction.

135. When compounded across the trillions of digital advertising transactions that occur every day, SSDRS enabled Google to manipulate millions, if not billions, of dollars' worth of bids by AdX.

136. SSDRS was particularly invidious because Google concealed it from publishers, advertisers, and ad exchanges. Google first introduced SSDRS in 2014, but did not disclose its existence until 2016. Even so, beginning in 2014 and continuing through the fall of 2015, Google applied SSDRS to its publishers' inventory. When Google publicly announced SSDRS in the summer of 2016, Google said that SSDRS would increase publishers' yields. That was false. Far from increasing publishers' yields, SSDRS decreased advertising revenue, particularly given the pairing of SSDRS and Last Look. At any rate, Google's announcement of SSDRS disclosed nothing about AdX's ability to manipulate its take rate for individual auctions.

137. Neither PubMatic nor anyone else outside of Google could discover AdX's manipulation of its take rate, because DFP hid all non-winning bids. PubMatic had no reason to believe that AdX was engaging in this activity, particularly given Google's hard stance against deviating from AdX's 20% take rate in negotiations with publishers. Indeed, Google has maintained that "supracompetitive" 20% take rate "[f]or over a decade."[63] Without access to Google's internal systems, PubMatic and others simply could not discover what SSDRS was actually doing behind the scenes to manipulate AdX's take rate and enable AdX to win more

[63] Memorandum Opinion at 76–77.

auctions. This is particularly so given that, through its manipulation of the take rate, AdX's average take rate across all transactions was still 20%. There was thus no way for PubMatic or others to reasonably discover that AdX was manipulating the take rate on individual transactions without direct access to AdX's algorithms and code.

138. The new advantages that SSDRS gave AdX exacerbated anew the harms suffered by PubMatic and other exchanges. At least in part due to the combination of SSDRS with header bidding, between November 2015 and November 2016, PubMatic was forced to reduce its workforce by more than 40%. In the same time period, Pubmatic's revenue declined by approximately 8%. As Judge Brinkema noted, "[b]ecause third-party exchanges did not have Last Look to 'see all the bids' and vary their take rate accordingly, they lost scale and revenue from AdX's use of sell-side dynamic revenue share."[64] This enabled Google to "further enhance[] AdX's market power at the expense of rivals, thereby reducing competition and harming its publisher customers' ability to diversify their revenue sources away from Google."[65] In a word, Google's implementation of SSDRS was anticompetitive.

H. Google Develops "Open Bidding" to Further Stunt Header Bidding and Shift More Market Share to AdX.

139. Google's anticompetitive conduct did not end there. Beginning in 2016, Google developed a mechanism called Exchange Bidding, which was later renamed Open Bidding—a tool that resembled header bidding, but occurred entirely within Google's DFP. Google portrayed Open Bidding as a better version of header bidding because it would facilitate real-time bidding auctions with competing ad exchanges but hold them on Google's servers to reduce latency.

140. These ostensible benefits, however, were simply misdirection. The true purpose behind Google's launch of Open Bidding was to blunt header bidding's momentum so that Google could maintain the control it held as a result of its unlawful ties and monopoly power in the publisher ad server market for open-web display, and so that Google could increase its power over

[64] *Id.* at 36.
[65] *Id.* at 100.

the ad exchange market. Despite Google's contrary suggestions, competing ad exchanges still could not compete on a level playing field with AdX within Open Bidding, because Google imposed several major drawbacks on competing ad exchanges who chose to participate in Open Bidding.

141. One such drawback was a mandatory fee that Google charged on every advertising transaction won by an ad exchange competing with Open Bidding. Whenever a rival ad exchange like PubMatic won, Google imposed a 5% transaction fee. As explained earlier, ad exchanges already impose a take rate on advertising transactions to generate revenue, so Google's decision to charge an additional fee on top of whatever a competing ad exchange already charged effectively reduced the net bid of that exchange relative to AdX's bid. In contrast, AdX was not subject to this additional 5% fee if it won the bid through Open Bidding. The result of this was that bids from AdX were generally more attractive to publishers than bids from PubMatic or other non-Google ad exchanges, which resulted in AdX winning even more auctions.

142. Another drawback that Google imposed within Open Bidding was that, even if a competing ad exchange won the auction, Google facilitated payment to the publisher. Ordinarily, when PubMatic wins an auction, PubMatic pays the publisher directly—a significant touchpoint between PubMatic and its publisher customer. When PubMatic won an auction on Open Bidding, PubMatic was required to pay Google in the amount of the winning net bid, and Google would then transfer payment to the publisher. Google thus effectively disintermediated PubMatic and other ad exchanges from publishers, making those publishers ever more reliant on Google.

143. A third drawback was that Google could see the bids of every rival exchange participating in Open Bidding for each impression, further increasing Google's data advantage. Google could use such data to better calibrate AdX's bids and, ultimately, win more auctions. Competing ad exchanges participating in Open Bidding could not see that same data, diminishing their ability to effectively compete with AdX.

144. Open Bidding thus forced PubMatic and other exchanges to choose between two bad options. On the one hand, PubMatic could choose to participate in Open Bidding, knowing

that AdX would add a 5% tax to all of PubMatic's bids, giving AdX a significant advantage. On the other hand, PubMatic could decline to participate in Open Bidding, opting instead for the header bidding process that Google had constrained via Last Look and SSDRS.

145. Given Open Bidding's significant drawbacks, PubMatic initially refused to participate in Open Bidding. By 2018, however, PubMatic was forced to change course. In light of Google's dominance across the ad tech stack and anticompetitive conduct, more and more publishers refused to work with PubMatic unless PubMatic participated in Open Bidding. PubMatic thus had little choice but to join Open Bidding to access the publishers (and advertisers) enthralled to Google as a result of its unlawful ties. PubMatic invested significant resources to build the technology to integrate with Open Bidding. Over the next several years, one-fifth of PubMatic's net revenue was derived through advertising transactions that occurred on Open Bidding. And yet, PubMatic had little control over those transactions. Google ran the auctions, prevented PubMatic from paying publishers directly, and charged an additional fee on top of PubMatic's take rate that made PubMatic's net bids less competitive than they would otherwise have been in a header bidding auction.

146. Google thus used Open Bidding to stunt the growth of header bidding, move more transactions within Google's sphere of influence, and then exploit its control over the participants in Open Bidding to further advantage AdX over rival ad exchanges. As Judge Brinkema has already found, "Open Bidding was not a substitute for header bidding because it discriminated against non-AdX exchanges, including by extracting a 5% fee from their bids, by prohibiting them from submitting any bids that originated from their own demand-side platforms or ad networks, and by requiring them to share their bid data with Google."[66]

I. Google Implements Project Poirot to Surreptitiously Reduce Bids Placed by DV360 with Competing Ad Exchanges.

147. First Look, Last Look, SSDRS, and Open Bidding were all possible because Google had illegally tied DFP to AdX, illegally tied AdWords to AdX, and exercised monopoly

[66] Memorandum Opinion at 34.

power in the publisher ad server market. In 2017, Google launched a new mechanism—called Project Poirot—that exploited Google's control over a different product, DV360, to enable it to acquire and maintain a monopoly in the ad exchange market.

148. As a reminder, DV360 is the demand-side platform that Google obtained through its acquisition of Invite Media in 2010. Larger advertisers or ad agencies use DV360 to manage their advertising campaigns and bid on publishers' advertising space. At first, Google considered introducing a policy that would prohibit DV360 from bidding on any header bidding auctions, effectively excluding non-Google ad exchanges from accessing the significant advertiser demand represented by DV360 unless those ad exchanges accepted the draconian terms of Open Bidding. Put another way, Google considered tying DV360 to AdX, just as it had tied AdWords to AdX years earlier. But Google determined that it could not persuade the sophisticated advertisers using DV360 that prohibiting bids on header bidding exchanges—that is, tying DV360 demand to AdX—was beneficial. Google thus decided to accomplish the same goal in a different, more underhanded way.

149. Project Poirot was Google's solution. Under Project Poirot, Google would systematically and surreptitiously "shade," or reduce, the bids that DV360 submitted to competing advertising exchanges. Thus, for instance, if an advertiser using DV360 wished to place a $2.00 bid for a particular impression through PubMatic's exchange, Google would arbitrarily reduce the advertiser's bid before conveying the bid to PubMatic. This made DV360's bids on PubMatic or other non-Google exchanges less valuable to publishers, increasing the likelihood that those publishers would seek out the more valuable bids on AdX. It also made advertisers using DV360 believe that bids placed with PubMatic were less likely to win than bids placed on AdX, influencing them to allocate more traffic to AdX and decline to negotiate supply-path optimization deals with PubMatic.

150. Beginning in 2017, all advertising campaigns that were run through DV360 were automatically opted into Project Poirot. Because Google concealed what Project Poirot was doing, almost no advertisers opted out. When it first launched, Project Poirot reduced DV360 bids placed

with non-Google ad exchanges by 10% to 40%. In late 2018, Google revamped Project Poirot and released Project Poirot 2.0, which reduced DV360 bids placed with some rival exchanges by up to 90%.

151. Project Poirot only affected bids placed with rival exchanges. Bids placed on Google's AdX were never reduced. This was true even if DV360 bid on the same impression on both AdX and a rival exchange; the bid placed on the rival exchange was reduced, but the bid placed for the same impression on AdX was not. This all but ensured that AdX would win the auction, transitioning ever more inventory to Google's ecosystem and further cementing Google's stranglehold of the digital advertising economy.

152. Project Poirot significantly harmed non-Google ad exchanges. As Google employees admitted in internal documents, Project Poirot "generate[d] margins by shifting inventory to AdX."[67] Indeed, shortly after Project Poirot's introduction, "advertisers that used DV360 spen[t] an average of 9% more on AdX and 10% less on non-AdX exchanges."[68] From PubMatic's perspective, in the year 2018, Google spend on PubMatic's platform decreased by more than 10%, even while spend from other DSPs increased by more than 10%.

153. The shift in DV360 advertising spend away from non-Google ad exchanges and towards AdX negatively impacted PubMatic in a new way. Google's earlier anticompetitive acts—First Look, Last Look, SSDRS, and Open Bidding—restricted PubMatic's ability to compete with AdX by influencing the sell-side of the market, reducing the quality or amount of publisher inventory available for PubMatic to bid on. Project Poirot was different. It restricted the highest end of the buy-side of the market, impacting the bids placed on PubMatic's exchange by the largest advertisers.

154. Historically, a substantial portion of advertising transactions occurring on PubMatic's platform involved bids placed by DV360. This is particularly true given the illegal tie Google had created between AdWords and AdX, thereby cutting off PubMatic's access to the

[67] *United States v. Google*, PTX0734 at -596.
[68] Memorandum Opinion at 37.

AdWords advertising demand. For the most part, the only advertising demand available to PubMatic (outside of Open Bidding) was: (1) the relatively few small- to medium-sized advertisers not using AdWords; and (2) the large, sophisticated advertisers using DSPs (the largest of which was DV360). The advertiser demand on DV360 thus represented a large swath of PubMatic's business.

155. During the months following Project Poirot's introduction, PubMatic suffered a decline in spending from DV360 of at least 30%, depriving PubMatic of millions of dollars of additional revenue. PubMatic also suffered a corresponding decline in its win rate for bids received by DV360 advertisers, because those bids were now being won by AdX. As many DV360 advertisers shifted away from PubMatic and to AdX, PubMatic was also deprived of the valuable data it could have collected had it been able to compete fairly with AdX and maintain or improve the DV360 advertising spend that PubMatic was receiving before Project Poirot's introduction.

156. At the time, PubMatic had no idea what was causing this decline in DV360 advertising spend on PubMatic's exchange. In the ad exchange market, it can be extraordinarily difficult to determine the cause of any such decline, because PubMatic only has access to its own data. For instance, declines in advertiser spending could be caused by, among other things, a technical issue within the DSP, changes that PubMatic's competitors made to their algorithms, lagging business performance by an advertiser leading to a reduced advertising budget, seasonal trends, publishers removing inventory from the market, or the content of bids placed by PubMatic's competitors. PubMatic has only limited or no access to any of this information, particularly in real time. Without that information, and especially without access to the internal data of Google or data from other market participants, PubMatic could not uncover the cause of the decline in DV360 spend that PubMatic was seeing after Project Poirot was launched in 2017. This is especially so because Google launched Project Poirot gradually in a way that would help it avoid detection.

157. PubMatic also had no reason to believe that the decline was caused by a secret, nefarious act by Google. Although Google had previously granted itself unfair advantages, all of

those advantages came through DFP and AdX. To PubMatic's knowledge, Google had never before given itself an unfair advantage through a policy it implemented within DV360.

158. Even though it was almost impossible to determine the cause of the decline in DV360 spending in real time, that did not stop PubMatic from trying. PubMatic's diligent efforts, however, were stymied by Google's affirmative concealment of Project Poirot. Google never disclosed Project Poirot's existence or methodology to PubMatic. To the contrary, Google concealed the fact that Project Poirot was systematically shading bids placed by DV360 on competing ad exchanges. On several occasions, Google even affirmatively misled PubMatic and PubMatic's advertiser-customers to hide what Project Poirot was doing.

159. For instance, after PubMatic first noticed the decline in DV360 spend in 2017, PubMatic contacted Google in August 2017 to try to determine what was causing the decline. PubMatic informed Google that it had begun seeing a reduction in spending on PubMatic's exchange across multiple major buyers using DV360, provided reports demonstrating this decline, and asked Google to investigate the cause. After preliminary responses, Google fell silent for weeks and ignored PubMatic's repeated follow-ups. Eventually, Google offered a vague response that the decline PubMatic was experiencing was "due to filtration" by Google's "AdSpam team"—in other words, the inventory on which the bids would be placed had been flagged as fraudulent or spam. That explanation made no sense, particularly given that the decline related to inventory being offered by several of PubMatic's major publisher customers, including eBay and AOL. After PubMatic pointed this out, Google once again fell silent and ignored PubMatic's follow-ups in late 2017 and early 2018. At no point did Google disclose what was truly causing the decline: Project Poirot was shading DV360's bids placed on PubMatic's exchange.

160. PubMatic reached out to Google again in 2019. This time, PubMatic shared the results of an experiment PubMatic had conducted. The experiment involved PubMatic setting itself up as an advertiser in DV360 and running advertising campaigns. PubMatic directed some of the advertising campaigns only to PubMatic's ad exchange, and it made the other campaigns available to all ad exchanges. The results were dramatic. DV360 had no problem delivering the campaign

offered just to PubMatic's ad exchange, and PubMatic's exchange won over 64,000 impressions, confirming there was no backend issue with communication between PubMatic's ad exchange and DV360. During the campaign offered to all exchanges, however, PubMatic won just 304 of the available 53,195 impressions. AdX, meanwhile, won more than 26,000, which was approximately 15,000 more than the next closest competitor. This demonstrated that something was happening to the bids that DV360 was placing on PubMatic's ad exchange during auctions in which AdX was also participating. PubMatic presented the results of this experiment to Google and asked for help to uncover what was causing it. After a few preliminary exchanges, Google simply ignored PubMatic, despite repeated follow-ups. Once again, Google did not tell PubMatic that Project Poirot was shading DV360's bids or that this was causing the declines that PubMatic had experienced.

161. Google went beyond failing to be forthright with PubMatic. Google also misled PubMatic's advertiser customers. One of those customers was a major agency holding company ("AHC"). In or around 2019, PubMatic had negotiated a supply-path optimization deal with AHC. Under the deal, AHC agreed to consolidate a portion of certain ad budgets onto PubMatic's exchange. These types of supply-path optimization deals are an innovative method by which PubMatic expands its relationships with key advertiser customers to attract additional advertising revenue. From PubMatic's perspective, these deals are profitable only if the additional bids actually flow to PubMatic's exchange, so that PubMatic can collect its take rate on the bids that win the auctions for advertising space.

162. After PubMatic and AHC finalized their supply-path optimization agreement in or around 2019, PubMatic expected to see an increase in transaction volume and advertising revenue from AHC. But no such increase occurred. After investigating the issue, PubMatic and AHC discovered that, despite AHC preferencing PubMatic's exchange within the DV360 platform, the vast majority of AHC's bids were going through AdX. AHC reported that number as 90%. Neither PubMatic nor AHC knew why this was happening at the time, though it later became clear that it was due to Project Poirot shading AHC's bids that were submitted to PubMatic's exchange.

163. AHC contacted Google[69] to ask why nearly all its bids were still going through AdX. Rather than come clean about Project Poirot, Google obfuscated. Google first told AHC that a "viewability" feature within DV360 had identified AdX as a better exchange, and so directed bids to AdX. AHC informed Google that it had its own viewability solutions and asked Google to turn off DV360's viewability feature, which Google ostensibly did. But that did not fix the problem. After that conversation, approximately 80% of AHC's bids were still flowing to AdX rather than to PubMatic. When AHC contacted Google again, Google came up with a different excuse. This time, Google said that a fraud detection feature had prevented the bids from going to PubMatic's exchange. Because AHC had its own fraud-detection solutions, it asked Google to turn off this feature as well. But that did not fix the issue either.

164. Eventually, PubMatic could not implement a supply-path optimization deal with AHC that incentivized routing of AHC's advertising campaigns to PubMatic when using DV360 (as many advertisers increasingly wanted to use given Google's self-preferencing). Despite AHC preferencing PubMatic's exchange within DV360, AHC's bids were not flowing through PubMatic's exchange but were instead flowing to AdX. Google never disclosed the real reason why this was happening: Project Poirot was reducing AHC's bids placed via DV360 with PubMatic's exchange, making the bids placed with AdX much more desirable to publishers. AdX was thus winning those auctions, earning the associated revenue, and deepening its relationship with both publishers and AHC at PubMatic's expense. Project Poirot thus caused PubMatic to lose out on the revenue and other benefits it expected to earn from this deal with AHC and from all other deals with AHC or other buyers for whom DV360 was the DSP that was to implement the buyers' advertising campaign.

165. PubMatic believes that Project Poirot likely caused other, similar deals to fail, depriving PubMatic of even more revenue, relationships, and data by shifting transactions away

[69] PubMatic knew, through long experience with Google, that Google would not respond to this inquiry if it came from PubMatic. Instead, Google would say that the advertiser needed to ask the question.

from PubMatic to AdX. Indeed, in 2018 and 2019 (when Project Poirot was active), PubMatic experienced an overall decline in its revenue growth rate. Many of its previously profitable customer accounts became unprofitable during this period, such that approximately 25% of PubMatic's customer accounts were not profitable. Because PubMatic could not determine or reverse the root cause of this decline in profitability (i.e., Project Poirot), PubMatic was forced to stop doing business with those accounts. From 2017 to 2018, PubMatic's revenue declined by almost 20%.

166. At the time, PubMatic did not know Project Poirot was causing these harms to PubMatic. Indeed, PubMatic did not discover the reduction in DV360 bids that Project Poirot was accomplishing until those details became public as a result of the lawsuit that the United States filed against Google in 2023. Before then, Google actively concealed Project Poirot's details, and used Project Poirot to surreptitiously capture even greater market share for AdX. This harmed both PubMatic and other ad exchanges, including by reducing their market share accordingly.

167. Project Poirot also harmed publishers. As explained earlier, PubMatic and other market participants developed header bidding to counter the advantages AdX enjoyed as a result of Google's First Look by injecting the winning bid from a header bidding auction as the price floor within DFP. Under Project Poirot, the bids placed during header bidding auctions by DV360—which represents a significant share of sophisticated advertiser demand—were systematically reduced. The upshot was that, for many header bidding auctions, the winning bid was lower than it otherwise would have been absent Project Poirot shading DV360's bids. That, in turn, led to a lower price floor being injected into DFP, which meant that AdX could bid less to win the ad space than it would have needed to bid in a normal, competitive environment. This decreased the amount of advertising revenue that publishers received for their advertising space.

168. Through Project Poirot and its concealment thereof, Google was able to entrench and expand AdX's substantial market share and further Google's campaign to undermine the threat posed by header bidding. In sum, Project Poirot channeled DV360 advertising spend through AdX, stifling PubMatic's and other ad exchanges' abilities to compete on equal footing with Google.

J. Google Seeks to Kill Header Bidding for Good by Imposing Unified Pricing Rules.

169. After years of unfairly benefiting from Last Look, SSDRS, Open Bidding, and Project Poirot at everyone else's expense, Google faced intense pressure to remove its anticompetitive policies. At the time, the details of SSDRS and Project Poirot had still not been made public, so the industry focused on pushing Google to remove Last Look.

170. In 2019, Google agreed to remove Last Look, but immediately replaced it with yet another policy to continue punishing those using header bidding. That policy was called Unified Pricing Rules ("UPR"). UPR was yet another new tactic by Google to: (1) reinforce the ties between AdWords, AdX, and DFP; and (2) combat other parties' attempts to make the exchange market more competitive. It increased AdX's scale advantage even more, harmed customer choice, harmed competition by other ad exchanges like PubMatic, and reduced publisher's revenue.

171. Like some of Google's earlier anticompetitive policies, UPR was made possible by Google's unlawful ties involving AdX and its drastic market power. But UPR was also markedly different from Google's earlier actions, because UPR made header bidding virtually impossible for publishers who wanted to access AdWords advertising demand. This, in turn, greatly diminished the ability for PubMatic and other ad exchanges to compete with AdX.

172. Before UPR, publishers using DFP were free to set price floors for their inventory at whatever amount they chose. Publishers could vary their price floors across different ad spaces or among various ad exchanges. This flexibility is why header bidding was so successful. Publishers could set one floor price for the header bidding auction, and then use the winning bid from that auction to set a new and higher floor price when requesting a bid from AdX.

173. Publishers had many reasons why they might want to set non-uniform floor prices for different ad exchanges. For instance, a publisher may have negotiated a volume discount threshold with a particular ad exchange, and so would want to increase that ad exchange's chances of winning a particular impression to reach that threshold (similar to the supply-path optimization deals that are negotiated with advertisers). A publisher may also set a lower floor price for an ad

exchange that the publisher believes has higher-quality advertisers or other features that other ad exchanges lack. Given the dominance of AdX, some publishers also set lower floor prices for competing ad exchanges to reduce their dependence on Google by making it easier for other ad exchanges to win an impression, thereby diversifying publishers' sources of revenue. In short, publishers' ability to set different floor prices for different ad exchanges "was a primary tool . . . to maintain revenue diversity and to mitigate Google's dominance of the ad exchange market."[70]

174. UPR removed this tool from publishers' toolboxes. Under UPR, Google "prohibited publishers using DFP from setting higher floor prices for AdX than for other exchanges."[71] Publishers could no longer set a lower floor price for a header-bidding auction run on rival ad exchanges and then inject the winning bid as a higher floor price for AdX. Instead, publishers were forced to give AdX the lowest floor price that they gave to any other ad exchange for the particular impression being offered.

175. Google pitched UPR as a fair solution to even the playing field among ad exchanges. But UPR accomplished no such thing. Despite its name, UPR did not mandate uniform pricing in all directions. Although publishers could no longer impose a higher floor price for AdX than the floor prices given to rival ad exchanges, UPR still "permitted publishers to set higher price floors on third-party exchanges than on AdX."[72] Put simply, UPR was just another way in which Google sought to unfairly advantage AdX to the detriment of competing ad exchanges. UPR allowed publishers to favor AdX, but prevented them from favoring competing ad exchanges like PubMatic.

176. Predictably, publishers "were disgruntled with the implementation of Unified Pricing Rules."[73] As Stephanie Layser of News Corp. testified, UPR was "in the best interests of Google and not in the best interests of their publishers," but publishers could not switch to a non-Google publisher ad server because "the tying of DFP and AdX made it too much of a revenue

[70] Memorandum Opinion at 100.
[71] *Id.* at 37.
[72] *Id.* at 38.
[73] Memorandum Opinion at 38.

risk."[74] Google's internal notes from its employees' meetings with publishers following the implementation of UPR reveal rampant publisher dissatisfaction with UPR. Indeed, many publishers saw their CPMs[75] decrease and had trouble diversifying the ad exchanges winning their impressions after UPR was introduced. For example, Matthew Wheatland of the Daily Mail wrote that the "[g]eneral trend is that CPM has decreased a lot since UPR," and that AdX was "monetising roughly 3x the amount of our inventory post UPR."[76] Publishers recognized Google's real motivation behind UPR. As Jana Meron of Business Insider told Google, UPR "was built for Header Bidding NOT to exist."[77]

177. UPR harmed PubMatic anew. UPR nearly eliminated PubMatic's ability to compete on equal footing with AdX via header bidding. Publishers that previously favored PubMatic's ad exchange for particular impressions by setting a lower floor price could no longer do so. As a result of UPR, even more transactions that would have occurred on PubMatic's exchange shifted to AdX, depriving PubMatic of revenue, touchpoints with its publisher customers, and the valuable data that PubMatic could garner from advertising transactions completed on its exchange. Indeed, following the introduction of UPR, PubMatic's revenue decreased by a significant margin as more advertising transactions were funneled away from PubMatic and to AdX. In October 2019 alone, PubMatic estimated that UPR decreased PubMatic's "overall [platform spend]" by roughly 10% and decreased the spend on particular PubMatic tools by roughly 16% to 28%.[78] As Judge Brinkema already found, UPR "increased the number of impressions AdX won and the revenue it received, while decreasing impressions won and revenue

[74] *United States v. Google* Trial Tr. (Layser) at 51:14–52:3.
[75] CPM refers to cost per thousand impressions, the standard industry measurement for pricing of digital ads. All else being equal, the higher the CPM for a particular impression, the more revenue a publisher will receive for that impression.
[76] *United States v. Google*, PTX1633 at '123.
[77] *United States v. Google*, PTX0751 at '121.
[78] *United States v. Google*, PTX 1621.

received by third-party exchanges."[79] The result: "Google's ad tech products continued to gain scale in the display advertising space while rival ad tech products lost scale."[80]

178. At bottom, UPR is yet "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."[81] UPR constituted "anticompetitive conduct because it involved Google using its coercive monopoly power to deprive its publisher customers of a choice that they had previously exercised to promote competition.[82]

K. Google's Anticompetitive Acts Have No Legitimate Pro-Competitive Justification.

179. During the *United States v. Google* trial that took place in this District last year, Google tried to justify its anticompetitive conduct with a series of purportedly pro-competitive rationales. Even though Judge Brinkema found most of Google's proffered explanations pretextual and unpersuasive, PubMatic anticipates that Google will try to resurrect its discredited explanations in this litigation. PubMatic thus briefly addresses them here.

180. To justify the unlawful tie between AdX and DFP, Google has previously argued that this tie was necessary to reduce "spam, fraud, malware, latency, and other quality issues."[83] Google's own internal documents refute that explanation. The very team within Google that "was responsible for ensuring its advertiser customers had their ads published without undue latency on high-quality websites that were not fraudulent" was the one "advocat[ing] for AdWords to buy on most other ad exchanges because those exchanges had 'acceptable levels' of spam and fraud."[84] Judge Brinkema thus found that Google's supposed "justifications of the AdX-DFP tie were either

[79] Memorandum Opinion at 39.
[80] *Id.*
[81] *Id.* at 100–01.
[82] *Id.* at 101.
[83] *Id.* at 105.
[84] *Id.* at 105–06 (quoting *United States v. Google*, PTX199).

pretextual or, at best, incidental to the primary purpose of the tie, which was to acquire and maintain market power."[85]

181. Google has also claimed that First Look and Last Look were appropriate because they "increased revenue for Google's publisher customers and gave advertisers more opportunities to bid on inventory."[86] The evidence demonstrates the opposite. "Google's preferencing AdX over non-Google ad exchanges within DFP . . . resulted in less revenue for publishers, fewer impressions going to the advertisers who were willing to pay the most for them, enhanced AdX market power, and reduced competition in the ad exchange market."[87] Although Google has argued that publishers could avoid Last Look by simply not requesting a bid from AdX, "this offer was a 'Hobson's choice;' it was not financially viable for large publishers to forgo using AdX and the access it offered to the unique advertising demand from AdWords."[88] Judge Brinkema thus concluded that Google "did not establish any valid and sufficient procompetitive justifications" for First Look and Last Look."[89]

182. As for SSDRS, Google has argued that it "helped create matches for impressions that would not have sold to any advertisers without it."[90] This, too, is misdirection. SSDRS was "just another way for AdX to exploit the last look advantage."[91] Its "primary purpose" was to "outbid rival exchanges by using AdX's anticompetitive Last Look advantage."[92] As a result, "Google's proffered procompetitive justification for" SSDRS is "pretextual."[93]

183. Nor can Google justify its anticompetitive conduct with Open Bidding. Google's size and dominance made it virtually impossible for competing ad exchanges to thrive without participating in Open Bidding and thus subjecting themselves to Google's draconian conditions.

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[85] *Id.* at 107.
[86] *Id.*
[87] *Id.* at 108.
[88] *Id.* at 109.
[89] *Id.*
[90] *Id.*
[91] *Id.*
[92] *Id.*
[93] *Id.*

Open Bidding "discriminated against non-AdX exchanges, including by extracting a 5% fee from their bids, by prohibiting them from submitting any bids that originated from their own demand-side platforms or ad networks, and by requiring them to share their bid data with Google."[94] All this was designed to further enhance Google's market power, to the detriment of its rivals.

184. Google also cannot justify Project Poirot (or its later iteration, Project Poirot 2.0). Although Google has claimed that Project Poirot was necessary to protect its advertiser customers from supposedly unfair auctions, Google's own documents admit that the spam and fraud levels that then existed on competing exchanges "were 'comparable' to the spam and fraud levels on AdX."[95] This undermines Google's proffered justification, revealing that Google's true purpose for introducing Project Poirot was to "enhance[] AdX's market power."[96] Indeed, the very fact that Google concealed Project Poirot demonstrates that it was not a strategy to benefit Google's advertiser customers, but rather one to harm rival ad exchanges. And Google's own internal documents reveal that Google deemed Project Poirot to be "effective" based on the Project "reducing spend on most other exchanges," not based on its ability to combat spam and fraud.[97]

185. Google also has no pro-competitive justification for UPR. Google has argued that UPR "established a level playing field for advertisers, simplified the ad tech bidding landscape for publishers, improved matches, and increased publisher revenue."[98] That is wrong. Google knew that publishers benefited from the ability to "set higher price floors on AdX," and yet chose to impose UPR anyways "to enhance the AdX-DFP tie."[99] As Judge Brinkema found, UPR was "targeted at enhancing AdX's control over DFP publishers' revenue streams, as opposed to simplifying publishers' decision-making."[100]

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[94] *Id.* at 34.
[95] *Id.* at 106 (quoting *United States v. Google*, PTX835).
[96] *Id.* at 100.
[97] *United States v. Google*, PTX0587 at 1.
[98] Memorandum Opinion at 110.
[99] *Id.*
[100] *Id.*

186. Google thus lacks any legitimate excuse for its anticompetitive conduct—conduct that has resulted in substantial harm to publishers, ad exchanges, and advertisers in the digital advertising economy.

L. Google Has Acquired and Maintained Monopoly Power in the Worldwide Markets for Ad Exchanges and Publisher Ad Servers, and Exercises Dominance in the Worldwide Market for Buy-Side Tools for Display Advertisements.

187. PubMatic files this lawsuit to address the significant harms it has suffered as a result of Google's anticompetitive conduct across the ad tech stack. As Google acquired more pieces of the ad tech stack and began using its market power to constrict PubMatic's ability to compete with Google's offerings, PubMatic lost significant market share. PubMatic's sales declined and its ability to scale was stymied as Google systematically imposed anticompetitive policies designed to make publishers and advertisers dependent on Google by funneling digital advertising transactions away from PubMatic and towards AdX. Despite being one of the few alternatives to AdX, PubMatic has a very small percentage of the ad exchange market, and it is extraordinarily difficult for PubMatic to meaningfully increase that share. This stands in stark contrast to PubMatic's success in areas where Google is less entrenched, such as in emerging channels like Connected TV, where PubMatic is consistently recognized as a top-tier, preferred platform. Where PubMatic has been able to compete on a more level playing field, its technology, innovation, and business strategy have enabled it to thrive. PubMatic's growth is artificially constrained only in those areas where Google has acquired and maintained monopoly power and engaged in anticompetitive conduct.

1. Market 1: Ad Exchanges for Open-Web Display Advertising.

188. Judge Brinkema has already found that "ad exchanges for open-web display advertising constitute a distinct relevant product market."[101] The "open-web" portion of this defined market refers to the fact that this market does not involve "walled gardens," which are "publishers that control the infrastructure through which advertisers buy and place advertisements

[101] *Id.* at 50.

on their websites," like Meta's Facebook or Amazon's website.[102] It also refers to the fact that this market excludes other forms of digital advertising distinct from open-web display ads, such as outstream video ads, social media ads, mobile ads, and search ads.

189. An ad exchange like PubMatic "is 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."[103] "[N]o other ad tech tool . . . is reasonably interchangeable with ad exchanges."[104]

190. The "relevant geographic market" for "ad exchanges for open-web display advertising is worldwide," excluding countries where the operation of ad tech companies is substantially restricted.[105] A worldwide scope reflects how this market actually works in practice:

> 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, have built global infrastructure and often manage, price, sell, and track performance of their products globally.[106]

191. PubMatic is no exception. Through its ad exchange, PubMatic serves both foreign and domestic publishers, facilitating bids placed on advertising impressions displayed in both the United States and abroad. PubMatic does not and has never considered the United States and foreign jurisdictions as separate and distinct markets for its ad exchange.

192. At least as of 2019, Google has possessed "monopoly power in the ad exchange for open-web display advertising market."[107] AdX is Google's ad exchange in that market, and Google enjoys substantial market share. Between 2019 and 2022, Google's AdX had a market share of approximately 64% to 71% of open-web display transactions in the worldwide ad exchange

[102] *Id.* at 21.
[103] *Id.* at 51.
[104] *Id.* at 50.
[105] *Id.* at 71.
[106] *Id.* at 69 (citations omitted).
[107] *Id.* at 76.

market. Google's market share dwarfs that of its next closest competitors, which "had only 6% of the market" as of 2022.[108]

193. Google's monopoly power in the ad exchange market is demonstrated by the fact that Google has been able to maintain "durable supracompetitive prices for AdX" even after implementing the wildly unpopular UPR policy in 2019.[109] Since introducing UPR and continuing through the present, Google's AdX has consistently charged a 20% take rate on transactions for open-web display advertising and has refused to lower it in the face of a maturing market and the reduction of take rates by competing ad exchanges. "Despite the availability of lower priced exchanges, customers generally have not left AdX due to Google's substantial market power in the ad exchange market."[110] As a result, AdX has not lost market share notwithstanding its supracompetitive pricing, which is "direct evidence of monopoly power."[111]

194. Google has also exerted its monopoly power in this market to prevent customers from switching from AdX to PubMatic or other ad exchanges. For instance, and as described in detail above, Google leveraged its monopoly power in the ad exchange market to force market participants to accept Google's imposition of policies such as UPR. Google has also maintained its monopoly power in the ad exchange market through the illegal ties it created involving AdX and its other anticompetitive conduct. Despite their wishes to the contrary, publishers were forced to sell an ever-increasing share of their impressions on AdX (incurring AdX's supracompetitive fees) rather than selling those impressions through PubMatic or rival ad exchanges.

195. Given Google's dominance, ad exchanges like PubMatic cannot effectively compete with AdX. "Scale and network effects are crucial for ad exchanges because these exchanges exist to create matches between publisher inventory and advertiser demand."[112] By funneling open-web display advertising transactions away from PubMatic and other ad exchanges

[108] *Id.* at 82.
[109] *Id.* at 76.
[110] *Id.* at 76–77.
[111] *Id.* at 80.
[112] *Id.*

to AdX, Google has prevented PubMatic and rival ad exchanges from increasing their scale and benefitting from network effects, such as the collection of "auction and targeting data that can be used to run rapid experiments on the effects of price and quality changes, to train machine learning algorithms, and to improve publisher-advertiser matching."[113] In addition, Google's dominance in the market caused PubMatic to lose lucrative business with publishers and advertisers, which translated to loss relating to PubMatic's related offerings as well. As AdX increased its own scale to the detriment of other ad exchanges, the already "high barriers to entry and expansion" that exist in this market grew even higher, cementing Google's monopoly.[114]

2. Market 2: Publisher Ad Servers for Open-Web Display Advertising.

196. "[P]ublisher ad servers for open-web display advertising constitute a distinct relevant product market."[115] Publisher ad servers enable publishers to manage their inventory of ad space and facilitate the sale of open-web display advertisements on their webpages. These servers "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."[116] By using a publisher ad server, publishers can "allocat[e] ad inventory between direct sales and programmatic sales; plac[e] ad exchange bids in competition with bids from header bidding, programmatic direct sales, and other ad exchanges; render[] an advertisement on the publisher's webpage for each impression; bill[] for ads rendered; and provid[e] inventory and revenue analytics."[117] Given the unique services provided by publisher ad servers, "other ad tech tools are not reasonably interchangeable with publisher ad servers."[118]

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[113] *Id.* at 83–84.
[114] *Id.* at 83.
[115] *Id.* at 43.
[116] *Id.*
[117] *Id.* at 44 (footnote omitted).
[118] *Id.* at 43.

197. For the reasons set forth in Paragraph 190, the "relevant geographic market for . . . publisher ad servers for open-web display advertising" is "worldwide," excluding countries where the operation of ad tech companies is substantially restricted.[119]

198. "Google possesses monopoly power in the publisher ad server for open-web display advertising market."[120] DFP is Google's publisher ad server in that market, and Google controls almost the entire market. "From 2018 through 2022, Google's share of this worldwide market held steady between 91.0% and 93.5%."[121]

199. Google has been able to maintain its monopoly power over the publisher ad server market for years. It has done so due to, among other things, the "significant barriers to entry and expansion" that exist within this market and the "lack of meaningful alternatives to DFP."[122] Google has also exerted its monopoly power to diminish the quality of DFP while knowing that publishers have nowhere else to turn. One example of this is Google's decision to introduce UPR, which prohibited publishers using DFP from favoring rival ad exchanges by offering them a price floor lower than that offered to AdX. Even though publishers complained about UPR (including because it diminished the level of control that they had over their own inventory), publishers could not leave DFP given the extraordinarily high cost to change publisher ad servers. Other examples of Google leveraging its monopoly power over the publisher ad server market include First Look, Last Look, and SSDRS.

200. As a result of Google's series of distinct, compounding anticompetitive acts, publishers grew even more dependent on Google as more of their impressions were funneled to Google's AdX, entrenching Google's monopoly power over the publisher ad server market. In fact, Google's anticompetitive conduct drove some competing publisher ad servers, such as PubMatic's Mocean Mobile ad server and the ad server developed by OpenX, out of the market, further diminishing the choices available to publishers. This, in turn, reduced the volume of

[119] *Id.* at 71.
[120] *Id.* at 73.
[121] *Id.*
[122] *Id.* at 74–75.

business that publishers directed to PubMatic, leading to decreased revenue, less scale, and fewer opportunities for growth. Google's dominance in this market caused PubMatic to lose lucrative business with publishers and advertisers, which resulted in losses relating to PubMatic's related offerings as well.

3. Market 3: Buy-Side Tools for Display Advertising

201. Google acquired and maintained its monopoly and market power in the worldwide markets for ad exchanges and publisher ad servers for open-web display advertising by leveraging its power in a related, but separate, market for advertiser display ad-buying tools. As explained earlier, buy-side tools are a distinct set of technologies within the ad tech stack that give advertisers the ability to purchase display advertisements. These display advertisements—for the purpose of this buy-side market definition—include open-web display ads, walled-garden display ads, in-app display ads, and social media display ads.

202. The market for advertiser display buy-side tools includes: (i) the buy-side of open-web display ad networks, such as Google's AdWords; and (ii) DSPs used by larger advertisers, such as Google's DV360. Although these sets of tools cater to advertisers of varying sizes, they share a common characteristic: they are tools built for advertisers so that advertisers can place bids on programmatic display ad inventory on one or more ad exchanges.

203. The products within the market for buy-side tools for display advertising are functionally interchangeable, and thus compete with one another for advertisers who can use these tools to bid on display ad inventory. Although the complexity and features of each tool vary, advertisers can use any of these tools to manage advertising campaigns, set goals and targets, and participate in real-time bidding on one or more ad exchanges.

204. Buy-side tools in other contexts, such as manual direct buys or traditional print advertising, are not reasonable substitutes for the tools that exist within the market for buy-side tools for display advertising. Among other things, the tools in those other contexts do not have programmatic functionality, and they lack the same efficiency, targeting, or scale as the tools within the market for buy-side tools.

205. The market for buy-side tools is worldwide, for similar reasons as those set forth above in Paragraph 190, excluding countries where the operation of ad tech companies is substantially restricted. Advertisers often run multinational advertising campaigns and use a single buy-side tool to do so, rather than using several buy-side tools to run campaigns in particular geographic markets. Many advertisers using buy-side tools are also located outside of the United States.

206. Google has long possessed sufficient market power in the market for buy-side tools for display ads to enable Google to restrict competition in the adjacent market for open-web display ad exchanges. Google operates two dominant buy-side tools for display ads: AdWords (launched in 2000) and DV360 (acquired in 2010).

207. These tools represent a significant portion of the market for buy-side tools for display ads. As Judge Brinkema found, "[o]ver four million advertisers use only AdWords."[123] The advertising demand represented by AdWords is "unique[ly] attractive[]," such that AdWords is a must-have source of demand for publishers.[124] AdWords has thus long been "the leading source of small and medium-sized online advertisers."[125] By the same token, DV360 is "one of the leading demand-side platforms" in the market.[126] DV360 has nearly 50% market share, dwarfing its nearest competitor (which has less than half that amount).

208. Google has been able to leverage its power over the market for buy-side tools for display ads through AdWords and DV360 to restrain competition in the market for open-web display ad exchanges. For instance, Google largely prevented AdWords from bidding into any exchange other than AdX, effectively forcing publishers to solicit bids from AdX if they wanted to access AdWord's advertising demand. As another example, Google implemented Project Poirot within DV360 to surreptitiously and systematically shade all bids that DV360 placed on rival ad exchanges, like PubMatic. This funneled even more advertising transactions towards AdX,

[123] Memorandum Opinion at 57.
[124] *Id.* at 29.
[125] *Id.* at 39.
[126] *Id.*

increasing both publishers' and advertisers' reliance on Google and entrenching Google's monopoly power over the ad exchange market. PubMatic and other ad exchanges have lost revenue, opportunities for growth, and scale as a result.

M. Judge Brinkema Has Already Determined that Google Exerted Monopoly Power and Engaged in Anticompetitive Conduct in the Worldwide Markets for Ad Exchanges and Publisher Ad Servers.

209. Beginning as early as 2019, the Antitrust Division of the United States Department of Justice investigated the extent of Google's monopoly power in various markets and its anticompetitive conduct related to the ad tech stack.

210. That investigation culminated in a civil antitrust lawsuit filed on January 24, 2023, against Google in the Eastern District of Virginia. The lawsuit was filed by the Department of Justice and the attorneys general of California, Colorado, Connecticut, New Jersey, New York, Rhode Island, Tennessee, and Virginia (collectively, the "Government"). Similar to the allegations made in this Complaint, the Government alleged that Google had violated federal antitrust laws by monopolizing the worldwide markets for ad exchanges and publisher ad servers, illegally tying AdX to DFP, and engaging in other anticompetitive conduct.

211. Following a three-week bench trial on the Government's claims before Judge Brinkema that involved testimony from dozens of witnesses and the admission of hundreds of trial exhibits, the Court issued a Memorandum Opinion finding Google liable for antitrust violations. In particular, the Court found that:

a. Ad exchanges and publisher ad servers for open-web display advertising worldwide constitute valid product and geographic markets.

b. Google's tying of real-time bids from AdX to the use of DFP was an unlawful tie.

c. Google's tying of real-time bids from AdX to the use of DFP was an anticompetitive means to maintain monopoly power.

d. Google engaged in anticompetitive conduct by implementing First Look, Last Look, Sell-Side Dynamic Revenue Share, and Unified Pricing Rules.

e. Google illegally acquired and maintained monopoly power in the publisher ad server market for open-web display advertising.

f. Google illegally acquired and maintained monopoly power in the ad exchange market for open-web display advertising.[127]

212. Despite being on notice for at least six years that its conduct likely violated the antitrust laws, and despite having been found liable for such violations by Judge Brinkema, Google has continued to exploit its monopoly power and has not stopped its ongoing anticompetitive conduct. This is unsurprising, given that Google tried to hide its illegal conduct by destroying relevant evidence. "Google's internal messaging application deleted records of chats between employees," and Google failed to turn that off even after the Government began its investigation of Google anticompetitive conduct.[128] Despite its attempts to hide its illegal conduct, Google was nevertheless found liable by this Court for violating the antitrust laws.

213. PubMatic files this lawsuit pursuant to 15 U.S.C. §§ 15, 15b, and 16(i) to challenge the same conduct found by this Court to violate federal antitrust law, as well as Google's anticompetitive conduct involving Project Poirot.

N. PubMatic's Claims Are Not Barred by the Statute of Limitations.

214. Causes of action asserted under the Sherman Act are generally subject to a four-year statute of limitations.[129] That limitations period is subject to tolling or has been restarted for multiple reasons.

215. *First*, the statute of limitations for causes of action asserted under the Sherman Act is suspended "[w]henever any civil or criminal proceeding is instituted by the United States to prevent, restrain, or punish violations of any of the antitrust laws."[130] The suspension lasts "during the pendency" of the government's proceedings "and for one year thereafter."[131]

216. As described above, the Antitrust Division of the United States Department of Justice began investigating Google for its violations of the antitrust laws detailed in this Complaint as early as 2019. That investigation culminated in the Government's lawsuit filed on January 24,

[127] *See generally* Memorandum Opinion.
[128] *Id.* at 113.
[129] 15 U.S.C. § 15b.
[130] 15 U.S.C. § 16(i).
[131] *Id.*

2023. That lawsuit remains pending. The statute of limitations applicable to PubMatic's causes of action asserted under the Sherman Act has thus been suspended since the Government's proceedings began and will remain suspended until one year after those proceedings conclude.

217. This means that any claims regarding Google's anticompetitive conduct in violation of the Sherman Act that occurred on or after January 24, 2019 (i.e., four years before the Government filed its pending lawsuit) are timely. Google engaged in substantial anticompetitive conduct after that date. Most notably, in or around May 2019, Google leveraged its unlawful ties involving AdX and its monopoly power in a new way to implement UPR. As detailed earlier, UPR is anticompetitive and caused substantial harm to both PubMatic and other market participants. Given the pendency of the Government's action, the statute of limitations does not bar PubMatic from seeking recovery for that harm and for all other harm it suffered as a result of Google's anticompetitive acts on or after January 24, 2019.

218. *Second*, the statute of limitations has been tolled for an even longer period by Google's fraudulent concealment of its anticompetitive conduct. In particular, Google fraudulently concealed its activities relating to SSDRS and Project Poirot.

219. As described earlier, Google leveraged its unlawful ties involving AdX to impose SSDRS, which was a program by which AdX could manipulate its take rate on an impression-by-impression basis to win more auctions than it otherwise would have and win those auctions more efficiently. This prevented PubMatic and other ad exchanges from winning those auctions, depriving them of substantial revenue, data, and touchpoints with publishers. Google concealed SSDRS's ability to manipulate AdX's take rate. At first, Google concealed SSDRS entirely, operating it covertly for more than one year. When Google publicly disclosed SSDRS in the summer of 2016, Google said nothing about SSDRS's ability to change AdX's take rate on a transaction-by-transaction basis. Instead, Google merely described SSDRS as a method to increase publisher's yields—a false statement. SSDRS in fact had the opposite effect, because it enabled AdX to adjust its take rate and submit lower net bids than it otherwise would have in a fair auction, reducing publisher revenue.

220. PubMatic and other market participants had no reason to know of, and could not reasonably discover, SSDRS's manipulation of AdX's take rate on an impression-by-impression basis. Because SSDRS manipulated AdX's take rate both up and down, AdX's average take rate was still 20%—the same rate that AdX had been charging before SSDRS's introduction. The mechanism by which manipulation of the take rate occurred was also buried within Google's proprietary, non-public systems. PubMatic and others without access to Google's systems thus could not discover what SSDRS was doing. The first time PubMatic became aware of the full extent of what Google was doing through SSDRS was after the Government filed its Complaint in January 2023.

221. Google also leveraged its control over a different platform, DV360, to introduce Project Poirot. Under Project Poirot, Google systematically reduced bids placed by large, sophisticated advertisers on competing ad exchanges (like PubMatic), but left bids placed on AdX untouched. As described earlier, this had the effect of shifting even more advertising transactions away from PubMatic and rival ad exchanges and towards AdX, enabling AdX to capture additional market share.

222. Google fraudulently concealed its activities relating to Project Poirot. Google never disclosed that Project Poirot was arbitrarily shading bids placed by DV360 onto competing ad exchanges, while leaving bids placed on AdX intact. To the contrary, Google affirmatively hid that fact when PubMatic and others asked Google why they were experiencing a decline in DV360 spend. As detailed above, PubMatic reached out to Google multiple times—including in 2017 and 2019—to determine the root cause of this decline. In each case, Google either fabricated an excuse (such as that a spam filter was causing the decline) or simply ignored PubMatic's outreach. In 2019, one of PubMatic's advertiser partners also reached out to Google when its bids were not flowing to PubMatic's exchange but were instead flowing to AdX, despite preferencing PubMatic's exchange within DV360. Google obfuscated once again. Rather than admit that Project Poirot was shading AHC's bids placed with PubMatic's exchange, Google first said that a "viewability" solution with DV360 was causing the issue, and then later said that a fraud-detection

solution was causing the issue. On information and belief, neither of those explanations was true. Google concocted them so that it did not reveal what was actually happening—that Project Poirot was surreptitiously reducing AHC's bids.

223. Google also structured the rollout of Project Poirot in such a way that it would hide what was occurring. When Google first introduced Project Poirot, it limited how much Project Poirot shaded DV360's bids so that any decline in DV360 spend experienced by other ad exchanges was not sudden or dramatic. At first, Project Poirot shaded bids by only 10% to 40%. This caused only a modest decline in spend, and one that could be explained away by any number of factors (such as seasonality, technical issues, business preferences, fraud detection, etc.). After more than one year, Google augmented Project Poirot and began shading bids by up to 90%. By gradually increasing the amount by which Project Poirot shaded bids—and by dynamically adjusting the magnitude to which the bid shading occurred (i.e., the amount of bid shading differed from auction to auction)—Google concealed what Project Poirot was doing and made it impossible for PubMatic or other market participants to discover that Google was affirmatively reducing DV360 bids.

224. PubMatic thus had no reason to know of and could not reasonably discover Google's anticompetitive conduct executed through Project Poirot. The first time that PubMatic discovered what Google was doing with Project Poirot was when the Government filed its Complaint in January 2023.

225. *Third*, the statute of limitations has been restarted multiple times pursuant to the continuing wrong doctrine. As described throughout this Complaint, Google engaged in an ongoing pattern of anticompetitive conduct that continued after January 2019. Among other things, Google tied DFP to AdX, tied AdX to AdWords, and instituted First Look, Last Look, SSDRS, Open Bidding, Project Poirot, and UPR. Each of these actions was a new, distinct antitrust wrong designed to further Google's illegal ties and undermine competition, creating a world in which both publishers and advertisers are forced to use ad tech tools that favor AdX to the detriment of other ad exchanges. Each of these policies, along with other overt actions undertaken to reassert

these policies, inflicted new and accumulating harm on PubMatic. As just one example of this, each time Google collected payment from PubMatic in association with Open Bidding, it performed an independent act that inflicted new harm on PubMatic. The same is true for each time Google further tweaked its DFP auction logic to favor AdX, each time Google revised the shading of its bids under Project Poirot, and each time Google allowed AdX to unfairly win a bid that PubMatic should have won. Similarly, when Google misled AHC regarding Project Poirot in a way that made PubMatic lose a potential deal with AHC, Google inflicted yet another distinct antitrust harm on PubMatic. On information and belief, Google continued tweaking its various policies directed to favoring AdX to the present day, causing continuing and accumulating harm each time. Indeed, Google's documents produced in the *United States v. Google* case in this District reveal that Google continued to try to dominate the ad tech stack by any means available. In a June 2019 email, Google continued to discuss how to eliminate the threat of header bidding in order to "capture all transactions through our system" and "become the platform of choice for all media transactions."[132]

226. Each time that Google applied any of the foregoing acts, Google did so to further enhance its monopoly power or unlawful ties and entrench its dominance within the industry. Each time that Google instituted each of these anticompetitive policies or practices, Google committed an overt act that reaffirmed and renewed all its prior unlawful, anticompetitive conduct. Those overt acts inflicted harm on PubMatic and others within the industry anew, and PubMatic is entitled to recover for all such harm.

227. In sum, even though many of the anticompetitive ties and policies described in the foregoing paragraphs were first instituted before January 2019, Google has committed affirmative and new acts leveraging those anticompetitive ties and policies in or after January 2019. Because each such act triggers a new statutory limitations period, PubMatic is entitled to seek recovery for all harm it has suffered from any of Google's anticompetitive occurring within the statutory

[132] *United States v. Google*, PTX0786.

limitations period (as extended by the Government's proceedings against Google, Google's fraudulent concealment, Google's overt acts reaffirming earlier illegal conduct, and the continuing harm caused by Google's anticompetitive acts). This harm includes lost profits and other damages that PubMatic has suffered to date, as well as lost profits and other damages that PubMatic will continue to suffer in the future as a result of Google's anticompetitive conduct.

228. *Fourth*, pursuant to the revival doctrine, PubMatic is entitled to recover for damages that would have been too speculative to recover for if PubMatic had brought suit earlier. For example, if PubMatic had attempted to bring suit regarding the tie between DFP and AdX in 2013, PubMatic would have had no way to predict the damages that tie would cause many years later, particularly when compounded with the various additional antitrust harms herein. PubMatic is thus able to seek, now, those damages based on Google's growing, changing pattern of illegal conduct that it could not have sought earlier.

229. Based on and in light of the foregoing, PubMatic expects that its awardable damages in this case, once trebled pursuant the relevant antitrust laws, will reach into the billions.

V. VIOLATIONS ALLEGED

COUNT ONE

Monopolization and Monopoly Maintenance of the Ad Exchange Market in Violation of Sherman Act § 2 (15 U.S.C. § 2)

230. PubMatic restates, realleges, and incorporates by reference each of the allegations set forth above as if fully set forth herein.

231. Judge Brinkema has already found that "Google has violated Section 2 of the Sherman Act by willfully acquiring and maintaining monopoly power in . . . the open-web display ad exchange market."[133]

232. Ad exchanges for open-web display advertising around the world constitute a relevant antitrust market, and Google has monopoly power in that market.

[133] Memorandum Opinion at 1.

233. Google has unlawfully monopolized the worldwide ad exchange market through the exclusionary conduct and anticompetitive acts described above, including UPR and Project Poirot. Google's ongoing actions over time increased, maintained, and/or protected its ad exchange monopoly. Not only is each of Google's actions anticompetitive on its own, but each has a cumulative effect that further harmed competition and caused substantial damages to PubMatic.

234. The anticompetitive conduct that contributed to Google's acquisition or maintenance of monopoly power in the ad exchange market includes:

a. Google's unlawful tying of AdX real-time bids to using Google's ad server;

b. Google's tying of the advertiser demand on AdWords to AdX;

c. First Look;

d. Last Look;

e. Sell-Side Dynamic Revenue Share;

f. Open Bidding;

g. Project Poirot (including Project Poirot 2.0); and

h. Unified Pricing Rules.

235. Google's anticompetitive conduct has negatively altered the paths through which open-web display advertising is sold, which has hurt ad exchange competitors, reduced payouts to publishers, burdened advertisers and publishers with lower-quality matches of advertisements to inventory, and inhibited choice and innovation across the ad tech stack.

236. Google has no legitimate or pro-competitive purpose for this conduct that could justify its anticompetitive effects.

237. Google's conduct violated Section 2 of the Sherman Act, which prohibits "monopliz[ing], or attempt[ing] to monopolize, or combin[ing] or conspir[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.

238. PubMatic is a competitor in the market for ad exchanges for open-web display advertising.

239. Google's exclusionary conduct significantly diminished PubMatic's ability to compete in the market for ad exchanges for open-web display advertising. PubMatic was harmed by Google's anticompetitive conduct in ways that the antitrust laws were designed to prevent. PubMatic suffered and will continue to suffer substantial damages and irreparable injury.

240. PubMatic is entitled to an award of damages and an injunction ending Google's anticompetitive conduct in order to remedy the harm caused to PubMatic by Google. The damages that PubMatic is entitled to recover are remedies for the harm that PubMatic has suffered to date, as well as for all future harm (including, but not limited to, lost profits, decreased market share, and lost business opportunities) that PubMatic will continue to suffer as a result of Google's anticompetitive conduct.

COUNT TWO

Monopolization and Monopoly Maintenance of the Publisher Ad Server Market in Violation of Sherman Act § 2 (15 U.S.C. § 2)

241. PubMatic restates, realleges, and incorporates by reference each of the allegations set forth above as if fully set forth herein.

242. Judge Brinkema has already found that "Google has violated Section 2 of the Sherman Act by willfully acquiring and maintaining monopoly power in the open-web display publisher ad server market."[134]

243. Publisher ad servers for open-web display advertising worldwide constitute a relevant antitrust market, and Google has monopoly power in that market.

244. Google has unlawfully monopolized the worldwide publisher ad server market through the exclusionary conduct and anticompetitive acts described above. Google's actions increased, maintained, or protected its publisher ad server monopoly. Not only is each of Google's actions anticompetitive on its own, but each has a cumulative effect that further harmed competition and caused substantial damages to PubMatic.

[134] Memorandum Opinion at 1.

245. The anticompetitive conduct that contributed to Google's acquisition or maintenance of monopoly power in the publisher ad server market includes:

a. Google's unlawful tying of AdX real-time bids to using Google's ad server;

b. Google's tying of the advertiser demand on AdWords to AdX;

c. First Look;

d. Last Look;

e. Sell-Side Dynamic Revenue Share;

f. Open Bidding;

g. Project Poirot (including Project Poirot 2.0); and

h. Unified Pricing Rules.

246. Google's anticompetitive conduct has negatively altered the paths through which open-web display advertising is sold, which has reduced payouts to publishers, burdened advertisers and publishers with lower-quality matches of advertisements to inventory, and inhibited choice and innovation across the ad tech stack. It has also negatively impacted ad exchanges like PubMatic, including because Google's power in this market allowed it to make programmatic changes within DFP that favored AdX and harmed AdX's competitors.

247. Google has no legitimate or pro-competitive purpose for this conduct that could justify its anticompetitive effects.

248. Google's conduct violated Section 2 of the Sherman Act, which prohibits "monopliz[ing], or attempt[ing] to monopolize, or combin[ing] or conspir[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.

249. Google's exclusionary conduct made possible by Google's monopoly power in the publisher ad server market significantly diminished both PubMatic's ability to compete against Google for open-web display advertising transactions and PubMatic's ability to compete in its core ad exchange market. PubMatic was harmed by Google's anticompetitive conduct in ways that the

antitrust laws were designed to prevent. PubMatic suffered and will continue to suffer substantial damages and irreparable injury.

250. PubMatic is entitled to an award of damages and an injunction ending Google's anticompetitive conduct in order to remedy the harm caused to PubMatic by Google. The damages that PubMatic is entitled to recover are remedies for the harm that PubMatic has suffered to date, as well as for all future harm (including, but not limited to, lost profits, decreased market share, and lost business opportunities) that PubMatic will continue to suffer as a result of Google's anticompetitive conduct.

COUNT THREE

Unlawful Tying in Violation of Sherman Act §§ 1 and 2 (15 U.S.C. §§ 1, 2)

251. PubMatic restates, realleges, and incorporates by reference each of the allegations set forth above as if fully set forth herein.

252. Judge Brinkema has already found that Google "unlawfully tied its publisher ad server (DFP) and ad exchange (AdX) in violation of Sections 1 and 2 of the Sherman Act."[135]

253. "[P]ublisher ad servers and ad exchanges are two separate products that are not reasonably interchangeable."[136] They "serve different functions, use different pricing structures, and are recognized as different products by industry participants."[137]

254. Judge Brinkema has previously determined that "the policy and technology restrictions that Google has placed within AdX conditioned purchase of the tying product [AdX] upon purchase of the tied product [DFP]."[138] For instance, "Google's restriction of AdX's real-time bidding to DFP required Google's publisher customers who wanted to use AdX's core feature to use DFP."[139]

[135] Memorandum Opinion at 1.
[136] *Id.* at 91 (cleaned up).
[137] *Id.* at 92.
[138] *Id.*
[139] *Id.*

255. Google also "possessed sufficient economic power in the tying product market to restrain competition in the tied product market" because "Google has monopoly power in the open-web display ad exchange market."[140]

256. Because of Google's illegal tie between DFP and AdX, as well as its illegal tie between its AdWords buy-side tools and AdX, Google was able to force market participants to accept its anticompetitive conduct, including First Look, Last Look, SSDRS, Open Bidding, Project Poirot, and UPR.

257. Each of Google's anticompetitive acts described herein are interrelated and interdependent. Each of them served to increase, maintain, and/or protect Google's monopoly power in the publisher ad server and ad exchange markets identified above. Each of Google's acts also had a cumulative and synergistic effect that has harmed competition and the competitive process.

258. Given the breadth of Google's operations, "the tying of AdX and DFP," and the tying of AdWords to AdX, "has had a not insubstantial impact on interstate commerce."[141]

259. Google's unlawful ties substantially foreclosed competition. PubMatic suffered substantial damages as a direct and proximate result of Google's unlawful ties because Google prevented PubMatic from gaining additional publisher customers, earning associated revenue, and increasing scale for its ad exchange for reasons that have nothing to do with the merits of Google's products.

260. PubMatic is entitled to an award of damages and an injunction ending Google's anticompetitive conduct in order to remedy the harm caused to PubMatic by Google. The damages that PubMatic is entitled to recover are remedies for the harm that PubMatic has suffered to date, as well as for all future harm (including, but not limited to, lost profits, decreased market share, and lost business opportunities) that PubMatic will continue to suffer as a result of Google's anticompetitive conduct

[140] *Id.* at 96.
[141] *Id.*

VI. REQUEST FOR RELIEF

261. Wherefore, PubMatic respectfully requests that the Court enter judgment in favor of PubMatic and against Google by:

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

b. finding that the restraints complained of herein are unlawful;

c. awarding, as monetary relief pursuant to 15 U.S.C. § 15(a), compensatory, consequential, and punitive (including treble) damages for all past, current, and future injuries directly and proximately caused to PubMatic by Google, as described herein, according to proof, as well as the costs of suit, including attorneys' fees, incurred herein;

d. awarding any other equitable relief necessary to prevent and remedy Google's anticompetitive conduct; and

e. granting such other and further relief as the Court deems just and proper.

VII. JURY TRIAL DEMAND

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

Dated: September 8, 2025

Respectfully submitted,

/s/ Chad E. Kurtz

Chad Kurtz (VSB #88863)
COZEN O'CONNOR
2001 M Street NW, Suite 500
Washington, DC 20036
Tel.: (202) 463-2521
Fax: (202) 640-5939
ckurtz@cozen.com

John C. Hueston (to be admitted *pro hac vice*)
Doug J. Dixon (to be admitted *pro hac vice*)
Christina Rayburn (to be admitted *pro hac vice*)
Joseph A. Reiter (to be admitted *pro hac vice*)
Justin M. Greer (to be admitted *pro hac vice*)
Amber E. Munoz (to be admitted *pro hac vice*)

HUESTON HENNIGAN LLP
1 Little West 12th Street
New York, New York 10014
Telephone: (646) 930-4046
Facsimile: (888) 775-0898
jhueston@hueston.com
ddixon@hueston.com
crayburn@hueston.com
jreiter@hueston.com
jgreer@hueston.com
amunoz@hueston.com

Attorneys for Plaintiff
PubMatic, Inc.