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**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE**

STACY PENNING, SUNGGIL HONG,  
LAURA BONETTI, JONATHAN  
FINESTONE, TANISHA DANTIGNAC,  
and ROBERT MASON, individually and on  
behalf of all others similarly situated,

Plaintiffs,

v.

MICROSOFT CORPORATION,

Defendant.

Case No.:

**CLASS ACTION COMPLAINT**

**JURY TRIAL DEMANDED**

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1 Plaintiffs Stacy Penning, SungGil Hong, Laura Bonetti, Jonathan Finestone, Tanisha  
2 Dantignac, and Robert Mason (“Plaintiffs”) bring this action on behalf of themselves and all others  
3 similarly situated against Microsoft Corporation (“Microsoft” or “Defendant”). Plaintiffs bring this  
4 action based upon personal knowledge of the facts pertaining to themselves, and on information and  
5 belief as to all other matters, by and through the investigation of undersigned counsel.

6 **NATURE OF THE ACTION**

7 1. This class action lawsuit sets forth how the business practices of Microsoft amount to  
8 constant, widespread surveillance of millions of Americans via their activity on the Internet and  
9 mobile applications. Through its advertising and analytics platform, Xandr, and its Adnxs Pixel,  
10 Microsoft tracks in real time and records indefinitely the personal information and specific web  
11 activity of hundreds of millions of Americans.

12 2. This unlawfully collected information is worth billions of dollars to Defendant  
13 because it makes up the content of Microsoft’s extensive line of data analysis products and creates  
14 individual sales of advertisements in the real-time-bidding ecosystem present on thousands of major  
15 websites.

16 3. Plaintiffs bring this action to enforce their constitutional rights to privacy and to seek  
17 damages under California law for the harm caused by the collection and sale of their confidential  
18 data and personal information.

19 **THE PARTIES**

20 **I. PLAINTIFFS**

21 4. ***Plaintiff Stacy Penning.*** Plaintiff Stacy Penning is a natural person and citizen of  
22 California, residing in El Cerrito, California. Plaintiff Penning was in California when he accessed  
23 the BuzzFeed website and had his activity on that website and subsequent activity on other websites  
24 tracked by Defendant.

25 5. ***Plaintiff SungGil Hong.*** Plaintiff SungGil Hong is a natural person and citizen of  
26 California, residing in San Diego, California. Plaintiff Hong was in California when he accessed the  
27 AliExpress website and had his activity on that website and subsequent activity on other websites  
28 tracked by Defendant.

1           6.       ***Plaintiff Laura Bonetti.*** Plaintiff Laura Bonetti is a natural person and citizen of  
2 California, residing in Venice, California. Plaintiff Bonetti was in California when she accessed the  
3 Bon Appetit website and had her activity on that website and subsequent activity on other websites  
4 tracked by Defendant.

5           7.       ***Plaintiff Jonathan Finestone.*** Plaintiff Jonathan Finestone is a natural person and  
6 citizen of California, residing in West Hollywood, California. Plaintiff Finestone was in California  
7 when he accessed the Hyatt website and had his activity on that website and subsequent activity on  
8 other websites tracked by Defendant.

9           8.       ***Plaintiff Tanisha Dantignac.*** Plaintiff Tanisha Dantignac is a natural person and  
10 citizen of California, residing in Mission Hills, California. Plaintiff Dantignac was in California  
11 when she accessed the Expedia website and had her activity on that website and subsequent activity  
12 on other websites tracked by Defendant.

13           9.       ***Plaintiff Robert Mason.*** Plaintiff Robert Mason is a natural person and citizen of  
14 California, residing in San Jacinto, California. Plaintiff Mason was in California when he accessed  
15 the Plushcare website and had his activity on that website and subsequent activity on other websites  
16 tracked by Defendant.

17 **II. DEFENDANT**

18           10. Defendant Microsoft Corporation is a Washington corporation with its principal place  
19 of business in Redmond, Washington. Microsoft uses its proprietary technology, including but not  
20 limited to the Adnxs Pixel and Xandr platform to accomplish the widespread surveillance and  
21 unlawful sharing and sale of data alleged herein.

22 **JURISDICTION AND VENUE**

23           11. This Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1332(d)(2)(A)  
24 because this case is a class action where the aggregate claims of all members of the proposed class  
25 are in excess of \$5,000,000, exclusive of interest and costs, and at least one member of the proposed  
26 class is a citizen of a state different from at least one Defendant.

27           12. This Court has personal jurisdiction over Defendant because Defendant is  
28 headquartered and incorporated in Washington.

1 13. Venue is proper in this District pursuant to 28 U.S.C. § 1391 because Defendant  
2 resides in this District.

3 **FACTUAL ALLEGATIONS**

4 **I. DATA BROKERS AND REAL-TIME BIDDING: THE INFORMATION ECONOMY**

5 14. To put the invasiveness of Defendant’s privacy violations into perspective, it is  
6 important to understand three concepts: data brokers, real-time bidding, and cookie syncing.

7 **A. Data Brokers**

8 15. While “[t]here is no single, agreed-upon definition of data brokers in United States  
9 law,”<sup>1</sup> California law defines a “data broker” as “a business that knowingly collects and sells to third  
10 parties the personal information of a consumer with whom the business does not have a direct [*i.e.*,  
11 consumer-facing] relationship,” subject to certain exceptions. Cal. Civ. Code § 1798.99.80(c).

12 16. “Data brokers typically offer pre-packaged databases of information to potential  
13 buyers,” either through the “outright s[ale of] data on individuals” or by “licens[ing] and otherwise  
14 shar[ing] the data with third parties.”<sup>2</sup> Such databases are extensive, and can “not only include  
15 information publicly available [such as] from Facebook but also the user’s exact residential address,  
16 date and year of birth, and political affiliation,” in addition to “inferences [that] can be made from  
17 the combined data.” And whereas individual data sources “may provide only a few elements about  
18 a person’s activities, data brokers combine these elements to form a detailed, composite view of the  
19 consumer’s life.”<sup>3</sup>

20 17. For instance, as a report by NATO found, data brokers collect two sets of information:  
21 “observed and inferred (or modelled).” The former “is data that has been collected and is actual,”

22  
23 <sup>1</sup> Justin Sherman, *Data Brokers and Sensitive Data on U.S. Individuals: Threats to American Civil  
24 Rights, National Security, and Democracy*, Duke Sanford Cyber Policy Program, at 2 (2021),  
25 [https://techpolicy.sanford.duke.edu/wp-content/uploads/sites/4/2021/08/Data-Brokers-and-  
Sensitive-Data-on-US-Individuals-Sherman-2021.pdf](https://techpolicy.sanford.duke.edu/wp-content/uploads/sites/4/2021/08/Data-Brokers-and-Sensitive-Data-on-US-Individuals-Sherman-2021.pdf).

26 <sup>2</sup> Sherman, *supra*, at 2.

27 <sup>3</sup> Tehila Minkus et al., *The City Privacy Attack: Combining Social Media and Public Records for  
28 Detailed Profiles of Adults and Children*, COSN ’15: PROCEEDINGS OF THE 2015 ACM ON  
CONFERENCE ON ONLINE SOCIAL NETWORKS 71, 71 (2015), [https://dl.acm.org/doi/pdf/10.1145/  
2817946.2817957](https://dl.acm.org/doi/pdf/10.1145/2817946.2817957).

1 such as websites visited.<sup>4</sup> Inferred data “is gleaned from observed data by modelling or profiling,”  
2 meaning what consumers may be *expected* to do.<sup>5</sup> On top of this, “[b]rokers typically collect not  
3 only what they immediately need or can use, but Hoover up as much information as possible to  
4 compile comprehensive data sets that might have some future use.”<sup>6</sup>

5 18. Likewise, a report by the Duke Sanford Cyber Policy Program “examine[d] 10 major  
6 data brokers and the highly sensitive data they hold on U.S. individuals.”<sup>7</sup> The report found that  
7 “data brokers are openly and explicitly advertising data for sale on U.S. individuals’ sensitive  
8 demographic information, on U.S. individuals’ political preferences and beliefs, on U.S. individuals’  
9 whereabouts and even real-time GPS locations, on current and former U.S. military personnel, and  
10 on current U.S. government employees.”<sup>8</sup>

11 19. This data collection has grave implications for Americans’ right to privacy. For  
12 instance, “U.S. federal agencies from the Federal Bureau of Investigation [] to U.S. Immigration and  
13 Customs Enforcement [] purchase data from data brokers—without warrants, public disclosures, or  
14 robust oversight—to carry out everything from criminal investigations to deportations.”<sup>9</sup>

15 20. As another example:

16 Data brokers also hold highly sensitive data on U.S. individuals such  
17 as race, ethnicity, gender, sexual orientation, immigration status,  
18 income level, and political preferences and beliefs (like support for  
19 the NAACP or National LGBTQ Task Force) that can be used to  
20 directly undermine individuals’ civil rights. Even if data brokers do  
21 not explicitly advertise these types of data (though in many cases  
22 they do), everything from media reporting to testimony by a Federal  
23 Trade Commission commissioner has identified the risk that data  
24 brokers use their data sets to make “predictions” or “inferences”  
25 about this kind of sensitive information (race, gender, sexual  
26 orientation, etc.) on individuals.

23 <sup>4</sup> Henrik Twetman & Gundars Bergmanis-Korats, *Data Brokers and Security*, at 11, NATO Strategic  
24 Communications Centre Of Excellence, (2020), [https://stratcomcoe.org/cuploads/pfiles/  
data\\_brokers\\_and\\_security\\_20-01-2020.pdf](https://stratcomcoe.org/cuploads/pfiles/data_brokers_and_security_20-01-2020.pdf).

25 <sup>5</sup> *Id.*

26 <sup>6</sup> *Id.*

27 <sup>7</sup> Sherman, *supra*, at 1.

28 <sup>8</sup> *Id.*

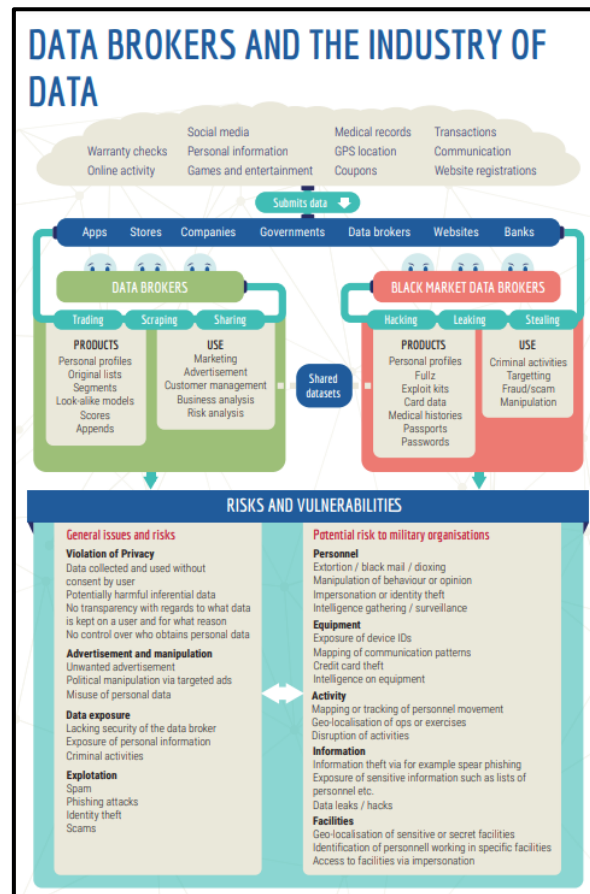
<sup>9</sup> *Id.* at 9.

This data can be used by commercial entities within the U.S. to discriminately target goods and services, akin to how Facebook advertising tools allow advertisers to exclude certain groups, such as those who are identified as people with disabilities or those who are identified as Black or Latino, from seeing advertisements. Many industries from health insurance to life insurance to banking to e-commerce purchase data from data brokers to run advertisements and target their services.

...

Given identified discrimination problems in machine learning algorithms, there is great risk of these predictive tools only further driving up costs of goods and services (from insurance to housing) for minority groups.<sup>10</sup>

21. Similarly, as the report from NATO noted, corporate data brokers cause numerous privacy harms, including but not limited to depriving consumers of the right to control who does and does not acquire their personal information, unwanted advertisements that can even go as far as manipulating viewpoints, and spam and phishing attacks.<sup>11</sup>



<sup>10</sup> *Id.*

<sup>11</sup> Twetman & Bergmanis-Korats, *supra* note 4, at 8.



1 22. Data brokers are able to compile such wide swaths of information in part by collecting  
2 users' IP addresses and other device information, which is used by data brokers like Defendant to  
3 track users across the Internet.<sup>12</sup>

4 23. Indeed, as McAfee (a data security company) notes, "data brokers ... can even place  
5 trackers or cookies on your browsers ... [that] track your IP address and browsing history, which  
6 third parties can exploit."<sup>13</sup>

7 24. These data brokers will then:

8 take that data and pair it with other data they've collected about you,  
9 pool it together with other data they've got on you, and then share  
10 all of it with businesses who want to market to you. They can  
11 eventually build large datasets about you with things like: "browsed  
12 gym shorts, vegan, living in Los Angeles, income between \$65k-  
13 90k, traveler, and single." Then, they sort you into groups of other  
14 people like you, so they can sell those lists of like-people and  
15 generate their income.<sup>14</sup>

16 25. In short, data brokers track consumers across the Internet, compiling various bits of  
17 information about users, building comprehensive user profiles that include an assortment of  
18 information, interests, and inferences, and offering up that information for sale to the highest bidder.  
19 The "highest bidder" is a literal term, as explained below.

20 **B. Real-Time Bidding**

21 26. So, once data brokers collect information from consumers and create comprehensive  
22 user profiles, how do they "sell" or otherwise monetize that information? This is where real-time  
23 bidding—and the Microsoft software that is at issue in this action—comes in.

24 27. "Real Time Bidding (RTB) is an online advertising auction that uses sensitive  
25 personal information to facilitate the process to determine which digital ad will be displayed to a user  
26 on a given website or application."<sup>15</sup>

27 <sup>12</sup> *Id.* at 11.

28 <sup>13</sup> Jasdev Dhaliwal, *How Data Brokers Sell Your Identity*, McAfee (Jan. 28, 2025),  
<https://www.mcafee.com/blogs/tips-tricks/how-data-brokers-sell-your-identity/>.

<sup>14</sup> Paul Jarvis, *The Problem with Data Brokers: Targeted Ads and Your Privacy*, Fathom Analytics  
(May 10, 2022), <https://usefathom.com/blog/data-brokers>.

<sup>15</sup> Sara Geoghegan, *What is Real Time Bidding?*, ELECTRONIC PRIVACY INFORMATION CENTER (Jan.  
15, 2025), <https://epic.org/what-is-real-time-bidding/>.

1           28. “There are three types of platforms involved in an RTB auction: Supply Side  
2 Platforms (SSPs), Advertising Exchanges, and Demand Side Platforms (DSPs).” An SSP “work[s]  
3 with website or app publishers to help them participate in the RTB process.” “DSPs primarily work  
4 with advertisers to help them evaluate the value of user impressions and optimize the bid prices they  
5 put forth.”<sup>16</sup> And an Advertising Exchange “allows advertisers and publishers to use the same  
6 technological platform, services, and methods, and ‘speak the same language’ in order to exchange  
7 data, set prices, and ultimately serve an ad.”<sup>17</sup>

8           29. In other words, (i) SSPs work with website operators to provide user information to  
9 advertisers that might be interested in those users; (ii) DSPs work with advertisers to help advertisers  
10 select which users to target, and ultimately make bid to show advertisements to selected users; and  
11 (iii) an Advertising Exchange is the platform on which all of this happens.

12           30. As described in more detail below, Microsoft participates on all sides of this process.  
13 The Adnxs Pixel—now known as “Microsoft Invest”—is a DSP,<sup>18</sup> and Xandr provides both an SSP  
14 and DSP.<sup>19</sup> This tracks with the trend of many technology companies serving both the “publisher”  
15 and “advertiser” (supply and demand, respectively) sides of the RTB ecosystem.<sup>20</sup>

16           31. The RTB process works as follows:

17                   After a user loads a website or app, an SSP will send user data to  
18 Advertising Exchanges ... The user data, often referred to as  
19 “bidstream data,” contains information like device identifiers, IP  
20 address, zip/postal code, GPS location, browsing history, location  
21 data, and more. After receiving the bidstream data, an Advertising  
22 Exchange will broadcast the data to several DSPs. The DSPs will  
23 then examine the broadcasted data to determine whether to make a  
24 bid on behalf of their client.

23 <sup>16</sup> Geoghegan, *supra*.

24 <sup>17</sup> *Introducing To Ad Serving*, MICROSOFT IGNITE (Mar. 3, 2024), <https://learn.microsoft.com/en-us/xandr/industry-reference/introduction-to-ad-serving>.

25 <sup>18</sup> MICROSOFT INVEST, <https://about.ads.microsoft.com/en/solutions/technology/microsoft-invest-dsp> (“Microsoft Invest is a demand-side platform built for the future of video advertising.”).

26 <sup>19</sup> *Introducing To Ad Serving, supra*.

27 <sup>20</sup> See Amir Sharer, *Why SSPs and DSPs are Breaking the Barrier Between Supply and Demand*,  
28 ADEXCHANGER (May 2, 2024), <https://www.adexchanger.com/data-driven-thinking/why-ssps-and-dsps-are-breaking-the-barrier-between-supply-and-demand/>.

1 Ultimately, if the DSP wins the bid, its client’s advertisement will  
 2 appear to the user. Since most RTB auctions are held on the  
 3 server/exchange side, instead of the client/browser side, the user  
 4 only actually sees the winner of the auction and would not be aware  
 5 of the DSPs who bid and lost. But even the losing DSPs still benefit  
 6 because they also receive and collect the user data broadcasted  
 7 during the RTB auction process. This information can be added to  
 8 existing dossiers DSPs have on a user.<sup>21</sup>

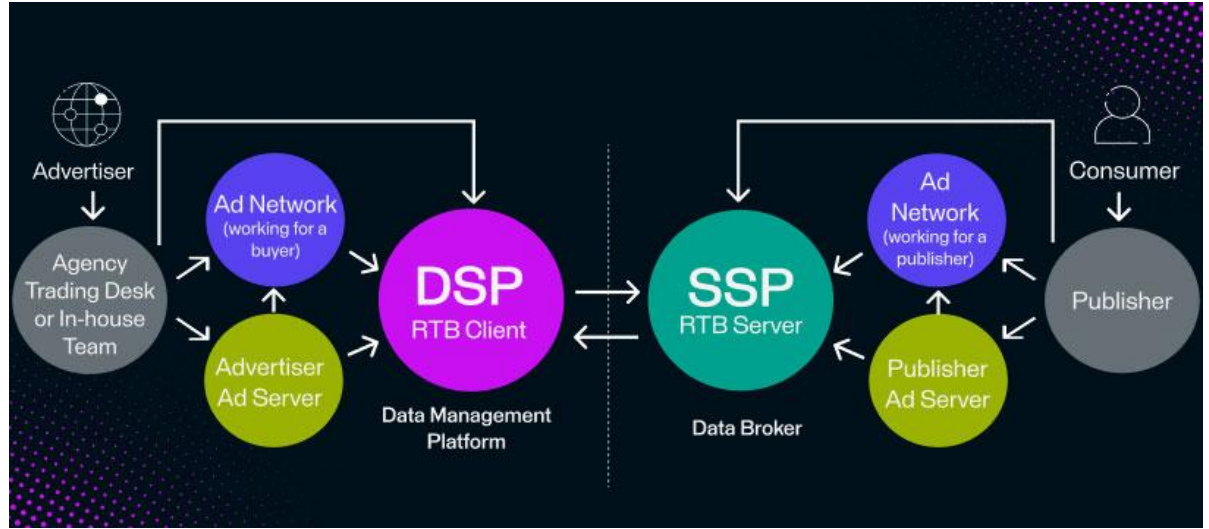


13 32. Facilitating this real-time bidding process means SSPs and DSPs—like those offered  
 14 by Microsoft—must have as much information as possible about consumers to procure the greatest  
 15 interest from advertisers and obtain the highest bids for website and app operators’ users. But these  
 16 SSPs and DSPs receive assistance by connecting with other third parties like data brokers and Data  
 17 Management Platforms (“DMPs”) to de-anonymize users and bolster the information they can either  
 18 provide to advertisers or advertisers can consider when making bids:

19 the economic incentives of an auction mean that DSP with more  
 20 specific knowledge of individuals will win desirable viewers due to  
 21 being able to target them more specifically and out-bid other  
 22 entities. As a consequence, the bid request is not the end of the road.  
 23 The DSP enlists a final actor, the data management platform (DMP)  
 24 [or data broker, like Defendants]. DSPs send bid requests to DMPs,  
 25 who enrich them by attempting to identify the user in the request  
 26 and use a variety of data sources, such as those uploaded by the  
 27 advertiser, collected from other sources, or bought from data brokers  
 28 The DSP also wins the right to cookie sync its own cookies with  
 those from the [Advertising Exchange], thus enabling easier linkage  
 of the data to the user’s profile in the future.<sup>22</sup>

<sup>21</sup> Geoghegan, *supra*; see also REAL-TIME BIDDING, APPSFLYER, <https://www.appsflyer.com/glossary/real-time-bidding/>.

<sup>22</sup> Michael Veale & Federik Zuiderveen Borgesius, *Adtech and Real-Time Bidding under European Data Protection Law*, 23 GERMAN L. J. 226, 232-33 (2022) <https://tinyurl.com/yjddt5ey>; see also



33. In other words, before bidding to show a user an advertisement, SSPs and DSPs like those offered by Defendant will attempt to determine what other information about a user may be available. SSPs and DSPs do this by connecting with entities like data brokers, DMPs, and the like, who match a consumer’s information from a particular website or mobile application (e.g., their IP address, device metadata, other unique identifiers) with any profiles on those users data brokers may have compiled. If there is a match, then advertisers will pay more money to show users an advertisement because the advertisers have more information to base their targeting on. This naturally enriches website and app operators, as their users are now more valuable. It also enriches SSPs who can offer users to advertisers for more money based on the greater number of traits available, and DSPs who can receive higher bids for the same users. And SSPs and DSPs can continue linking users on a website or mobile application through the Advertising Exchange, which enhances the SSP’s and DSP’s ability to better identify users in the future and helps the SSP and DSP profit further as well.

34. As the Federal Trade Commission (“FTC”) has noted, “[t]he use of real-time bidding presents potential concerns,” including but not limited to:

- (a) “incentiviz[ing] invasive data-sharing” by “push[ing] publishers [i.e., website and app operators] to share as much end-user data as possible to get higher valuation for their ad inventory—particularly their location data and cookie cache,

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PERION, WHAT IS A SUPPLY-SIDE PLATFORM (SSP): DEFINITION AND IMPORTANCE, <https://perion.com/publishers/what-is-a-supply-side-platform-ssp-definition-and-importance/>.

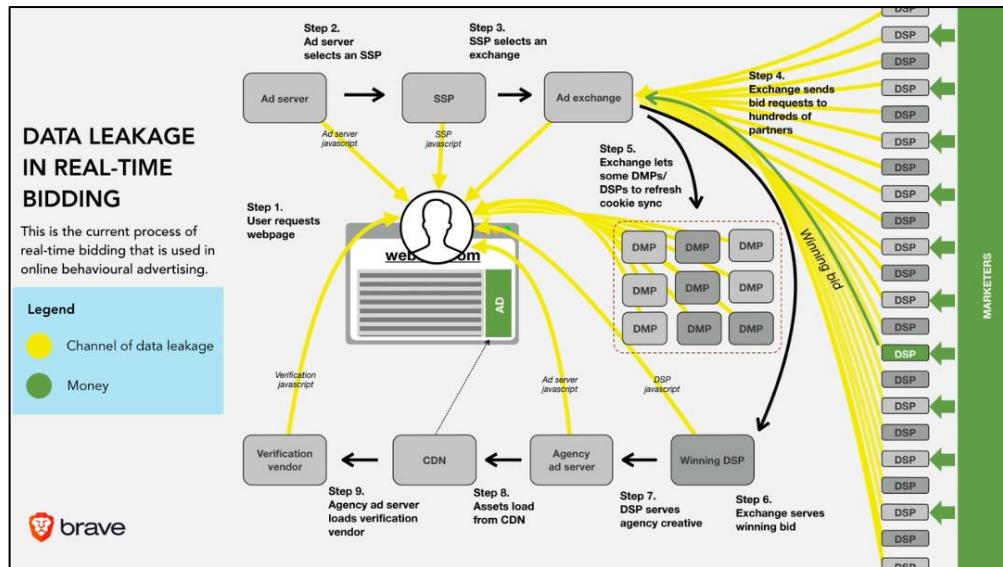
which can be used to ascertain a person’s browsing history and behavior.”

- (b) “send[ing] sensitive data across geographic borders.”
- (c) sending consumer data “to potentially dozens of bidders simultaneously, despite only one of those parties—the winning bidder actually using that data to serve a targeted ad. Experts have previously cautioned that there are few (if any) technical controls ensuring those other parties do not retain that data for use in unintended ways.”<sup>23</sup>

35. The last point bears additional emphasis, as it means the data Defendant provides through its DSP services to serve targeted advertisements is even provided to those entities who do not actually serve an advertisement on a consumer. This greatly diminishes the ability of users to control their personal information.

36. Likewise, the Electronic Privacy Information Center (“EPIC”) has warned that “[c]onsumers’ privacy is violated when entities disclose their information without authorization or in ways that thwart their expectations.”<sup>24</sup>

37. For these reasons, some have characterized “real-time bidding” as “[t]he biggest data breach ever recorded” because of the sheer number of entities that receive personal information<sup>25</sup>:



<sup>23</sup> FEDERAL TRADE COMMISSION, UNPACKING REAL TIME BIDDING THROUGH FTC’S CASE ON MOBILEWALLA (Dec. 3, 2024), <https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2024/12/unpacking-real-time-bidding-through-ftcs-case-mobilewalla>.

<sup>24</sup> Geoghegan, *supra*.

<sup>25</sup> DR. JOHNNY RYAN, “RTB” ADTECH & GDPR, <https://assortedmaterials.com/rtb-evidence/> (video).

1 38. All of this is in line with protecting the right to determine who does and does not get  
 2 to know one's information, a harm long recognized at common law and one statutes like the CIPA  
 3 were enacted to protect against. *Ribas v. Clark*, 38 Cal. 3d 355, 361 (1985) (noting the CIPA was  
 4 drafted with a two-party consent requirement to protect "the right to control the nature and extent of  
 5 the firsthand dissemination of [one's] statements"); *U.S. Dep't of Justice v. Reporters Comm. for*  
 6 *Freedom of the Press*, 489 U.S. 749, 763-64 (1989) ("[B]oth the common law and the literal  
 7 understandings of privacy encompass the individual's control of information concerning his or her  
 8 person.").

### 9 C. Cookie Syncing

10 39. It should now be clear both the capabilities of data brokers like who de-anonymize  
 11 users, and the reasons that Defendant's technology is installed on websites (to provide more  
 12 information to advertisers in real-time bidding). The final question is how do Defendant share  
 13 information with other services to either offer the most complete user profiles up for sale or solicit  
 14 the highest and most informed bids from advertisers? This occurs through "cookie syncing."

15 40. Cookie syncing is a process that "allow[s] web companies to share (synchronize)  
 16 cookies, and match the different IDs they assign for the same user while they browse the web."<sup>26</sup>  
 17 This allows entities like Defendant to circumvent "the restriction that sites can't read each other  
 18 cookies, in order to better facilitate targeting and real-time bidding."<sup>27</sup>

19 41. Cookie syncing works as follows:

20 Let us assume a user browsing several domains like website1.com  
 21 and website2.com, in which there are 3rd-parties like tracker.com  
 22 and advertiser.com, respectively. Consequently, these two 3rd-  
 23 parties have the chance to set their own cookies on the user's  
 browser, in order to re-identify the user in the future. Hence,  
 tracker.com knows the user with the ID user123, and advertiser.com  
 knows the same user with the ID userABC.

25 <sup>26</sup> Panagiotis Papadopoulos et al., *Cookie Synchronization: Everything You Always Wanted to Know*  
 26 *But Were Afraid to Ask*, 1 WWW '19: THE WORLD WIDE WEB CONFERENCE 1432, 1432 (2019),  
<https://dl.acm.org/doi/10.1145/3308558.3313542>.

27 <sup>27</sup> Gunes Acar et al., *The Web Never Forgets: Persistent Tracking Mechanisms in the Wild*, 6B  
 28 CCS'14: ACM SIGSAC CONFERENCE ON COMPUTER AND COMMUNICATIONS SECURITY 674, 674  
 (2014)

Now let us assume that the user lands on a website (say website3.com), which includes some JavaScript code from tracker.com but not from advertiser.com. Thus, advertiser.com does not (and cannot) know which users visit website3.com. However, *as soon as the code of tracker.com is called, a GET request is issued by the browser to tracker.com (step 1), and it responds back with a REDIRECT request (step 2), instructing the user's browser to issue another GET request to its collaborator advertiser.com this time, using a specifically crafted URL (step 3).*

...

When advertiser.com receives the above request along with the cookie ID userABC, it finds out that userABC visited website3.com. *To make matters worse, advertiser.com also learns that the user whom tracker.com knows as user123, and the user userABC is basically one and the same user.* Effectively, CSync enabled advertiser.com to collaborate with tracker.com, in order to: (i) find out which users visit website3.com, and (ii) *synchronize (i.e., join) two different identities (cookies) of the same user on the web.*<sup>28</sup>



42. Through this process, third party trackers like Defendant's are not only able to resolve user identities (e.g., learning that who Third Party #1 knew as "userABC" and Third Party #2 knew

<sup>28</sup> Papadopoulos, *supra*, at 1433.

1 as “user123” are the same person), they can “track a user to a much larger number of websites,” even  
2 though that “do not have any collaboration with” the third party.<sup>29</sup>

3 43. On the flip side, “CSync may re-identify web users even after they delete their  
4 cookies.”<sup>30</sup> “[W]hen a user erases her browser state and restarts browsing, trackers usually place and  
5 sync a new set of userIDs, and eventually reconstruct a new browsing history.”<sup>31</sup> But if a tracker can  
6 “respawn” its cookie or like to another persistent identifier (like an IP address), “then through CSync,  
7 all of them can link the user’s browsing histories from before and after her state erasure.  
8 Consequently: (i) users are not able to abolish their assigned userIDs even after carefully erasing  
9 their set cookies, and (ii) trackers are enabled to link user’s history across state resets.”<sup>32</sup>

10 44. Thus, “syncing userIDs of a given user increases the user identifiability while  
11 browsing, thus reducing their overall anonymity on the Web.”<sup>33</sup>

12 45. Cookie syncing is precisely what is happening here. When Defendant’s technology  
13 like the Adnxs Pixel is installed on users’ browsers, Defendant’s technology syncs Defendant’s  
14 unique user identifiers with other third parties on the websites (*e.g.*, the Partner Pixels listed below).  
15 The result of this process is not only that a single user is identified as one person by these multiple  
16 third parties, but they share all the information about that user with one another (because the cookie  
17 is linked to a specific user profile). This prevents users from being anonymous when they visit  
18 websites.

19 \* \* \*

20 46. To summarize the proceeding allegations, data brokers focus on collecting as much  
21 information about users as possible to create comprehensive user profiles. Through “cookie  
22 syncing,” those profiles are shared with Defendant’s advertising technologies and other entities (and  
23 vice versa) to form the most fulsome picture (literally, a profile) with the most attributes as possible.

24 \_\_\_\_\_  
25 <sup>29</sup> Papadopoulos, *supra*, at 1434.

26 <sup>30</sup> *Id.*

27 <sup>31</sup> *See id.*

28 <sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 1441.



1 And those profiles and sold to and bought by advertisers through real-time bidding using the  
2 technology Defendant implements on the websites, where users will command more value the more  
3 advertisers know about a user. Thus, Defendant enriches the value that website users would  
4 otherwise command by tying the data they obtain directly from users on websites with  
5 comprehensive user profiles in their possession or in the possession of other entities they sync with.

6 47. Accordingly, Defendant is using its conjunction in conjunction with website  
7 operators and other third parties to (i) de-anonymize users, (ii) allow users to be bought by and sold  
8 to advertisers in real-time bidding, and (iii) allow website operators to monetize websites by  
9 installing Defendant’s Pixels and allowing Defendant to collect as much information about users as  
10 possible (without consent).

11 48. Of course, Defendant also benefits from this arrangement because websites and apps  
12 will want to employ Defendant’s services to bring in more advertising revenue, meaning Defendant  
13 can continue to expand and grow the information they have about any consumers and add to  
14 consumers’ profiles, which further perpetuates the value of Defendant’s services.

15 49. As it stands though, Defendant is already one of the largest players in this industry.  
16 Defendant achieved this status using a variety of technologies and services, as described below.

17 **II. AN OVERVIEW OF DEFENDANT’S ONLINE TRACKING AND ADVERTISING TECHNOLOGY**

18 **A. Adnxs Pixel**

19 50. Microsoft oversees a massive web of online tracking technologies that provide  
20 ongoing information to Microsoft and its partners.

21 49. The collection of this highly detailed information relies on a series of “pixels” loaded  
22 onto websites.

23 50. A pixel is a piece of code that website operators can integrate into their websites to  
24 “track[] the people and type of action they take.”<sup>34</sup>

25  
26  
27 \_\_\_\_\_  
28 <sup>34</sup> *Retargeting*, Meta, <https://www.facebook.com/business/goals/retargeting> (last accessed Feb. 12, 2025).

1 51. Microsoft collects information on Internet users' activity on a wide variety of  
2 websites using the Adnxs Pixel, a pixel it owns and develops and through partnering with other data  
3 brokers and advertisers.

4 52. The advertisers that Microsoft contracts with also have their own pixels ("Partner  
5 Pixels"), which are integrated into the design of websites. To facilitate the identity resolution and  
6 real time bidding processes, described below, these pixels interact with and receive information from,  
7 the Adnxs Pixel when both pixels are loaded onto a particular website.

8 53. Plaintiffs' testing revealed that the Adnxs Pixel interacts with dozens of Partner Pixels  
9 on websites across the internet.

10 54. Microsoft collects additional data from Internet users through Microsoft's  
11 interactions with users and through Microsoft's products.<sup>35</sup> Microsoft collects data by and through  
12 users' interactions, use, and experiences with Microsoft's products.<sup>36</sup> Microsoft also obtains data  
13 about Internet users from Microsoft affiliates, subsidiaries, and third parties.<sup>37</sup> Microsoft shares data  
14 "with Microsoft-controlled affiliates and subsidiaries [and] with vendors working on [Microsoft's]  
15 behalf."<sup>38</sup> This data is combined with the data collected from internet pixels to build even more  
16 comprehensive profiles about the behavior and characteristics of millions of people.

17 55. Microsoft has several methods to collect data on users. For instance, Microsoft  
18 applications use additional identifiers, such as the Advertising ID in Windows.<sup>39</sup> "Windows  
19 generates a unique advertising ID for each person using a device, which app developers and  
20 advertising networks can then use for their own purposes, including providing relevant advertising  
21 in apps."<sup>40</sup> According to Microsoft, when the advertising ID is enabled, both Microsoft apps and  
22 third-party apps can access and use the advertising ID in much the same way that websites can access

23 \_\_\_\_\_  
24 <sup>35</sup> *Microsoft Privacy Statement*, Microsoft, <https://www.microsoft.com/en-us/privacy/privacy-statement#mainpersonaldatawecollectmodule> (last updated Jan. 2025).

25 <sup>36</sup> *Id.*

26 <sup>37</sup> *Id.*

27 <sup>38</sup> *Id.*

28 <sup>39</sup> *Id.*

<sup>40</sup> *Id.*

1 and use a unique identifier stored in a cookie.<sup>41</sup> Thus, a user’s advertising ID can be used by app  
2 developers and advertising networks to provide “more relevant” advertising across their apps and on  
3 the Internet.<sup>42</sup>

4 **B. The Bing Pixel**

5 56. Microsoft owns and develops a second pixel, the Bing Pixel, which is similarly  
6 deployed on websites across the internet.

7 57. The Bing Pixel does not, itself facilitate real-time bidding. Instead, the Bing Pixel  
8 installs tracking cookies on the browsers of visitors to the websites where it is loaded and intercepts  
9 the content of user communications and other interactions with those websites.

10 58. The data collected by the Bing Pixel is similarly used by Defendants to add to its  
11 consumer data profiles and data advertising products described herein.

12 **C. The Microsoft Surveillance Apparatus**

13 59. All of the above information is used to identify individuals and track their activity,  
14 but wiretapping communications and collection of persistent identifiers play particular roles in the  
15 Microsoft surveillance apparatus.

16 *1. Interception Of Communications*

17 60. When an individual visits a website, they communicate a wide variety of information  
18 to that website. This can be as simple as their selection of an article or video the individual would  
19 like to view, but can also include highly personal information such as health status and treatment,  
20 travel plans, political affiliation, sexual orientation, and many, many more.

21 61. When the Adnxs Pixel or Bing Pixel is loaded on to a website, Defendant  
22 surreptitiously intercepts these communications. The primary way this is accomplished is through  
23 the collection of the universal resource locator (“URL”) for each page of each website visited by an  
24 individual.

25 62. Sometimes known as a “web address,” the URL is the name of the webpage as  
26 displayed in the address bar of a browser.

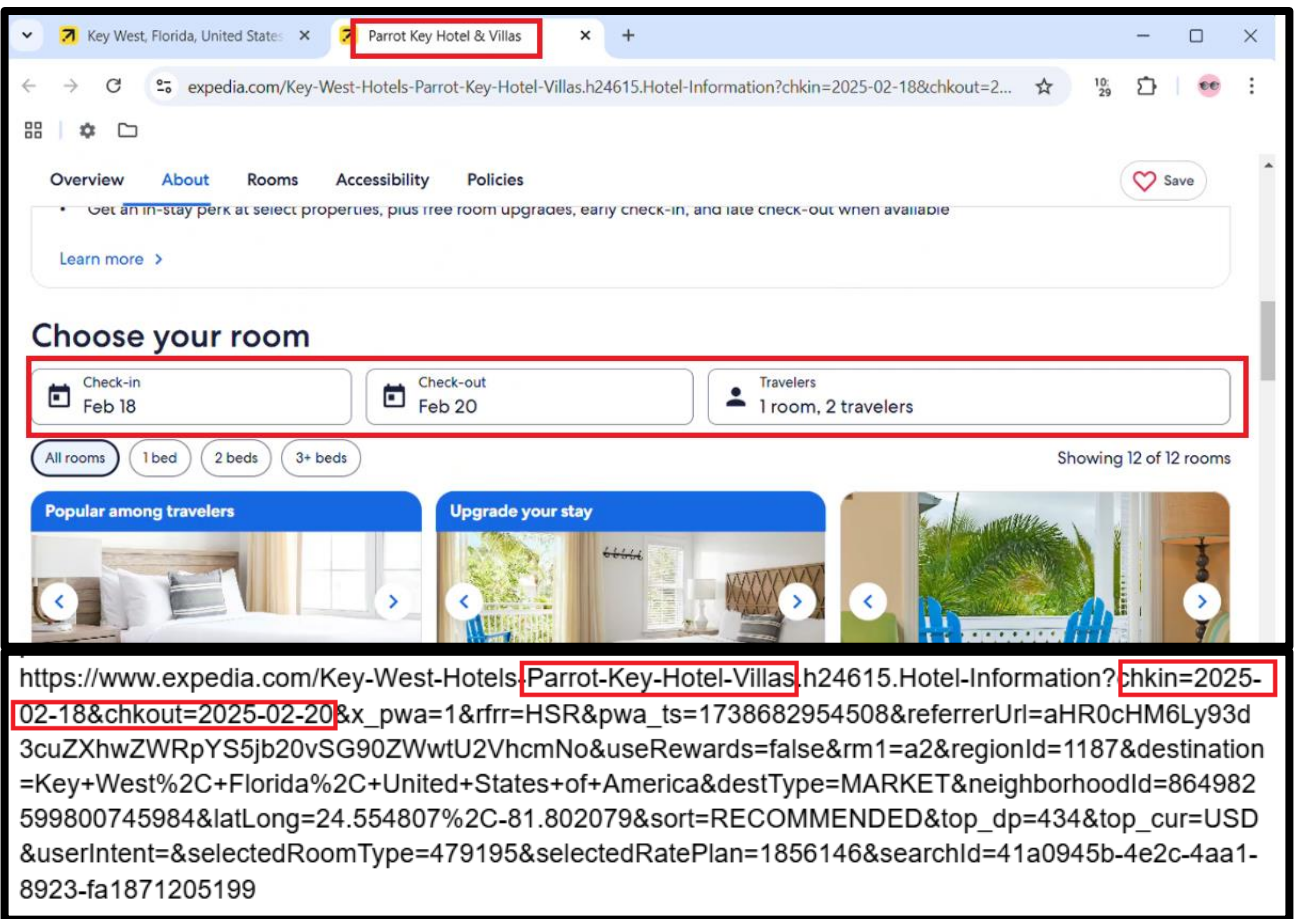
27 <sup>41</sup> *Id.*

28 <sup>42</sup> *Id.*

1 63. Each page on a website has its own individual URL, allowing pixels with access to  
2 the URL to see which pages of a website a particular Internet user visited.

3 64. All URLs identify the pages of each page of a website an internet user visited, but  
4 some—depending on the design of the website also disclose the contents of information entered onto  
5 a webpage. These URLs are known as full-string descriptive URLs.

6 65. For example, when a user enters information into the Expedia website indicating  
7 where they would like to stay and the dates of travel, that information is included in the URL of the  
8 webpage with the search results.



24 66. The Adnxs Pixel and Bing Pixel collect the URL values of the pages visited by  
25 millions of internet users and, thus, intercept communications between individuals and those  
26 websites, including sensitive information like travel information and health information.

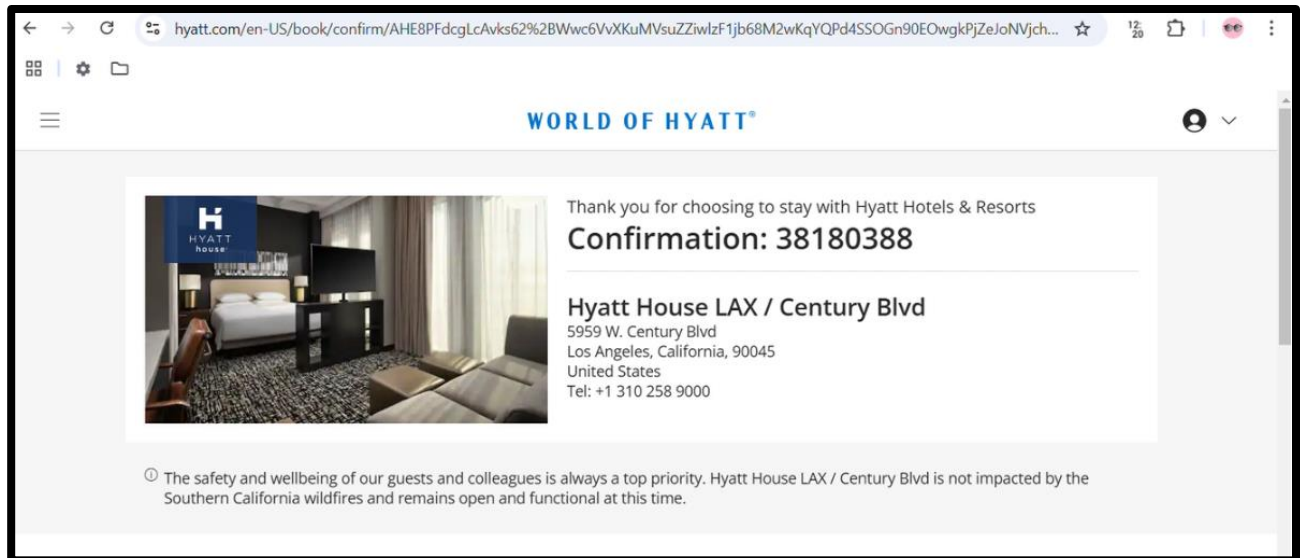
1 67. As such, any pixel that intercepts the URL on this page also intercepts the content of  
2 the users' communications with Expedia about their travel plans. This process works similarly on  
3 other websites.

4 68. The Microsoft pixels collect both types of URLs and any information that can be  
5 gleaned or inferred from those URLs are added to the profiles that Defendant has for that particular  
6 user.

7 69. Further, with the Microsoft Pixels, Microsoft is able to keep track of users by tracking  
8 the referrer URL of the page the pixel was loaded from.<sup>43</sup> In even the most basic implementation of  
9 the pixels, Microsoft is able to track page views and identify the URLs driving them.<sup>44</sup> Because  
10 Microsoft tracks Internet users' URLs, it also tracks information from those URLs.

11 70. The Adnxs Pixel and Bing Pixel also intercept communications between individual  
12 internet users and websites that are not contained in the page URL.

13 71. For example, on the Hyatt website, the Adnxs Pixel intercepts booking information  
14 from the website itself through a "pageview" event.



24

25

26 <sup>43</sup> *Microsoft Invest – Universal Pixel*, Microsoft (Oct. 14, 2024), <https://learn.microsoft.com/en-us/xandr/invest/the-universal-pixel>.

27 <sup>44</sup> *Microsoft Monetize – Universal Pixel Basic Implementation*, Microsoft (Feb. 7, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/universal-pixel-basic-implementation>.

28



The screenshot shows a browser's developer tools window with the 'Cookies' tab selected. A table of cookies is displayed, with the 'uids' cookie highlighted. The 'uids' cookie has a value consisting of a long, complex alphanumeric string. The browser's address bar shows a URL starting with 'https://'. The page title is 'adnxs.com'.

76. In other words, Microsoft effectively “stamps” each cookie with its own identifier to better enable it to track individuals across the Internet.

77. After the cookie is loaded onto a person’s browser, each time that person visits a website where a Microsoft pixel is called, Microsoft uses the cookie to identify the website visitor as the same person who visited previous websites with the same cookie installed on their browser. As such, Microsoft is able to track each individual internet user across multiple sites to create a more detailed profile on that person’s beliefs, interests, and habits.

78. This information is cross-referenced with other information collected by Microsoft to specifically identify the individual using the device and to add this web-activity information to a larger profile on the individual in order to sell their profile for targeted advertising.

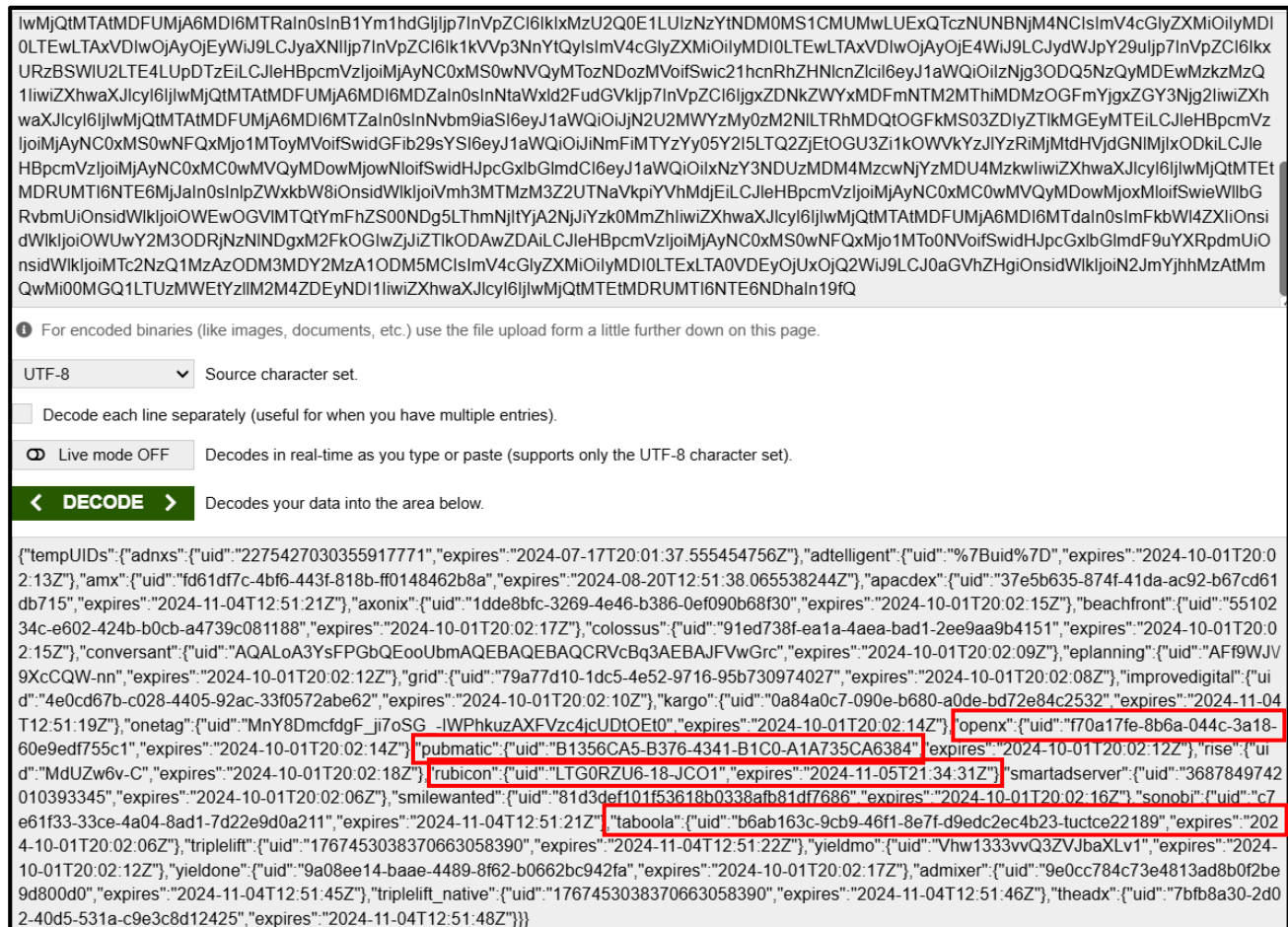
79. Microsoft associates users with several types of unique identifiers. The first is the “uuid2,” which “identifiers a returning user’s device” and is “used for targeted ads.”<sup>46</sup>

80. The second is the “XANDR\_PANID,” which “registers data on the visitor” and “is used to optimize advertisement relevance.”<sup>47</sup>

<sup>46</sup> TYSABRL, COOKIES, [https://www.tysabri.com/en\\_us/cookies.html](https://www.tysabri.com/en_us/cookies.html).

<sup>47</sup> *Id.*

1 81. The third is the “UIDS” parameter. The “UIDS” value is encoded in Base64, which  
2 can be easily decoded on publicly available websites.<sup>48</sup> Decoding the UIDS values above yields the  
3 user IDs for Partner Pixels that Microsoft’s pixels are syncing with, which are then permanently  
4 stored with the cookie on the users’ browsers. This allows Microsoft to identify the user based on  
5 other third party identifiers, and this value is constantly updated as Microsoft syncs with further third  
6 parties. For instance, the below screenshot shows the “UIDS” cookie includes identifiers for  
7 registered data brokers like PubMatic,<sup>49</sup> Magnite (Rubicon),<sup>50</sup> OpenX,<sup>51</sup> and Taboola<sup>52</sup>:



48 See, e.g., <https://www.base64decode.org/>.

49 DATA BROKER REGISTRATION FOR PUBMATIC, INC., <https://oag.ca.gov/data-broker/registration/186702>.

50 DATA BROKER REGISTRATION FOR MAGNITE INC., <https://oag.ca.gov/data-broker/registration/568127>.

51 DATA BROKER REGISTRATION FOR OPENX TECHNOLOGIES, INC., <https://oag.ca.gov/data-broker/registration/193614>.

52 DATA BROKER REGISTRATION FOR TABOOLA, INC., <https://oag.ca.gov/data-broker/registration/186589>.





1 individuals with ads that are relevant to their interests.”<sup>57</sup> Indeed, “IP targeting is one of the most  
 2 targeted marketing techniques [companies] can employ to spread the word about [a] product or  
 3 service”<sup>58</sup> because “[c]ompanies can use an IP address ... to personally identify individuals.”<sup>59</sup>

4 88. In fact, an IP address is a common identifier used for “geomarketing,” which is “the  
 5 practice of using location data to identify and server marketing messages to a highly-targeted  
 6 audience. Essentially, geomarketing allows [websites] to better serve [their] audience by giving  
 7 [them] an inside look into where they are, where they have been, and what kinds of products or  
 8 services will appeal to their needs.”<sup>60</sup> For example, for a job fair in a specific city, companies can  
 9 send advertisements to only those in the general location of the upcoming event.<sup>61</sup>

10 89. “IP targeting is a highly effective digital advertising technique that allows you to  
 11 deliver ads to specific physical addresses based on their internet protocol (IP) address. IP targeting  
 12 technology works by matching physical addresses to IP addresses, allowing advertisers to serve ads  
 13 to specific households or businesses based on their location.”<sup>62</sup>

14 90. “IP targeting capabilities are highly precise, with an accuracy rate of over 95%. This  
 15 means that advertisers can deliver highly targeted ads to specific households or businesses, rather  
 16 than relying on more general demographics or behavioral data.”<sup>63</sup>

17 91. In addition to “reach[ing] their target audience with greater precision,” businesses are  
 18 incentivized to use a customer’s IP address because it “can be more cost-effective than other forms

19  
 20 <sup>57</sup> Herbert Williams, *The Benefits of IP Adress Targeting for Local Businesses*, LinkedIn (Nov. 29, 2023), <https://tinyurl.com/4uk2p7k9>.

21 <sup>58</sup> *IP Targeting: Understanding This Essential Marketing Tool*, *supra*.

22 <sup>59</sup> Trey Titone, *The Future of IP Address As An Advertising Identifier*, Ad Tech Explained (May 16, 2022) <https://adtechexplained.com/the-future-of-ip-address-as-an-advertising-identifier/>.

23 <sup>60</sup> *Geomarketing Strategies & Tips: The Essential Guide*, Deep Sync (Jan. 3, 2025), <https://deepsync.com/geomarketing/>.

24 <sup>61</sup> See, e.g., *Personalize Your Website And Digital Marketing Using IP Address*, GEOFLI ,  
 25 <https://www.geofli.com/blog/how-to-use-ip-address-data-to-personalize-your-website-and-digital-marketing-campaigns> (last accessed Feb. 12, 2025).

26 <sup>62</sup> *IP Targeting*, Savant DSP, [https://www.savantdsp.com/ip-targeting?gad\\_source=1&gclid=Cj0KCQjw1Yy5BhD-ARIsAI0RbXZJKJSqMI6p1xAxyqai1WhAiXRJTbX8qYhNuEvIfSCJ4jfOV5-5maUaAgtNEALw\\_wcB](https://www.savantdsp.com/ip-targeting?gad_source=1&gclid=Cj0KCQjw1Yy5BhD-ARIsAI0RbXZJKJSqMI6p1xAxyqai1WhAiXRJTbX8qYhNuEvIfSCJ4jfOV5-5maUaAgtNEALw_wcB) (last accessed Feb. 12, 2025).

27 <sup>63</sup> *Id.*  
 28

1 of advertising.”<sup>64</sup> “By targeting specific households or businesses, businesses can avoid wasting  
2 money on ads that are unlikely to be seen by their target audience.”<sup>65</sup>

3 92. Further, “IP address targeting can help businesses to improve their overall marketing  
4 strategy.”<sup>66</sup> “By analyzing data on which households or businesses are responding to their ads,  
5 businesses can refine their targeting strategy and improve their overall marketing efforts.”<sup>67</sup>

6 93. Putting IP addresses in the hands of the data brokers who sync with Microsoft is  
7 particularly invasive, as the NATO report noted:

8 [a] data broker may receive information about a[] [website] user,  
9 including his ... IP address. The user then opens the [website] while  
10 his phone is connected to his home Wi-Fi network. When this  
11 happens, the data broker can use the IP address of the home network  
12 to identify the user’s home, and append this to the unique profile it  
13 is compiling about the user. If the user has a computer connected to  
14 the same network, this computer will have the same IP address. The  
15 data broker can then use the IP address to connect the computer to  
16 the same user, and identify that user when their IP address makes  
17 requests on other publisher pages within their ad network. Now the  
18 data broker knows that the same individual is using both the phone  
19 and the computer, which allows it to track behaviour across devices  
20 and target the user and their devices with ads on different  
21 networks.<sup>68</sup>

22 94. For these reasons, under Europe’s General Data Protection Regulation, IP addresses  
23 are considered “personal data, as they can potentially be used to identify an individual.”<sup>69</sup>

24 **b. Mobile Advertising Identifiers**

25 95. Microsoft employs similar methods to track individuals using mobile apps on Android  
26 and iOS devices.

27 <sup>64</sup> Williams, *supra* note 39.

28 <sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> Twetman & Bergmanis-Korats, *supra* note 4.

<sup>69</sup> *Is an IP Address Personal Data?* Convesio, <https://convesio.com/knowledgebase/article/is-an-ip-address-personal-data/> (last modified June 22, 2024); *see also Data Protection Explained*, European Commission, [https://commission.europa.eu/law/law-topic/data-protection/data-protection-explained\\_en](https://commission.europa.eu/law/law-topic/data-protection/data-protection-explained_en) (last accessed Feb. 12, 2025).

1 96. Microsoft owns and operates multiple “software development kits” (SDKs), pieces of  
2 code that work independently or with “application programming interfaces” (APIs) and are loaded  
3 into mobile apps and can track users’ activity on certain apps.<sup>70</sup>

4 97. An SDK is a “set of tools for developers that offers building blocks for the creation  
5 of an application instead of developers starting from scratch ... For example, Google Analytics  
6 provides an SDK that gives insight into user behavior, engagement, and cross-network attribution.”<sup>71</sup>

7 98. An API “acts as an intermediary layer that processes data transfer between systems,  
8 letting companies open their application data and functionality to external third-party developers  
9 [and] business partners.”<sup>72</sup> An API can “work[] as a standalone solution or included within an SDK  
10 ... [A]n SDK often contains at least one API.”<sup>73</sup> APIs “enable[] companies to open up their  
11 applications’ [or websites’] data and functionality to external third-party developers, business  
12 partners, and internal departments within their companies.”<sup>74</sup>

13 99. Similar to the pixels on web browsers, the Microsoft SDKs are called by other SDKs  
14 when a user accesses a particular app.

15 100. The Microsoft SDKs track the types of user information Defendant obtains through  
16 the Microsoft pixels including, but not limited to, users’: location information, email addresses,  
17 device and advertising identifiers, and usage of the particular app being accessed.

18 101. In addition to its own ID tracking, Microsoft collects advertising identifiers that are  
19 designed to track the app activity of individual users across different apps. Two of the most

20  
21  
22 <sup>70</sup> *SDK vs. API: What’s the difference?* IBM (July 13, 2021), <https://www.ibm.com/blog/sdk-vs-api/>  
23 (“SDK” stands for software development kit and “is a set of software-building tools for a specific  
24 program,” while “API” stands for application programming interface). Plaintiff will refer to both  
25 collectively as the “Microsoft SDKs” to avoid any confusion.

26 <sup>71</sup> *API vs. SDK: The Difference Explained (with Examples)*, stream, [https://getstream.io/glossary/api-  
27 vs-sdk/](https://getstream.io/glossary/api-vs-sdk/) (last accessed Feb. 13, 2025).

28 <sup>72</sup> Michael Goodwin, *What is an API (application programming interface)?* IBM, Apr. 9, 2024,  
<https://www.ibm.com/topics/api>.

<sup>73</sup> IBM, *supra* note 52.

<sup>74</sup> *Application Programming Interface*, sdxcentral, [https://www.sdxcentral.com/resources/glossary/  
application-programmatic-interface-api/](https://www.sdxcentral.com/resources/glossary/application-programmatic-interface-api/) (last accessed Feb. 13, 2025).

1 prominent are AAIDs (for Android devices) and IDFAs (for iOS devices) (collectively, “Mobile  
2 Advertising IDs” or “MAIDs”).

3 102. An AAID is a unique string of numbers that attaches to a device. As the name implies,  
4 an AAID is sent to advertisers and other third parties so they can track user activity across multiple  
5 mobile applications.<sup>75</sup> So, for example, if a third party collects AAIDs from two separate mobile  
6 applications, it can track, cross-correlate, and aggregate a user’s activity on both apps.

7 103. Although technically resettable, an AAID is a persistent identifier because average  
8 users are not aware of AAIDs and, correspondingly, virtually no one resets that identifier. The fact  
9 that the use and disclosure of AAIDs is so ubiquitous evidences an understanding on the part of  
10 Defendant, and others like Google in the field that AAIDs are almost never manually reset by users  
11 (or else an AAID would be of no use to advertisers). Byron Tau, *Means of Control: How the Hidden*  
12 *Alliance of Tech and Governments is Creating a New American Surveillance State*, at 175 (2024)  
13 (“Like me, most people had no idea about the ‘Limit Ad Tracking’ menu on their iPhones or the  
14 AAID that Google had given even Android devices. Many still don’t.”); *see also Louth v. NFL*  
15 *Enterprises LLC*, 2022 WL 4130866, at \*3 (D.R.I. Sept. 12, 2022) (“While AAID are resettable by  
16 users, the plaintiff plausibly alleges that AAID is a persistent identifier because virtually no one  
17 knows about AAIDs and, correspondingly, virtually no one resets their AAID.”) (cleaned up).

18 104. Using publicly available resources, an AAID can track a user’s movements, habits,  
19 and activity on mobile applications.<sup>76</sup> Put together, the AAID serves as “the passport for aggregating  
20 all of the data about a user in one place.”<sup>77</sup>

21 105. Because an AAID creates a record of user activity, this data can create inferences  
22 about an individual, like a person’s political or religious affiliations, sexuality, or general reading  
23

24 <sup>75</sup> *Advertising ID*, Google, <https://support.google.com/googleplay/android-developer/answer/6048248> (last accessed Feb. 13, 2025).

25 <sup>76</sup> Thomas Tamblyn, *You Can Effectively Track Anyone, Anywhere Just By the Adverts They Receive*,  
26 HuffPost, Oct. 19, 2017, [https://www.huffingtonpost.co.uk/entry/using-just-1000-worth-of-mobile-adverts-you-can-effectively-track-anyone\\_uk\\_59e87ccbe4b0d0e4fe6d6be5](https://www.huffingtonpost.co.uk/entry/using-just-1000-worth-of-mobile-adverts-you-can-effectively-track-anyone_uk_59e87ccbe4b0d0e4fe6d6be5).

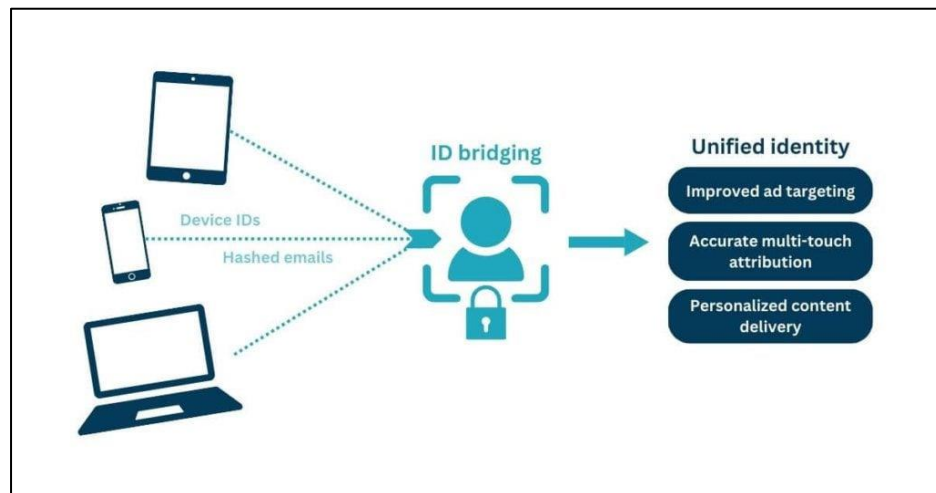
27 <sup>77</sup> *Trend Report: Apps Oversharing Your Advertising ID*, International Digital Accountability  
28 Council, <https://digitalwatchdog.org/trend-report-apps-oversharing-your-advertising-id/> (last  
accessed Feb. 13, 2025).

1 and viewing preferences. These inferences, combined with publicly available tools, make AAIDs an  
 2 identifier that sufficiently permits an ordinary person to identify a specific individual.

3 106. Similarly, an “Identifier for Advertisers, or IDFA for short, is a unique, random  
 4 identifier (device ID) that Apple assigns to every iOS device. An IDFA would be the equivalent of  
 5 a web cookie, in the sense that it enables advertisers to monitor users’ engagement with their ads,  
 6 and keep track of their post-install activity.”<sup>78</sup>

7 107. As with the Microsoft cookie and AAID, Microsoft’s collection of IDFAs allows  
 8 Microsoft to track iOS users’ activity across the various apps they use. Like the AAID, this data can  
 9 create inferences about an individual, such as a person’s political or religious affiliations, sexuality,  
 10 or general reading and viewing preferences. These inferences, combined with publicly available  
 11 tools, sufficiently permit even an ordinary person to identify a specific individual with the IDFA.

12 108. Regardless of whether these IDs are supposed to be anonymous, MAIDs are often  
 13 combined with other identifiers to identify users in what is known as ID Bridging. “ID Bridging” is  
 14 the process of “piecing together different bits of information about” a user “to confidently infer that  
 15 it is the same individual accessing a publisher’s site or sites from various devices or browsers.”<sup>79</sup>  
 16 That is, users can be identified and tracked by “bridging” (or linking) their MAIDs to other sources,  
 17 such as e-mail addresses, geolocation, or phone numbers.



26 <sup>78</sup> *Identifier for Advertisers (IDFA)*, Apps Flyer, <https://www.appsflyer.com/glossary/idfa> (last  
 27 accessed Feb. 13, 2025).

28 <sup>79</sup> Kayleigh Barber, *WTF is the difference between ID bridging and ID spoofing?* Digiday, July 9,  
 2024, <https://digiday.com/media/wtf-is-the-difference-between-id-bridging-and-id-spoofing/>.

1 109. ID Bridging “has long been the foundation of the programmatic advertising,”<sup>80</sup> which  
 2 is the process by which companies “use [] advertising technology to buy and sell digital ads” by  
 3 “serv[ing] up relevant ad impressions to audiences through automated steps, in less than a second.”<sup>81</sup>  
 4 It entails a “unique identifier [] assigned to individual devices,” including Google’s Advertising ID,”  
 5 personal information like geolocation and e-mail address, and “cross-platform linkage.”<sup>82</sup>

6 110. ID Bridging is a money-making machine for advertisers and app developers. On the  
 7 advertiser side, ID Bridging “increase the chances of an ad buying platform finding their inventory  
 8 to be addressable and, therefore, maximizes their ‘ad yields.’” And on the app developer side,  
 9 “publishers can boost revenue from direct-sold campaigns by offering advertisers access to more  
 10 defined and valuable audiences.”<sup>83</sup>

11 111. In other words, advertisers will be able to find users that are more directly and likely  
 12 interested in what is being sold by having access to significantly more information. And app users’  
 13 information will be more valuable (and therefore, bring in more money to app developers) because  
 14 it is combined with a plethora of other information from various sources.

15 112. Many companies (*e.g.*, data brokers, identity graph providers), publicly advertise their  
 16 ability to conduct such bridging. Yet, while those within the ID Bridging industry describe it as  
 17 privacy-protective, it is anything but. As courts have noted, the “ability to amass vast amounts of  
 18 personal data for the purpose of identifying individuals and aggregating their many identifiers”  
 19 creates “dossiers which can be used to further invade [users] privacy by allowing third parties to  
 20 learn intimate details of [users’] lives, and target them for advertising, political, and other purposes,  
 21 ultimately harming them through the abrogation of their autonomy and their ability to control  
 22

23 <sup>80</sup> Matt Keiser, *How Can ID Bridging – The Foundation of Our Space – Suddenly Be a Bad Thing?*  
 24 Ad Exchanger (July 23, 2024), <https://www.adexchanger.com/data-driven-thinking/how-can-id-bridging-the-foundation-of-our-space-suddenly-be-a-bad-thing/>.

25 <sup>81</sup> *Programmatic Advertising*, Amazon, <https://advertising.amazon.com/blog/programmatic-advertising#> (last accessed Feb. 13, 2025).

26 <sup>82</sup> Anete Jodzevica, *ID Bridging: The Privacy-First Future of Audience Targeting*, Setupad (Nov.  
 27 15, 2024) <https://setupad.com/blog/id-bridging/>.

28 <sup>83</sup> Bennett Crumbling, *What is ‘ID Bridging’ and how publishers use it to grow direct and programmatic revenue?* Optable (Aug. 22, 2024), <https://www.optable.co/blog/what-is-id-bridging>.

1 dissemination and use of information about them.” *Katz-Lacabe v. Oracle Am., Inc.* 688 F. Supp.  
2 3d 928, 940 (N.D. Cal. 2023) (cleaned up).

3 113. In February 2019, Oracle published a paper entitled, “Google’s Shadow Profile: A  
4 Dossier of Consumers Online and Real World Life,” part of which provides as accurate a description  
5 of Google’s services (and Oracle’s, ironically) as Defendant’s:

6 a consumer’s “shadow profile” [is a] massive, largely hidden  
7 dataset[] of online and offline activities. This information is  
8 collected through an extensive web of ... services, which is difficult,  
9 if not impossible to avoid. It is largely collected invisibly and  
10 without consumer consent. Processed by algorithms and artificial  
11 intelligence, this data reveals an intimate picture of a specific  
12 consumer’s movements, socio-economics, demographics, “likes”,  
13 activities and more. It may or may not be associated with a specific  
14 users’ name, but the specificity of this information defines the  
15 individual in such detail that a name is unnecessary.<sup>84</sup>

16 114. In other words, ID Bridging is dangerous because of the sheer expanse of information  
17 being compiled by companies like Defendant’s without the knowledge or consent of users, all of  
18 which is being done for pecuniary gain.

19 **c. Other Identifiers**

20 115. In addition to the methods described above, which are explicitly designed to track  
21 individuals across different devices and apps, Microsoft collects other identifying information that  
22 allows it to determine whether the same individual is visiting multiple websites or using multiple  
23 apps where Microsoft technology is called to or installed directly.

24 116. One method is through collecting e-mail addresses. The logic of this is  
25 straightforward. If Microsoft collects the same e-mail address from two different site visits, it can  
26 determine with almost total accuracy that the sites are both being visited by the same person. The  
27 same is true of devices. If the same e-mail address is captured on two different devices, it is very  
28 likely those devices are used by the same individual.

117. Location information functions in a similar manner. If multiple websites or apps are  
visited from the same location, the pool of potential individuals who are accessing the website or app  
is narrowed considerably immediately and can be narrowed to a pinpoint over time.

<sup>84</sup> *Google’s Shadow Profile: A Dossier of Consumers Online and Real World Life*, Oracle, at 1 (Feb. 2019), <https://tinyurl.com/2mtuh7vf>.



1 118. HTTP requests, when intercepted by Microsoft, collect device information that can  
2 also identify whether the same user is visiting multiple sites or apps, and can distinguish between the  
3 devices being used by a particular person. With every visit, and every subsequent HTTP request, the  
4 device information will be identical in each.

5 3. *User ID Mapping with getUID and mapUID*

6 119. Microsoft offers tools so that its clients can identify the users they track. Microsoft  
7 provides its clients with technology that allows them to sync user ID information to have a user ID  
8 associated with all users in all ad calls.<sup>85</sup> Microsoft used the Adnxs Pixel to sync user IDs with  
9 supply partners, demand partners, and data providers.<sup>86</sup>

10 120. According to Microsoft, when it gets an ad call, it has “to know the user’s Microsoft  
11 Advertising user ID so that [it] can apply frequency and regency, segment, and other data.”<sup>87</sup>  
12 [Microsoft] can easily do this when [Microsoft’s] tag is on the page (*i.e.*, the tag domain is  
13 ib.adnxs.com or has been CNAMEd to ib.adnxs.com) because [Microsoft] can access the user’s  
14 ib.adnxs.com browser cookie where [Microsoft] store[s] an Microsoft Advertising ID.”<sup>88</sup>

15 121. For bidders, Microsoft states it “initiates the usersyncing process with external  
16 bidders because these bidders need to be able to make purchasing decisions based on their own user  
17 data.”<sup>89</sup> As for data providers, Microsoft syncs “with data providers because they send [Microsoft]  
18 more data to bid on. This leads to making better bidding decisions based on having better information  
19 available.”<sup>90</sup>

20  
21  
22  
23  
24 <sup>85</sup> *User ID Syncing with External Partners*, Microsoft (Feb. 2, 2024),  
<https://learn.microsoft.com/en-us/xandr/monetize/user-id-syncing-with-external-partners>,

25 <sup>86</sup> *Id.*

26 <sup>87</sup> *Id.*

27 <sup>88</sup> *Id.*

28 <sup>89</sup> *Id.*

<sup>90</sup> *Id.*

1 122. Microsoft is able to sync user IDs through two pixels: mapUID and getUID.<sup>91</sup> The  
2 mapUID services passes Microsoft’s clients’ internal ID to Microsoft for mapping to the Microsoft  
3 Advertising ID within the Microsoft Advertising cookie store.<sup>92</sup>

4 123. The average time to live for mapUID mappings is around 2.5 weeks. Thus, Microsoft  
5 stresses the importance of its clients firing the mapUID pixel “as frequently as possible and on as  
6 many pages as possible to keep [the] mappings live.”<sup>93</sup>

7 124. The getUID service, initiated on websites by the Adnxs Pixel retrieves the Microsoft  
8 Advertising ID so Microsoft’s clients can coordinate it with their own in-house ID server side or  
9 their own cookie space.<sup>94</sup> Then Microsoft clients can pass in an offline data feed that says, “update  
10 Microsoft Advertising user ABC with the following segment data.”<sup>95</sup>

11 125. The getUID service is Microsoft’s version of a data sharing practice known as  
12 “identity resolution”

13 126. In plain language, identity resolution is another way to monetize Microsoft’s tracking,  
14 where it assigns an ID number to an individual so that the individual is attached to a record of their  
15 web and app activity for the purpose of targeted advertising.

16 127. Once sufficient data has been collected on an individual, Defendant monetizes the  
17 individual’s data in a number of ways. One way is to provide individuals’ identities and web  
18 browsing information to the companies operating the Partner Pixels to assist with those companies’  
19 collection of internet users’ data.

20 128. This process happens when both the Adnxs Pixel and a Partner Pixel are loaded onto  
21 a website. The Partner Pixel “calls” the Adnxs Pixel and the Adnxs Pixel responds with a getUID  
22  
23

24 <sup>91</sup> *Microsoft Invest – User ID Mapping with getUID and mapUID*, Microsoft (Feb. 23, 2024),  
25 [https://learn.microsoft.com/en-us/xandr/invest/user-id-mapping-with-getuid-and-mapuid#getuid-  
service](https://learn.microsoft.com/en-us/xandr/invest/user-id-mapping-with-getuid-and-mapuid#getuid-service).

26 <sup>92</sup> *Id.*

27 <sup>93</sup> *Id.*

28 <sup>94</sup> *Id.*

<sup>95</sup> *Id.*

1 request that shares the individual’s Microsoft ID and associated information, including the identifiers  
2 described above, with that Partner Pixel.

3 `https://ib.adnxs.com/getuid?https://dis.criteo.com/dis/rtb/appnexus/cookieimat`  
4 `ch.aspx?appnxsid=$UID`

5 129. This process happens multiple times on each website, with many tracking pixels and  
6 potential advertisers gaining access to an individual’s information for bidding and targeted  
7 advertising, enriching Defendant, the other technology companies involved, and the host websites  
8 alike while trampling consumer privacy in the process. Transmissions of this type are happening  
9 across all of the websites and apps where the Adnxs pixel is loaded.

10 130. With respect to the delivery of targeted advertisements on websites, Defendant’s ID  
11 syncing makes the entire real-time-bidding process possible by identifying the individual visiting the  
12 site and providing information about their web activity and interests. This creates the basis for hyper-  
13 targeted advertising related to that activity and those interests to be served. This ultimately benefits  
14 the website or app operator, as it makes their userbase more valuable because said users have been  
15 further identified and linked to other activity via the Microsoft’s pixels.

16 131. For these processes to happen, Defendant must necessarily share the information it  
17 collects on individual internet users with its partners.

18 132. The identity resolution service aids in the wiretapping and surveillance conducted by  
19 the Pixel Partners.

20 133. As part of their investigation, Plaintiffs’ counsel conducted testing on several  
21 websites to provide a sample of the widespread tracking and wiretapping of, and targeted advertising  
22 to, millions of Americans by Microsoft. For each of the websites tested, there are hundreds or  
23 thousands of others where the same or similar information is collected. *See Factual Allegations*  
24 *§ III, infra.*

25 134. Specifically, Plaintiffs’ counsel found that each website and/or app had Partner Pixels  
26 loaded onto it, which in turn communicated with the Adnxs pixel to better enable their advertising.  
27 Each Partner Pixel would itself intercept users’ communications with the website or app. The Adnxs  
28 pixel would then assign a Microsoft ID to the user’s activity on the website or app, which, among

1 other things, (i) allowed for the user to be identified; (ii) link the user to information from across  
 2 other websites and apps; and (iii) benefit the websites, apps, and Partner Pixels by making that user  
 3 more valuable to advertisers because the user could be better targeted with relevant ads due to the  
 4 extensive information Defendant collected and provided to the Partner Pixels.

5 **B. Xandr**

6 135. Xandr, formerly known as AppNexus, is a real-time bidding advertising platform  
 7 powered by Microsoft. Xandr offers products and services for “executing programmatic advertising  
 8 campaigns across screens and tapping into engaged audiences.”<sup>96</sup> In other words, Xandr offers a  
 9 portfolio of advertising and analytics products and services that provide Microsoft’s clients the  
 10 technology to buy and sell digital advertising space, data management, and analytics tools.<sup>97</sup> Xandr’s  
 11 features include real-time bidding, programmatic buying ... as well as tools for creative optimization  
 12 and audience targeting ... and solutions for video and mobile advertising.”<sup>98</sup> Xandr achieves this  
 13 through three products: Microsoft Invest, Microsoft Monetize, and Microsoft Curate. Xandr is both  
 14 a demand-side platform and a supply-side platform.<sup>99</sup>

15 136. Xandr partners with third-party providers who receive platform data and other  
 16 consumer information (however, the extent of this data is unknown as it is confidential and tied to  
 17 specific contracts between Xandr and its customers<sup>100</sup>).<sup>101</sup>

18 137. As a result, Xandr shares information about consumers with over a thousand ad-server  
 19 partners, hundreds of bidder partners, and 115 user sync providers.<sup>102</sup> Xandr’s bidders receive full  
 20

21 <sup>96</sup> *Xandr Platform Documentation*, Microsoft, <https://learn.microsoft.com/en-us/xandr/> (last  
 22 accessed Feb. 10, 2025).

23 <sup>97</sup> *What is Xandr?* Zuuvi, <https://www.zuuvi.com/display-advertising-platforms/xandr> (last accessed  
 24 Feb. 10, 2025).

25 <sup>98</sup> *Id.*

26 <sup>99</sup> *Differences Between DSPs, SSPs, and DMPs in Advertising*, SetupAd (Sept. 25, 2024),  
 27 <https://setupad.com/blog/dsp-vs-ssp> (last accessed Feb. 10, 2025).

28 <sup>100</sup> *Policies and Regulations*, Microsoft, [https://learn.microsoft.com/en-us/xandr/policies-  
 regulations/](https://learn.microsoft.com/en-us/xandr/policies-regulations/) (last accessed Feb. 10, 2025).

<sup>101</sup> *Third Party Providers*, Microsoft (Feb. 7, 2024), [https://learn.microsoft.com/en-  
 us/xandr/policies-regulations/third-party-providers](https://learn.microsoft.com/en-us/xandr/policies-regulations/third-party-providers).

<sup>102</sup> *Id.*

1 details of every auction the bid request.<sup>103</sup> These details include: auction ID, Xandr user ID, referrer  
 2 URL (usually the URL of a webpage visited by the individual), IP address, data about a user collected  
 3 by Microsoft (known as “segment information”), data about a user that has been shared by another  
 4 data provider.<sup>104</sup>

5 *1. Microsoft Invest*

6 138. Microsoft Invest is a “strategic buying platform built for the needs of today’s  
 7 advertisers looking to invest in upper-funnel buying and drive business results.”<sup>105</sup> This means that  
 8 Microsoft Invest is a tool aimed at the beginning of a consumer’s journey, where a consumer begins  
 9 to find information on products or services needed or desired.<sup>106</sup> “This is possibly the most critical  
 10 step in the funnel because potential consumers have the tendency to turn toward the business most  
 11 effective at capturing their attention.”<sup>107</sup>

12 139. Microsoft Invest “is an end-to-end, integrated platform across the buy and sell side,  
 13 which provides a number of benefits to users, including: seamless integration with major ad  
 14 networks, exchanges, and aggregators[:] [s]streamlined, direct access to premium omnichannel  
 15 supply[; and r]educed discrepancies and optimal match rates on [their] platform supply.”<sup>108</sup>

16 140. Microsoft Invest features the Microsoft Advertising platform, which is a real-time  
 17 bidding system and ad server.<sup>109</sup> The main processing system of the platform receives ad requests,  
 18 applies data to the request, receives bids, makes decisions, serves creatives, and logs auctions, among  
 19 other functions.<sup>110</sup>

20 <sup>103</sup> *Xandr’s Bidders*, Microsoft (Feb. 27, 2024), <https://learn.microsoft.com/en-us/xandr/data-providers/segment-usage-by-buyers#xandrs-bidders>.

21 <sup>104</sup> *Id.*

22 <sup>105</sup> *About Microsoft Invest*, Microsoft, <https://learn.microsoft.com/en-us/xandr/invest/about-invest> (last accessed Feb. 10, 2025).

23 <sup>106</sup> Matt Colborn, *Upper Funnel vs. Lower Funnel*, Matrix Point, <https://www.thematrixpoint.com/resources/articles/upper-funnel-vs-lower-funnel> (last accessed Feb. 10, 2025).

24 <sup>107</sup> *Id.*

25 <sup>108</sup> *About Microsoft Invest*, Microsoft, <https://learn.microsoft.com/en-us/xandr/invest/about-invest> (last accessed Feb. 10, 2025).

26 <sup>109</sup> *Id.*

27 <sup>110</sup> *Id.*

1           141. Microsoft Invest offers the “universal pixel”—a pixel that provides insights into the  
 2 interaction that users have with a website, so that Microsoft clients can easily segment, *i.e.*, identify  
 3 the users and measure the value of the actions they take.<sup>111</sup> According to Microsoft, the universal  
 4 pixel removes the need to separately define conversion pixels and segment pixels.<sup>112</sup> Defendant’s  
 5 clients implement the pixel by placing the code on their website.<sup>113</sup> With the universal pixel,  
 6 Defendant’s clients are able to keep track of users by tracking the referrer URL of the page the pixel  
 7 was loaded from, track standard events based on user actions on a page, and track additional metadata  
 8 that is passed using a parameter along with a standard event.<sup>114</sup> The universal pixel enables  
 9 Defendant and Defendant’s clients who use the pixel to track and target consumers on the Internet.

10                           2. *Microsoft Monetize*

11           142. Another product that Microsoft offers to track individuals on the Internet, is Microsoft  
 12 Monetize. Microsoft Monetize is “a sophisticated ad management technology platform with both  
 13 buy- and sell-side capabilities.<sup>115</sup> Microsoft Monetize is built on an API, the Digital Platform API,  
 14 which allows Microsoft’s clients to buy and sell ad space on a single, unified interface.<sup>116117</sup>

15           143. Through Microsoft Monetize, Defendant offers a “segment pixel,” which is “placed  
 16 on web pages to collect data about users, such as pages they visit, actions they take, or qualities such  
 17 as gender, location, and wealth.”<sup>118</sup> Further, “when a segment pixel fires, the user is added to a  
 18  
 19

20 <sup>111</sup> *Microsoft Invest – Universal Pixel*, Microsoft (Oct. 14, 2024), <https://learn.microsoft.com/en-us/xandr/invest/the-universal-pixel>.

21 <sup>112</sup> *Id.*

22 <sup>113</sup> *Id.*

23 <sup>114</sup> *Id.*

24 <sup>115</sup> *Network Guide*, Microsoft (Mar. 2, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/network-guide>.

25 <sup>116</sup> *Monetize API*, Microsoft (Mar. 4, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/digital-platform-ui-api-info>.

26 <sup>117</sup> *About Microsoft Monetize*, Microsoft (May 10, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/about-monetize>.

27 <sup>118</sup> *Microsoft Monetize – Object Hierarchy*, Microsoft (Nov. 3, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/object-hierarchy>.

1 segment, which can later be targeted in line items to attempt to reach the user again (retargeting).”<sup>119</sup>

2 In this way, **users are perpetually tracked, identified and targeted or “retargeted”** over and over.

3 144. Defendant’s clients have “many different options for targeting users in [their] line  
4 items and campaigns.”<sup>120</sup> Some options Defendant offers include “targeting based on geography,  
5 domain, and inventory type” and through defining custom keys and values.<sup>121</sup> “Key/value targeting  
6 allows [clients] to take information [they have] collected and target [their] line items or campaigns  
7 to specific sets of users based on that information.”<sup>122</sup>

8 145. As Defendant explains, a key is a category, such as the information a client has on the  
9 types of music users listen to or the types of cars they drive.<sup>123</sup> As such, “music\_genre” and  
10 “car\_type” could be custom keys.<sup>124</sup> A value is a specific instance of the key. For instance, the  
11 music\_genre key could have values such as rock, jazz, and classical and the car\_type key could  
12 include sedan, coupe, and SUV.<sup>125</sup>

13 146. This demonstrates not only that Defendant enables its clients to access vast amounts  
14 of detailed information Defendant collects on users, but also that Defendant’s clients are able to  
15 quickly and easily customize and sift through that data.

16 147. But the ways that Microsoft Monetize offers to track users do not stop there.  
17 Microsoft Monetize offers Defendant’s clients the “conversion pixel” to track user actions on a  
18 webpage such as registering at a site or making a purchase; “the third-party creative pixel” to trigger  
19 a third-party action like performing ad verification or collecting data about the creative (which is an  
20 advertising unit created by a client for the purpose of communicating a marketing message to that  
21 client’s audience and can include images, animation, video, interactive experiences or more) when a

22 \_\_\_\_\_  
23 <sup>119</sup> *Id.*

24 <sup>120</sup> *Getting Started with Key/Value Targeting*, Microsoft (Mar. 2, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/getting-started-with-key-value-targeting>.

25 <sup>121</sup> *Id.*

26 <sup>122</sup> *Id.*

27 <sup>123</sup> *Id.*

28 <sup>124</sup> *Id.*

<sup>125</sup> *Id.*

1 creative is served; an “impression tracker” to track impressions associated with creatives that are  
 2 hosted by non-Microsoft Advertising ad servers by attaching the tracker as a “piggyback pixel” on  
 3 the externally hosted creative; and a “click tracker” to track clicks associated with creatives that are  
 4 hosted by non-Microsoft Advertising ad servers by also attaching the tracker as a “piggyback pixel”  
 5 on the externally hosted creative;<sup>126</sup> and the “universal pixel” as discussed above,<sup>127</sup> where even the  
 6 most basic implementation of the universal pixel allows Microsoft’s client to track page views and  
 7 identify the URLs driving them.<sup>128</sup>

8 148. The pixel can be configured to identify events the client wants captured, such as  
 9 adding an item to a shopping cart<sup>129</sup> or tracking when a user enters payment information at  
 10 checkout.<sup>130</sup>

11 149. After Microsoft’s clients have set up a standard or custom event, they can use the data  
 12 collected to identify audiences and conversions.<sup>131</sup> An audience, or audience segment, consists of a  
 13 collection of users who have interacted on a website in a similar way.<sup>132</sup> After one or more audiences  
 14 are configured, Microsoft’s clients can target the audience from a line item.<sup>133</sup> A conversion,  
 15 however, is a “specific type of interaction that indicates the successful downstream effects of an ad  
 16 campaign”<sup>134</sup> or in other words, the website user’s behavior on the website conformed with what the  
 17 website owner wanted the user to do.

18  
 19 \_\_\_\_\_  
 126 *Microsoft Monetize – Object Hierarchy*, *supra* note 46.

20 127 *Microsoft Invest – Universal Pixel*, Microsoft (Oct. 14, 2024), <https://learn.microsoft.com/en-us/xandr/invest/the-universal-pixel>.

21 128 *Microsoft Monetize – Universal Pixel Basic Implementation*, Microsoft (Feb. 7, 2024),  
 22 <https://learn.microsoft.com/en-us/xandr/monetize/universal-pixel-basic-implementation>.

23 129 *Microsoft Monetize – Using Events and Parameters*, Microsoft (Mar. 7, 2024),  
 24 <https://learn.microsoft.com/en-us/xandr/monetize/using-events-and-parameters>.

130 *Microsoft Monetize – Standard Events and Parameters*, Microsoft (Mar. 6, 2024),  
 25 <https://learn.microsoft.com/en-us/xandr/monetize/standard-events-and-parameters>.

26 131 *Microsoft Monetize – Universal Pixel Audiences and Conversions*, Microsoft (Feb. 7, 2024),  
 27 <https://learn.microsoft.com/en-us/xandr/monetize/universal-pixel-audiences-and-conversions>.

28 132 *Id.*

133 *Id.*

134 *Id.*



1 150. Microsoft Monetize, through Microsoft Advertising, attributes conversion to a  
 2 specific user and is able to tell Microsoft’s clients whether the user has converted in response to  
 3 having previously viewed or clicked one of the advertiser’s creatives.<sup>135</sup> The universal pixel lets  
 4 Microsoft’s clients set up highly specific audiences and conversions based on complex rules.<sup>136</sup> For  
 5 instance, Microsoft’s client “might determine that a user who has clicked through to an offer, viewed  
 6 three or more TVs, and accessed product details for a TV that cost over \$1000 should be added to an  
 7 audience segment called High-End TV Buyers.”<sup>137</sup>

8 151. Defendant’s targeting tools can be so precise that it allows its clients to add or remove  
 9 a user from one or more segments at the same time a conversion pixel is fired.<sup>138</sup> Segmenting users  
 10 after conversion is done, for example, when Microsoft’s clients do not want to advertise to users who  
 11 have already purchased a product.<sup>139</sup> In this way, users across the Internet are tracked and identified  
 12 by some means.

13 152. Microsoft Monetize also offers what it calls “birthday cookies.”<sup>140</sup> This is the  
 14 codename for the “stamping” and ID syncing process described above. The first time a user without  
 15 one of Microsoft’s cookie visits a website where a Microsoft pixel is loaded, Microsoft sets a  
 16 cookie.<sup>141</sup> Defendant also adds that user to the “Microsoft Advertising Birthday Cookie” segment,  
 17 where the segment is exposed to all members of the platform and any member of the platform can  
 18 use the segment.<sup>142</sup>

19  
 20  
 21 <sup>135</sup> *Microsoft Monetize – Conversion Attribution*, Microsoft (Feb. 26, 2024),  
<https://learn.microsoft.com/en-us/xandr/monetize/conversion-attribution>.

22 <sup>136</sup> *Microsoft Monetize – Universal Pixel Audiences and Conversions*, Microsoft (Feb. 7, 2024),  
<https://learn.microsoft.com/en-us/xandr/monetize/universal-pixel-audiences-and-conversions>.

23 <sup>137</sup> *Id.*

24 <sup>138</sup> <https://learn.microsoft.com/en-us/xandr/monetize/conversion-pixels-advanced> (last accessed  
 Feb. 10, 2025).

25 <sup>139</sup> *Id.*

26 <sup>140</sup> *Microsoft Monetize – Birthday Cookies*, Microsoft (Mar. 1, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/birthday-cookies>.

27 <sup>141</sup> *Id.*

28 <sup>142</sup> *Id.*

1           153. Through its Microsoft Advertising cookie store, **Defendant is able to both recognize**  
 2 **any given user and access their relevant user data across multiple sites and platforms.**<sup>143</sup> The  
 3 Microsoft Advertising cookie store is a server-side user data storage system that allows Defendant  
 4 to sync user ID and frequency data across all Microsoft Advertising supply partners and store cookie  
 5 data, both from Microsoft and Microsoft’s clients, server side, so that it is accessible on every ad  
 6 call.<sup>144</sup> This allows Microsoft to “maintain consistent and comprehensive data about a user no matter  
 7 where, when, or how [Microsoft is] ‘seeing’ them across the Internet landscape.”<sup>145</sup>

8           154. Further yet, Microsoft Monetize enables its clients to target based on location.<sup>146</sup> “A  
 9 geo radius segment is a list of latitude, longitude, and radius data”<sup>147</sup> and this data provides enough  
 10 information to locate and individual user. Microsoft Monetize allows its clients to use geo radius  
 11 segments for “geographical targeting of multiple user locations.”<sup>148</sup>

### 12                           3. *Microsoft Curate*

13           155. Microsoft Curate is another program offered by Microsoft. Microsoft Curate allows  
 14 curators to use their proprietary assets to enhance the value of a seller’s inventory and create unique  
 15 offerings for buyers.<sup>149</sup> Curators such as retailers, data companies, independent trading desks, and  
 16 other media companies can use Microsoft Curate’s features to centralize their business rules and  
 17 targeting configurations across DSPs to simplify their campaign execution.<sup>150</sup>

18  
 19  
 20  
 21 <sup>143</sup> *Microsoft Monetize – Server Side Cookie Store*, Microsoft (Mar. 6, 2024), [https://  
 learn.microsoft.com/en-us/xandr/monetize/server-side-cookie-store](https://learn.microsoft.com/en-us/xandr/monetize/server-side-cookie-store).

22 <sup>144</sup> *Id.*

23 <sup>145</sup> *Id.*

24 <sup>146</sup> *Microsoft Monetize – Geo Radius Segments*, Microsoft (Mar. 2, 2024), [https://  
 learn.microsoft.com/en-us/xandr/monetize/geo-radius-segments](https://learn.microsoft.com/en-us/xandr/monetize/geo-radius-segments).

25 <sup>147</sup> *Id.*

26 <sup>148</sup> *Id.*

27 <sup>149</sup> *About Microsoft Curate*, Microsoft (Feb. 12, 2024), [https://learn.microsoft.com/en-  
 us/xandr/curate/about-curate](https://learn.microsoft.com/en-us/xandr/curate/about-curate).

28 <sup>150</sup> *Id.*

1           156. Another feature of Microsoft Curate is that it allows Microsoft’s clients, whether  
 2 buyers or sellers, to interact with each other.<sup>151</sup> Microsoft Curate offers a platform where Microsoft’s  
 3 clients can discover new partners, cultivate relationships by communicating directly in Curate,  
 4 motivate partners to do business with a client, and track success of partnerships with metrics.<sup>152</sup>  
 5 Microsoft Curate also offers a feature where Microsoft’s clients can “target users based on the day  
 6 and time when they see impressions.”<sup>153</sup>

7           157. Like Microsoft Invest and Microsoft Monetize, Microsoft Curate offers tools to target  
 8 users on the Internet. With system targeting on Microsoft Curate, Defendant’s clients can “target  
 9 users based on [that user’s] operating systems, browsers, language, device model, or carrier.”<sup>154</sup>  
 10 Moreover, Microsoft Curate clients can target mobile users even when traditional cookies are not  
 11 used in in-app mobile inventory.<sup>155</sup> Defendant has engineered ways to track and target users  
 12 irrespective of where that user finds themselves or what type of device they use.

13           158. In sum, Defendant offers a suite of products that rely on the collection of mass amounts  
 14 of data on each individual, collected both from the Microsoft pixels and other sources, including  
 15 Partner Pixels and other data brokers and allow for that data to be instantly sold in a large variety of  
 16 ways with entities involved in the real-time bidding and advertising delivery. This is the core of the  
 17 privacy violations alleged herein: not only are individuals tracked everywhere they go online, but the  
 18 data collected is sold to dozens or hundreds of other parties without their consent.

19  
 20  
 21  
 22  
 23 \_\_\_\_\_  
 24 <sup>151</sup> *Microsoft Curate – Partner Center Guide*, Microsoft (Feb. 22, 2024), <https://learn.microsoft.com/en-us/xandr/curate/partner-center-guide>.

25 <sup>152</sup> *Id.*

26 <sup>153</sup> *Microsoft Curate – Daypart Targeting*, Microsoft (Nov. 24, 2024), <https://learn.microsoft.com/en-us/xandr/curate/daypart-targeting>.

27 <sup>154</sup> *Microsoft Curate – System Targeting*, Microsoft (Jan. 29, 2025), <https://learn.microsoft.com/en-us/xandr/curate/system-targeting>.

28 <sup>155</sup> *Id.*

1 **III. DEFENDANT’S PIXELS ARE PRESENT ON EACH OF THE SUBJECT WEBSITES**

2 **A. Ali Express**

3 159. AliExpress is a discount shopping website that offers a wide variety of consumer  
4 goods for sale at very low prices.

5 160. Unbeknownst to website visitors, the Adnxs Pixel is loaded onto the AliExpress  
6 website.

7 161. As soon as the individual reaches the AliExpress website, the Adnxs Pixel collects  
8 the individual’s IP address.

```
9 x-proxy-origin: 12.21.168.66
```

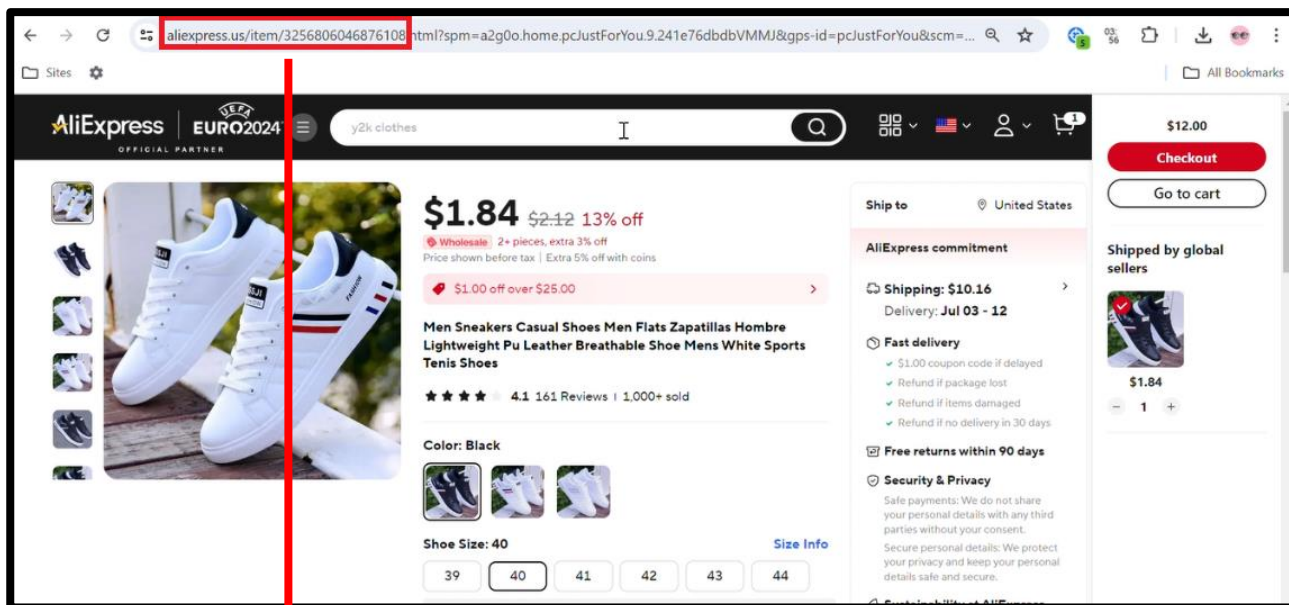
10 162. The Adnxs Pixel also immediately loads the Adnxs Tracking Cookies onto the  
11 individual’s browser in the manner described above.

```
12 set-cookie:  
13 XANDR_PANID=3Ln34SI7mp59XKIRZQPKmuiPt16QQv0ckitP1kMHbt6WABqaLJQirzaMybh4-9  
14 7DDyHtf8CaFT1ZIP7t0wn23YlmsTm7WOS7ymMG8Mq_G58.; SameSite=None; Path=/;  
15 Max-Age=7776000; Expires=Tue, 29-Apr-2025 17:30:09 GMT; Domain=.adnxs.com; Secure;  
16 Partitioned  
17 set-cookie:  
18 anj=dTM7k!M40N@KUGgk.r1Jb_aU0QqJ3cAD8lo`6=+IWY=RplWoL52nlut0]S!9htm<2k!gNZIZ9  
19 zb?g6!<'U98Bp$'qg5pbcQ<O?O/IE4C[<?YX2)JzFHCSS$(73:H73x`v?L3[J6shXDcYeQmpQ1qZ  
20 WI_J#ldYZKVKn1@LThU$0WpoGMNVI SWJe>B2rjk<?BvpeAyIP?'Z>yhEUVOO_ '<nW*3]cF*e+d  
21 tHQY$.PF%0!Wg'tiCmEb6F:]s!GK K9#u/8hJeF5oZu$P%=?QHq4Niv5=(1<FqO8 ]sl>^OV=0Y>`
```

22 163. Also unbeknownst to visitors to the AliExpress website, the Criteo Pixel, a Partner  
23 Pixel, is loaded on the AliExpress website.

```
24 https://sslwidget.criteo.com/event?  
25 a an=www.aliexpress.com&cn=US&ln=en
```

26 164. When a user clicks on a particular item to view or purchase, the unique item number  
27 of that item is contained in the detailed descriptive URL of the page of the AliExpress website selling  
28 that item.



[aliexpress.us/item/3256806046876108](https://aliexpress.us/item/3256806046876108)

165. As the information is entered into the website (i.e., in real time) the Criteo Pixel intercepts the information by receiving the page URL in a “GET request.”

```

tld aliexpress.us
fu
https://www.aliexpress.us/item/3256806046876108.html?spm=a2g0o.home.pcJustForYou.9
.241e76dbdbVMMJ&gps-id=pcJustForYou&scm=1007.13562.333647.0&scm_id=1007.13562.3336
47.0&scm-url=1007.13562.333647.0&pvid=c0aeadc9-5d29-43e2-adb3-a1695384d3be&t=gps-
id:pcJustForYou,scm-url:1007.13562.333647.0,pvid:c0aeadc9-5d29-43e2-adb3-a1695384d
3be,tpp_buckets:668%232846%238115%232000&pdp_npi=4%40dis%21USD%212.12%211.84%21%21
%212.12%211.84%21%402101fb0c17193452861613171ea95c%2112000036393276923%21rec%21US%
21%21AB&utparam-url=scene%3ApcJustForYou%7Cquery_from%3A
  
```

166. Xandr, through the Adnxs Pixel, provides identity resolution to a number of Partner Pixels on the AliExpress website.

1 167. Specifically, Adnxs shares the unique user ID and profile information with Criteo and  
 2 a number of currently unknown Partner Pixels. The phrase “cookiematch” indicates identity  
 3 resolution and “rtb” indicates the information is used in the real-time bidding process.

```
4 :authority: ib.adnxs.com
5 :method: GET
6 :path:
  /getuid?https://dis.criteo.com/dis/rtb/appnexus/cookiematch.aspx?appnxsid=$UID
```

7 168. Receiving the UID allows Criteo and any other Partner Pixel to identify which  
 8 individual is entering which information into the AliExpress website and, thus the Adnxs Pixel aids  
 9 Criteo’s wiretapping.

10 169. Further, the Adnxs Pixel works with other providers of identity resolution on the  
 11 AliExpress website to bolster its own profile of an individual.

12 170. Plaintiffs’ testing shows the Adnxs Pixel working with a number of Partner Pixels,  
 13 including the MediaWallah Pixel, to obtain identity resolution. This additional information is then  
 14 added to Defendant’s consumer and advertising profiles.

```
15 :authority: secure.adnxs.com
16 :method: GET
17 :path:
  /getuid?https://partner.mediawallahscript.com/?account_id=2016&partner_id=208
  7&uid=$UID&tag_format=img&tag_action=sync
```

18 171. The Adnxs Pixel also collects user device information as described above.

```
19
20 priority: i
21 sec-ch-ua: "Not A(Brand";v="8", "Chromium";v="132", "Google Chrome";v="132"
22 sec-ch-ua-mobile: ?0
23 sec-ch-ua-platform: "Windows"
24 sec-fetch-dest: image
25 sec-fetch-mode: no-cors
  sec-fetch-site: cross-site
  user-agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36
  (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36
```

26 172. Defendant, because of the setting of cookies and collecting of the user’s device  
 27 information and IP address, tracks the future web activity of the individual and adds that information  
 28

1 to its consumer profiles and tracking products, as well as connecting that information to users being  
2 offered up for sale to advertisers as part of the real-time-bidding advertising process.

3 **B. Bon Appetit**

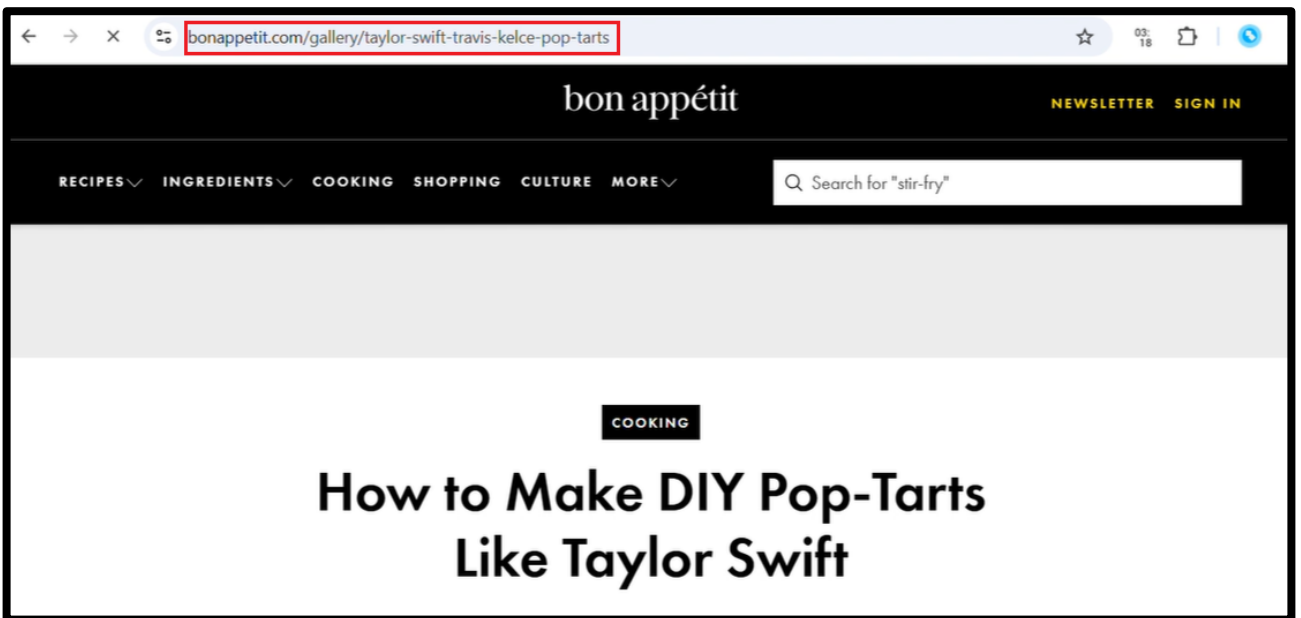
4 173. Bon Appetit is a website featuring a wide variety of recipes and related articles about  
5 restaurants and food.

6 174. The website also contains ad space where companies, like Defendant, act as an  
7 advertising exchange and facilitate the real-time bidding process to hyper-target advertisements to  
8 individual website users based on data collected about their browsing activity and other activity.

9 175. Unbeknownst to website visitors, the Adnxs Pixel is loaded onto the Bon Appetit  
10 website.

11 `"https://nym1-ib.adnxs.com/it?an_audit=0&referrer=https%3A%2F%2Fwww.bonappetit.com%2Fgallery%2Ftaylor-swift-travis-kelce-pop-tarts&e=wqT_3QLDBaDDAgAAAwDWAUAUBCI-Dmr0GEPnXpKTuivbfe`

12  
13 176. As shown above, the Adnxs Pixel collects the detailed descriptive URL of the specific  
14 articles viewed by each website visitor and the articles are selected on the website (i.e., in real time),  
15 and thus collects the affirmative selections of articles by each visitor to the Bon Appetit website.



26 177. As soon as the individual user reaches the Bon Appetit website, the Adnxs Pixel  
27 collects the user's IP address.  
28





1 181. The Adnxs Pixel also collects each individual's device information as described  
2 above.

```
3
4     "device": {
5         "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36
6         (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36",
7         "w": 3072,
8         "h": 1728
```

7 182. Defendant also services real time bidding for advertisements on the Bon Appetit  
8 website. To do this, Defendant uses the real-time bidding process described above to auction off the  
9 ad space to advertisers interested in reaching the particular user, who is identified and profiled by  
10 Xandr and the Adnxs Pixel. Plaintiffs' testing showed Xandr soliciting bids for a banner  
11 advertisement on the selected page. YouTube TV (through Google's advertising service,  
12 DoubleClick) won the auction and paid approximately a \$0.67 cost per thousand impressions  
13 ("CPM") to run the advertisement.<sup>156</sup>

14 **Summary:**

15 Bon Appétit's website is requesting an ad for a 728x90 banner slot on the Taylor Swift & Travis Kelce  
16 Pop-Tarts article.

17 The request is sent to Adnxs (XANDR) to solicit bids from advertisers.

18 YouTube TV is seen in the response paying for their ad to be placed on the website.

```
19     "primary_size": {
20         "width": 728,
21         "height": 90
22     },
23     "ad_types": ["banner"],
24     "uuid": "1190c58504a97a15",
25     "id": 18589466,
26     "allow_smaller_sizes": false,
27     "use_pmt_rule": false,
28     "prebid": true,
29     "disable_psa": true,
30     "reserve": 0.05,
31     "gpid": "3379/conde.bonapp/footer/cooking/gallery/1",
32     "hb_source": 1
```

156 <https://www.criteo.com/wp-content/uploads/2017/07/Report-criteo-the-smart-marketers-guide-to-retargeting-acronyms-one-pager.pdf>

1  
2  
3  
4  
5  
6  
7  
8  
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11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

```
"ads": [{
  "cpm": 0.672614,
  "cpm_publisher_currency": 0.672614,
  "publisher_currency_code": "$",
  "publisher_currency_codename": "USD",
  "content_source": "rtb",
  "ad_type": "banner",
  "buyer_member_id": 2062,
  "creative id": 588061589,
```

```
  "rtb": {
    "banner": {
      "content": "<!-- Creative 588061589 served by Member 2062 via
AppNexus --><html> <body> <div id='native-8845026060891925497'> </div>\n<script
src=\"https://icdn.adnxs.com/renderer-content/1e7f25e2-757c-4238-9cde-bf5e0e85754b\"></sc
ript>\n<script> render_3660(JSON.parse(\"{\\\\"title\\\\":\\\\"Watch the NHL
live\\\\" ,\\\\"desc\\\\":\\\\"See games live, record and watch later with DVR, or catch
highlights with Key
Plays\\\\" ,\\\\"sponsored\\\\":\\\\"YouTubeTV\\\\" ,\\\\"main_img\\\\" :{\\\\"url\\\\" :\\\\"https://s
hfr.adnxs.net/r?url=https%3A%2F%2F0.2mdn.net%2Fimgad%2F11081234068398227419&width=1200
&height=627&crop=1&bidder=101&buying_member=1212&selling_member=7529&creative_id=58806158
9\\\\" ,\\\\"width\\\\" : 1200 ,\\\\"height\\\\" :
```

183. In addition to facilitating the technical elements of taking bids on the advertising space, awarding a winner, and servicing the ads, Defendant facilitates the sharing of the individual website user’s information to potential bidders in order to inform whether the advertisements with be sufficiently targeted to an interested individual. Using the products described above, which are created from Defendant’s consumer and advertising profiles, advertisers purchase and access information previously collected by Defendant on the individual visiting the Bon Appetit website and use that information to determine whether to bid on the advertising space made available by Defendant’s ad exchange.

184. Plaintiffs’ testing showed dozens of “prebid” requests related to the ad space facilitated by Defendant, meaning the individual website user’s information is shared with each of those companies.

```
https://ib.adnxs.com/prebid/setuid?bidder=lemmadigital&uid=ae2bcf28-e590-11ef-b47b
-d08e79f6cf7e&f=b GET ib.adnxs.com
/prebid/setuid?bidder=lemmadigital&uid=ae2bcf28-e590-11ef-b47b-d08e79f6cf7e&f=b
Fri Feb 07 15:18:23 EST 2025 1x1
```

185. Defendant, because of the setting of cookies and collecting of the user’s device information and IP address, tracks the future web activity of the individual and adds that information to its consumer profiles and tracking products, as well as connecting that information to users being offered up for sale to advertisers as part of the real-time-bidding advertising process.

**C. Buzzfeed**

186. Buzzfeed is a popular entertainment and culture website, featuring a variety of articles and quizzes related to popular culture.

187. Unbeknownst to visitors of the Buzzfeed website, the Adnxs Pixel is loaded onto the website.

```
https://ib.adnxs.com/ut/v3/prebid
```

188. When a user visits the Buzzfeed website, the Adnxs Pixel automatically collects the user’s IP address.

```
x-proxy-origin: 12.21.168.66; 12.21.168.66;
```

189. The Adnxs Pixel also immediately loads the Adnxs Tracking Cookies onto the individual’s browser in the manner described above.

```
uuid2 476255108948676925
XANDR_PANID
gcCam31Jgo65_lpt8XQmjXVRZQW_stSNUZ_OEcFV6PZZldEkeoqnDVP7yWvB1ldJMETLA8vc
-Agz4wtK8J0kmsXkJBqWCxXb6S34e_mOj9E.
receive-cookie-deprecation 1
icu
Chgl39VKEAoYBSAFKAUwk4mKvQY4A0AFSAUKGQi22oQBEOYASABKAEw-O2JvQY4AEA
BSAEQk4mKvQYYBQ..
usersync
eNqdWNtqW0EM_Jfz7AdppV1p_SullJL6wZAmIQ6IJeTfa2jxMXRXXc2rjwdJo8tl-779OL1ezs9P2
5EP28v55-nxsh0_vW_nb9tRD9v119PDI8vb19e36x9M3Kh187-_Pzx_f3k8vZ2unz4OfyA1D_ERh
GqjOaSPrVgAYcp7xgxAJ4wppxgGlijOscU3hCdQkwdYzRfzF0w9gloxzFUzzvm0jeNwG4lj6xl
3M7qstfbcNUynNw-5alxwd2qJtbDTCcrzdHfJO8nc75eustP3aYar4QmDWfVWbEvSIASBwYpgpU
```

1 190. Defendant provides identity resolution to *at least 11 Partner Pixels on the BuzzFeed*  
 2 *website*. The Adnxs Pixel shares both the UID created to track users with the cookies loaded onto  
 3 their browsers and the user’s IP address with each Partner Pixel.

4 `https://ssp-sync.criteo.com/user-sync/match?p=Ho_0nF9tNXZpY01VZ3prb0NPaGY1R3diNGd`  
 5 `wUFBEUzV1cUtVS3liT0hpRVlWwXRTNE&u=476255108948676925&gdpr=&gdpr_consent=`

6 191. Defendant also services real time bidding for advertisements on the BuzzFeed website.  
 7 To do this, Defendant identifies the user as described above and collects the URL for the page visited  
 8 by the user as the user clicks on a particular link or article (i.e., in real time).

9 `"rd_ref":`  
 10 `"https%3A%2F%2Fwww.buzzfeed.com%2Fkristatorres%2Fdouchebag-reddit",`

11 192. Defendant also shares the information it has gathered on a particular user through its  
 12 Microsoft Invest, Microsoft Monetize, and Microsoft Curate products to allow bidding partners to  
 13 know that their advertisements will be targeted to a user’s interests.

14 193. Defendant facilitates advertising on specific spaces on the BuzzFeed website. For  
 15 example, Xandr operates the advertising space for a video ad on a particular article published by  
 16 BuzzFeed.

17 `}},`  
 18 `"primary_size": {`  
 19 `"width": 600,`  
 20 `"height": 338`  
 21 `},`  
 22 `"ad_types": ["video"],`  
 23 `"uuid": "522b26551066c6",`  
 24 `"id": 26682145,`  
 25 `"allow_smaller_sizes": false,`  
 26 `"use_pmt_rule": false,`  
 27 `"prebid": true,`  
 28 `"disable_psa": true,`  
`"reserve": 1.65,`  
`"position": 0,`  
`"gpid": "/23bdb39b/buzzfeed/kristatorres/Desktop",`

194. Defendant uses the real-time bidding process described above to auction off the ad  
 space to advertisers interested in reaching the particular user, who is identified and profiled by

1 Defendant and the Adnxs Pixel. In the image below, the auction id shows that the ad space is  
 2 available for bidding and the UUID is the unique identifier assigned to a particular user.

```

    3 "version": "3.0.0",
    4 "tags": [{
    5   "uuid": "522b26551066c6",
    6   "tag_id": 26682145,
    7   "auction_id": "8096687646380101096",
    8   "nobid": true,
    9   "ad_profile_id": 0
    
```

9 195. During the test of the Buzzfeed website, the Partner Pixel Criteo submitted a request  
 10 to bid on the advertisement, located on the specific Buzzfeed article.

```

    11 "rd_can": "https://www.buzzfeed.com/kristatorres/douchebag-reddit"
    12 },
    13 "eids": [{
    14   "source": "criteo.com",
    15   "id":
    16 "91zfb19FMHhGUGJBQjR6V0hCUWlMbDRMTEdOUkhFMW4xRnpJSDNjRFV0eER5eXphUFhnTk03Q1lxQTFX
    17 NkJomM9lNUY0bGdSZXVnRTEwMGgwVFLZXMwaFBhZlB6ZHdpNzkIMkVvZVpkWFM1aWRKMVJBjTNE"
    
```

17 196. As with the Bon Appetit website, the facilitation of advertising space requires the  
 18 sharing of information about each user with multiple parties who may bid to advertise to that  
 19 particular user.

20 197. Defendant also, because of the setting of cookies and collecting of the user’s device  
 21 information and IP address, tracks the future web activity of the individual and adds that information  
 22 to its consumer profiles and tracking products, as well as connecting that information to users being  
 23 offered up for sale to advertisers as part of the real-time-bidding advertising process.

24 **D. Expedia**

25 198. Expedia is a travel website that allows visitors to book vacations, hotels, flights, and  
 26 other travel-related reservations.

199. Unbeknownst to website visitors, the Bing Pixel is loaded onto the Expedia website.

```

https://bat.bing.com/action/0?
ti      56343525
Ver     2
mid     4509d325-9b2f-46fc-b969-a8d80d49171e
bo      1
sid     99c02270e30b11ef939775ca9c9a23a6
vid     99c03de0e30b11ef8f413b933727484f
vids    0
msclkid      N
uach        pv=15.0.0
pi          918639831
lg          en-US
sw          3072
sh          1728
sc          24
tl          Expedia: Payment

```

200. When a user clicks on a particular reservation—and again when they complete the purchase, the name of the hotel and dates of booking are contained in the detailed descriptive URL of each page as described above.

201. As that information is entered by the individual into the Expedia website (i.e., in real time) the information is intercepted by the Bing Pixel.

```

https://bat.bing.com/action/0?
ti      56343525
Ver     2
mid     423eb69a-8626-4770-a69d-b1fe28ed01e5
bo      1
sid     99c02270e30b11ef939775ca9c9a23a6
vid     99c03de0e30b11ef8f413b933727484f
vids    0
msclkid      N
uach        pv=15.0.0
pi          918639831
lg          en-US
sw          3072
sh          1728
sc          24
tl          Parrot Key Hotel & Villas
p
https://www.expedia.com/Key-West-Hotels-Parrot-Key-Hotel-Villas/h24615.Hotel-Information?chkin=2025-02-18&chkout=2025-02-20&_pwa=1&frfr=HSR&pwa_ts=1738682954508&referrerUrl=aHR0cHM6Ly93d3cuZGhwaWZWRpYS5jb2UvSG90ZWwtUjVhcmNo&useRewards=false&rm1=a2&regionId=1187&destination=Key+West%2C+Florida%2C+United+States+of+America&destType=MARKET&neighborhoodId=864982599800745984&latLong=24.554807%2C-81.802079&sort=RECOMMENDED&top_dp=434&top_cur=USD&userIntent=&selectedRoomType=479195&selectedRatePlan=1856146&searchId=41a0945b-4e2c-4aa1-8923-fa1871205199

```

202. The information collected by the Bing Pixel is then transferred to Defendant, who adds it to its consumer profiles, which are included in the products described above and used in the real-time-bidding process.

**E. Hyatt**

203. Hyatt is one of the largest hotel chains in the world. Hyatt customers can book hotel reservations on the Hyatt website.

204. Unbeknownst to website visitors, the Adnxs Pixel is loaded onto the Hyatt website.

205. The Adnxs Pixel immediately loads the Adnxs Tracking Cookies onto the individual's browser in the manner described above.

```

uuid2 2275427030355917771
usersync
eNqdWM1qm0EMfJfv7MPqZ6Vdv0oppaQ-GNIkxKa0hLx7DQn9elitV3O1PYw0kkfSvm2_Tq-X8_PTdqTD9r
L-fXq8bMcvb9v5x3bUw3b58_Tw7XL9_nq9_cCZuzaX-vn5w_PP18fT9XT76v3wAal5SBtCrHoM6QHLBEII
HxkRgAFEO0A1KxOMDTGtSYzht7mfYKp-fKwA5iWj01kmaf8wwBaSw9iazFGNY-pJa-BUZ7HOK9BA2Jr49
ha73F9GhKbLPPsFkKA7VheayoVAJHm1aahJbjxTG5iWQbtTNIAA1bKV4m0AepVXwbtQtiwiXphm5lwzXc4
Wcu3OBMQH1PLS840drsb1QQEjRZmhEnyxWUpAJMoUCcxQHIVILxgwtwB2TJoV0-RNqqI5JXyxsJVgZxqR
iQ4gZudAfU88bCgRvNJtdbFmJncslvuezAJGR3ICfwhIcbStzEANT1BRhqqjIlqfGXtwOhCelBCCa7OLP
80NNoktuYMs7EwFrpZDkiyvhyUYTECPqcQeYhAHJRfJtJKJATuOhdic8RW5H7QHTxI2kAn93CQbAyCx3IC
zp8uCwm3eEIRdxtMPOBoA4Ep4Dp5C4AcV1pI28L4P2OrUCCNFkOaf_mDR_E0o4ambhQVOjI3XqbZlpz6kI
K4GOh9pcci3ADquF8x6hRZCcnP_woQV4pNXwyXUGkg5IriX_EKgKXNSqijAZUFx1JLYeGNRf3_8Cu8huXA
..
icu ChkIwP2XARAKGBogGigaMOapYrUGOAdAGkgaEOapYrUGGBk.
    
```

206. As website visitors select hotels and dates of booking (i.e. in real time), the Adnxs Pixel intercepts this information.

```

https://secure.adnxs.com/getuid?https://pixel.mediaiqdigital.com/pixel?u1=57407921&u2=1592.00&u8=Cu
lver%20City&u9=destination&u19=2024-11-20&u20=2024-11-24&u10=KING&u11=1&u13=ADPR&u5=019
146c69d970002b4a1e2bd7eee0506f0016067012d8&u6=1&u7=0&pixel_id=848530&uid=$UID

Parameters and Their Meanings:
u1=57407921 → Unique transaction or booking ID.
u2=1592.00 → Price or monetary value (e.g., booking cost).
u8=Culver City → Location or user destination.
u9=destination → Travel or purchase type.
u19=2024-11-20 and u20=2024-11-24 → Date range (e.g., check-in/check-out dates).
u10=KING → Hotel room type or other category data.
u11=1 → Quantity or selection count.
u13=ADPR → Advertisement or campaign code.
u5=019146c69d970002b4a1e2bd7eee0506f0016067012d8 → Possibly a hashed user identifier or
session ID.
pixel_id=848530 → A tracking pixel ID to identify specific user interactions.
uid=$UID → Placeholder for a unique user identifier assigned by Adnxs.
    
```

1           207. The Adnxs Pixel also shares the intercepted information with Partner Pixels. The  
 2 below image shows the Adnxs Pixel passing the individual’s UID, alongside the intercepted  
 3 information, to Media IQ (now known as MIQ), another data broker who uses intercepted  
 4 information to service advertising.

```

    5 Request:
    6 https://pixel.mediaiqdigital.com/pixel?u1 57407921
    7 u2 1592.00
    8 u8 Culver City
    9 u9 destination
    10 u19 2024-11-20
    11 u20 2024-11-24
    12 u10 KING
    13 u11 1
    14 u13 ADPR
    15 u5 019146c69d970002b4a1e2bd7eee0506f0016067012d8
    16 u6 1
    17 u7 0
    pixel_id 848530
    uid $UID

    :path:
    /getuid?https://pixel.mediaiqdigital.com/pixel?u1=57407921&u2=1592.00&u8=Culver%20
    City&u9=destination&u19=2024-11-20&u20=2024-11-24&u10=KING&u11=1&u13=ADPR&u5=01914
    6c69d970002b4a1e2bd7eee0506f0016067012d8&u6=1&u7=0&pixel_id=848530&uid=$UID
    
```

18           208. The Adnxs Pixel provides similar identity resolution to at least 2 other Partner Pixels.

19           209. Defendant also, because of the setting of cookies and collecting of the user’s device  
 20 information and IP address, tracks the future web activity of the individual and adds that information  
 21 to its consumer profiles and tracking products, as well as connecting that information to users being  
 22 offered up for sale to advertisers as part of the real-time-bidding advertising process.

23           **F. Plushcare**

24           210. Plushcare is an online healthcare provider that allows its patients to make medical  
 25 appointments and purchase medication on its website.

26           211. Unbeknownst to website visitors, the Adnxs Pixel is loaded onto the Plushcare  
 27 Website.



1 212. When a user visits the Plushcare website, the Adnxs Pixel automatically collects the  
 2 user’s IP address.

3 213. The Adnxs Pixel also immediately loads the Adnxs Tracking Cookies onto the  
 4 individual’s browser in the manner described above.

```

5 uuid2 476255108948676925
6 XANDR_PANID
7 gcCam31.Jgo65_lpt8XQmjXVRZQW_stSNUZ_OEcFV6PZZldEkeoqnDVP7yWvB1ldJMETLA8vc
8 -Agz4wtK8J0kmsXkJBqWCxXb6S34e_mOj9E.
9 receive-cookie-deprecation 1
10 icu
11 Chgl39VKEAoYBSAFKAUwk4mKvQY4A0AFSAUKGQi22oQBEOYASABKAEw-O2JvQY4AEA
12 BSAEQk4mKvQYYBQ..
13 usersync
14 eNqdWNtqW0EM_Jfz7AdppV1p_SullJL6wZAmIQ6lJeTfa2jxMXRXXc2rjwdJo8tl-779OL1ezs9P2
15 5EP28v55-nxsh0_vW_nb9tRD9vl19PDI8vb19e36x9M3Khl87-_Pzx_f3k8vZ2unz4OfyA1D_ERh
16 GqjOaSPrVgAYcp7xgXgANJ4wppxgGlijOscU3hCdQkwdYzRfzF0w9gl0xzFUzzvm0jeNwG4lj6xl
17 3M7qstlfcNUynNw-5alxwd2qJtbDTCcrzdHfJO8nc75eustP3aYar4QmDWfVWbEvSIASBwYpgpU
    
```

13 214. Defendant because of the setting of cookies and collecting of the user’s device  
 14 information and IP address, tracks the future web activity of the individual and adds that information  
 15 to its consumer profiles and tracking products, as well as connecting that information to users being  
 16 offered up for sale to advertisers as part of the real-time-bidding advertising process.

17 215. Defendant also provides identity resolution to at least 3 Partner Pixels, including the  
 18 Criteo Pixel on the Plushcare website. The Adnxs Pixel shares both the UID created to track users  
 19 with the cookies loaded onto their browsers and the user’s IP address with each Partner Pixel

20 216. Unbeknownst to visitors on the Plushcare website, the Criteo Partner Pixel is loaded  
 21 onto the website.

22 217. When a user selects the condition for which they are seeking treatment, that  
 23 information is contained in a detailed descriptive URL as described above.

```

24 https://ib.adnxs.com/getuid?https%3A%2F%2Fdis.criteo.com%2Fdis%2Frtb%2Fappnexus%2F  

25 cookiematch.aspx%3Fappnxsid=%24UID GET ib.adnxs.com  

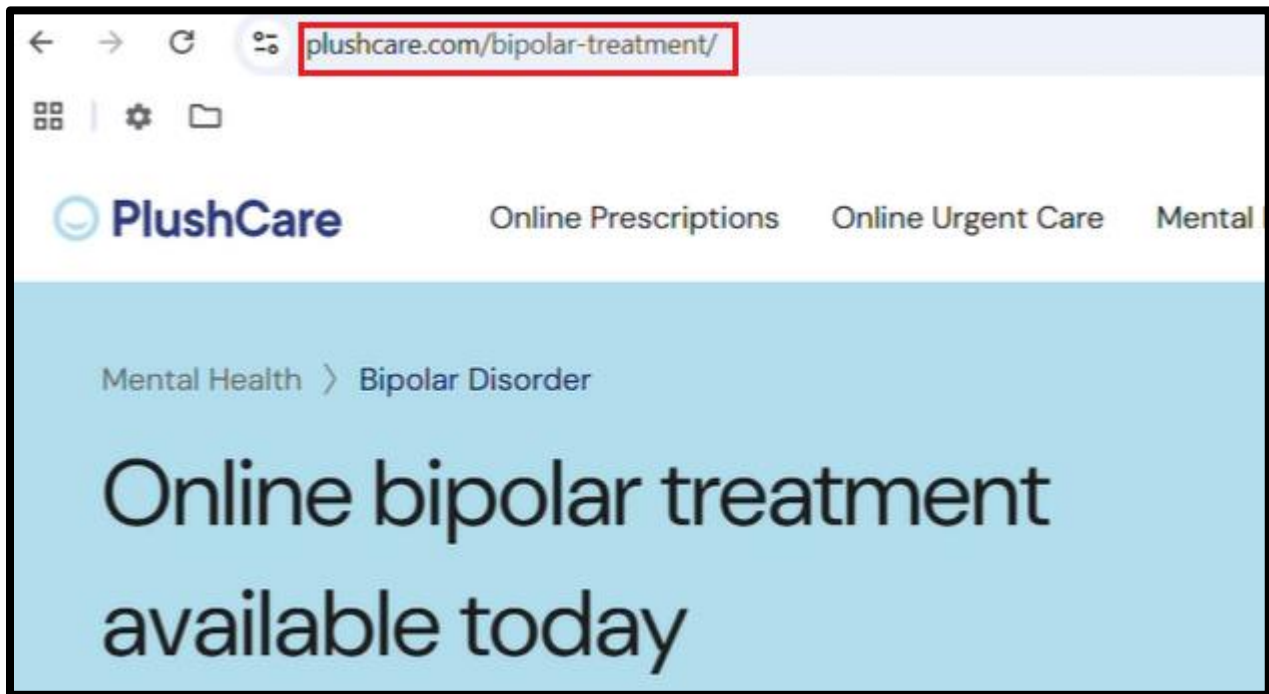
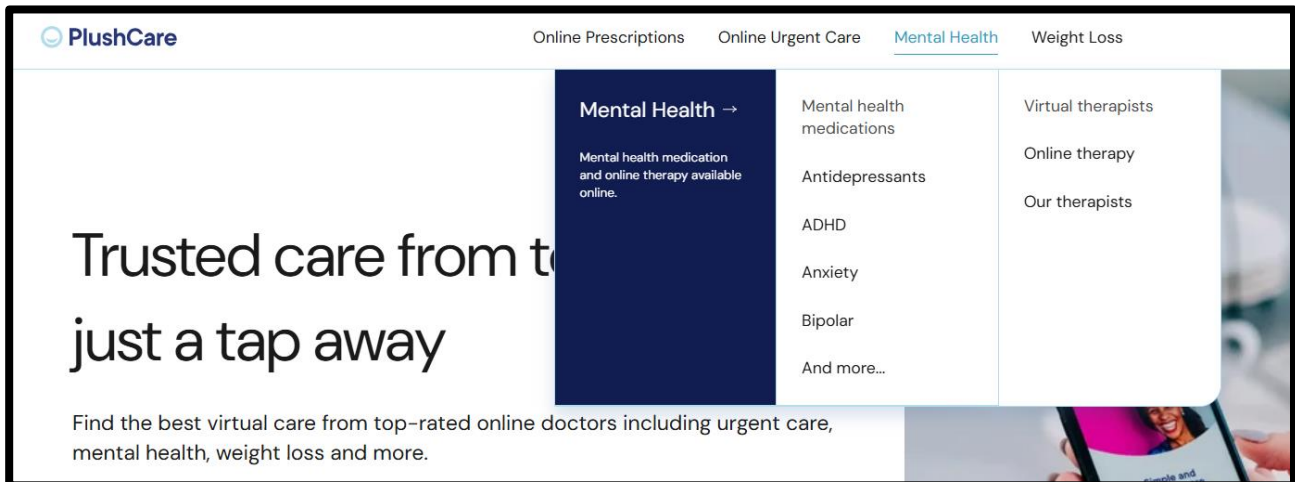
26 /getuid?https%3A%2F%2Fdis.criteo.com%2Fdis%2Frtb%2Fappnexus%2Fcookiematch.aspx%3Fa  

27 ppnxsid=%24UID  

28 Fri Feb 07 09:48:24 EST 2025
    
```

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```
:authority: gum.criteo.com
:method: GET
:path: /syncframe?topUrl=plushcare.com&origin=onetag
:scheme: https
```



218. As the user navigates through the website, the Criteo Pixel intercepts the URL of each page visited by each individual website visitor, thus intercepting communications between the visitor and the Plushcare website about the individual’s medical symptoms and treatment.

1           219. The UID shared by Defendant allows Criteo and any other Partner Pixel to identify  
2 which individual is entering which information into the Plushcare website and, thus the Adnxs Pixel  
3 aids Criteo’s wiretapping.

4 **IV. DEFENDANT’S SERVICES DEANONYMIZE USERS AND ENRICH DEFENDANT,  
5 WEBSITE OPERATORS, AND PARTNER PIXELS ALIKE THROUGH REAL-  
6 TIME BIDDING AND PROFILING INDIVIDUALS**

7 **A. Defendant Combines The Data From All The Subject Websites With  
8 Other Data To Deanonymize Users**

9           220. As a result of Microsoft technology being deployed on thousands or millions of  
10 websites, Defendant is collecting various forms of PII and web activity records of nearly every  
11 American and sells that data to target advertising.

12           221. The information collected, on its own, is enough to identify the individual internet  
13 user. But this is only the first step in Defendant’s practices of dragnet surveillance.

14           222. Defendant also combines the data from each and every website a person visits with  
15 other data collected by its partner advertisers. Further, through Microsoft’s user ID syncing  
16 processes, Microsoft has access to not only its own information that it tracks from Internet users, but  
17 also the information that its partner advertisers track.<sup>157</sup> In this way, Microsoft amasses and  
18 aggregates Internet users’ data and sells it back to its’ partner advertisers. According to Microsoft,  
19 its clients can seamlessly integrate with major ad networks, exchanges, aggregators, and SSPs to buy  
20 data.<sup>158</sup> Microsoft notes that some of its key inventory supply partners are: Google Ad Manager,  
21 Microsoft Ad Exchange, Yahoo Ad Exchange, OpenX, Pubmatic, and The Rubicon Project, some of  
22 the largest players in the data-sharing space.<sup>159</sup>

23  
24  
25 \_\_\_\_\_  
26 <sup>157</sup> Microsoft, *supra* note 76.

27 <sup>158</sup> *About Microsoft Monetize*, Microsoft (May 10, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/about-monetize>.

28 <sup>159</sup> *Exchanges and Aggregators*, Microsoft (Mar. 2, 2024), <https://learn.microsoft.com/en-us/xandr/monetize/exchanges-and-aggregators>.

1           **B. The Partner Pixels Use The Profiles Created By Defendants To**  
2           **Enhance Their Advertising And Analytics Services**

3           223. In addition to contributing vast amounts of data to Microsoft’s data profiles, the data  
4 collected by Microsoft is utilized by both Microsoft and the Partner Pixels to conduct hyper-targeted  
5 advertising through the real-time bidding process. *See* Factual Allegations § I.B, *supra*.

6           224. The Microsoft identity resolution process is a key part of a complex ecosystem of  
7 pixels that deliver detailed user information to advertisers to increase the efficiency of those  
8 advertisements.

9           225. Further, the delivery of advertisements facilitated by Xandr, involves the sharing of  
10 vast amounts of consumer information with Partner Pixels.

11           226. When Microsoft shares website visitor information with a Pixel Partner, that partner  
12 (i) uses the information provided by Microsoft to add information to its own data and advertising  
13 datasets and (ii) shares the identity information with other advertisers during the real-time bidding  
14 delivery of advertisements.

15           227. For ads to be delivered as soon as a website user visits a site, multiple technology  
16 companies need access to detailed information about the identity and interests of the individual  
17 website visitor.

18           228. This information is provided by the Partner Pixels, who use Defendant’s identity  
19 resolution services or advertising services (which they pay for) to create and expand their own  
20 datasets, which they in turn disclose to other players in the real-time bidding ecosystem as  
21 advertisements are delivered on websites.

22           229. Each time a user is selected by this network of advertisers to receive an ad, the  
23 advertisers “bid” on the user—meaning Defendant or the Partner Pixels are paid for the information  
24 they have stored about that user. Millions of these bids are made per day across the Internet,  
25 demonstrating the immense value of the data Defendant improperly collects on Plaintiffs and Class  
26 Members.

27           230. As such, the improper collection of vast amounts of data on Plaintiffs and Class  
28 Members is done both for Defendant’s profit and for the profit of the Partner Pixels.

1 **IV. PLAINTIFFS' EXPERIENCES**

2 **A. Plaintiff Stacy Penning**

3 231. In or about December 2024, Plaintiff Stacy Penning visited the BuzzFeed website  
4 while in California.

5 232. Unbeknownst to Plaintiff Penning, the Adnxs Pixel was loaded onto each page of the  
6 website.

7 233. When Plaintiff Penning visited the BuzzFeed website, The Adnxs Pixel installed  
8 multiple separate cookies onto Plaintiff Penning's browser.

9 234. The Adnxs Pixel collected information about Plaintiff Penning, including the  
10 webpages he visited, his IP address, and fingerprint information about his device and browser, among  
11 others.

12 235. Defendant shared Plaintiff Penning's IP address, Microsoft ID, previously collected  
13 information, and information about which pages of the BuzzFeed website he visited with every  
14 Partner Pixel to which it provided identity resolution through the Adnxs Pixel.

15 236. Defendant compiled the information it collected into a profile on Plaintiff Penning  
16 and added the bolstered profile to its suite of data products described above.

17 237. Defendant also, by using the cookies loaded onto Plaintiff Penning's browser, tracked  
18 his future web browsing activity across the internet and assisted other Partner Pixels in tracking and  
19 wiretapping his communications with websites.

20 238. Plaintiff Penning was unaware that Defendant was installing trackers on his browser,  
21 wiretapping his communications, aiding in the wiretapping of his communications by Partner Pixels,  
22 deanonymizing his personal data, or collecting, selling, and disclosing his personal data to  
23 advertising technology companies, other data brokers, or any person or entity doing business with  
24 Defendant. Nor could Plaintiff Penning have discovered these facts.

25 239. Plaintiff Penning did not provide his prior consent to Defendant to install trackers on  
26 his browser, wiretap his communications, aid in the wiretapping of his communications,  
27 deanonymize his personal data, or collect, sell, and disclose his personal data to advertising  
28

1 technology companies, other data brokers, or any person or entity doing business with Defendant.  
2 Nor did Defendant obtain a court order to do the same.

3 240. Plaintiff Penning has, therefore, had his privacy invaded by Defendant's violations of  
4 CIPA §§ 631(a) and 638.51(a), and Defendant has been unjustly enriched by the disclosure and sale  
5 of the improperly collected data concerning Plaintiff Penning.

6 **B. Plaintiff SungGil Hong**

7 241. In or about December 2024, Plaintiff SungGil Hong visited the AliExpress website  
8 while in California and viewed a bike rack for sale on the website.

9 242. Unbeknownst to Plaintiff Hong, the Criteo Pixel was loaded onto each page of the  
10 AliExpress website.

11 243. The Criteo Pixel, by receiving the detailed URL of each page of the website,  
12 intercepted Plaintiff Hong's confidential communications with the AliExpress website.

13 244. Unbeknownst to Plaintiff Hong, the Adnxs Pixel was loaded onto each page of the  
14 website.

15 245. These interceptions happened in real time as Plaintiff Hong searched for goods on the  
16 website.

17 246. Defendant provided Criteo with identity resolution services so that Criteo could  
18 deanonymize the data it collected on Plaintiff Hong and sell it during the real-time bidding process.

19 247. When Plaintiff Hong visited the AliExpress website, The Adnxs Pixel installed  
20 multiple separate cookies onto Plaintiff Hong's browser.

21 248. The Adnxs Pixel collected information about Plaintiff Hong, including the webpages  
22 he visited, his IP address, and fingerprint information about his device and browser, among others.

23 249. Defendant shared Plaintiff Hong's IP address, Microsoft ID, previously collected  
24 information, and information about which pages of the AliExpress website he visited with every  
25 Partner Pixel to which it provided identity resolution through the Adnxs Pixel.

26 250. Defendant compiled the information it collected into a profile on Plaintiff Hong and  
27 added the bolstered profile to its suite of data products described above.  
28

1           251. Defendant also, by using the cookies loaded onto Plaintiff Hong’s browser, tracked  
2 his future web browsing activity across the internet and assisted other Partner Pixels in tracking and  
3 wiretapping his communications with websites.

4           252. Plaintiff Hong was unaware that Defendant was installing trackers on his browser,  
5 collecting his IP address, wiretapping her communications, aiding in the wiretapping of his  
6 communications by Partner Pixels, deanonymizing his personal data, or collecting, selling, and  
7 disclosing his personal data to advertising technology companies, other data brokers, or any person  
8 or entity doing business with Defendant. Nor could Plaintiff Hong have discovered these facts.

9           253. Plaintiff Hong did not provide his prior consent to Defendant to install trackers on his  
10 browser, wiretap his communications, aid in the wiretapping of his communications, deanonymize  
11 his personal data, or collect, sell, and disclose his personal data to advertising technology companies,  
12 other data brokers, or any person or entity doing business with Defendant. Nor did Defendant obtain  
13 a court order to do the same.

14           254. Plaintiff Hong has, therefore, had his privacy invaded by Defendant’s violations of  
15 CIPA §§ 631(a) and 638.51(a), and Defendant has been unjustly enriched by the disclosure and sale  
16 of the improperly collected data concerning Plaintiff Hong.

17           **C. Plaintiff Laura Bonetti**

18           255. In or about December 2024, Plaintiff Laura Bonetti visited the Bon Appetit website  
19 while in California.

20           256. Unbeknownst to Plaintiff Bonetti, the Adnxs Pixel was loaded onto each page of the  
21 website.

22           257. When Plaintiff Bonetti visited the Bon Appetit website, The Adnxs Pixel installed  
23 multiple separate cookies onto Plaintiff Bonetti’s browser.

24           258. The Adnxs Pixel collected information about Plaintiff Bonetti, including the  
25 webpages she visited, her IP address, and fingerprint information about her device and browser,  
26 among others.

1           259. Defendant shared Plaintiff Bonetti’s IP address, Microsoft ID, previously collected  
2 information, and information about which pages of the Bon Appetit website she visited with every  
3 Partner Pixel to which it provided identity resolution through the Adnxs Pixel.

4           260. Defendant compiled the information it collected into a profile on Plaintiff Bonetti and  
5 added the bolstered profile to its suite of data products described above.

6           261. Defendant also shared the information it collected on Plaintiff Bonetti with advertisers  
7 to facilitate the real-time bidding process for ad space it holds on the Bon Appetit website.

8           262. Defendant also, by using the cookies loaded onto Plaintiff Bonetti’s browser, tracked  
9 her future web browsing activity across the internet and assisted other Partner Pixels in tracking her  
10 and wiretapping her communications with websites.

11           263. Plaintiff Bonetti was unaware that Defendant was installing trackers on her browser,  
12 wiretapping her communications, aiding in the wiretapping of her communications by Partner Pixels,  
13 deanonymizing her personal data, or collecting, selling, and disclosing her personal data to  
14 advertising technology companies, other data brokers, or any person or entity doing business with  
15 Defendant. Nor could Plaintiff Bonetti have discovered these facts.

16           264. Plaintiff Bonetti did not provide her prior consent to Defendant to install trackers on  
17 her browser, wiretap her communications, aid in the wiretapping of her communications,  
18 deanonymize her personal data, or collect, sell, and disclose her personal data to advertising  
19 technology companies, other data brokers, or any person or entity doing business with Defendant.  
20 Nor did Defendant obtain a court order to do the same.

21           265. Plaintiff Bonetti has, therefore, had her privacy invaded by Defendant’s violations of  
22 CIPA §§ 631(a) and 638.51(a), and Defendant has been unjustly enriched by the disclosure and sale  
23 of the improperly collected data concerning Plaintiff Bonetti.

24           **D. Plaintiff Tanisha Dantignac**

25           266. In or about August 2024, Plaintiff Tanisha Dantignac visited the Expedia website  
26 while in California and booked a flight.

27           267. Unbeknownst to Plaintiff Dantignac, the Bing Pixel was loaded onto each page of the  
28 Expedia website.



1 268. The Bing Pixel, intercepted Plaintiff Hong’s confidential communications with the  
2 Expedia website, including information about her travel.

3 269. These interceptions happened in real time as Plaintiff Dantignac searched for flights  
4 and completed her booking.

5 270. When Plaintiff Dantignac visited the Expedia website, The Bing Pixel installed  
6 multiple separate cookies onto Plaintiff Dantignac’s browser.

7 271. Defendant compiled the information it collected into a profile on Plaintiff Dantignac  
8 and added the bolstered profile to its suite of data products described above.

9 272. Defendant also, by using the cookies loaded onto Plaintiff Dantignac’s browser,  
10 tracked her future web browsing activity across the internet and assisted other Partner Pixels in  
11 tracking and wiretapping her communications with websites.

12 273. Plaintiff Dantignac was unaware that Defendant was installing trackers on her  
13 browser, collecting his IP address, wiretapping her communications, aiding in the wiretapping of her  
14 communications by Partner Pixels, deanonymizing her personal data, or collecting, selling, and  
15 disclosing her personal data to advertising technology companies, other data brokers, or any person  
16 or entity doing business with Defendant. Nor could Plaintiff Dantignac have discovered these facts.

17 274. Plaintiff Dantignac did not provide her prior consent to Defendant to install trackers  
18 on her browser, wiretap her communications, aid in the wiretapping of her communications,  
19 deanonymize her personal data, or collect, sell, and disclose her personal data to advertising  
20 technology companies, other data brokers, or any person or entity doing business with Defendant.  
21 Nor did Defendant obtain a court order to do the same.

22 275. Plaintiff Dantignac has, therefore, had her privacy invaded by Defendant’s violations  
23 of CIPA §§ 631(a) and 638.51(a), and Defendant has been unjustly enriched by the disclosure and  
24 sale of the improperly collected data concerning Plaintiff Dantignac.

25 276. Plaintiff Dantignac did not discover these violations until January 2025.

26 **E. Plaintiff Jonathan Finestone**

27 277. Multiple times in 2024, including in or about July 2024, Plaintiff Jonathan Finestone  
28 visited the Hyatt website and made a reservation.

1 278. Unbeknownst to Plaintiff Finestone, the Adnxs Pixel was loaded onto the Hyatt  
2 website.

3 279. When Plaintiff Finestone visited the Hyatt website, The Adnxs Pixel installed  
4 multiple separate cookies onto Plaintiff Finestone's browser.

5 280. As Plaintiff Finestone selected his hotel and dates of stay and made his purchase (i.e.  
6 in real time), the Adnxs Pixel intercepted that information.

7 281. The Adnxs Pixel then shared the information about Plaintiff Finestone's reservation  
8 with Partner Pixels loaded on the Hyatt website.

9 282. The Adnxs Pixel also collected information about Plaintiff Finestone, including the  
10 webpages he visited, his IP address, and fingerprint information about his device and browser, among  
11 others.

12 283. Defendant compiled the information it collected into a profile on Plaintiff Finestone  
13 and added the bolstered profile to its suite of data products described above.

14 284. Defendant also shared the information it collected on Plaintiff Finestone with  
15 advertisers to facilitate the real-time bidding process as described above.

16 285. Defendant also, by using the cookies loaded onto Plaintiff Finestone's browser,  
17 tracked his future web browsing activity across the internet and assisted other Partner Pixels in  
18 tracking him and wiretapping his communications with websites.

19 286. Plaintiff Finestone was unaware that Defendant was installing trackers on his  
20 browser, wiretapping his communications, aiding in the wiretapping of his communications by  
21 Partner Pixels, deanonymizing his personal data, or collecting, selling, and disclosing his personal  
22 data to advertising technology companies, other data brokers, or any person or entity doing business  
23 with Defendant. Nor could Plaintiff Finestone have discovered these facts.

24 287. Plaintiff Finestone did not provide her prior consent to Defendant to install trackers  
25 on his browser, wiretap his communications, aid in the wiretapping of his communications,  
26 deanonymize his personal data, or collect, sell, and disclose his personal data to advertising  
27 technology companies, other data brokers, or any person or entity doing business with Defendant.  
28 Nor did Defendant obtain a court order to do the same.

1           288. Plaintiff Finestone has, therefore, had his privacy invaded by Defendant’s violations  
2 of CIPA §§ 631(a) and 638.51(a), and Defendant has been unjustly enriched by the disclosure and  
3 sale of the improperly collected data concerning Plaintiff Finestone.

4           **F. Plaintiff Robert Mason**

5           289. In or about February 2021, Plaintiff Robert Mason visited the Plushcare website while  
6 in California and made a medical appointment.

7           290. Unbeknownst to Plaintiff Mason, the Criteo Pixel was loaded onto each page of the  
8 Plushcare website.

9           291. The Criteo Pixel, by receiving the detailed URL of each page of the website,  
10 intercepted Plaintiff Mason’s confidential communications with the Plushcare website, including  
11 information about his medical condition and treatment.

12           292. Unbeknownst to Plaintiff Mason, the Adnxs Pixel was loaded onto each page of the  
13 website.

14           293. These interceptions happened in real time as Plaintiff Mason entered confidential  
15 information on the website.

16           294. Defendant provided Criteo with identity resolution services so that Criteo could  
17 deanonymize the data it collected on Plaintiff Mason and sell it during the real-time bidding process.

18           295. When Plaintiff Mason visited the Plushcare website, The Adnxs Pixel installed  
19 multiple separate cookies onto Plaintiff Mason’s browser.

20           296. The Adnxs Pixel collected information about Plaintiff Mason, including the webpages  
21 he visited, his IP address, and fingerprint information about his device and browser, among others.

22           297. Defendant shared Plaintiff Mason’s IP address, Microsoft ID, previously collected  
23 information, and information about which pages of the Plushcare website he visited with every  
24 Partner Pixel to which it provided identity resolution through the Adnxs Pixel.

25           298. Defendant compiled the information it collected into a profile on Plaintiff Mason and  
26 added the bolstered profile to its suite of data products described above.

27  
28



1 sale or use through Defendant’s Microsoft Invest, Microsoft  
2 Monetize, or Microsoft Curate Products, distributed or sold in the  
3 process of delivering advertising on websites, mobile applications,  
4 or ither digital media, or otherwise.

5 305. The Class and California Subclass shall be collectively referred to as the “Classes,”  
6 and Members of the Class and Subclass will collectively be referred to as “Class Members,” unless  
7 it is necessary to differentiate them.

8 306. Excluded from the Classes are Defendant, any affiliate, parent, or subsidiary of any  
9 Defendant; any entity in which any Defendant has a controlling interest; any officer director, or  
10 employee of any Defendant; any successor or assign of any Defendant; anyone employed by counsel  
11 in this action; any judge to whom this case is assigned, his or her spouse and immediate family  
12 members; and members of the judge’s staff.

13 307. **Numerosity**. Members of the Class are so numerous that joinder of all members  
14 would be unfeasible and not practicable. The exact number of Class Members is unknown to  
15 Plaintiffs at this time; however, it is estimated that there are tens or hundreds of millions of  
16 individuals in the Classes. The identity of such membership is readily ascertainable from  
17 Defendant’s records and non-party records, such as those of Defendant’s customers and advertising  
18 partners.

19 308. **Typicality**. Plaintiffs’ claims are typical of the claims of the Classes. Plaintiffs, like  
20 all Class Members, had their information collected and made available for sale by Defendant through  
21 the use of comprehensive user profiles compiled about Plaintiffs.

22 309. **Adequacy**. Plaintiffs are fully prepared to take all necessary steps to represent fairly  
23 and adequately the interests of the Classes. Plaintiffs’ interests are coincident with, and not  
24 antagonistic to, those of the members of the Classes. Plaintiffs are represented by attorneys with  
25 experience in the prosecution of class action litigation generally and in the field of digital privacy  
26 litigation specifically. Plaintiffs’ attorneys are committed to vigorously prosecuting this action on  
27 behalf of the members of the Classes.

28 310. **Commonality/Predominance**. Questions of law and fact common to the members  
of the Classes predominate over questions that may affect only individual members because

1 Defendant has acted on grounds generally applicable to the Classes. Such generally applicable  
2 conduct is inherent in Defendant’s wrongful conduct. Questions of law and fact common to the  
3 Classes include:

- 4 (a) Whether Defendant’s acts and practices alleged herein  
5 constitute egregious breaches of social norms;
- 6 (b) Whether Defendant acted intentionally in violating  
7 Plaintiffs’ and Class Members’ privacy rights under the  
8 California Constitution or common law;
- 9 (c) Whether Defendant was unjustly enriched as a result of its  
10 violations of Plaintiffs’ and Class Members’ privacy rights;  
11 and
- 12 (d) Whether Plaintiffs and Class Members are entitled to  
13 damages under CIPA or any other relevant statute;

14 311. **Superiority:** Class action treatment is a superior method for the fair and efficient  
15 adjudication of the controversy. Such treatment will permit a large number of similarly situated  
16 persons to prosecute their common claims in a single forum simultaneously, efficiently, and without  
17 the unnecessary duplication of evidence, effort, or expense that numerous individual actions would  
18 engender. The benefits of proceeding through the class mechanism, including providing injured  
19 persons or entities a method for obtaining redress on claims that could not practicably be pursued  
20 individually, substantially outweighs potential difficulties in management of this class action.  
21 Plaintiffs know of no special difficulty to that would be encountered by litigating this action that  
22 would preclude its maintenance as a class action.

23 **CAUSES OF ACTION**

24 **COUNT I**

25 **Intrusion Upon Seclusion**

26 312. Plaintiffs repeat the allegations contained in the foregoing paragraphs as if fully set  
27 forth herein.

28 313. Plaintiffs bring this claim individually and on behalf of the Classes against Defendant.

314. Plaintiffs bring this claim pursuant to California law.

315. To state a claim for intrusion upon seclusion “[Plaintiffs] must possess a legally  
protected privacy interest ... [Plaintiffs’] expectations of privacy must be reasonable ... [and

1 Plaintiffs] must show that the intrusion is so serious in ‘nature, scope, and actual or potential impact  
2 as to constitute an egregious breach of the social norms.’ *Hernandez v. Hillside, Inc.* 47 Cal. 4th  
3 272, 286-87 (2009).

4 316. Plaintiffs and Class Members have an interest in: (i) precluding the dissemination  
5 and/or misuse of their sensitive, confidential communications and information; and (ii) making  
6 personal decisions and/or conducting personal activities without observation, intrusion or  
7 interference, including, but not limited to, the right to visit and interact with various internet sites  
8 without being subjected to highly intrusive surveillance at every turn.

9 317. By conducting such widespread surveillance, Defendant intentionally invaded  
10 Plaintiffs’ and Class Members’ privacy rights, as well as intruded upon Plaintiffs’ and Class  
11 Members’ seclusion.

12 318. Plaintiffs and Class Members had a reasonable expectation that their communications,  
13 identities, personal activities, health and other data would remain confidential.

14 319. Plaintiffs and Class Members did not and could not authorize Defendant to intercept  
15 data on every aspect of their lives and activities.

16 320. The conduct as described herein is highly offensive to a reasonable person and  
17 constitutes an egregious breach of social norms, specifically including the following:

- 18 (a) Defendant engages in widespread data collection and  
19 interception of Plaintiffs’ and Class Members’ internet and  
20 app activity, including their communications with websites  
21 and apps, thereby learning intimate details of their daily lives  
22 based on the massive amount of information collected about  
23 them.
- 24 (b) Defendant combines the information collected on websites  
25 and apps with offline information also gathered on  
26 individuals to create the profiles used in the Microsoft  
27 products described herein.
- 28 (c) Defendant creates comprehensive profiles based on this  
online and offline data, which violates Plaintiffs’ Class  
Members’ common law right to privacy and the control of  
their personal information.
- (d) Defendant sells or discloses these profiles, which contain the  
data improperly collected about Plaintiffs and Class  
Members, to an unknown number of advertisers for use in  
the real-time-bidding process, which likewise violates

1 Plaintiffs’ Class Members’ common law right to privacy and  
2 the control of their personal information.

3 321. Defendant’s amassment of electronic information reflecting all aspects of Plaintiffs’  
4 and Class Members’ lives into profiles for future or present use is in and of itself a violation of their  
5 right to privacy in light of the serious risk these profiles pose to their autonomy.

6 322. In addition, those profiles are and can be used to further invade Plaintiffs’ and Class  
7 Members’ privacy by, for example, allowing third parties to learn intimate details of their lives and  
8 target them for advertising, political, and other purposes, as described herein, thereby harming them  
9 by selling this data to advertisers and other data brokers without their consent.

10 323. Accordingly, Plaintiff and Class and California Subclass Members seek all relief  
11 available for invasion of privacy claims under common law.

12 **COUNT II**  
13 **Violation Of The California Invasion of Privacy Act**  
14 **Cal. Penal Code § 631(a)**

15 324. Plaintiffs repeat the allegations contained in the foregoing paragraphs as if fully set  
16 forth herein.

17 325. Plaintiffs bring this claim individually and on behalf of the California Subclass  
18 against Defendant.

19 326. The California Legislature enacted the CIPA to protect certain privacy rights of  
20 California citizens. The California Legislature expressly recognized that “the development of new  
21 devices and techniques for the purpose of eavesdropping upon private communications ... has  
22 created a serious threat to the free exercise of personal liberties and cannot be tolerated in a free and  
23 civilized society.” Cal. Penal Code § 630.

24 327. The California Supreme Court has repeatedly stated the “express objective” of CIPA  
25 is to “protect a person placing or receiving a call from a situation where the person on the other end  
26 of the line *permits an outsider to tap his telephone or listen in on the call.*” *Ribas*, 38 Cal. 3d at 363  
27 (emphasis added, internal quotations omitted). This restriction is based on the “substantial  
28 distinction ... between the secondhand repetition of the contents of a conversation and *its*  
*simultaneous dissemination to an unannounced second auditor*, whether that auditor be a person or



1 mechanical device.” *Id.* at 361 (emphasis added). Such “simultaneous dissemination” “denies the  
 2 speaker an important aspect of privacy of communication—the right to control the nature and extent  
 3 of the firsthand dissemination of his statements.” *Id.*; see also *Reporters Committee for Freedom of*  
 4 *Press*, 489 U.S. at 763 (“[B]oth the common law and the literal understandings of privacy encompass  
 5 the individual’s control of information concerning his or her person.”).

6 328. Further, “[t]hough written in terms of wiretapping, Section 631(a) applies to Internet  
 7 communications.” *Javier v. Assurance IQ, LLC*, 2022 WL 1744107, at \*1 (9th Cir. May 31, 2022).  
 8 Indeed, “the California Supreme Court regularly reads statutes to apply to new technologies where  
 9 such a reading would not conflict with the statutory scheme.” *In re Google Inc.*, 2013 WL 5423918,  
 10 at \*21 (N.D. Cal. Sep. 26, 2013). This accords with the fact that “the California Supreme Court has  
 11 [] emphasized that all CIPA provisions are to be interpreted in light of the broad privacy-protecting  
 12 statutory purposes of CIPA.” *Javier*, 2022 WL 1744107, at \*2. “Thus, when faced with two possible  
 13 interpretations of CIPA, the California Supreme Court has construed CIPA in accordance with the  
 14 interpretation that provides the greatest privacy protection.” *Matera v. Google Inc.*, 2016 WL  
 15 8200619, at \*19 (N.D. Cal. Aug. 12, 2016).

16 329. CIPA § 631(a) imposes liability for “distinct and mutually independent patterns of  
 17 conduct.” *Tavernetti v. Superior Ct.*, 22 Cal. 3d 187, 192-93 (1978). Thus, to establish liability  
 18 under CIPA § 631(a), a plaintiff need only establish that the defendant, “by means of any machine,  
 19 instrument, contrivance, or in any other manner,” does any of the following:

20 Intentionally taps, or makes any unauthorized connection, whether  
 21 physically, electrically, acoustically, inductively or otherwise, with  
 22 any telegraph or telephone wire, line, cable, or instrument, including  
 the wire, line, cable, or instrument of any internal telephonic  
 communication system,

23 *Or*

24 Willfully and without the consent of all parties to the  
 25 communication, or in any unauthorized manner, reads or attempts to  
 26 read or learn the contents or meaning of any message, report, or  
 27 communication while the same is in transit or passing over any wire,  
 line or cable or is being sent from or received at any place within  
 this state,

28 *Or*

1 Uses, or attempts to use, in any manner, or for any purpose, or to  
2 communicate in any way, any information so obtained,

3 *Or*

4 Aids, agrees with, employs, or conspires with any person or persons  
5 to unlawfully do, or permit, or cause to be done any of the acts or  
6 things mentioned above in this section.

7 330. To avoid liability under CIPA § 631(a), a defendant must show it had the consent of  
8 *all* parties to a communication, and that such consent was procured *prior to* the interception  
9 occurring. *See Javier, 2022 WL 1744107, at \*2.*

10 331. Defendant’s various pixels and SDKs, including the Adnxs and Bing Pixels are each  
11 a “machine, instrument, contrivance, or ... other manner” used to engage in the prohibited conduct  
12 at issue here.

13 332. Defendant is a “separate legal entity that offers [a] ‘software-as-a-service’ and not  
14 merely [] passive device[s].” *Saleh v. Nike, Inc., 562 F. Supp. 3d 503, 520 (C.D. Cal. 2021).* Further,  
15 Defendant has the capability to use the wiretapped information for a purpose other than simply  
16 recording the communications and providing the communications to website operators.  
17 Accordingly, Defendant was a third party to any communication between Plaintiffs and California  
18 Subclass Members, on the one hand, and any of the websites at issue, on the other. *Id. at 521; see*  
19 *also Javier v. Assurance IQ, LLC, 649 F. Supp. 3d 891, 900 (N.D. Cal. 2023).*

20 333. At all relevant times, Defendant willfully and without the consent of all parties to the  
21 communication, and in an unauthorized manner, read, attempted to read, and learned the contents of  
22 the electronic communications of Plaintiffs and California Subclass Members, on the one hand, and  
23 the websites at issue, on the other, while the electronic communications were in transit or were being  
24 sent from or received at any place within California.

25 334. At all relevant times, Defendant uses those intercepted communications, including  
26 but not limited to building comprehensive user profiles that are offered for disclosure or sale in real-  
27 time bidding to prospective advertisers.

28 335. Further, Defendant “[a]ids, agrees with, employs, or conspires with” each Partner  
Pixel that it provides identity resolution to and who intercepts Plaintiffs’ and California subclass

1 Members' confidential communications.

2 336. Plaintiffs and California Subclass Members did not provide their prior consent to  
3 Defendant's intentional interception, reading, learning, recording, collection, and usage of Plaintiffs'  
4 and California Subclass Members' electronic communications.

5 337. The wiretapping of Plaintiffs and California Subclass Members occurred in  
6 California, where Plaintiffs and California Subclass Members accessed the websites, where  
7 Defendant's pixels were loaded on Plaintiffs' and California Subclass Members' browsers, and  
8 where Defendant routed Plaintiffs' and California Subclass Members' electronic communications to  
9 Defendant's servers.

10 338. Pursuant to Cal. Penal Code § 637.2, Plaintiffs and California Subclass Members have  
11 been injured by Defendant's violations of CIPA § 631(a), and each seeks statutory damages of \$5,000  
12 for each of Defendant's violations of CIPA § 631(a).

13 **COUNT III**  
14 **Violation Of The California Invasion Of Privacy Act,**  
15 **Cal. Penal Code § 638.51(a)**

16 339. Plaintiffs repeat the allegations contained in the foregoing paragraphs as if fully set  
17 forth herein.

18 340. Plaintiffs bring this claim individually and on behalf of the proposed California  
19 Subclass against Defendant.

20 341. CIPA § 638.51(a) proscribes any "person" from "install[ing] or us[ing] a pen register  
21 or a trap and trace device without first obtaining a court order."

22 342. A "pen register" is a "a device or process that records or decodes dialing, routing,  
23 addressing, or signaling information transmitted by an instrument or facility from which a wire or  
24 electronic communication is transmitted, but not the contents of a communication." Cal. Penal Code  
25 § 638.50(b).

26 343. A "trap and trace device" is a "a device or process that captures the incoming  
27 electronic or other impulses that identify the originating number or other dialing, routing, addressing,  
28 or signaling information reasonably likely to identify the source of a wire or electronic  
communication, but not the contents of a communication." Cal. Penal Code § 638.50(c).

1           344. In plain English, a “pen register” is a “device or process” that records *outgoing*  
2 information, while a “trap and trace device” is a “device or process” that records *incoming*  
3 information.

4           345. For example, if a user sends an email, a “pen register” might record the email address  
5 it was sent from, the email address the email was sent to, and the subject line—because this is the  
6 user’s *outgoing* information. On the other hand, if that same user receives an email, a “trap and trace  
7 device” might record the email address it was sent from, the email address it was sent to, and the  
8 subject line—because this is *incoming* information that is being sent to that same user.

9           346. Historically, law enforcement used “pen registers” to record the numbers of outgoing  
10 calls from a particular telephone line, while law enforcement used “trap and trace devices” to record  
11 the numbers of incoming calls to that particular telephone line. As technology has advanced,  
12 however, courts have expanded the application of these surveillance devices. This, combined with  
13 the California Supreme Court’s mandate to read provisions of the CIPA broadly to protect privacy  
14 rights, has led courts to apply CIPA § 638.50 to internet tracking technologies similar to Defendant’s  
15 technologies at issue here. *See, e.g., Shah v. Fandom, Inc.*, --- F. Supp. 3d ---, 2024 WL 4539577,  
16 at \*21 (N.D. Cal. Oct. 21, 2024) (finding trackers were “pen registers” and noting “California courts  
17 do not read California statutes as limiting themselves to the traditional technologies or models in  
18 place at the time the statutes were enacted”); *Mirmalek v. Los Angeles Times Communications LLC*,  
19 2024 WL 5102709, at \*3-4 (N.D. Cal. Dec. 12, 2024) (same); *Lesh v. Cable News Network, Inc.*,  
20 --- F. Supp. 3d ---, 2025 WL 563358, at \*3-5 (S.D.N.Y. Feb. 20, 2025) (same); *Moody v. C2 Educ.*  
21 *Sys. Inc.*, 742 F. Supp. 3d 1072, 1076 (C.D. Cal. 2024) (“Plaintiff’s allegations that the TikTok  
22 Software is embedded in the Website and collects information from visitors plausibly fall within the  
23 scope of §§ 638.50 and 638.51.”); *Greenley v. Kochava, Inc.*, 684 F. Supp. 3d 1024, 1050 (S.D. Cal.  
24 2023) (referencing CIPA’s “expansive language” when finding software provided by data broker  
25 was a “pen register”).

26           347. The Microsoft Pixels Microsoft installed on Plaintiffs’ and California Subclass  
27 Members’ browsers, to the extent they do not intercept “contents” of communications as defined in  
28 CIPA § 631(a), are “pen registers” because they are “device[s] or process[es]” that “capture” the

1 “routing, addressing, or signaling information”—the IP address, geolocation, device information,  
2 and other persistent identifiers—from the electronic communications transmitted by Plaintiffs’ and  
3 California Subclass Members’ computers or smartphones. Cal. Penal Code § 638.50(b); *see also*  
4 *Shah*, 2024 WL 4539577, at \*3; *Mirmalek*, 2024 WL 4102709, at \*3.

5 348. At all relevant times, Defendant installed the Microsoft Pixels—which are pen  
6 registers—on Plaintiffs’ and California Subclass Members’ browsers, which enabled Defendant to  
7 collect Plaintiffs’ and California Subclass Members’ IP addresses, geolocation, device information,  
8 and other persistent identifiers from the websites they visited. Defendant then used the pixels to  
9 build comprehensive user profiles, which were used to unjustly enrich Defendant and its clients by  
10 linking and enhancing Plaintiffs’ and California Subclass Members’ data when it is provided to  
11 advertisers through the real-time bidding process.

12 349. Plaintiffs and California Subclass Members did not provide their prior consent to  
13 Defendant’s installation or use of the pixels or any other tracking technology at issue.

14 350. Defendant did not obtain a court order to install or use the pixels or other tracking  
15 technology at issue.

16 351. Pursuant to Cal. Penal Code § 637.2, Plaintiffs and California Subclass Members have  
17 been injured by Defendant’s violations of CIPA § 638.51(a), and each seeks statutory damages of  
18 \$5,000 for each of Defendant’s violations of CIPA § 638.51(a).

19 **COUNT IV**  
20 **Unjust Enrichment**

21 352. Plaintiffs repeat the allegations contained in the foregoing paragraphs as if fully set  
22 forth herein.

23 353. Plaintiffs bring this claim individually and on behalf of the Class against Defendant  
24 and on behalf of the California Subclass against Defendant.

25 354. In both cases, Plaintiffs bring this claim pursuant to California law.

26 355. Defendant has wrongfully and unlawfully trafficked in the named Plaintiffs’ and  
27 Class Members’ personal information and other personal data without their consent for substantial  
28 profits.

1 356. Plaintiffs' and Class Members' personal information and data have conferred an  
2 economic benefit on Defendant, which was collected and used by Defendant without consent.

3 357. Defendant has been unjustly enriched at the expense of Plaintiffs and Class Members,  
4 and has unjustly retained the benefits of its unlawful and wrongful conduct.

5 358. It would be inequitable and unjust for Defendant to be permitted to retain any of the  
6 unlawful proceeds resulting from its unlawful and wrongful conduct.

7 359. Plaintiffs and Class Members accordingly are entitled to equitable relief including  
8 restitution and disgorgement of all revenues, earnings, and profits that Defendant obtained as a result  
9 of its unlawful and wrongful conduct.

10 360. When a defendant is unjustly enriched at the expense of a plaintiff, the plaintiff may  
11 recover the amount of the defendant's unjust enrichment even if plaintiff suffered no corresponding  
12 loss, and plaintiff is entitled to recovery upon a showing of merely a violation of legally protected  
13 rights that enriched a defendant.

14 361. Defendant has been unjustly enriched by virtue of its violations of Plaintiffs' and  
15 California Class members' legally protected rights to privacy as alleged herein, entitling Plaintiffs  
16 and California Class members to restitution of Defendant's enrichment. "[T]he consecrated formula  
17 'at the expense of another' can also mean 'in violation of the other's legally protected rights,' without  
18 the need to show that the claimant has suffered a loss." RESTATEMENT (THIRD) OF RESTITUTION § 1,  
19 cmt. a.

20 362. Defendant was aware of the benefit conferred by Plaintiffs. Indeed, Defendant's data-  
21 brokerage products are premised entirely on the sale of such data to third parties. Defendant therefore  
22 acted in conscious disregard of the rights of Plaintiffs and Class and California Subclass Members  
23 and should be required to disgorge all profit obtained therefrom to deter Defendant and others from  
24 committing the same unlawful actions again.

25 **COUNT V**  
26 **Violation of the Electronic Communications Privacy Act**  
27 **18 U.S.C. § 2511(1), *et seq***

28 363. Plaintiffs repeat the allegations contained in the foregoing paragraphs as if fully set  
forth herein.

1 364. Plaintiffs bring this claim individually and on behalf of the Class against Defendant  
2 and on behalf of the California Subclass against Defendant.

3 365. The Electronic Communications Privacy Act (“ECPA”) prohibits the intentional  
4 interception of the content of any electronic communication. 18 U.S.C. § 2511.

5 366. The ECPA protects both sending and the receipt of communications.

6 367. 18 U.S.C. § 2520(a) provides a private right of action to any person whose wire or  
7 electronic communications are intercepted, disclosed, or intentionally used in violation of Chapter  
8 119.

9 368. The transmission of Plaintiffs’ website page visits, selections, bookings, appointment  
10 information, purchases and persistent identifiers to each website each qualify as a “communication”  
11 under the ECPA’s definition of 18 U.S.C. § 2510(12).

12 369. The transmission of this information between Plaintiff and Class members and each  
13 website with which they chose to exchange communications are “transfer[s] of signs, signals,  
14 writing,...data, [and] intelligence of [some] nature transmitted in whole or in part by a wire, radio,  
15 electromagnetic, photoelectronic, or photooptical system that affects interstate commerce” and are  
16 therefore “electronic communications” within the meaning of 18 U.S.C. § 2510(12).

17 370. The ECPA defines “contents,” when used with respect to electronic communications,  
18 to “include[] any information concerning the substance, purport, or meaning of that communication.”  
19 18 U.S.C. 18 U.S.C. § 2510(8).

20 371. The ECPA defines an interception as the “acquisition of the contents of any wire,  
21 electronic, or oral communication through the use of any electronic, mechanical, or other device.”  
22 18 U.S.C. § 2510(4).

23 372. The ECPA defines “electronic, mechanical, or other device,” as “any device...which  
24 can be used to intercept a[n]...electronic communication.” 18 U.S.C. § 2510(5).

25 373. The following instruments constitute “devices” within the meaning of the ECPA:

- 26 (a) The Adnxs Pixel;  
27 (b) The Bing Pixel;  
28 (c) Any other tracking code or SDK used by Defendant;

1 (d) Each Partner Pixel.

2 374. Plaintiff and Class Members' interactions with each website are electronic  
3 communications under the ECPA.

4 375. By utilizing the Adnxs Pixel and Bing Pixel, as described herein, Defendant  
5 intentionally intercepted, endeavored to intercept, and/or procured another person to intercept, the  
6 electronic communications of Plaintiff and Class members in violation of 18 U.S.C. § 2511(1)(a).

7 376. Defendant intercepted communications that include, but are not limited to,  
8 communications to/from Plaintiff and Class members regarding their health, travel, shopping habits,  
9 consumption of media, geolocation, and many more. This confidential information is then added to  
10 consumer profiles and monetized for targeted advertising purposes, among other things.

11 377. By intentionally using, or endeavoring to use, the contents of Plaintiffs' and Class  
12 Members' electronic communications, while knowing or having reason to know that the information  
13 was obtained through the interception of an electronic communication in violation of 18 U.S.C. §  
14 2511(1)(a), Defendant violated 18 U.S.C. § 2511(1)(d).

15 378. Defendant intentionally intercepted the contents of Plaintiffs' and Class Members'  
16 electronic communications for the purpose of committing a criminal or tortious act in violation of  
17 the Constitution or laws of the United States or of any state, namely, invasion of privacy, intrusion  
18 upon seclusion, CIPA, and other state wiretapping and data privacy laws, among others.

19 379. The party exception in 18 U.S.C. § 2511(2)(d) does not permit a party that intercepts  
20 or causes interception to escape liability if the communication is intercepted for the purpose of  
21 committing any tortious or criminal act in violation of the Constitution or laws of the United States  
22 or of any State. Here, as alleged above, "[t]he association of Plaintiffs' data with preexisting user  
23 profiles is a further use of Plaintiffs' data that satisfies [the crime-tort] exception," because it  
24 "violate[s] state law, including the [CIPA], intrusion upon seclusion, and invasion of privacy."  
25 *Brown v. Google, LLC*, 525 F. Supp. 3d 1049, 1067 (N.D. Cal. 2021); *see also Marden v. LMND*  
26 *Medical Group, Inc.*, 2024 WL 4448684, at \*2 (N.D. Cal. July 3, 2024); *R.C. v. Walgreen Co.*, 733  
27 F. Supp. 3d 876, 902 (C.D. Cal. 2024).



1 380. Defendant was not acting under the color of law to intercept Plaintiff's and Class  
2 members' wire or electronic communications.

3 381. Plaintiffs and Class Members did not authorize Defendant to acquire the content of  
4 their communications for purposes of invading Plaintiffs' and Class Members' privacy. Plaintiff and  
5 Class members had a reasonable expectation that Defendant would not intercept their  
6 communications and sell their data to dozens of parties without their knowledge or consent.

7 382. The foregoing acts and omission therefore constitute numerous violations of 18  
8 U.S.C. § 2511(1), *et seq.*

9 383. As a result of each and every violation thereof, on behalf of herself and the Class,  
10 Plaintiffs seek statutory damages of \$10,000 or \$100 per day for each violation of 18 U.S.C. § 2510,  
11 *et seq.* under 18 U.S.C. § 2520.

12 **PRAAYER FOR RELIEF**

13 WHEREFORE, Plaintiffs, on behalf of themselves and all Class Members, seek judgment  
14 against Defendant, as follows:

- 15 (a) For an order certifying the Classes pursuant to Fed. R. Civ.  
16 P. 23, naming Plaintiffs as the representatives of the Classes,  
17 and naming Plaintiffs' attorneys as Class Counsel to  
18 represent the Classes.
- 19 (b) For an order finding in favor of Plaintiffs and the Classes on  
20 all counts asserted herein;
- 21 (c) For compensatory, punitive, and statutory damages in  
22 amounts to be determined by the Court and/or jury;
- 23 (d) For pre- and post-judgment interest on all amounts awarded;  
24 and
- 25 (e) For an order awarding Plaintiffs and the Class their  
26 reasonable attorneys' fees and expenses and costs of suit.

27 **JURY TRIAL DEMANDED**

28 Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs demand a trial by jury of all issues so triable.

1 Dated: April 1, 2025

Respectfully submitted,

2 By: /s/ Wright A. Noel  
3 Wright A. Noel

4 **CARSON NOEL PLLC**  
5 Wright A. Noel (WSBA #25264)  
6 20 Sixth Avenue NE  
7 Issaquah, WA 98027  
8 Telephone: (425) 395-7786  
9 Email: wright@carsonnoel.com

10 **BURSOR & FISHER, P.A.**  
11 Philip L. Fraietta (*Pro Hac Vice* forthcoming)  
12 Max S. Roberts (*Pro Hac Vice* forthcoming)  
13 Victoria X. Zhou (*Pro Hac Vice* forthcoming)  
14 1330 Avenue of the Americas, 32nd Floor  
15 New York, NY 10019  
16 Telephone: (646) 837-7408  
17 Facsimile: (212) 989-9163  
18 Email: pfraietta@bursor.com  
19 mroberts@bursor.com  
20 vzhou@bursor.com

21 **BURSOR & FISHER, P.A.**  
22 Joshua R. Wilner (*Pro Hac Vice* forthcoming)  
23 1990 North California Blvd., 9th Floor  
24 Walnut Creek, CA 94596  
25 Telephone: (925) 300-4455  
26 Facsimile: (925) 407-2700  
27 E-mail: jwilner@bursor.com

28 *Attorneys for Plaintiffs*

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

STACY PENNING, ET AL., individually and on behalf of all others similarly situated.

(b) County of Residence of First Listed Plaintiff (EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)

Carson & Noel PLLC, 20 Sixth Avenue NE, Issaquah, WA 98027; (425) 395-7786

DEFENDANTS

MICROSOFT CORORATION

County of Residence of First Listed Defendant KING (IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- 1 U.S. Government Plaintiff, 2 U.S. Government Defendant, 3 Federal Question (U.S. Government Not a Party), 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- Citizen of This State, Citizen of Another State, Citizen or Subject of a Foreign Country, PTF DEF, 1 1, 2 2, 3 3, 4 4, 5 5, 6 6

IV. NATURE OF SUIT (Place an "X" in One Box Only)

Click here for: Nature of Suit Code Descriptions.

Table with columns: CONTRACT, REAL PROPERTY, TORTS, CIVIL RIGHTS, PRISONER PETITIONS, FORFEITURE/PENALTY, LABOR, IMMIGRATION, BANKRUPTCY, INTELLECTUAL PROPERTY RIGHTS, SOCIAL SECURITY, FEDERAL TAX SUITS, OTHER STATUTES. Includes various legal categories and checkboxes.

V. ORIGIN (Place an "X" in One Box Only)

- 1 Original Proceeding, 2 Removed from State Court, 3 Remanded from Appellate Court, 4 Reinstated or Reopened, 5 Transferred from Another District, 6 Multidistrict Litigation - Transfer, 8 Multidistrict Litigation - Direct File

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity): 28 U.S.C. § 1332(d)(2)(A)
Brief description of cause: Intrusion Upon Seclusion

VII. REQUESTED IN COMPLAINT:

CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P. DEMAND \$ 5,000,000 CHECK YES only if demanded in complaint: JURY DEMAND: Yes No

VIII. RELATED CASE(S) IF ANY

(See instructions): JUDGE DOCKET NUMBER

DATE SIGNATURE OF ATTORNEY OF RECORD

April 1, 2025 /s/ Wright A. Noel

FOR OFFICE USE ONLY

RECEIPT # AMOUNT APPLYING IFP JUDGE MAG. JUDGE

**INSTRUCTIONS FOR ATTORNEYS COMPLETING CIVIL COVER SHEET FORM JS 44**

## Authority For Civil Cover Sheet

The JS 44 civil cover sheet and the information contained herein neither replaces nor supplements the filings and service of pleading or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. Consequently, a civil cover sheet is submitted to the Clerk of Court for each civil complaint filed. The attorney filing a case should complete the form as follows:

- I.(a) Plaintiffs-Defendants.** Enter names (last, first, middle initial) of plaintiff and defendant. If the plaintiff or defendant is a government agency, use only the full name or standard abbreviations. If the plaintiff or defendant is an official within a government agency, identify first the agency and then the official, giving both name and title.
- (b) County of Residence.** For each civil case filed, except U.S. plaintiff cases, enter the name of the county where the first listed plaintiff resides at the time of filing. In U.S. plaintiff cases, enter the name of the county in which the first listed defendant resides at the time of filing. (NOTE: In land condemnation cases, the county of residence of the "defendant" is the location of the tract of land involved.)
- (c) Attorneys.** Enter the firm name, address, telephone number, and attorney of record. If there are several attorneys, list them on an attachment, noting in this section "(see attachment)".
- II. Jurisdiction.** The basis of jurisdiction is set forth under Rule 8(a), F.R.Cv.P., which requires that jurisdictions be shown in pleadings. Place an "X" in one of the boxes. If there is more than one basis of jurisdiction, precedence is given in the order shown below.
- United States plaintiff. (1) Jurisdiction based on 28 U.S.C. 1345 and 1348. Suits by agencies and officers of the United States are included here. United States defendant. (2) When the plaintiff is suing the United States, its officers or agencies, place an "X" in this box.
- Federal question. (3) This refers to suits under 28 U.S.C. 1331, where jurisdiction arises under the Constitution of the United States, an amendment to the Constitution, an act of Congress or a treaty of the United States. In cases where the U.S. is a party, the U.S. plaintiff or defendant code takes precedence, and box 1 or 2 should be marked.
- Diversity of citizenship. (4) This refers to suits under 28 U.S.C. 1332, where parties are citizens of different states. When Box 4 is checked, the citizenship of the different parties must be checked. (See Section III below; **NOTE: federal question actions take precedence over diversity cases.**)
- III. Residence (citizenship) of Principal Parties.** This section of the JS 44 is to be completed if diversity of citizenship was indicated above. Mark this section for each principal party.
- IV. Nature of Suit.** Place an "X" in the appropriate box. If there are multiple nature of suit codes associated with the case, pick the nature of suit code that is most applicable. Click here for: [Nature of Suit Code Descriptions](#).
- V. Origin.** Place an "X" in one of the seven boxes.
- Original Proceedings. (1) Cases which originate in the United States district courts.
- Removed from State Court. (2) Proceedings initiated in state courts may be removed to the district courts under Title 28 U.S.C., Section 1441.
- Remanded from Appellate Court. (3) Check this box for cases remanded to the district court for further action. Use the date of remand as the filing date.
- Reinstated or Reopened. (4) Check this box for cases reinstated or reopened in the district court. Use the reopening date as the filing date.
- Transferred from Another District. (5) For cases transferred under Title 28 U.S.C. Section 1404(a). Do not use this for within district transfers or multidistrict litigation transfers.
- Multidistrict Litigation – Transfer. (6) Check this box when a multidistrict case is transferred into the district under authority of Title 28 U.S.C. Section 1407.
- Multidistrict Litigation – Direct File. (8) Check this box when a multidistrict case is filed in the same district as the Master MDL docket.
- PLEASE NOTE THAT THERE IS NOT AN ORIGIN CODE 7.** Origin Code 7 was used for historical records and is no longer relevant due to changes in statute.
- VI. Cause of Action.** Report the civil statute directly related to the cause of action and give a brief description of the cause. **Do not cite jurisdictional statutes unless diversity.** Example: U.S. Civil Statute: 47 USC 553 Brief Description: Unauthorized reception of cable service.
- VII. Requested in Complaint.** Class Action. Place an "X" in this box if you are filing a class action under Rule 23, F.R.Cv.P.
- Demand. In this space enter the actual dollar amount being demanded or indicate other demand, such as a preliminary injunction.
- Jury Demand. Check the appropriate box to indicate whether or not a jury is being demanded.
- VIII. Related Cases.** This section of the JS 44 is used to reference related cases, if any. If there are related cases, insert the docket numbers and the corresponding judge names for such cases.

**Date and Attorney Signature.** Date and sign the civil cover sheet.

AO 440 (Rev. 06/12) Summons in a Civil Action

UNITED STATES DISTRICT COURT

for the

Western District of Washington



STACY PENNING, SUNGGIL HONG, LAURA BONETTI, JONATHAN FINESTONE, TANISHA DANTIGNAC AND ROBERT MASON, individually and on behalf of all others similarly situated,

Plaintiff(s)

v.

MICROSOFT CORPORATION,

Defendant(s)

Civil Action No.

SUMMONS IN A CIVIL ACTION

To: (Defendant's name and address) Microsoft Corporation Corporation Service Company 300 Deschutes Way SW, Suite 208 MC-CSC1 Tumwater, WA 98501

A lawsuit has been filed against you.

Within 21 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are:

Wright A. Noel Carson & Noel PLLC 20 Sixth Avenue NE Issaquah, WA 98027

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

CLERK OF COURT

Date: \_\_\_\_\_

Signature of Clerk or Deputy Clerk

AO 440 (Rev. 06/12) Summons in a Civil Action (Page 2)

Civil Action No. \_\_\_\_\_

**PROOF OF SERVICE**

*(This section should not be filed with the court unless required by Fed. R. Civ. P. 4 (l))*

This summons for *(name of individual and title, if any)* \_\_\_\_\_  
was received by me on *(date)* \_\_\_\_\_ .

I personally served the summons on the individual at *(place)* \_\_\_\_\_  
\_\_\_\_\_ on *(date)* \_\_\_\_\_ ; or

I left the summons at the individual's residence or usual place of abode with *(name)* \_\_\_\_\_  
\_\_\_\_\_, a person of suitable age and discretion who resides there,  
on *(date)* \_\_\_\_\_ , and mailed a copy to the individual's last known address; or

I served the summons on *(name of individual)* \_\_\_\_\_ , who is  
designated by law to accept service of process on behalf of *(name of organization)* \_\_\_\_\_  
\_\_\_\_\_ on *(date)* \_\_\_\_\_ ; or

I returned the summons unexecuted because \_\_\_\_\_ ; or

Other *(specify)*:

My fees are \$ \_\_\_\_\_ for travel and \$ \_\_\_\_\_ for services, for a total of \$ \_\_\_\_\_ 0.00 \_\_\_\_\_ .

I declare under penalty of perjury that this information is true.

Date: \_\_\_\_\_

\_\_\_\_\_  
*Server's signature*

\_\_\_\_\_  
*Printed name and title*

\_\_\_\_\_  
*Server's address*

Additional information regarding attempted service, etc: