# Fordham Intellectual Property, Media and Entertainment Law Journal

Volume 29 XXIX Number 1

Article 4

2019

# **Privacy in Gaming**

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#### **Recommended Citation**

N. Cameron Russell, Joel R. Reidenberg, and Sumyung Moon, Privacy in Gaming, 29 Fordham Intell. Prop. Media & Ent. L.J. 61 (2019).

Available at: https://ir.lawnet.fordham.edu/iplj/vol29/iss1/4

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# **Cover Page Footnote**

A grant from the Digital Trust Foundation to the Center on Law and Information Policy at the Fordham University School of Law, New York, NY (Fordham CLIP) supported work on this study. Fordham CLIP would also like to thank Graham Russell for his input on these contents. The views and opinions expressed in this report are those of the authors and are not presented as those of any of the sponsoring organizations or financial supporters of those organizations. Any errors and omissions are the responsibility of the authors. © 2018 Fordham Center on Law and Information Policy. This study may be reproduced, in whole or in part, for educational and non-commercial purposes provided that attribution to Fordham CLIP is included.

# Privacy in Gaming

N. Cameron Russell, Joel R. Reidenberg, & Sumyung Moon\*

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FORDHAM INTELL, PROP. MEDIA & ENT. L.J.

[Vol. XXIX:61

62

#### I. Introduction

Video games appeal to all people regardless of age. However, game developers tend to market their products most heavily towards minors, one of the more substantial demographics of gamers. Children are also more willing to trade their personal data in exchange for something else, and gaming platforms and business models are increasingly built upon collection, use and sharing of personal information for purposes of both functionality and revenue. The goal of this study is to examine present-day

<sup>&</sup>lt;sup>1</sup> See Entertainment Software Association, 2017 Sales, Demographic and Usage Data, ESSENTIAL FACTS ABOUT THE COMPUTER AND VIDEO GAME INDUSTRY 1, 7 (2017), http://www.theesa.com/wp-content/uploads/2017/09/EF2017\_Design\_FinalDigital.pdf [https://perma.cc/D98Z-FBLL].

<sup>&</sup>lt;sup>2</sup> Dan Graziano, *Study Shows Major Generational Divide on Online Privacy Attitudes*, BGR (Apr. 25, 2013), http://bgr.com/2013/04/25/online-piracy-study-young-adults-465164 [https://perma.cc/5FU9-HUSS] ("The fact that Millennials are willing to part with personal information creates new opportunities for businesses to develop marketing models that capitalize on the wants of this generation of Internet users.").

<sup>&</sup>lt;sup>3</sup> See 2017 Sales, Demographic and Usage Data, supra note 1.

<sup>&</sup>lt;sup>4</sup> See Children's Data Protection and Parental Consent, ADVERTISING EDUCATION FORUM 1, 4 (2013), http://www.aeforum.org/gallery/5248813.pdf [https://perma.cc/BB88-82QU] ("As children are increasingly exposed to social networks and online activities, they are also exposed to greater risks on the Internet, especially through the inadvertent disclosure of their personal contact details. Children younger than 11 reported to be less aware of privacy settings, while only 26% of children aged between 11 and 16 said they take online privacy precautions. Young children may not, in most cases, understand the nature of the information being sought or the intended purposes for collection. They represent a vulnerable group, and should be protected accordingly.").

See Joe Newman, Press Start to Track?: Privacy and the New Questions Posed by Modern Video Game Technology, 42 AIPLA Q. J. 527, 567 (2014) ("Using player data to better predict purchasing needs outside the game environment can provide convenience and value to both the player and seller. It can also provide an important source of revenue for the developer, which will become increasingly necessary as more games become free-to-play."); see also Alicia Shiu, Zynga Analytics at its Peak, AMPLITUDE (June 24, 2015), https://amplitude.com/blog/2015/06/24/zynga-analytics-at-its-peak

<sup>[</sup>https://perma.cc/M3KJ-RFC7] ("Zynga optimized for monetization by creating buildables that had a number of parts just a bit out of reach of a users' friend network. That way, a player would get most of the parts from their friends, but would be unlikely to gather all of the parts from their network. Since they were so close to completion, they would just pay for the last one or two parts to complete the buildable . . . [Zynga] built its own data tracking infrastructure, dubbed ZTrack, at a time when such advanced

privacy issues in gaming. Specifically, the project explores data practices and policy statements of the most popular games and gaming platforms on mobile, console, and virtual reality ("VR") devices. After objectively selecting major players in gaming and providing an overview of the privacy legal landscape potentially governing them, the study then observes how modern gaming aligns with information privacy notions and norms and how data practices and technologies specific to gaming may affect users and, in particular, child gamers.

## II. RESEARCH METHODOLOGY

Fordham CLIP developed a methodology to: (1) identify the currently most popular games, consoles, and platforms; (2) investigate the data practices and capabilities of the identified games, consoles, and platforms by examining the (a) technical specifications, (b) privacy policies, and (c) media coverage and other publicly-available information for each; and (3) draw conclusions from the research results about privacy in popular gaming, especially those aspects which might particularly affect child gamers.

# A. Selection of Games and Devices for Investigation

To investigate data practices of major players in modern gaming, Fordham CLIP noted three separate market segments: mobile games, traditional video game console,<sup>6</sup> and VR platforms.<sup>7</sup>

solutions were pretty much unheard of. Zynga used this data to optimize and improve their games  $\dots$ ").

Fordham CLIP observed that personal computer (PC) gaming would likely fit into the category of traditional video game consoles, but concluded that children are now much more likely to play games on platforms other than PCs. *See, e.g.*, Lance Whitney, *Kids Pick Mobile Devices over PCs, Consoles for Gaming*, CNET (Sept. 23, 2015), https://www.cnet.com/news/kids-now-pick-mobile-devices-over-pcs-consoles-for-gaming-npd-group [https://perma.cc/9FGK-DDC6]. Thus, Fordham CLIP did not specifically investigate PC gaming in its research except to the extent that PCs are utilized for VR gaming. *See infra* Part II.A.3 and Part IV.E.

Augmented reality gaming occurs within each of these three categories: mobile (e.g. Pokémon Go), traditional consoles (e.g. The Playroom for Playstation 4), and VR platforms (e.g. ZED Mini camera attachment). *See Catching Pokémon in AR+ Mode (iOS only)*, https://support.pokemongo.nianticlabs.com/hc/en-us/articles/115015868188-Catching-Pok%C3%A9mon-in-AR-mode-iOS-only- [https://perma.cc/JW6D-ZQJC] (last

Within these segments, Fordham CLIP identified the currently most popular mobile games, traditional video game consoles, and VR platforms based upon recent sales data.

Fordham CLIP approached each of these market segments separately in its research. The platform in mobile gaming is the mobile device; thus, rather than focus on data practices and capabilities of mobile devices generally, Fordham CLIP instead sought to research the most popular game splayed on mobile devices. Mobile devices are equipped to do many things outside of game-playing; analysis of all the various data practices and capabilities of a mobile device and mobile network would be overly-broad in reaching conclusions about mobile gaming specifically. However, Fordham CLIP's research of gaming in traditional consoles and VR platforms was platform-driven instead of game-focused, as traditional game consoles and VR platforms are built primarily for gaming and its interrelated functionality. Therefore, unlike the mobile game market, we are able to draw more meaningful conclusions about privacy practices in modern console and VR gaming by analyzing these platforms, which both are designed principally for gaming and provide the bottleneck for data collection and use capabilities of console and VR games.

#### 1. Mobile Games

Mobile devices are now most popular for gaming among children.<sup>8</sup> To select games for further research in the mobile market, Fordham CLIP chose those at the top of the app rankings provided by the Apple Store and Google Play Store. Both app stores published rankings of top grossing game apps, and these operated as a basis for intelligence firms to estimate app revenues.<sup>9</sup>

visited Jan. 30, 2018); The Playroom, https://www.playstation.com/en-us/games/the-playroom-ps4/ [https://perma.cc/5HKU-MLZ7] (last visited Jan. 30, 2018); *Meet ZED Mini, the World's First Camera for Mixed-reality*, https://www.stereolabs.com/zed-mini/[https://perma.cc/A4LM-RJ47] (last visited Jan. 30, 2018).

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Whitney, *supra* note 6.

<sup>&</sup>lt;sup>9</sup> Anuj Tandon, *Impact of the New Apple App Store on App Developers*, ET TECH (June 10, 2017), http://tech.economictimes.indiatimes.com/catalysts/impact-of-the-new-apple-app-store-on-app-developers/2411 [https://perma.cc/TP4X-AN9D].

Fordham CLIP accessed the top grossing charts for mobile games through App Annie. Using App Annie's Market Intelligence tool, Fordham CLIP filtered the results by selecting "Games" for the category of apps, "United States" for the country, and June 2017 as the date filter.

The following two tables represent the daily rankings of the top-five grossing games in June 2017 in the Apple Store and Google Play Store as of June 25, 2017. Games appearing within the top five for the first time between June 1 and June 25, 2017 are noted with asterisks (\*) and the developers of these mobile games are stated in parenthesis. *See* Tables 1, 2.

TABLE 1

Top Grossing Games in the Apple Store – June 2017									
Rank Date	1	2	3	4	5				
June 1, 2017	*Clash of Clans	*Clash Royale	*Candy Crush Saga	*Game of War – Fire	*Mobile Strike (Epic				
	(Supercell)	(Supercell)	(King)	Age (MZ)	War)				
June 2, 2017	Clash of Clans	Clash Royale	Game of War – Fire Age	Candy Crush Saga	Mobile Strike				
June 3, 2017	Clash of Clans	Clash Royale	Game of War – Fire Age	Candy Crush Saga	Mobile Strike				
June 4, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Mobile Strike	Game of War – Fire Age				
June 5, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	*Candy Crush Soda	Game of War – Fire Age				
				Saga (King)					
June 6, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Mobile Strike	Game of War – Fire Age				
June 7, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Mobile Strike	Game of War – Fire Age				
June 8, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Game of War – Fire Age	Mobile Strike				
June 9, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Mobile Strike	Game of War – Fire Age				
June 10, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Mobile Strike	Game of War – Fire Age				
June 11, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Mobile Strike	Game of War – Fire Age				
June 12, 2017	Mobile Strike	Clash of Clans	Game of War – Fire Age	Candy Crush Saga	Candy Crush Soda Saga				
June 13, 2017	Clash Royale	Clash of Clans	Candy Crush Saga	Game of War – Fire Age	*Pokémon Go (Niantic)				
June 14, 2017	Clash Royale	Clash of Clans	Candy Crush Saga	Pokémon Go	Mobile Strike				
June 15, 2017	Clash Royale	Clash of Clans	Candy Crush Saga	Pokémon Go	Game of War – Fire Age				
June 16, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Pokémon Go	Mobile Strike				
June 17, 2017	Clash Royale	Clash of Clans	Candy Crush Saga	Pokémon Go	Game of War – Fire Age				
June 18, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Pokémon Go	Game of War – Fire Age				
June 19, 2017	Clash of Clans	Clash Royale	Candy Crush Saga	Pokémon Go	Game of War – Fire Age				
June 20, 2017	Clash Royale	Clash of Clans	Candy Crush Saga	Pokémon Go	Candy Crush Soda Saga				
June 21, 2017	Candy Crush Saga	Clash Royale	Clash of Clans	Pokémon Go	Game of War – Fire Age				
June 22, 2017	Candy Crush Saga	Clash of Clans	Clash of Royale	Game of War – Fire Age	Mobile Strike				
June 23, 2017	Pokémon Go	Candy Crush Saga	Clash of Clans	Clash of Royale	Candy Crush Soda Saga				
June 24, 2017	Pokémon Go	Candy Crush Saga	Clash of Clans	Clash of Royale	Game of War – Fire Age				
June 25, 2017	Candy Crush Saga	Clash Royale	Clash of Clans	Pokémon Go	Game of War – Fire Age				

<sup>&</sup>lt;sup>10</sup> App Annie is a market intelligence firm for apps. *See* APP ANNIE, https://www.appannie.com/en/apps/ios/top [https://perma.cc/8B6E-5WGE] (last visited June 25, 2017).

Table 2

Top Grossing Games in the Google Play Store – June 2017										
Rank	1	2	3	4	5					
Date	1		3	7	,					
June 1, 2017	*Clash of Clans	*Game of War – Fire	*Clash Royale	*Mobile Strike (Epic	*Candy Crush Saga					
	(Supercell)	Age (MZ)	(Supercell)	War)	(King)					
June 2, 2017	Game of War – Fire Age	Clash Royale	Clash of Clans	Mobile Strike	Candy Crush Saga					
June 3, 2017	Game of War – Fire Age	Clash of Clans	Mobile Strike	Clash Royale	Candy Crush Saga					
June 4, 2017	Game of War – Fire Age	Clash of Clans	Mobile Strike	Candy Crush Saga	*Candy Crush Soda Saga (King)					
June 5, 2017	Game of War - Fire Age	Clash of Clans	Mobile Strike	Candy Crush Saga	Candy Crush Soda Saga					
June 6, 2017	Clash of Clans	Game of War - Fire Age	Mobile Strike	Candy Crush Saga	Candy Crush Soda Saga					
June 7, 2017	Clash of Clans	Game of War - Fire Age	Mobile Strike	Candy Crush Saga	Candy Crush Soda Saga					
June 8, 2017	Clash of Clans	Mobile Strike	Game of War - Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 9, 2017	Clash of Clans	Mobile Strike	Game of War - Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 10, 2017	Clash of Clans	Mobile Strike	Game of War - Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 11, 2017	Clash of Clans	Mobile Strike	Game of War – Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 12, 2017	Mobile Strike	Clash of Clans	Game of War – Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 13, 2017	Mobile Strike	Clash of Clans	Game of War - Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 14, 2017	Mobile Strike	Clash of Clans	Game of War – Fire Age	Candy Crush Saga	Candy Crush Soda Saga					
June 15, 2017	Game of War – Fire Age	Mobile Strike	Clash of Clans	Candy Crush Saga	Candy Crush Soda Saga					
June 16, 2017	Mobile Strike	Game of War - Fire Age	Clash of Clans	Candy Crush Saga	Candy Crush Soda Saga					
June 17, 2017	Mobile Strike	Game of War – Fire Age	Clash of Clans	Candy Crush Saga	Candy Crush Soda Saga					
June 18, 2017	Mobile Strike	Game of War – Fire Age	Candy Crush Saga	Clash of Clans	Candy Crush Soda Saga					
June 19, 2017	Mobile Strike	Game of War - Fire Age	Candy Crush Saga	Clash of Clans	*Pokémon Go (Niantic)					
June 20, 2017	Mobile Strike	Game of War – Fire Age	Candy Crush Saga	Clash of Clans	Pokémon Go					
June 21, 2017	Game of War – Fire Age	Mobile Strike	Candy Crush Saga	Pokémon Go	Clash of Clans					
June 22, 2017	Game of War – Fire Age	Mobile Strike	Candy Crush Saga	Clash of Clans	Candy Crush Soda Saga					
June 23, 2017	Game of War - Fire Age	Candy Crush Saga	Mobile Strike	Clash of Clans	Candy Crush Soda Saga					
June 24, 2017	Game of War – Fire Age	Candy Crush Saga	Mobile Strike	Clash of Clans	Candy Crush Soda Saga					
June 25, 2017	Game of War - Fire Age	Candy Crush Saga	Mobile Strike	Clash of Clans	Candy Crush Soda Saga					

In summary, there were seven mobile games appearing in the top-five grossing games in June 2017 in either the Apple Store or the Google Play Store as of June 25, 2017: Clash of Clans, Game of War Fire Age, Clash Royale, Mobile Strike, Candy Crush Saga, Candy Crush Soda Saga, and Pokémon Go. Fordham CLIP identified these mobile games as the most popular ones for analysis. Some of these seven games were developed by the same company. As a result, Fordham CLIP identified that these five mobile game developers created the seven most popular games: Supercell, MZ, Epic War, King, and Niantic.

# 2. Traditional Game Consoles

Fordham CLIP selected popular gaming consoles based upon hardware unit sales in the United States. Instead of using aggregate sales since a console's launch to market, Fordham CLIP used 2017 sales data to capture the most popular consoles more recently. Fordham CLIP accessed 2017 sales figures through VG Chartz, a

market intelligence firm specializing in console game market.<sup>11</sup> The following table shows the top selling traditional game consoles in 2017 as of June 25, 2017, as well as the total unit sales since each platform came to market.<sup>12</sup> *See* Table 3.

Table 3

Global Yearly Hardware Sales by Platform in 2017										
Platform	Company	2017 Unit Sales to Date	Total Sales Since Launch							
(1) Nintendo Switch	Nintendo	1,243,940	1,243,940							
(2) PlayStation 4	Sony	1,169,160	18,829,459							
(3) Xbox One	Microsoft	900,142	16,819,876							
(4) 3DS	Nintendo	343,183	19,258,414							
(5) Wii U	Nintendo	23,676	5,684,830							

Thus, Fordham CLIP identified these five traditional game consoles as the most popular ones for analysis: Nintendo Switch, PlayStation 4, Xbox One, 3DS, and Wii U.

# 3. Virtual Reality

Gaming on a virtual reality platform requires paring between a head-mounted display ("HMD") and a base device such as a smartphone, console, or PC. For example, HTC Vive and Oculus Rift operate with a PC, while Sony's PSVR requires the PlayStation 4. Google and Samsung offer smartphone-based headsets. Although gaming in virtual reality platforms currently requires such base devices, developers are targeting standalone virtual reality platforms for the future. 14

VGChartz (Video Game Charts) is a business intelligence and research firm and publisher of the VGChartz.com websites. As an industry research firm, VGChartz publishes over 7,000 unique estimates per week relating to worldwide game hardware and software sales and hosts an ever-expanding game database with over 40,000 titles listed and 1.5 million unique data points. The VGChartz.com website provides consumers with a range of content from news and features to reviews to social networking and community features. *About VGChartz*, VGCHARTZ, http://www.vgchartz.com/about.php [https://perma.cc/5H4H-TPQ7] (last visited July 29, 2017).

<sup>&</sup>lt;sup>12</sup> VGChartz Global Yearly 2017, VGCHARTZ, http://www.vgchartz.com/yearly/2017/Global [https://perma.cc/X8M2-FNET] (last visited July 29, 2017).

Sophie Charara, *Explained: How Does VR Actually Work?*, WAREABLE (May 22, 2017), https://www.wareable.com/vr/how-does-vr-work-explained [https://perma.cc/52ZZ-T2FF].

Kyle Orland, Google Announces Untethered, Fully Tracked, Standalone VR Headsets, ARS TECHNICA (May 17, 2017), https://arstechnica.com/gaming

To identify the most popular VR platforms, Fordham CLIP used worldwide sales data for virtual reality hardware/HMDs in the first quarter of 2017.<sup>15</sup> The following table shows these top selling VR platforms. *See* Table 4.

TABLE 4

Q1 2017 Sales <sup>16</sup>									
HMD (Base Device)	Company	Unit Sales							
(1) Gear VR (Smartphone)	Samsung	782,000							
(2) PSVR (PS4)	Sony	375,000							
(3) DayDream (Smartphone)	Google	170,000							
(4) Vive (PC)	HTC	95,000							
(5) Rift (PC)	Oculus (Facebook)	64,000							

Thus, Fordham CLIP identified five VR platforms as the most popular ones for analysis: Samsung Gear VR, Sony PSVR, Google DayDream, HTC Vive, and Oculus Rift.

#### III. U.S. LAW APPLICABLE TO DATA PRACTICES IN GAMING

Several legal frameworks in the United States are relevant to privacy in gaming.<sup>17</sup> Although there is currently no single set of

Although Fordham CLIP used U.S records for mobile and traditional consoles, we could only locate worldwide sales data for VR platforms. *See* Jeff Grubb, *Vive Outsells Rift – But Mobile and Console VR Outsell Both*, VENTURE BEAT (May 9, 2017), https://venturebeat.com/2017/05/09/vive-outsells-rift-but-mobile-and-console-vr-outsell-both [https://perma.cc/NW2F-47DK]. Venture Beat reported data from Super Data Research, a market-intelligence firm for the gaming industry. *See* SUPERDATA, https://www.superdataresearch.com [https://perma.cc/5HCM-LSFU] (last visited Aug. 2, 2017).

<sup>&</sup>lt;sup>16</sup> Venture Beat reported data from Super Data Research, a games and interactive media intelligence company that publishes data, insights, and guidance for gaming, VR, AR, and interactive entertainment markets. *See Superdata, supra* note 15.

Online Games Provide Shelter for Criminal Organizations in the Surveillance Age, 31 Ariz. J. Int'l & Comp. L. 875 (2014); Alexandra McDonald et al., Mobile Apps: Redefining the Virtual California Economy and the Laws That Govern It, 24 Competition: J. Antitrust, Unfair Competition L. & Privacy Sec. St. B. Cal. 86 (2015); Joshua A.T. Fairfield, Avatar Experimentation: Human Subjects Research in Virtual Worlds, 2 U.C. Irvine L. Rev. 695 (2012); Roya Bagheri, Virtual Reality: The Real Life Consequences, 17 U.C. Davis Bus. L. J. 101 (2016); Matthew Knopf, Privacy

rules governing gaming platforms, the Entertainment Software Rating Board "Privacy Certified" program assesses privacy risks and assists to ensure that game companies are compliant with privacy laws and regulatory frameworks. <sup>18</sup> In addition, major console manufacturers generally require a list of possible information exchanged between players and the software developer in order to approve games for play on their machine. <sup>19</sup> Similarly, companies like Apple and Google require app developers to promise to follow data guidelines as a condition of selling games on their respective app stores. <sup>20</sup>

## A. Credit Reporting and Consumer Protection

Credit reporting and consumer protection laws can apply to collection, use, and sharing of gamer data. <sup>21</sup> The Fair Credit Reporting Act ("FCRA") can apply to uses of video game data if players' personal profile or data is shared with insurers or employers and used to make credit, insurance, employment or housing determinations, game developers could be deemed "consumer reporting agencies." <sup>22</sup> Thus, if under the FCRA, game developers must take reasonable steps to ensure recipients of their player data have a permissible purpose for use of that information, take reasonable steps to ensure the highest possible accuracy of the information being collected, and provide data recipients with information about their obligations under the law. <sup>23</sup> For example, apps which "score" users based on their economic proclivities could implicate the FCRA. <sup>24</sup>

Expectations in Online Video Games: In Light of Edward Snowden's NSA Document Leak, 31 Syracuse J. Sci. & Tech. L. Rep. 98 (2015).

<sup>&</sup>lt;sup>18</sup> ESRB Privacy Certified, ENTM'T SOFTWARE RATING BD., http://www.esrb.org/privacy/ [https://perma.cc/G82G-JYPB] (last visited Jan. 30, 2018).

Newman, *supra* note 5, at 586.

<sup>20</sup> Id.; App Store Review Guidelines, APPLE, https://developer.apple.com/app-store/review/guidelines/#privacy [https://perma.cc/9KSJ-T7YA] (last visited Jan. 31, 2018); Developer Policy Center, GOOGLE PLAY, https://play.google.com/about/developer-content-policy-print/ [https://perma.cc/G6H2-C6TT] (last visited Jan. 31, 2018).

See Newman, supra note 5, at 569.

<sup>&</sup>lt;sup>22</sup> See 15 U.S.C. § 1681 (2013).

<sup>23</sup> See id.

<sup>&</sup>lt;sup>24</sup> Newman, *supra* note 5, at 575–76.

Gaming platforms' data practices are also subject to the FTC Act,<sup>25</sup> which provides that "[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are hereby declared unlawful."<sup>26</sup> The Federal Trade Commission (FTC) can bring enforcement actions against gaming and VR companies who transmit user information to third parties in violation of what their privacy policies state.<sup>27</sup> The FTC has also used its enforcement authority to pursue companies that implemented ineffective data security measures.<sup>28</sup>

# B. Protection of Children's Privacy

Legal frameworks also protect children's privacy interests generally and in the educational context.<sup>29</sup> The Children's Online Privacy Protection Act ("COPPA")<sup>30</sup> may require online services or mobile applications collecting and sharing personal information about children under thirteen to obtain verifiable parental consent and to follow a number of other data-handling requirements.<sup>31</sup> COPPA applies to any online service or mobile application directed either to children under thirteen or to general-audience services that are known to collect personal information from children under thirteen. 32 Under COPPA's definition, "personal information" can be a child's name, address, phone number, or email address, as well as any photos, videos, and audio recordings of the child and any persistent identifier such as IP address.<sup>33</sup> It is important for gaming companies to be COPPA compliant. For example, in the U.S. District Court for the Northern District of California, a complaint has been filed against Disney alleging that Disney allowed its mobile gaming app, Princess Palace Pets, to

<sup>&</sup>lt;sup>25</sup> See 15 U.S.C. § 45 (2013); Newman, supra note 5, at 583; Fairfield, supra note 17, at 759.

<sup>&</sup>lt;sup>26</sup> See 15 U.S.C. § 45 (2013).

Fairfield, *supra* note 17, at 759.

<sup>&</sup>lt;sup>28</sup> See Newman, supra note 5, at 584; see generally FTC v. Wyndham Worldwide Corp., 799 F.3d 236 (3d Cir. 2015).

See Newman, supra note 5, at 573.

<sup>&</sup>lt;sup>30</sup> See generally Children's Online Privacy Protection Act, 15 U.S.C. §§ 6501–6506 (2013).

<sup>&</sup>lt;sup>31</sup> 15 U.S.C. § 6502 (2013).

<sup>&</sup>lt;sup>32</sup> 15 U.S.C. § 6501 (2013); see Newman, supra note 5, at 573.

<sup>&</sup>lt;sup>33</sup> 15 U.S.C. § 6501 (2013); Newman, *supra* note 5, at 573.

collect and export children's personal information to advertising partners without parental consent. <sup>34</sup> The plaintiffs alleged a violation of COPPA, in addition to claims based upon California intrusion upon seclusion tort law and a state constitutional right to privacy. <sup>35</sup> Thus, COPPA has led to an increase in the use of agegates and age verification systems on mobile games. <sup>36</sup>

Children's privacy issues can also exist when data is collected and shared within the context of education.<sup>37</sup> If game developers collaborate with schools, the Family Educational Rights and Privacy Act ("FERPA")<sup>38</sup> may require educational institutions to safeguard student information and meet certain requirements prior to releasing student data to individuals and organizations outside of the school environment.<sup>39</sup> Video games are increasingly used in the classroom, and game developers should note special rules about the collection and use of data through educational institutions.<sup>40</sup>

#### C. Surveillance

When player data is shared with third parties, surveillance-related laws can be implicated. <sup>41</sup> For example, the Electronic Communications Privacy Act ("ECPA") and its Wiretap Act and Stored Communication Act ("SCA") may require game developers to comply with government requests for user data. <sup>42</sup> The Wiretap Act also makes it unlawful for any individual to intercept a communication to which they are not a party without consent. <sup>43</sup>

Also, gaming platforms could be subject to government surveillance through the Foreign Intelligence Surveillance Act

See Knopf, supra note 17, at 112.

<sup>&</sup>lt;sup>34</sup> Rushing v. The Walt Disney Co., et al., No. 3:17-cv-04419 (N.D. Cal. filed Aug. 3, 2017).

<sup>&</sup>lt;sup>35</sup> *Id.*; Jimmy H. Koo, *Disney Faces Children's Class Claims over Mobile App*, BLOOMBERG BNA (Aug. 7, 2017), https://www.bna.com/disney-faces-childrens-n73014462817 [https://perma.cc/9C7T-XV7V].

See Newman, supra note 5, at 574.

<sup>&</sup>lt;sup>37</sup> See Id., at 574–75.

See Family Educational Rights and Privacy Act, 20 U.S.C. § 1232 (2013).

<sup>&</sup>lt;sup>39</sup> *See* Newman, *supra* note 5, at 574–75.

<sup>10</sup> See id.

<sup>&</sup>lt;sup>42</sup> Electronic Communications Privacy Act, 18 U.S.C. §§ 2510–2522 (2013); Knopf, supra note 17, at 112.

Wiretap Act, 18 U.S.C. § 2511 (2013); Knopf, *supra* note 17, at 112.

("FISA"), which gives procedures to the government to conduct physical and electronic surveillance of "foreign intelligence information" between foreign powers and agents of foreign powers. 44 While conducting surveillance on foreign targets, the government can incidentally obtain data on United States citizens through private computers and video game consoles during gaming. 45

#### D. State Laws

State law can impose additional requirements for the protection of privacy. 46 For example, the California Online Privacy Protection Act ("CalOPPA") requires any entity collecting information from California residents to inform consumers about their specific online data practices, including how they respond to browser "Do Not Track" signals. 47 In addition, Illinois enacted its Biometric Information Privacy Act ("BIPA"), which addresses the collection, use, safeguarding, handling, storage retention, and destruction of biometric identifiers and applies to private entities. 48 However, there is currently no federal legislative framework that addresses collection of biometrics. 49

### IV. ANALYSIS

To research data practices and make observations about privacy in modern gaming, Fordham CLIP surveyed the technical specifications, privacy policies, and other publicly-available

<sup>&</sup>lt;sup>44</sup> See Foreign Intelligence Surveillance Act, 50 U.S.C. § 1801-85c (2013); Knopf, supra note 17, at 113.

See Knopf, supra note 17, at 113.

See Newman, supra note 5, at 584.

<sup>&</sup>lt;sup>47</sup> See Cal. Business & Professions Code §§ 22575-79 (2004); see Newman, supra note 5, at 584.

<sup>&</sup>lt;sup>48</sup> See 740 ILCS 14/5 (2008).

<sup>&</sup>lt;sup>49</sup> Biometric Data and the General Data Protection Regulation, GEMALTO, https://www.gemalto.com/govt/biometrics/biometric-data [https://perma.cc/CB53-25YC] (last updated Aug. 20, 2018).

information for each of the mobile games,<sup>50</sup> traditional consoles,<sup>51</sup> and VR platforms<sup>52</sup> identified in Section II.<sup>53</sup>

# A. Discrepancy Between Age Rating and Privacy Policy Restriction

For the mobile games, the Apple App Store and Google Play Store state age ratings ranging from "Everyone" to "12 plus."<sup>54</sup> However, four of the mobile game developers (Supercell, <sup>55</sup> King, <sup>56</sup> MZ, <sup>57</sup> and Epic War<sup>58</sup>) state in their privacy policies that users must be at least 13 years old to access and/or use their games and that these companies do not knowingly collect personal data about children under the age of 13. <sup>59</sup> Undoubtedly, these privacy policy statements are boilerplate language to attempt to avoid COPPA governance. <sup>60</sup> Practically, however, Supercell, King, MZ, and Epic War mobile games cannot both be *endorsed for* and *prohibited from* play by those under the age of 13. In addition to being paradoxical academically, this contradiction may cause real world confusion for parents of gamers.

# B. Collection and Sharing of Data by Gaming Companies

All of the mobile games in Fordham CLIP's data set collect location information. According to the Google Play Store's

<sup>&</sup>lt;sup>50</sup> Appendix A contains Fordham CLIP's methodological approach, as well as detailed tables summarizing its analysis of technical specifications and privacy policies for each mobile game identified in Section II. *See infra* Appendix A.

Appendix B contains Fordham CLIP's methodological approach, as well as detailed tables summarizing its analysis of technical specifications and privacy policies for each traditional game console identified in Section II. *See infra* Appendix B.

Appendix C contains Fordham CLIP's methodological approach, as well as detailed tables summarizing its analysis of technical specifications and privacy policies for each virtual reality platform identified in Section II. *See infra* Appendix C.

For references used in Tables 1 to 10 in Appendices A, B, and C, Fordham CLIP used endnotes for readability. To distinguish footnotes used in the body of the report, Fordham CLIP adopted double byte numbering for references in these Appendices.

<sup>54</sup> See infra Appendix A, Table 5.

<sup>55</sup> See infra Appendix A, Table 6.

<sup>56</sup> See infra Appendix A, Table 6.

<sup>57</sup> See infra Appendix A, Table 6.

See infra Appendix A, Table 6.

<sup>59</sup> See infra endnotes 33–36.

<sup>60</sup> See supra Part III.B.

Permission Group identification, mobile games Game of War, Mobile Strike, and Pokémon Go can use device's "approximate" location based on network, whereas Clash of Clans, Clash Royale, Candy Crush Saga, and Candy Crush Soda Saga do not. 61 In addition to the approximate location, Pokémon Go can use a device's "precise" location based on GPS and mobile network access. 62

In addition, some mobile games examined by Fordham CLIP may require that users grant permission to locate and access accounts or a Smartphone's contacts. Candy Crush Saga, Candy Crush Soda Saga, Game of War, Mobile Strike, and Pokémon Go may seek permission to locate accounts on a device. <sup>63</sup> Candy Crush Soda Saga may seek permission to access a smartphone user's contacts. <sup>64</sup> All of the mobile games examined may utilize tracking technologies like cookies, web beacons, scripts, and tags. <sup>65</sup> Fordham CLIP's examination of the mobile games in its sample set also evidenced a substantial ability for sharing of user data. For example, all seven of the mobile games carve out an ability for sharing user data with advertising platforms and partners. <sup>66</sup>

Three of the five traditional gaming consoles (Switch, PS4, and Xbox One) collect location information from users.<sup>67</sup> However, all five of the consoles (i) collect user-created content such as messages, images, audio, and video, (ii) collect payment information and purchase histories, (iii) use tracking technologies such as cookies, web beacons, scripts, and tags, (iv) use player information for marketing and advertising purposes, (v) share user information with affiliates and advertising platforms, and (vi) provide an opt-out from receiving promotions and advertisements.68

<sup>61</sup> See infra Appendix A, Table 5.

<sup>62</sup> See infra Appendix A, Table 5.

<sup>63</sup> See infra Appendix A, Table 5.

<sup>64</sup> See infra Appendix A, Table 5.

<sup>65</sup> See infra Appendix A, Table 6.

See infra Appendix A, Table 6.
 See infra Appendix B, Table 8.

<sup>68</sup> See infra Appendix A, Table 8.

With respect to data collection and sharing by VR companies, all five (i) collect payment and location information, (ii) use tracking technologies like cookies, beacons, scripts, and tags, (iii) use player information for marketing and advertising purposes, and (iv) share user information with affiliates.<sup>69</sup> Three of the five VR platforms collect purchase histories (PSVR, DayDream, and Rift) and user-generated content (PSVR, Vive, and Rift).<sup>70</sup> Four of the five VR platforms state in their privacy policies that there is an ability to opt out from marketing to the user (Gear VR, PSVR, DayDre am, and Vive).<sup>71</sup>

#### C. Cameras

Console platform games frequently integrate cameras and use captured images to enhance immersion in game worlds.<sup>72</sup> Nintendo products Wii U, 3DS, and Switch all come with built-in cameras in their basic platforms.<sup>73</sup> PlayStation 4 and Xbox One do not have cameras built into the console.<sup>74</sup> However, PS4 and Xbox users can purchase additional camera accessories such as the PlayStation Camera <sup>75</sup> or Xbox Kinect <sup>76</sup> to use game features that require camera capabilities.

With a camera enabled, players can enhance the gaming experience in various ways. For example, the PlayStation Camera's 3D depth-sensing technology can track a user's body. Users can also personalize gameplay livestreams with pictures and videos. <sup>78</sup> In addition, the PlayStation Camera and Xbox Kinect

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<sup>69</sup> See infra Appendix C, Table 10.

<sup>&</sup>lt;sup>70</sup> See infra Appendix C, Table 10.

<sup>&</sup>lt;sup>71</sup> See infra Appendix C, Table 10.

See Newman, supra note 5, at 553.

See infra Appendix B, Table 7.

<sup>&</sup>lt;sup>74</sup> See infra Appendix B, Table 7. Note that the Switch contains an infrared rather than a traditional camera in its handheld controls. *Id.* 

<sup>&</sup>lt;sup>75</sup> *PlayStation Camera*, PLAYSTATION, https://www.playstation.com/en-us/explore/accessories/vr-accessories/playstation-camera/ [https://perma.cc/9EZX-X8LU] (last visited Nov. 10, 2018).

<sup>&</sup>lt;sup>76</sup> See Alex Cranz, Microsoft Kinect Refuses to Die, GIZMODO (May 10, 2018), https://gizmodo.com/microsoft-kinect-refuses-to-die-1825847023 [https://perma.cc/9NCH-6UUQ]

<sup>&</sup>lt;sup>77</sup> *PlayStation Camera*, supra note 75.

<sup>&</sup>lt;sup>78</sup> *Id*.

allow users to utilize cameras and facial recognition technology to automatically log in. <sup>79</sup> Thus, sensitive information such as a player's face can be collected through these cameras, as well as when a player creates an avatar using his or her real-world image. <sup>80</sup> For example, one Nintendo 3DS game called Face Raiders uses the device's integrated player-facing camera to capture the player's face and superimpose it on an animated 3D model. <sup>81</sup>

When Microsoft first introduced its Kinect, users raised concerns over the camera's "always-on" function because it could obtain a perfect view of users' living rooms and listen for voice commands even when users had turned off the Xbox. 82 Microsoft responded to users' concerns by stating that Kinect's cameras and microphones are not recording or transmitting any audio or video data back to Microsoft servers without the user's explicit consent and also stating that collected data is aggregated and anonymized. 83

# D. Microphones, Headsets, and Voice Recognition

Many gaming platforms also capture players' voices. <sup>84</sup> For example, gaming platforms may capture voice data when gamers create a voice profile. Also, with headsets, players can hear ingame details and chat with friends. <sup>85</sup> Several gaming systems are even utilizing voice recognition to add to game play depth. <sup>86</sup>

<sup>&</sup>lt;sup>79</sup> *Microsoft Privacy Statement*, MICROSOFT, https://privacy.microsoft.com/en-us/privacystatement [https://perma.cc/D3JK-Q9T9] (last visited July 12, 2017).

See Newman, supra note 5, at 553.

<sup>81</sup> See id

<sup>&</sup>lt;sup>82</sup> See Mike Fahey, Xbox One Kinect Privacy Concerns? Turn It Off. Pause It While Gaming, Kotaku (June 6, 2013), https://kotaku.com/xbox-one-kinect-privacy-concernsturn-it-off-511759241 [https://perma.cc/9YUM-NLA2].

<sup>83</sup> See *id*.

See Newman, supra note 5, at 552.

<sup>&</sup>lt;sup>85</sup> PlayStation 4, PLAYSTATION, https://www.playstation.com/en-gb/explore/ps4/buy-ps4/buy-1tb-ps4-pro [https://perma.cc/W2UQ-WLRT] (last visited Nov. 10, 2018); see supra Part IV.G.

<sup>&</sup>lt;sup>86</sup> See generally Voice Controlled Games: The Rise of Speech Technology in Gaming, GLOBALME, https://www.globalme.net/blog/voice-controlled-games [https://perma.cc/ZZ74-XUQM] (last updated Oct. 25, 2018).

## E. Use of Other Special Hardware

While six of the mobile games operate through either a mobile phone or tablet, gamers have an additional option to play Pokémon Go with an Apple Watch.<sup>87</sup> Game play through an Apple Watch may allow for additional mechanisms for data collection and may supply further means for aggregation of game data with third party data sets.88

With regard to traditional game consoles, these often come with separate hand-held controllers. With the exception of Nintendo 3DS, which does not require a separate controller due to its built-in keypads, the four other traditional game platforms require the use of controllers.<sup>89</sup> These controllers enable motion controls by utilizing assorted sensors that allow for the detection of a player's physical movements. 90 One such sensor, an accelerometer, is a sensor telling your device which direction is "up" and whether the screen should be in portrait or landscape mode. 91 Another, a gyroscope, is a sensor that helps to detect rotation of the device. 92 Wii U offers many compatible accessories for additional purchase, one of which is the Wii Fit U Balance

Pokémon Go, APPLE STORE, https://itunes.apple.com/us/app/pok%C3%A9mongo/id1094591345?mt=8 [https://perma.cc/6QY6-8MZ6] (last visited July 3, 2017).

Niantic Privacy Policy, NIANTIC, https://nianticlabs.com/privacy [https://perma.cc /5PST-627B] (last visited Oct. 12, 2018) ("If you use Pokémon GO with your Apple Watch, with your consent we use the Apple HealthKit APIs to read and/or write certain data about your fitness activity (Step Count, Calories Burned, and Distance Walked) to the Health App Database on your device (the "Health App Data"). We may store Health App Data on our servers in connection with your Pokémon GO user account. We use Health App Data to provide you certain functionality in the game (such as distances walked to hatch eggs), and to ensure you get "credit" in your Apple Health App for all of the walking you do while playing Pokémon GO. We will not use Health App Data for marketing or advertising purposes. We do not store Health App Data in iCloud. Pokémon GO cannot read from or write to the Health App Database without your consent.").

See infra Appendix B, Table 7.

See Nintendo Switch Features, NINTENDO, http://www.nintendo.com/switch/features [https://perma.cc/TD5Z-5TUF] (last visited July 13, 2017).

Understanding Sensors: Magnetometers, Accelerometers and Gyroscope, VIRTUAL REALITY SOCIETY, https://www.vrs.org.uk/virtual-reality-gear/motion-tracking/sensors .html [https://perma.cc/V72N-NDX9] (last visited July 13, 2017).

Id.

Board, which can interpret users' foot and other movements as users step onto and stand on the board. 93

Gear VR's host devices are smartphones, specifically Samsung Galaxy models. Gear VR is a virtual reality headset manufactured by Samsung in partnership with Oculus, with Oculus offering VR gaming software. DayDream View is a HMD that also utilizes the smartphone as its base device. Google announced that the company, in partnership with HTC Vive and Lenovo, is developing a standalone VR headset that does not require host devices such as a smartphone or a PC.

PSVR, Vive, and Rift are equipped with room-scale tracking technology, which means that these headsets are designed to be played in a small area of a room. Property Room-scale VR allows players to walk around their space and have movement fully recognized in all directions within the VR application. Property Room-scale VR allows players to walk around their space and have movement fully recognized in all directions within the VR application. Property Room-scale VR allows players to walk around their space and have movement fully recognized in all directions within the VR application. Property Room-scale tracking technology. A magnetometer and have movement fully recognized in all directions within the VR application. Property Room-scale tracking technology.

<sup>&</sup>lt;sup>93</sup> See Wii U Accessories, NINTENDO, http://www.nintendo.com/wiiu/accessories [https://perma.cc/YM7Y-B4NW] (last visited July 12, 2017).

<sup>&</sup>lt;sup>94</sup> Gear VR with Controller, SAMSUNG, http://www.samsung.com/us/mobile/virtual-reality/gear-vr/gear-vr-with-controller-sm-r324nzaaxar [https://perma.cc/3E5H-S2JU] (last visited July 13, 2017).

<sup>95</sup> Id

<sup>&</sup>lt;sup>96</sup> DayDream, GOOGLE, https://vr.google.com/daydream/standalonevr [https://perma.cc/YH2A-DFF2] (last visited July 13, 2017).

<sup>97</sup> See generally Matthew Gepp, Roomscale 101 – An Introduction to Roomscale VR, VIVE (Oct. 25, 2017), https://blog.vive.com/us/2017/10/25/roomscale-101/[https://perma.cc/2YZU-ZKT9]; Roomscale Revisited: Getting the Most Out of Your Rift, OCULUS (Jan. 5, 2018), https://www.oculus.com/blog/roomscale-revisited-getting-the-most-out-of-your-rift/[https://perma.cc/M2LY-HXXT].

<sup>&</sup>lt;sup>98</sup> Michael Higham, *Oculus Rift Officially Brings Room Scale To The VR Platform*, GAMESPOT (May 26, 2017), https://www.gamespot.com/articles/oculus-rift-officially-brings-room-scale-to-the-vr/1100-6450377 [https://perma.cc/7U8A-A4X5].

<sup>99</sup> See infra Appendix C, Table 9.

See infra Appendix C, Table 9.

Sanju Gautam, *Check your phone's VR compatibility*, INFORMATION LORD (Nov. 9, 2016), https://www.informationlord.com/check-phones-vr-compatibility [https://perma.cc/W4T9-BW9J].

pause and resume devices based on whether the headset is on a user's face. 102

Because virtual reality gaming requires paring between a HMD and a base device such as a smartphone, console, or PC, how gamers' data is governed, collected, used, and shared is enabled and impacted by the practices and capabilities of the base device. There also may be numerous avenues for data collection by, and sharing with, multiple corporate entities depending on the affiliate structure and technical architecture necessary for VR game play. For example, Oculus's privacy policy states that Oculus may receive information about users from related companies 103 and may combine that information with other information that Oculus collects. 104 However, because of the hardware and technical specifications required to play games on VR platforms, there may be a substantial increased cost for VR gaming as compared to mobile or traditional console games. Therefore, if VR gaming is more expensive, this may affect whether children have access to and play VR gaming platforms.

# F. Biometric Information

Cameras, microphones, and other special hardware enable a variety of ways to generate, collect, and use biometric data from gamers. For example, Niantic's privacy policy states that with user consent, Niantic can use the Apple HealthKit APIs to read certain data (such as step count, calories burned, and distance walked) and

Tim Moynihan, Everything You Need To Know Before Buying A VR Headset, WIRED (Mar. 3, 2016), https://www.wired.com/2016/03/everything-need-know-buying-vrheadset [https://perma.cc/N4WD-KD2M].

Oculus identifies the following entities as its related companies: Facebook, Inc., Facebook Ireland Limited, Facebook Payments Inc., Atlas, Instagram LLC, Mobile Technologies Inc., Onavo, Parse, Moves, LiveRail, and WhatsApp Inc. *Related Companies*, Oculus, https://www.oculus.com/legal/related-companies [https://perma.cc/8MWH-HHQK] (last visited Feb. 1, 2018).

<sup>104</sup> Oculus Privacy Policy, OCULUS, https://www.oculus.com/legal/privacy-policy/ [https://perma.cc/6V26-RQCJ] (last visited Feb. 1, 2018) ("We may receive information about you from other companies that are within the family of related companies that are legally part of the same group of companies that Oculus is part of, or that become part of that group, such as Facebook, and may combine that information with other information we collect about you.").

provide this to the Health App Database on users' devices. <sup>105</sup> Oculus's privacy policy explicitly states that it may collect a user's physical movements and dimensions. <sup>106</sup> In April 2016, U.S. Senator Al Franken made inquiries to Oculus regarding the language found in the Oculus Rift's privacy policy. <sup>107</sup> Users of PS4 and Xbox console games also raised concerns over consoles' abilities to collect biometric information of users. <sup>108</sup> In *Vigil v. Take-Two Interactive Software, Inc.*, 2017 BL 25907 (S.D.N.Y., No. 15-CV-8211, 1/30/17) Take-Two Interactive Software, Inc., the developer of NBA 2K15 and NBA 2K16, was alleged to have collected and retained facial scans of gamers and thus violated the Illinois Biometric Information Privacy Act. <sup>109</sup> In NBA 2K15 and NBA 2K16, gamers can create customized basketball players (avatars) using a facial scan feature enabled by the cameras of Xbox or PS4. <sup>110</sup>

<sup>105</sup> Pokémon GO Privacy Policy, NIANTIC, https://www.nianticlabs.com/privacy/pokemongo/en [https://perma.cc/XNQ6-FDWJ] (visited July 7, 2017).

Oculus Privacy Policy, supra note 104 ("Depending on which Services you use, we collect different kinds of information from or about you, such as . . . [i]nformation about your physical movements and dimensions when you use a virtual reality headset").

Joe Durbin, Senator Al Franken Questions Oculus Over Privacy Concerns, UPLOADVR (Apr. 7, 2016), https://uploadvr.com/senator-al-franken-wants-answers-from-oculus-over-privacy-concerns/ [https://perma.cc/8DZ4-TMF9]. Among several questions that he asked, Sen. Franken specifically inquired as to Oculus's collection of user's physical movements and dimensions. Id. Oculus responded that collection of physical movement and dimensions are necessary to provide "comfortable and seamless" VR experiences to users. Oculus Response Letter, Oculus, (May 13, 2016), https://cdn.uploadvr.com/wp-content/uploads/2016/05/OculusResponseFranken.pdf

<sup>[</sup>https://perma.cc/ZX72-EZ9E]. For example, Oculus stated that if users are engaged in a ping pong game, understanding the direction, speed, and angle of a person's hand motion helps them to determine if a player's ping pong ball will reach the opponent. *Id.* However, Oculus also disclosed that information about movement and physical dimensions may be provided to Oculus developers like Facebook, claiming that such sharing is critical for good VR experiences because Facebook can offer Oculus users an opportunity to view 360 degree videos and photos which allow the user to rotate images and see as one might in the real world. *Id.* 

Squire Patton Boggs, *Biometrics, Gaming & Privacy Laws*, LEXOLOGY (Feb. 3, 2017), http://www.lexology.com/library/detail.aspx?g=3ddfd8ff-046c-4621-ae4a-87f6db5a75e8 [https://perma.cc/BAD6-T24Q].

<sup>109</sup> Id.; see supra Part III.D.

<sup>&</sup>lt;sup>110</sup> Biometrics, Gaming & Privacy Laws, supra note 108. The SDNY, however, ultimately dismissed the suit finding that the plaintiffs did not suffer any cognizable harm. *Id.* 

# G. Data Sharing Among Players and Integration of Social Media Features

Six of the seven mobile games (Clash of Clans, Clash Royale, Candy Crush Saga, Candy Crush Soda Saga, Game of War Fire Age, and Mobile Strike) have similar social features, providing some form of a real-time chat system, an ability to send messages/mail to friends, an option to add friends, and an option to connect to Facebook. Pokémon Go, however, does not incorporate these social features. All of the mobile games that Fordham CLIP examined allow for game operators to store the contents of private messages sent through the game, and some mobile game privacy policies provide a right of the game company to access and review these private communications. In addition, linking game play to external social media platforms like Facebook may substantially increase the abilities for sharing and aggregation of gamers' personal information.

Traditional gaming consoles also incorporate social media features and allow players to share user-created content. For example, Nintendo Switch players can take and save screenshots, add text, and share to social networks. <sup>114</sup> In the PS4 platform, a button enables players to share gaming moments by uploading gameplay videos and screenshots directly from a player's system or live-stream gameplay, all without disturbing the game in progress. <sup>115</sup> Headsets available for traditional consoles also allow players to chat with friends during game play. <sup>116</sup>

However, real-time chat is not available from Candy Crush Saga and Candy Crush Soda Saga. *See infra* Appendix A, Table 5.

See infra Appendix A, Table 5.

See Appendix A, Table 6.

Nintendo Switch Features, supra note 90.

<sup>&</sup>lt;sup>115</sup> *Dual Shock 4,* PLAYSTATION, https://www.playstation.com/en-us/explore/accessories/gaming-controllers/dualshock-4 [https://perma.cc/4Z8U-57HY] (last visited July 11, 2017).

<sup>&</sup>lt;sup>116</sup> PlayStation 4, supra note 85; Xbox One Chat Headset, XBox, http://www.xbox.com/en-US/xbox-one/accessories/headsets/chat-headset [https://perma.cc/9KZ4-ZESU] (last visited July 13, 2017).

VR game developers have also focused on building immersive social features into their platforms. <sup>117</sup> For example, Samsung Gear VR enables multiplayer gaming where users can team up with friends or compete against other friends by creating a profile and searching for others. <sup>118</sup> Also, one can create "virtual rooms" where players can watch Hulu or Vimeo streams in a "room" with their friends who are actually physically far away. <sup>119</sup> Although smartphone-based HMDs do not have cameras built into the headset, Samsung offers the Gear 360, a camera that allows Gear VR users to upload and share photos or videos. <sup>120</sup>

# H. In-Game Purchases and Availability of Apps within Gaming Platforms

Although all seven mobile games are offered in a "free" version in both the Apple App Store and Google Play Store, they all also provide an option to purchase virtual items for users who want to speed up their progress within a game or otherwise enhance the game experience. Some consumers have initiated legal action against mobile game companies alleging that practices relating to in-app purchases violate consumer protection laws. 122

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<sup>&</sup>lt;sup>117</sup> Karissa Bell, *Oculus adds new social games and Facebook sharing to Gear VR*, MASHABLE (Mar. 9, 2017), https://mashable.com/2016/03/09/oculus-adds-social-features-gear-vr/#H3FKOOBOvEqF [https://perma.cc/9NTV-M7LB].

<sup>&</sup>lt;sup>118</sup> Join Friends in VR with New Oculus Social Features, OCULUS (Mar. 9, 2016), https://www.oculus.com/blog/join-friends-in-vr-with-new-oculus-social-features/ [https://perma.cc/7AN8-8GN4].

<sup>119</sup> Id.; Jamie Feltham, Samsung Gear VR's latest social feature has friends watching Hulu together in Oculus Rooms, VENTURE BEAT (Feb. 12, 2017) https://venturebeat.com/2017/02/12/samsung-gear-vrs-latest-social-feature-has-friends-watching-hulu-together-in-oculus-rooms [https://perma.cc/5SS9-CG27].

<sup>&</sup>lt;sup>120</sup> Gear 360, SAMSUNG, http://www.samsung.com/us/mobile/virtual-reality/gear-360/gear-360-sm-r210nzwaxar [https://perma.cc/82H2-K9N7] (last visited July 13, 2017).

See infra Appendix A, Table 5.

Class of Class is currently involved in a class action lawsuit. Paul Tassin, Clash of Class Action Says Terms of Service Violates N.J. Law, Top Class Actions (Nov. 15, 2016), https://topclassactions.com/lawsuit-settlements/lawsuit-news/349409-clash-of-clans-class-action-says-terms-of-service-violates-n-j-law [https://perma.cc/NL7Q-F5AL]. Candy Crush was also involved in a class action lawsuit over virtual items. Jillian Burstein & Jason Gordon, Consumer Protection Class Action Lawsuit over "Free" Candy Crush Plays Will Proceed, REED SMITH (June 19, 2017), https://www.adlawbyrequest.com/2017/06/articles/in-the-courts/consumer-protection-

Though these lawsuits are not based specifically on privacy violations, it is possible that judgments could be made regarding players' economic proclivities based on how much real-world money players spend for in-game purchases, <sup>123</sup> and this may trigger FCRA concerns. <sup>124</sup>

Users can also access third party apps through gaming platforms. For example, Nintendo 3DS supports entertainment apps like Netflix on its system, and users can also browse the internet on devices. <sup>125</sup> The Kinect for Xbox One enables users to make Skype calls. <sup>126</sup> Interaction with third party applications may impact how gamer data is governed and increase the extent to which data is collected, used, and shared.

#### I. Parental Control

Each of the traditional game consoles has ways for parents to control children's gaming. <sup>127</sup> For example, the Nintendo Switch enables parents to set limits on how long or how late the console can be used each day. <sup>128</sup> The PS4 allows parents to restrict the use of its features and games that have age limitations. <sup>129</sup>

Similarly, parents can exercise some control over their children's mobile gaming. In a smartphone's mobile settings, parents can restrict not just specific mobile games, but also features across-the-board on their smartphone devices. 130

class-action-lawsuit-over-free-candy-crush-plays-will-proceed [https://perma.cc/45YP-VKN81.

What Is Nintendo 3DS, NINTENDO, http://www.nintendo.com/3ds/what-is-nintendo-3ds [https://perma.cc/C5MA-KE5A] (last visited Nov. 10, 2018).

<sup>128</sup> Parental Controls, NINTENDO, https://www.nintendo.com/switch/family-fun/parental-controls/ [https://perma.cc/QM6Z-AZY3] (last visited Nov. 10, 2018).

See Newman, supra note 5, at 561.

<sup>124</sup> See infra Part III.A.

<sup>&</sup>lt;sup>126</sup> An All-New Skype Is Now Available on Xbox One, SKYPE BLOG (Apr. 13, 2017), https://blogs.skype.com/news/2017/04/13/new-skype-now-available-xbox-one/[https://perma.cc/2MW6-KJ5X].

See Appendix B, Table 7.

<sup>129</sup> Restricting Use of Applications and Devices, PLAYSTATION, https://manuals.playstation.net/document/en/ps4/basic/kidsapp.html [https://perma.cc/EBC9-JB4K] (last visited Nov. 10, 2018).

<sup>&</sup>lt;sup>130</sup> See Use Parental Controls On Your iPhone, iPad, and iPod Touch, APPLE, https://support.apple.com/en-us/HT201304 [https://perma.cc/8Q9M-QY2D] (last visited

Furthermore, parents can restrict children's in-app purchases or set access passcodes. <sup>131</sup>

However, in VR gaming, developers explicitly state that their devices are not intended for use by children. For example, the HTC Vive End User License Agreement specifically states that users must be of "legal age" to use Vive. Similarly, Samsung's Gear VR and Oculus Rift each recommend that users be over age 13. 134

#### V. CONCLUSIONS

There are currently many different ways that game companies collect data from users, including through hardware (cameras, sensors, and microphones), platform features (social media aspects and abilities for other user-generated content), and tracking technologies (cookies and beacons). Location data and biometric data—like facial, voice, heart rate, weight, skin response, brain activity, and eye-tracking data—are now routinely collected while gaming. In mobile gaming, requests for access to a user's contacts or address book are common. In addition, there are various social media components within current games and platforms, as well as capabilities for user-generated content-creation. Gamers should be wary of what information they share in-game and who they are sharing with.

Nov. 7, 2017); *Kids Mode*, SAMSUNG, http://www.samsung.com/global/galaxy/apps/kidsmode [https://perma.cc/S45K-AP6J] (last visited Nov. 7, 2017).

<sup>&</sup>lt;sup>131</sup> See Use Parental Controls On Your IPhone, IPad, And IPod Touch, supra note 130.

<sup>132</sup> See Edd Gent, Are Virtual Reality Headsets Safe for Children?, SCIENTIFIC AMERICAN (Oct. 4, 2016), https://www.scientificamerican.com/article/are-virtual-reality-headsets-safe-for-children [https://perma.cc/5GGQ-WLU4].

<sup>&</sup>lt;sup>133</sup> *Vive Product EULA*, HTC, https://www.vive.com/us/terms/chrome/vive-eula [https://perma.cc/9HMT-4EPN] (last visited Nov. 7, 2017).

<sup>134</sup> Is the Gear VR safe for children?, SAMSUNG, http://www.samsung.com/uk/support/mobile-devices/is-the-gear-vr-safe-for-children [https://perma.cc/X6SW-RCTW] (last visited Nov. 7, 2017); Oculus Terms Of Service, OCULUS, https://www.oculus.com/legal/terms-of-service [https://perma.cc/DQB6-PB6D] (last visited Nov. 7, 2017).

See Appendix A, Table 6.

See supra Part IV.F.

<sup>137</sup> See Appendix C, Table 10.

There may also be an interrelationship between data collection, game functionalities, and external hardware items like the Apple Watch or the smartphone device. Moreover, gaming companies have business relationships with each other. Data flows extend beyond the game and game console, and gamer data is often aggregated with external partners and sources. Every game and platform Fordham CLIP examined states that gamer data may be shared with advertising platforms or used for advertising purposes. Although there are some avenues for opt-outs and user choice, users may have difficulty discerning the identities of third-party affiliates with whom gaming companies share data even after reading the relevant privacy policies. Transparency as to gaming companies' data sharing practices could be much improved.

Regarding children in particular, parents should pay special attention to abilities to control kids' game play and privacy settings. Children should also be educated on how their privacy and safety may be threatened while gaming. Lastly, gaming companies should not include language in their privacy policies that is incongruent with age ratings advertised to children and parents.

#### APPENDIX A - MOBILE GAMES

# A. Technical Specifications

To identify the technical specifications for the seven mobile games, first Fordham CLIP accessed the description pages for each game in the Apple App Store and Google Play Store. Each app store had its own criteria for describing technical specifications of games. The left column of the chart in Table 5 below lists criteria specified by either the Apple App Store or Google Play Store. Some criteria such as operating system, age rating, and options for in-app purchases were utilized in both stores. However, the Apple App Store identified information such as "available languages" that were not stated in Google Play Store's app description page.

<sup>&</sup>lt;sup>138</sup> For example, Samsung Gear VR is powered by Oculus. Samsung Gear VR's gaming contents are provided through Oculus's platform. Thus, these gamers will be governed by both Samsung's and Oculus's privacy policies.

Similarly, the Google Play Store described technical specifications, like which "permission groups" a game will be able to access, <sup>139</sup> that were not contained in the Apple App Store description pages. In these scenarios, information not applicable is indicated below as N/A in blue. Information that could not be definitively determined is indicated as UNK also in blue.

Next, Fordham CLIP downloaded all seven games in mobile phones with Android and iOS operating systems to confirm the content of app store description pages and to supplement additional information that were not specified by either app store's description pages. The following Table 5 summarizes the findings. All citations within the chart below are contained in endnotes at the end of this study. 140

<sup>&</sup>lt;sup>139</sup> Before users download an app onto devices, users may need to give the app permission to access specific capabilities or information on the device, known as permission groups.

<sup>&</sup>lt;sup>140</sup> For references used in the Tables 5 to 10, Fordham CLIP used endnotes for readability. This list of endnotes indicates references for technical specifications and privacy policies. To distinguish these endnotes from footnotes used in the text of the report, Fordham CLIP adopted double byte numbering for endnotes.

Table 5

	Clash	of Clans	Clash	Royale		Crush		Crush Saga		of War Age	Mobil	e Strike	Pokér	non Go
Developer	Supe	ercell		ercell Specification	K	ing ed by Apple	K	ing	N	ΛZ	Epic	e War	Nia	antic
App Store 1	AA	GP	AA	GP	AA	GP	AA	GP	AA	GP	AA	GP	AA	GP
Latest Version	9.105. 9	9.105. 9	1.9.2	1.92	1.103. 0	1.103. 0.8	1.93.1 2	1.92.9	3.25.5 20	N/A	3.25.5 23	N/A	1.37.2	0.67.2
Last Update on	June 29, 2017	June 28, 2017	June 20, 2017	June 16, 2017	June 27, 2017	June 27, 2017	July 4, 2017	July 4, 2017	June 26, 2017	June 21, 2017	June 30, 2017	June 20, 2017	June 30, 2017	June 30, 2017
Operating System	iOS	4.0.3	iOS	4.0.3	iOS	2.3	iOS	2.3 or	iOS	4.0.3	iOS	4.0.3	iOS	4.4 or
Operating System	7.0 or up	or up	7.0 or up	or up	5.1.1 or up	and up	6.0 or up	up	8.0 or up	or up	8.0 or up	or up	8.0 or up	up
Available Languages	18	UNK	15	UNK	24	UNK	6	UNK	30	UNK	29	UNK	9	UNK
Age Rating	9+	10+	9+	10+	4+	Everyone	4+	Everyone	9+	10+	12+	10+	9+	Everyone
Offers In-app Purchase	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Google Play Permission Group <sup>2</sup> - Find Accounts on the Device <sup>3</sup>	N/A	No	N/A	No	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes
Google Play Permission Group - Read Contacts <sup>4</sup>	N/A	No	N/A	No	N/A	No	N/A	Yes	N/A	No	N/A	No	N/A	No
Google Play Permission Group - Approximate Location (Network- Based) <sup>5</sup>	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes	N/A	Yes	N/A	Yes
Google Play Permission Group - Precise Location (GPS and Network-Based) <sup>6</sup>	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Google Play Permission Group - Read the Contents of USB Storage <sup>7</sup>	N/A	Yes	N/A	Yes	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Google Play Permission Group - Modify or Delete the Contents of USB Storage <sup>8</sup>	N/A	Yes	N/A	Yes	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Google Play Permission Group - Take Pictures and Videos 9	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Google Play Permission Group - View Wi-Fi Connections <sup>1 0</sup>	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	N/A
Google Play Permission Group - Receive Data from Internet	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes
Google Play Permission Group - View Network Connections	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes
Google Play Permission Group - Connect and Disconnect from Wi-Fi	N/A	Yes	N/A	Yes	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No
Google Play Permission Group - Full Network Access	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes

0 1 71	27//	1			2711				1 27/1				Larre	T
Google Play	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Permission Group														
- Pair with Bluetooth														
Devices 1 1														
	NT/A	XI.	NT/A	NT.	NT/A	XI.	NT/A	XI.	NT/A	XI.	NT/A	XT.	NT/A	37
Google Play	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Permission Group														
- Access														
Bluetooth Settings	****		****		2711		****		****		****		2711	
Google Play	N/A	No	N/A	Yes	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Permission Group														
- Control														
Vibration														
Google Play	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	No	N/A	Yes
Permission Group														
- Use Accounts on														
the Device 1 2														
Google Play	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes
Permission Group														
- Prevent Device														
from Sleeping														
					earch Indep									
Internet	Essential	Essential	Essential	Essential	Not Essential	Not Essential	Not Essential	Not Essential	Essential	Essential	Essential	Essential	Essential	Essential
Connection 1 3														
Link to Privacy	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
		1 03	1 03	1 03	110			110		1 03	1 03	1 65	1 05	res
Policy from App	1	103	103	103	110			140		103	103	168	168	ies
Store Description		103	103	103	110			No		103	103	165	165	res
Store Description of the App														
Store Description of the App Link to Terms of	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Store Description of the App Link to Terms of Service from App						No	No							
Store Description of the App Link to Terms of						No	No							
Store Description of the App Link to Terms of Service from App Store Description of the App	Yes	Yes	Yes	Yes		No	No		Yes	Yes	Yes	Yes		Yes
Store Description of the App Link to Terms of Service from App Store Description						No No 1 5	No No 1 6							
Store Description of the App Link to Terms of Service from App Store Description of the App	Yes	Yes	Yes Yes Yes	Yes	No			No No 17 Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes	Yes	Yes No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat	Yes	Yes	Yes	Yes	No No 1 4	No.1 5	No.16	No No 17	Yes	Yes	Yes	Yes	Yes	Yes
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	No No 1 4 Yes	No <sup>15</sup> Yes	No <sup>16</sup> Yes	No No 17 Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes No No	Yes No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	No No 1 4 Yes	No <sup>15</sup> Yes	No <sup>16</sup> Yes	No No 17 Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes No No	Yes No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	No No 14 Yes Yes	No <sup>15</sup> Yes Yes	No <sup>16</sup> Yes Yes	No No 1 7 Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes No No No	Yes No No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	No No 14 Yes Yes	No <sup>15</sup> Yes Yes	No <sup>16</sup> Yes Yes	No No 1 7 Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes No No No	Yes No No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	No No No 4 Yes Yes Yes	No 1 5 Yes Yes	No <sup>16</sup> Yes Yes Yes	No No Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes No No No No	Yes No No No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook In Game Camera Feature	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	No No No 4 Yes Yes Yes	No 1 5 Yes Yes	No <sup>16</sup> Yes Yes Yes	No No Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes No No No No	Yes No No No No
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook In Game Camera Feature Access to Privacy	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	No No No No Yes Yes Yes No	No <sup>1 5</sup> Yes Yes Yes No	No <sup>16</sup> Yes Yes Yes No	No No No No Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes  No No No No Yes	Yes  No No No No Yes
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook In Game Camera Feature	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	No No No No Yes Yes Yes No	No <sup>1 5</sup> Yes Yes Yes No	No <sup>16</sup> Yes Yes Yes No	No No No No Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes  No No No No Yes	Yes  No No No No Yes
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook In Game Camera Feature Access to Privacy Policy During Gameplay	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	No No No No Yes Yes Yes No	No <sup>1 5</sup> Yes Yes Yes No	No <sup>16</sup> Yes Yes Yes No	No No No No Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes  No No No No Yes	Yes  No No No No Yes
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook In Game Camera Feature Access to Privacy Policy During Gameplay Access to Terms	Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes No Yes	Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes	No No No No Yes Yes No Yes	No 15 Yes Yes Yes No Yes	No. 1 6 Yes Yes Yes No Yes	No No No Yes Yes Yes No Yes	Yes Yes Yes Yes Yes Yes Yes No Yes	Yes  No No No No Yes  Yes	Yes No No No No Yes Yes			
Store Description of the App Link to Terms of Service from App Store Description of the App Real Time Chat Message/Mail Option to Add Friends Option to Connect Facebook In Game Camera Feature Access to Privacy Policy During Gameplay	Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes No Yes	Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes	No No No No Yes Yes No Yes	No 15 Yes Yes Yes No Yes	No. 1 6 Yes Yes Yes No Yes	No No No Yes Yes Yes No Yes	Yes Yes Yes Yes Yes Yes Yes No Yes	Yes  No No No No Yes  Yes	Yes No No No No Yes Yes			

# B. Privacy Policy

Fordham CLIP also reviewed the privacy policies for each of the seven mobile games. Fordham CLIP surveyed only five total privacy policies because Clash of Clans and Clash Royale (developed by Supercell) have the same privacy policy <sup>141</sup> and

<sup>&</sup>lt;sup>141</sup> See Privacy Policy, SUPERCELL, http://supercell.com/en/privacy-policy [https://perma.cc/2ZX5-YKRS] (last visited July 4, 2017) ("This Privacy Policy (this 'Policy') describes the ways we collect, store, use, and manage the information, including personal information, and data that you provide or we collect in connection with our websites, including www.supercell.com, www.clashofclans.com, www.clashofclans.co.kr, www.haydaygame.com, www.boombeach.com, www.clashofclans.co.kr, www.supercell.co.jp and www.supercell.net (the 'Sites') or any Supercell game provided on a mobile platform (for example, iOS and Android) (collectively, the 'Service').")

Candy Crush Saga and Candy Crush Soda Saga (developed by King) also have the same privacy policy. 142

Fordham CLIP prepared a chart that summarizes these privacy policies for mobile games. First, Fordham CLIP examined Supercell's privacy policy to extract specific categories for the lefthand column by focusing on what the policy states with regard to data collection, usage, sharing, storage, and how users can control their data. After completing the left-hand column with respect to Supercell, Fordham CLIP moved on to King's privacy policy and completed the chart with criteria reflected in King's privacy policy. If King's privacy policy mentioned new categories of information that was not specifically discussed in Supercell's policy, Fordham CLIP revisited Supercell's policy to double-check that it did not contain similar information. Fordham CLIP continued selecting the criteria contained in the left-hand column for each of the five privacy policies, completing the chart in this manner. 143 If a mobile game's privacy policy does not address a specific topic, this is indicated in the chart below as UNK in blue.

<sup>&</sup>lt;sup>142</sup> Privacy Policy, KING, https://about.king.com/consumer-terms/terms/en#privacy [https://perma.cc/MB5B-MZXT] (last visited July 4, 2017) ("This policy applies to all of our games, whether played on our website www.king.com, on mobile devices, PC or on other platforms such as Facebook.").

Tables 8 and 10 summarizing the privacy policies for the traditional consoles and VR platforms analyzed in this study were also compiled in this same manner.

# Table 6

	Clash of Clans, Clash Royale <sup>18</sup>	Candy Crush Saga, Candy Crush Soda Saga <sup>19</sup>	Game of War Fire Age (MZ) <sup>2 0</sup>	Mobile Strike (Epic War) <sup>2</sup>	Pokémon Go (Niantic) <sup>2</sup>
		(1) Basic I	nformation	•	
Data Controller	Supercell Oy <sup>2 3</sup>	King.com Limited <sup>2</sup>	Machine Zone, Inc. ("MZ") <sup>2 5</sup>	Epic War, LLC <sup>26</sup>	Niantic, Inc. <sup>2 7</sup>
Last Update	June 10, 2016	May 10, 2017	July 31, 2016	July 31, 2016	December 21, 2016
"Services" Defined	Games, Websites 2 8	Games, Websites, Advertising activities <sup>29</sup>	Games, Websites, Platform <sup>3 0</sup>	Game <sup>3</sup> 1	Game, Websites <sup>3 2</sup>
Policies Concerning Children Under the Age of 13	Restriction 3 3	Restriction <sup>3 4</sup>	Restriction <sup>3 5</sup>	Restriction <sup>3 6</sup>	Requires parental consent <sup>3</sup> <sup>7</sup>
0115		(2) Informati	on Collection		
Username	Yes <sup>38</sup>	Yes <sup>3 9</sup>	Yes <sup>40</sup>	Yes <sup>4 1</sup>	Yes <sup>4 2</sup>
E-mail Address	Yes <sup>4 3</sup>	Yes <sup>4 4</sup>	Yes <sup>45</sup>	Yes <sup>4 6</sup>	Yes <sup>4 7</sup>
Profile photo	Yes <sup>4 8</sup>	UNK	Yes <sup>4 9</sup>	Yes <sup>50</sup>	UNK
Telephone Number	UNK	UNK	Yes <sup>5</sup> 1	Yes <sup>5 2</sup>	UNK
Address	Yes <sup>5 3</sup>	UNK	UNK	UNK	UNK
Date of Birth/Age	Yes <sup>5 4</sup>	UNK	Yes <sup>5 5</sup>	UNK	Yes <sup>5 6</sup>
Gender	Yes <sup>5 7</sup>	UNK	UNK	UNK	UNK
Health Record	UNK	UNK	UNK	UNK	Yes <sup>5 8</sup>
Language/Country	Yes <sup>5 9</sup>	Yes <sup>6 0</sup>	Yes <sup>6</sup> 1	Yes <sup>6 2</sup>	Yes <sup>63</sup>
Location	Yes <sup>6 4</sup>	Yes <sup>65</sup>	Yes 6 6	Yes <sup>6</sup> <sup>7</sup>	Yes <sup>68</sup>
Information Obtained from Linking Social Network Profile (such as Facebook) in the Registration Process	Yes <sup>6 9</sup>	Yes <sup>70</sup>	Yes <sup>7</sup> <sup>1</sup>	UNK	UNK
Friends List	Yes <sup>7 2</sup>	Yes <sup>7-3</sup>	Yes 7 4	Yes 7 5	UNK
MAC address	Yes <sup>7 6</sup>	UNK	Yes 7 7	Yes 7 8	UNK
IP Address	Yes <sup>7 9</sup>	UNK	Yes <sup>8 0</sup>	Yes <sup>8</sup> 1	Yes <sup>8 2</sup>
Device Information in General (Device name; Device identifier; User setting; Operating system; Access time; Browser Type)	Yes <sup>83</sup>	Yes <sup>8 4</sup>	Yes <sup>85</sup>	Yes <sup>8 6</sup>	Yes <sup>87</sup>
Tracking Technology such as Cookies/Beacons/Scripts /Tags	Yes <sup>8 8</sup>	Yes <sup>8 9</sup>	Yes <sup>9 0</sup>	Yes <sup>9</sup> <sup>1</sup>	Yes <sup>9</sup> <sup>2</sup>
Details about how users use and interact with games (Progress within Game)	Yes <sup>93</sup>	Yes <sup>9 4</sup>	Yes <sup>9 5</sup>	Yes <sup>9 6</sup>	UNK
User's Characteristic and Interest	Yes <sup>97</sup>	Yes <sup>98</sup>	UNK	UNK	UNK
Purchase History	UNK	Yes 9 9	UNK	UNK	UNK
Payment Information	UNK	Yes <sup>100</sup>	Yes <sup>101</sup>	Yes <sup>102</sup>	UNK
Content of Private Chat/Message	Yes <sup>103</sup>	Yes <sup>104</sup>	Yes <sup>105</sup>	Yes <sup>106</sup>	Yes <sup>107</sup>
Details of Correspondence from User's Interaction with Customer Services	Yes <sup>1 0 8</sup>	Yes <sup>109</sup>	Yes <sup>110</sup>	Yes <sup>111</sup>	UNK
	1	(3) Inform	ation Usage	,	
Providing and optimizing Services	Yes <sup>1</sup> 1 2	Yes <sup>1 1 3</sup>	Yes <sup>1</sup> 1 4	Yes <sup>1 1 5</sup>	Yes <sup>1</sup> 16
Identify and suggest connection between users	Yes <sup>1</sup> 1 7	UNK	Yes 1 1 8	Yes <sup>1 1 9</sup>	UNK
Chat/Private Message between users	Yes 1 2 0	Yes <sup>1 2 1</sup>	Yes <sup>1 2 2</sup>	Yes <sup>123</sup>	UNK
Marketing and promotion	Yes <sup>124</sup>	Yes <sup>1 2 5</sup>	Yes <sup>1 2 6</sup>	Yes <sup>1 2 7</sup>	UNK

Customer Services (Technical support; Troubleshooting)	Yes <sup>1 2 8</sup>	Yes <sup>1 2 9</sup>	Yes <sup>1 3 0</sup>	Yes <sup>131</sup>	UNK
Analytics and Research	100	100	101	405	100
	Yes <sup>132</sup>	Yes <sup>133</sup>	Yes <sup>134</sup>	Yes <sup>135</sup>	Yes <sup>136</sup> UNK
Cheating, crime and fraud prevention	Yes <sup>137</sup>	Yes <sup>138</sup>	Yes <sup>139</sup>	Yes <sup>1 4 0</sup>	
Legal uses	Yes <sup>141</sup>	Yes <sup>1 4 2</sup>	Yes <sup>1 4 3</sup>	Yes 1 4 4	Yes <sup>1 4 5</sup>
		rmation Sharing - User data is			
Publishing partners	Yes <sup>146</sup>	Yes <sup>147</sup>	UNK	UNK	UNK
Advertising platforms and partners (ad exchanges, ad networks and ad servers)	Yes <sup>1 4 8</sup>	Yes <sup>1 4 9</sup>	Yes <sup>150</sup>	Yes 1 5 1	Yes <sup>1 5 2</sup>
Law enforcement officers and Government	Yes <sup>153</sup>	Yes <sup>154</sup>	Yes 1 5 5	Yes <sup>156</sup>	Yes <sup>1 5 7</sup>
Developer's group companies/business associations	Yes <sup>158</sup>	Yes <sup>159</sup>	Yes <sup>160</sup>	Yes <sup>161</sup>	Yes <sup>162</sup>
Other Players	UNK	Yes <sup>163</sup>	UNK	UNK	UNK
Developer's Service Providers (such as	Yes <sup>164</sup>	Yes <sup>165</sup>	Yes <sup>1 6 6</sup>	Yes <sup>167</sup>	Yes <sup>1 6 8</sup>
payment processor, data aggregator, hosting services, analytics firm, customer services)					
	1	(5) User Control, St	orage, and Retention	1	
User's Right to Access Information	Yes <sup>169</sup>	Yes <sup>170</sup>	Yes <sup>171</sup>	Yes <sup>172</sup>	Yes <sup>173</sup>
User's Right to Update Personal Information	Yes <sup>1 7 4</sup>	Yes <sup>1 7 5</sup>	Yes <sup>1 7 6</sup>	Yes <sup>177</sup>	Yes <sup>178</sup>
User's Right to Delete/Deactivate Account	Yes <sup>179</sup>	Yes <sup>180</sup>	Yes <sup>181</sup>	Yes <sup>182</sup>	Yes <sup>183</sup>
Response to "Do Not Track" Signal	UNK	UNK	Do not respond to DNT signal 1 8 4	Do not respond to DNT signal 1 8 5	Do not respond to DNT signal 1 8 6
Option to Disconnect Social Networks Accounts	UNK	Yes <sup>187</sup>	UNK	UNK	UNK
Limit the Use of Cookies in Web Browsers	Yes <sup>1 8 8</sup>	Yes <sup>189</sup>	Yes <sup>190</sup>	Yes <sup>191</sup>	Yes <sup>192</sup>
Opportunity to Opt-out from Direct Marketing/Promotion	Yes <sup>193</sup>	Yes <sup>194</sup>	UNK	UNK	Yes <sup>195</sup>
from the Developer Implementation of Security Measure	Yes <sup>196</sup>	UNK	Yes <sup>197</sup>	Yes <sup>198</sup>	Yes <sup>199</sup>
Data Retention After User's Request to Delete Account	Yes <sup>200</sup>	Yes <sup>2 0 1</sup>	Yes <sup>202</sup>	Yes <sup>203</sup>	Yes <sup>2 0 4</sup>
Retention Period After Deletion/Deactivation	"As long as necessary" 2 0 5	"As long as necessary" 2 0 6	UNK	UNK	"Commercially reasonable time period" <sup>2 0 7</sup>
Location of Servers that Stores Data	Servers in the United States via Amazon Web Services, but may be stored in elsewhere. <sup>2 0 8</sup>	Severs primarily in European Union, but may be stored in elsewhere <sup>2 0 9</sup>	UNK	UNK	UNK
International Transfer of Data	Yes <sup>2 1 0</sup>	UNK	Yes <sup>2 1 1</sup>	Yes <sup>2 1 2</sup>	Yes <sup>2 1 3</sup>
			Others	T	T = = = =
TRUSTe Certified	Yes <sup>2 1 4</sup>	UNK	UNK	UNK	UNK
Links to Third party Websites and Services	Yes <sup>2 1 5</sup>	Yes <sup>2 1 6</sup>	Yes <sup>2 1 7</sup>	Yes <sup>2 1 8</sup>	Yes <sup>2 1 9</sup>
Changes to the Privacy Policy	Notification by email or update on website 2 2 0	Update on website 2 2 1	Notification by email or update on website 2 2 2	Notification by email or update on website 2 2 3	Notification by email or update on website 2 2 4

Applicable law in the	California 2 2 5	Delaware <sup>2 2 6</sup>	California 2 2 7	California 2 2 8	California 2 2 9
United States (from					
Terms of Services)					
COPPA	UNK	UNK	UNK	UNK	Yes <sup>230</sup>
European Data	UNK	UNK	UNK	UNK	Ves 2 3 1
Protection laws					
California Civil Code	UNK	UNK	Yes <sup>2 3 2</sup>	Yes <sup>233</sup>	UNK
Section 1798.83			100	100	
Jurisdiction Specific	UNK	UNK	Yes <sup>2 3 4</sup>	Yes <sup>2 3 5</sup>	UNK
Addendum (Canada)				100	
Jurisdiction Specific	UNK	Yes <sup>2 3 6</sup>	UNK	UNK	UNK
Addendum (South					
Korea)					
Jurisdiction Specific	UNK	UNK	Yes 2 3 7	Yes <sup>2 3 8</sup>	UNK
Addendum (Japan)					
Contact Information	Ves <sup>2 3 9</sup>	Yes 2 4 0	Yes <sup>2 4 1</sup>	Yes <sup>2 4 2</sup>	Yes <sup>2 4 3</sup>
Regarding Privacy	1	1 2 2 2	2	1	
Policy					

#### APPENDIX B – TRADITIONAL GAME CONSOLES

## A. Technical Specifications

Fordham CLIP identified the five most popular gaming consoles based on 2017 hardware sales data: Nintendo Switch, Sony PlayStation 4, Microsoft Xbox One, Nintendo 3DS, and Nintendo Wii U. 144 To survey the technical specifications of each console, Fordham CLIP reviewed the statements made by console manufacturers and consumer electronic companies (like Best Buy) on company websites regarding specifications. The left-hand column of the chart below lists each technical element disclosed.

On some occasions, manufacturers provide various models within the same platform. For example, Xbox One is manufactured either as a model with 500GB or 1TB capacity. <sup>145</sup> However, Fordham CLIP only identified differences in specifications between models which were unrelated to privacy such as differences in weight, dimension, or hardware capacity. Thus, the chart below does not reflect differences between various models of the same gaming console and lists only technical specifications of the most current model now available on the market.

Andrew Webster, *Microsoft Announces the Xbox One S, Its Smallest Xbox Yet*, THE VERGE (June 13, 2016) https://www.theverge.com/2016/6/13/11911184/microsoft-xbox-one-s-announced-price-specs-e3-2016 [https://perma.cc/6T76-3GNU].

See supra Table 3.

Table 7

	Switch	PlayStation 4	Xbox One	3DS	Wii U
Company	Nintendo	Sony	Microsoft	Nintendo	Nintendo
Launched	March 3, 2017 2 4 4	November 15, 2013 2 4 5	August 23, 2016 2 4 6	February 13, 2015 2 4 7	November 18, 2012 2 4 8
			Console	•	
Model Name	Nintendo Switch <sup>TM</sup> console	PlayStation®4	Xbox One S	New Nintendo 3DS XL	Wii U™ Console
Internet Connectable	Yes	Yes	Yes	Yes	Yes
USB Port(s)	Yes	Yes	Yes	No	Yes
Wi-Fi Compatible	Yes	Yes	Yes	Yes	Yes
Parental Controls (to manage content accessed by children)	Yes	Yes	Yes	Yes	Yes
Networking (Bluetooth)	Yes	Yes	Yes	No	Yes
Headphone/microphone jack	Yes	Yes	Yes	Yes	Yes
Built in Camera	Yes (IR)	No <sup>2 4 9</sup>	No 2 5 0	Yes	Yes
			ntrollers		
Name	Joy- Con <sup>TM</sup> controllers	DUALSHOCK®4 <sup>251</sup>	Xbox One Wireless Controller <sup>2 5 2</sup>	N/A <sup>2 5 3</sup>	Wii U GamePad
Touch Pad	No	Yes	No	N/A	Yes
Wireless Support (Bluetooth)	Yes	Yes	Yes	N/A	Yes
Sensors (Accelerometer and Gyroscope)	Yes	Yes	No	N/A	Yes
Vibration	Yes	Yes	Yes	N/A	Yes
		(3) Other compatible access	sories for additional purchas	e	
Other types of controller	Yes 2 5 4	Yes 2 5 5	Yes 2 5 6	N/A	Yes 2 5 7
Remote Control	N/A	Yes 2 5 8	Vcs 2 5 9	N/A	Yes 2 6 0
Headset	N/A	Yes <sup>2 6 1</sup>	Yes 2 6 2	Yes <sup>263</sup>	Yes <sup>264</sup>
VR specific accessories such as camera or motion detector	N/A	Yes <sup>2 6 5</sup>	Yes <sup>2 6 6</sup>	N/A	Yes <sup>2 6 7</sup>
Keyboard	N/A	Ves 2 6 8	Ves 2 6 9	N/A	N/A
Wheel & Joystick	Yes 2 7 0	Yes 2 7 1	Yes 2 7 2	N/A	Yes <sup>273</sup>

# B. Privacy Policy

Fordham CLIP analyzed the privacy policies for the five traditional game consoles it studied. From Nintendo's Support page, <sup>146</sup> Fordham CLIP noted that Nintendo provided links to privacy policies applicable to different game platforms. For Nintendo Switch, Nintendo provides a link to a privacy policy last updated in March 2017. <sup>147</sup> For Nintendo Wii and 3DS, Nintendo links to a policy last updated in July 2015. Because these policies did not specifically name each platform to which the policy applies, Fordham CLIP contacted Nintendo and confirmed that a different privacy policy applies to Nintendo Switch users than 3DS

144

<sup>&</sup>lt;sup>146</sup> Documents, Policies, and Privacy Information, NINTENDO, http://www.nintendo.com/consumer/info/en\_na/docs.jsp [https://perma.cc/VW82-RBNW] (last visited Aug. 2, 2017).

<sup>&</sup>lt;sup>147</sup> *Id*.

and Wii U users, and that the same policy applies to both Nintendo 3DS and Wii U.

The PlayStation Network Privacy Policy states that the policy applies to "hardware" that utilizes the Sony Entertainment Network for data collection. Fordham CLIP contacted Sony Interactive Entertainment America and confirmed that the PlayStation Network Privacy Policy applies to users of both PlayStation 4 and PlayStation VR.

Microsoft has an umbrella privacy policy that applies to all Microsoft products. <sup>148</sup> In the policy there are separate sections for each product and there is a section for the Xbox.

The chart below summarizes the statements made in privacy policies with respect to data practices for each game console. If the policy does not appear to address a specific issue, this is indicated as UNK in blue.

<sup>&</sup>lt;sup>148</sup> *Microsoft Privacy Statement, supra* note 79.

## TABLE 8

	Switch	3DS, Wii U	PS4	Xbox One
		(1) Basic Information		
Policy Name	Nintendo Privacy Policy 2 7 4	Nintendo Privacy Policy 2 7 5	SIE – PlayStation Network Privacy Policy <sup>2 7 6</sup>	Microsoft Privacy Statement <sup>2 7 7</sup>
Last updated on	March, 2017	July, 2015	January, 2017	June, 2017
Policy applies to	All Nintendo services that directly reference or link to this policy, but does not apply to Nintendo services that have separate privacy policies that do not incorporate this policy.	Nintendo product or service <sup>2,7,8</sup>	SIE LLC websites, the PlayStation Network and Sony Entertainment Network (collectively "SEN"), or certain hardware or software which utilizes SEN for data collection and refers to this Privacy Policy (all collectively, "SIE LLC Network") <sup>279</sup>	Microsoft Products such as Xbox Services (Xbox console, Xbox Live) <sup>2 8 0 2 8 1</sup>
		(2) Information Collection		
Name	Ves 2 8 2	Ves 2 8 3	Yes 2 8 4	Ves 2 8 5
E-mail Address	Yes <sup>286</sup>	Yes <sup>287</sup>	Yes 2 8 8	Yes <sup>2 8 9</sup>
Phone number	Yes <sup>290</sup>	Yes <sup>291</sup>	Ves 2 9 2	Yes <sup>293</sup>
Address	Yes <sup>294</sup>	Yes 2 9 5	Yes <sup>296</sup>	Yes <sup>297</sup>
Age	Yes <sup>298</sup>	Yes <sup>299</sup>	Yes <sup>300</sup>	Yes <sup>301</sup>
Country of Residence	Yes 2 9 8 Yes 3 0 2	Yes 2 9 9 Yes 3 0 3	Ves 3 0 4	Ves <sup>301</sup>
Language	Yes 3 0 6	Yes 3 0 7	UNK	Yes 3 0 8
Gender	Yes 3 0 9	Yes 3 1 0		Yes <sup>311</sup>
Login Information such as username and password	UNK	Yes <sup>3 1 2</sup>	Yes <sup>313</sup>	Yes <sup>3 1 4</sup>
Hobbies and interest	UNK	Ves 3 1 5	UNK	Ves 3 1 6
Information about device	Yes 3 1 7	Yes <sup>318</sup>	Yes 3 1 9	Yes 3 2 0
Operating System	Yes 3 2 1	Yes 3 2 2	Yes 3 2 3	Ves 3 2 4
IP address	Yes 3 2 5	Yes 3 2 6	Yes 3 2 7	Yes 3 2 8
Browser type	UNK	Yes <sup>329</sup>	Yes 3 3 0	Yes 3 3 1
Location	Yes 3 3 2	UNK	Yes 3 3 3	Yes 3 3 4
Interaction with services - information about game play	Yes 3 3 5	Yes <sup>3 3 6</sup>	Yes <sup>3 3 7</sup>	Yes <sup>3 3 8</sup>
Connections with other users and the content that you share with them	Yes <sup>3 3 9</sup>	Yes <sup>3 4 0</sup>	UNK	Yes <sup>3 4 1</sup>
User's Interaction with Customer Services	UNK	Yes <sup>3 4 2</sup>	Yes <sup>3 4 3</sup>	Yes <sup>3 4 4</sup>
User created content (such as text, message, images, audio,	Yes <sup>3 4 5</sup>	Yes <sup>3 4 6</sup>	Yes <sup>3 4 7</sup>	Yes <sup>3 4 8</sup>
Payment information, such as credit card number, expiration	Yes <sup>3 4 9</sup>	Yes <sup>3 5 0</sup>	Yes <sup>3 5 1</sup>	Yes <sup>3 5 2</sup>
date, account authentication information and contact information like billing and shipping address.				
Purchase history	Yes <sup>353</sup>	Yes <sup>354</sup>	Yes 3 5 5	Yes 3 5 6
Tracking Technology such as	Yes 3 5 7	Yes 3 5 8	Yes 3 5 9	Yes 3 6 0
Cookies/Beacons/Scripts/Tags				
B 10 1 1 1 1	T	(3) Information Usage		
Providing and optimizing Services	Yes <sup>3 6 1</sup>	Yes <sup>3 6 2</sup>	Yes <sup>3 6 3</sup>	Yes <sup>3 6 4</sup>
Marketing, Promotion, Advertising	Yes <sup>3 6 5</sup>	Yes <sup>3 6 6</sup>	Yes <sup>3 6 7</sup>	Yes <sup>3 6 8</sup>
Customer Services (Technical support; Troubleshooting)	Yes <sup>3 6 9</sup>	Yes <sup>3 7 0</sup>	Yes <sup>3 7 1</sup>	Yes <sup>3 7 2</sup>
Helping users to establish connections with other users	Yes <sup>3 7 3</sup>	UNK	UNK	UNK
Cheating, crime and fraud prevention	Yes <sup>3 7 4</sup>	Yes <sup>3 7 5</sup>	Yes <sup>3 7 6</sup>	Yes <sup>3 7 7</sup>
Research/Analysis	Ves 3 7 8	Yes 3 7 9	Yes 3 8 0	Ves 3 8 1
Legal uses	Yes 3 8 2	Yes <sup>383</sup>	Yes 3 8 4	Yes 3 8 5
	1 113	LILIA	1 113	1 110

	(4) Information	on Sharing - User data is shared w	ith following parties	
Affiliates/Family companies	Yes 3 8 6	Yes 3 8 7	Yes 3 8 8	Yes 3 8 9
Other users/ General Public	Yes 3 9 0	Yes 3 9 1	Yes 3 9 2	UNK
Service Providers (such as	Yes 3 9 3	Yes 3 9 4	Yes 3 9 5	Yes 3 9 6
payment processor, data				
aggregator, hosting services,				
analytics firm, customer				
services)				
Advertising platforms and	Yes 3 9 7	Yes 3 9 8	Yes 3 9 9	Yes 4 0 0
partners				
(ad exchanges, ad networks				
and ad servers)	UNK	LINIK		
Law Enforcement		UNK	Yes 4 0 1	Yes 4 0 2
Business associations	Yes 4 0 3	(5) Hear control and Storago Pot	Yes 4 0 5	Yes 4 0 6
Hann's Dight to Assess	UNK	(5) User control and Storage Ret Yes (for children under		
User's Right to Access Personal Information	UNK	13) <sup>4 0 7</sup>	Yes 4 0 8	Yes 4 0 9
User's Right to	Yes 4 1 0	UNK	Yes 4 1 1	Yes 4 1 2
Update/Change Personal	Yes	OTAK	Yes 4 1 1	Yes 4 1 2
Information				
User's Right to	Yes <sup>413</sup>	Yes (for children under	Yes 4 1 5	Yes 4 1 6
Delete/Deactivate Account	Tes	13)414	165	1 65
Removing information stored	UNK	Yes 4 1 7	UNK	UNK
on the device		163		
International transfer	UNK	Yes 4 1 8	Yes 4 1 9	Yes 4 2 0
Ability to opt-out of receiving	Yes 4 2 1	Yes 4 2 2	Yes 4 2 3	Yes 4 2 4
notifications,			1 2 2 2	
promotions/advertisement				
Response to "Do Not Track"	No 4 2 5	UNK	UNK	No <sup>4 2 6</sup>
Signal				
Limit the Use of Cookies in	Yes 4 2 7	Yes 4 2 8	UNK	Yes 4 2 9
Web Browsers				
Retention Policy	UNK	UNK	Yes 4 3 0	Yes <sup>4 3 1</sup>
		(6) Others		
Implementation of Security Measure	Yes <sup>4 3 2</sup>	Yes 4 3 3	Yes <sup>4 3 4</sup>	Yes <sup>4 3 5</sup>
Information about children	Ves 4 3 6	Ves 4 3 7	Yes 4 3 8	Ves 4 3 9 4 4 0
ESRB Certified	Ves 4 4 1	Yes <sup>442</sup>	UNK	UNK
Contact Information	Ves 4 4 3	Yes 4 4 4	Ves 4 4 5	Ves 4 4 6
Changes made to Privacy	Notification by email or	Update on website 4 4 8	Update on website 4 4 9	Notification by email or
Policy	Update on website 4 4 7	-Faute on Website	- Pauce on Medice	Update on website 4 5 0

### APPENDIX C – VIRTUAL REALITY

### A. Technical Specifications

Fordham CLIP identified the five most popular virtual reality platforms based on the head-mounted display (HMD) sales data for 2017: Samsung Gear VR, Sony PlayStation VR, Google DayDream View, HTC Vive, and Oculus Rift. To survey the technical specifications of each VR platform, Fordham CLIP reviewed the specification statements provided by manufacturers of each HMD device and by consumer electronic companies (like

<sup>&</sup>lt;sup>149</sup> See supra Table 4.

# Best Buy). $^{150}$ The chart below summarizes the technical specifications for each VR platform.

## Table 9

	Gear VR	PlayStation® VR	DayDream View	Vive	Rift
Company	Samsung	Sony	Google	HTC	Oculus
			nformation		
Release Date	April 21, 2017 <sup>4 5 1</sup>	October 13, 2016 4 5 2	November 10, 2016 4 5 3	April 5, 2016 4 5 4	March 28, 2016 4 5 5
Retail Price	\$129.99 <sup>4 5 6</sup>	\$499.99 <sup>4 5 7</sup>	\$79.00458	\$799.99 <sup>459</sup>	\$499.99 <sup>460</sup>
In the box	Gear VR headset, Gear	PlayStation VR headset,	Daydream View	Vive headset, two	Rift headset, 2x sensors,
	VR Controller, Micro	the processor unit, stereo	headset,	wireless controllers, two	Touch controllers,
	USB device holder,	headphones and cables,	Daydream View	base stations, link box,	necessary cables, and
	Micro USB connector	camera, two motion	controller	earbuds, Vive	seven free titles 4 6 4
		controllers 4 6 1	Wrist strap	accessories, safety guide	
			Quick start guide 4 6 2	and warranty card 4 6 3	
	La		patibility		
Requirements (Host Device)	Smartphone	PS4	Smartphone 4 6 5	PC 4 6 6	PC <sup>4 6 7</sup>
Compatible Smartphone	Samsung Galaxy S8,	N/A	Google Pixel, Motorola	N/A	N/A
Models	S8+, S7, S7 edge,		Moto Z, Huawei Mate 9		
	Note5, S6 edge+, S6, S6		Pro, ZTE Axon 7 <sup>468</sup>		
	edge	2711	2711	X 1004 G 004 LE 4	
Recommended	N/A	N/A	N/A	Intel <sup>TM</sup> Core <sup>TM</sup> i5-4590	Intel i5-4590 / AMD Ryzen 5 1500X or
Computer Specs –				or AMD FXTM 8350,	greater 4 6 9
Processor:				equivalent or better	greater
D 1.1	N/A	N/A	N/A	NIVIDIA C.E. TM	NVIDIA GTX 1060 /
Recommended	N/A	N/A	N/A	NVIDIA GeForce <sup>TM</sup> GTX 1060 or AMD	AMD Radeon RX 480
Computer Specs – Graphics				Radeon™ RX 480.	or greater 4 7 0
Graphics				equivalent or better	or greater
Recommended	N/A	N/A	N/A	Windows <sup>TM</sup> 7 SP1,	Windows 10 <sup>471</sup>
Computer Specs –	IV/A	IVA	IVA	Windows 7 St 1, Windows 7 St 1, Windows 7 St 1,	Wildows 10
Operating system				or Windows <sup>TM</sup> 10	
Recommended	N/A	N/A	N/A	1x USB 2.0 port or	3x USB 3.0 ports plus
Computer Specs – USB				newer	1x USB 2.0 port 4 7 2
Recommended	N/A	N/A	N/A	4 GB RAM or more	8GB+ RAM 4 7 3
Computer Specs -					
Memory					
Recommended	N/A	N/A	N/A	1x HDMI 1.4 port, or	Compatible HDMI 1.3
Computer Specs –				DisplayPort 1.2 or	video output 4 7 4
Video Output				newer	
					478
Platform	Oculus	PS4	Google DayDream	SteamVR, VivePort 4 7 5	Oculus Home 4 7 6
Y	101.1	(3) Head Mounted Displ		110.1 47.9	110.1 480
Lens (Field of view – FOV)	101 degree	100 degree 4 7 7	90 degree 4 7 8	110 degree 4 7 9	110 degree 4 8 0
Tracking Area	Fixed Position 4 8 1	10 x 10 feet 4 8 2	N/A 4 8 3	15 x 15 feet 4 8 4	5 x 11 feet 4 8 5
Sensors – Accelerometer	Yes	Yes	Yes	Yes	Yes
Sensors – Gyroscope	Yes	Yes	Yes	Yes	Yes
			=		
Sensors - Magnetometer	No	Yes	No	No	Yes
Sensors – Proximity	Yes	No	Yes	No	No
Built-in Camera	No	No 4 8 6	No	Yes 4 8 7	No 4 8 8
Built-in Microphone	No	Yes 4 8 9	No	Yes 4 9 0	Yes 4 9 1
Built-in Audio	No	No 4 9 2	No	Yes 4 9 3	Yes 4 9 4
Positional Tracking 4 9 5	No 4 9 6	Yes	No	Yes	Yes 4 9 7
		(4) Other Compa			
Controller	Yes	Yes	Yes	Yes	Yes
Camera	Yes 4 9 8	Yes <sup>499</sup>	No	No 5 0 0	No

### B. Privacy Policy

Gear VR is manufactured by Samsung. Samsung has a privacy policy that covers all Samsung products. Even though Samsung's policy does not specifically mention Gear VR by name, Fordham CLIP confirmed with Samsung customer support that Gear VR users are subject to this umbrella privacy policy. Similarly, Sony PSVR, Google DayDream View, HTC Vive, and Oculus Rift users are governed by the manufacturer's privacy policy covering all services offered by the manufacturer. Fordham CLIP contacted each of these device manufacturers and confirmed that the specific VR product is covered by the respective manufacturer's privacy policy. 154

However, Samsung developed the Gear VR product in partnership with Oculus.<sup>155</sup> Oculus provides a platform where Gear VR users can download and purchase software.<sup>156</sup> Thus, if users create Oculus accounts to access VR experiences through a Samsung device, they will be subject to Oculus's privacy policy in addition to the Samsung privacy policy.<sup>157</sup> Fordham CLIP contacted Oculus Customer Support and confirmed that Oculus's privacy policy applies to both Gear VR and Rift's users.<sup>158</sup>

<sup>&</sup>lt;sup>151</sup> Samsung Privacy Policy, SAMSUNG, http://www.samsung.com/us/common/privacy.html [https://perma.cc/9XY2-9FWS] (last visited Nov. 6, 2017) ("This Privacy Policy applies to any Samsung device, website or online application that refers to or links to the Privacy Policy.").

<sup>&</sup>lt;sup>152</sup> *Id.* ("This Privacy Policy applies to any Samsung device, website or online application that refers to or links to the Privacy Policy (collectively, our "Services").").

<sup>&</sup>lt;sup>153</sup> See infra Table 10.

<sup>154</sup> See id

Shara Tibken, *Samsung Will Take on Oculus, Vive With High-Power VR Rig*, CNET (Mar. 29, 2017), https://www.cnet.com/news/samsung-virtual-reality-gear-vr-high-power-oculus-vive/ [https://perma.cc/K5DC-GKVC].

<sup>&</sup>lt;sup>156</sup> Using the Oculus Store and Library, OCULUS, https://support.oculus.com/guides/gear-vr/latest/concepts/ug-b-st-store/ [https://perma.cc/YVA9-NT57] (last visited Nov. 10, 2018).

<sup>&</sup>lt;sup>157</sup> Samsung Privacy Policy, supra note 151 ("This Privacy Policy applies to any Samsung device, website or online application that refers to or links to the Privacy Policy.").

E-mail from Marlo, Oculus Support, to Sumyung Moon, Project Fellow, Fordham CLIP (July 25, 2017, 5:13 EST) (on file with author).

The chart below summarizes the privacy policies for the five VR gaming platforms. If the policy does not appear to address a specific issue, this is indicated as UNK in blue.

Table 10

	Gear VR	PSVR	DayDream	Vive	Rift
	501		nformation 1503	LITTO O C TITTO	Lo. 1. III II 0505
Company	Samsung <sup>5 0 1</sup>	Sony Interactive Entertainment LLC ("SIE LLC") <sup>5 0 2</sup>	Google <sup>5 0 3</sup>	HTC Corporation, HTC America, Inc. <sup>5 0 4</sup>	Oculus VR, LLC <sup>5 0 5</sup>
Applicable Privacy Policy	Samsung Privacy Policy <sup>5 0 6</sup>	SIE LLC Privacy Policy <sup>5 0 7</sup>	Google Privacy Policy <sup>5 0 8</sup>	HTC Privacy Policy 5 0 9	Oculus Privacy Policy <sup>5 1 0</sup>
Last updated on	February 10, 2015 <sup>5</sup> <sup>1</sup> <sup>1</sup>	July 20, 2017 <sup>5 1 2</sup>	April 17, 2017 <sup>5 1 3</sup>	September 29, 2014. <sup>5 1 4</sup>	February 12, 2016 <sup>5</sup> 1 5
Products and Service Defined	any Samsung device, website or online application <sup>5</sup> <sup>1</sup> <sup>6</sup>	websites, the PlayStation Network and, Sony Entertainment Network, hardware, and software <sup>5</sup> 1 7	all of the services offered by Google Inc. and its affiliates <sup>5</sup> <sup>1</sup> <sup>8</sup>	websites, devices, applications and services <sup>5</sup> <sup>1</sup> <sup>9</sup>	websites, mobile apps, platform, content and hardware <sup>5 2 0</sup>
		(2) Informati	on Collection		
Name	Yes 5 2 1	Yes 5 2 2	Yes 5 2 3	Yes 5 2 4	Yes 5 2 5
Email	Yes 5 2 6	Yes 5 2 7	Yes 5 2 8	Yes <sup>5 2 9</sup>	Yes 5 3 0
Phone number	UNK	Yes 5 3 1	Yes 5 3 2	Yes 5 3 3	Yes 5 3 4
Age/Date of birth	UNK	Ves 5 3 5	UNK	Ves 5 3 6	Ves 5 3 7
Address	Yes <sup>538</sup>	Yes 5 3 9	UNK	Yes 5 4 0	Yes 5 4 1
Gender	UNK	UNK	UNK	Yes 5 4 2	UNK
Occupation	UNK	UNK	UNK	Yes 5 4 3	UNK
Company or organization name	UNK	UNK	UNK	Yes 5 4 4	UNK
Language	UNK	Yes 5 4 5	Yes <sup>5 4 6</sup>	Yes <sup>5 4 7</sup>	UNK
Photo	UNK	Yes <sup>5 4 8</sup>	Yes <sup>5 4 9</sup>	Yes 5 5 0	UNK
Payment information	Yes 5 5 1	Yes 5 5 2	Yes 5 5 3	Yes 5 5 4	Ves 5 5 5
Purchase history	UNK	Yes 5 5 6	Yes 5 5 7	UNK	Yes <sup>558</sup>
Interaction with customer services	UNK	Yes 5 5 9	Yes 5 6 0	UNK	Yes <sup>5 6 1</sup>
Interaction with other users	Yes <sup>5 6 2</sup>	Yes <sup>5 6 3</sup>	UNK	UNK	Yes <sup>5 6 4</sup>
User created contents (such as text, message, images, audio, video)	UNK	Yes <sup>5 6 5</sup>	UNK	Yes 5 6 6	Yes <sup>5 6 7</sup>
Physical feature and dimensions	UNK	UNK	UNK	UNK	Yes <sup>5 6 8</sup>
Physical movements and dimensions	UNK	UNK	UNK	UNK	Yes <sup>5 6 9</sup>
Voice	Yes 5 7 0	Yes 5 7 1	UNK	UNK	UNK
Location	Yes 5 7 2	Ves 5 7 3	Yes 5 7 4	Ves 5 7 5	Ves 5 7 6
IP address	Ves 5 7 7	Ves 5 7 8	Ves 5 7 9	Ves 5 8 0	Ves 5 8 1
Error data	UNK	Yes 5 8 2	UNK	Yes 5 8 3	UNK
Device Type/Model	Yes 5 8 4	Ves 5 8 5	Yes 5 8 6	Yes 5 8 7	Ves 5 8 8
Device identifier	Ycs <sup>5 8 9</sup>	Yes 5 9 0	Ycs <sup>5 9 1</sup>	Yes <sup>5 9 2</sup>	Ycs <sup>5 9 3</sup>
Browser type	UNK	Yes <sup>5 9 4</sup>	Yes <sup>5 9 5</sup>	Yes <sup>5 9 6</sup>	Yes <sup>5 9 7</sup>
Operating system	Ves 5 9 8	Ves 5 9 9	Ves 6 0 0	Ves 6 0 1	Ves 6 0 2
Browsing History	Yes 6 0 3	Yes 6 0 4	Yes 6 0 5	Yes 6 0 6	UNK
Device settings	Yes 6 0 7	UNK	Yes 6 0 8	Yes 6 0 9	UNK
Use of tracking technology such as	Yes 6 1 0	Yes <sup>6</sup> <sup>1</sup> <sup>1</sup>	Yes 6 1 2	Yes <sup>6</sup> 1 3	Yes <sup>6</sup> <sup>1</sup> <sup>4</sup>
cookies/beacons/scripts/t ags Interaction with the	** 0.15	** 6.1.6	** 617	** 610	xx 610
service	Yes 6 1 5	Yes 6 1 6	Yes <sup>6 1 7</sup>	Yes 6 1 8	Yes <sup>6</sup> 1 9
Any information received from third parties	Yes <sup>6 2 0</sup>	Yes <sup>6 2 1</sup>	Yes <sup>6 2 2</sup>	Yes <sup>6 2 3</sup>	Yes <sup>6 2 4</sup>
		(3) Informa	ation Usage		
Use of De-identified or aggregate data	Yes <sup>6 2 5</sup>	Yes <sup>6 2 6</sup>	Yes <sup>6 2 7</sup>	Yes <sup>6 2 8</sup>	Yes <sup>6 2 9</sup>
Providing or optimizing services	Yes <sup>6 3 0</sup>	Yes <sup>6 3 1</sup>	Yes <sup>6 3 2</sup>	Yes <sup>633</sup>	Yes <sup>6 3 4</sup>
Customizing Services	Yes 6 3 5	Yes 6 3 6	Yes 6 3 7	Yes <sup>638</sup>	Yes <sup>6 3 9</sup>

information and content Customer services Research/Analysis	UNK				
Facilitate sharing of information and content Customer services Research/Analysis		UNK	UNK	UNK	Yes <sup>6 4 0</sup>
Customer services Research/Analysis	UNK	UNK	Yes <sup>6 4 1</sup>	Yes 6 4 2	UNK
Research/Analysis					
	Yes 6 4 3	Yes 6 4 4	Yes 6 4 5	Yes 6 4 6	Yes 6 4 7
	Yes <sup>6 4 8</sup> Yes <sup>6 5 3</sup>	Yes <sup>6 4 9</sup> Yes <sup>6 5 4</sup>	Yes 6 5 5 Yes 6 5 5	Yes 6 5 1 Yes 6 5 6	Yes <sup>6 5 2</sup> Yes <sup>6 5 7</sup>
promotion					
fraud prevention	Yes 6 5 8	Yes <sup>6 5 9</sup>	Yes 6 6 0	Yes <sup>6 6 1</sup>	Yes <sup>6 6 2</sup>
Complying with government/law enforcement	Yes <sup>6 6 3</sup>	Yes <sup>6 6 4</sup>	Yes <sup>6 6 5</sup>	Yes <sup>6 6 6</sup>	Yes <sup>6 6 7</sup>
Legal uses	Yes 6 6 8	Ves 6 6 9	Ves 6 7 0	Yes 6 7 1	Ves 6 7 2
	(4)		data is shared with following pa		
Related companies/Affiliates	Yes <sup>6 7 3</sup>	Yes <sup>6</sup> <sup>7</sup> <sup>4</sup>	Yes <sup>6 7 5</sup>	Yes <sup>6 7 6</sup>	Yes <sup>6 7 7</sup>
	See Endnotes <sup>6 7 8</sup>	See Endnotes <sup>6 7 9</sup>	See Endnotes <sup>6 8 0</sup>	UNK	Facebook, Inc., Facebook Ireland Limited, Facebook Payments Inc., Atlas, Instagram LLC, Mobile Technologies Inc., Onavo, Parse, Moves, LiveRail, WhatsApp Inc. 6 8 1
Public	UNK	Yes 6 8 2	Yes 6 8 3	UNK	Yes 6 8 4
Other Parties in Connection With Corporate Transactions	Yes <sup>6 8 5</sup>	Yes <sup>6 8 6</sup>	Yes 6 8 7	Yes 6 8 8	Yes <sup>6 8 9</sup>
Service providers	Yes 6 9 0	Ves 6 9 1	Ves 6 9 2	Yes 6 9 3	Ves 6 9 4
Wireless carriers	Yes 6 9 5	UNK	UNK	Yes 6 9 6	UNK
	Yes 6 9 7	Yes 6 9 8	Yes 6 9 9	Yes 7 0 0	Yes 7 0 1
officers and government	100		and Storage Retention		
Opportunity to access	UNK	Yes 7 0 2	Yes 7 0 3	Yes <sup>7 0 4</sup>	Yes 7 0 5
data Opportunity to	UNK				UNK
change/update/amend data		Yes <sup>7 0 6</sup>	Yes <sup>7 0 7</sup>	Yes <sup>7 0 8</sup>	UNK
Opportunity to delete/deactivate data	UNK	Yes <sup>7 0 9</sup>	Yes <sup>7 1 0</sup>	Yes <sup>7</sup> <sup>1</sup> <sup>1</sup>	Yes <sup>7 1 2</sup>
Data retention after account deletion/deactivation	UNK	Yes <sup>7 1 3</sup>	Yes <sup>7</sup> 1 4	UNK	Yes <sup>7 1 5</sup>
	UNK	Yes <sup>7 1 6</sup>	Yes <sup>7 1 7</sup>	Yes <sup>7 1 8</sup>	Yes <sup>7 1 9</sup>
	UNK	U.S. and other countries <sup>7 2 0</sup>	"many countries around the world" <sup>7 2 1</sup>	U.S., Taiwan, Singapore, EU member state countries and any other country <sup>7 2 2</sup>	U.S. and other countries <sup>7 2 3</sup>
Retention duration	UNK	"as long as it is necessary" 7 2 4	UNK	"as for as long as needed" or "required by applicable regulations or laws" <sup>7 2 5</sup>	UNK
	Yes 7 2 6	Yes <sup>7 2 7</sup>	Yes <sup>7 2 8</sup>	Yes <sup>7 2 9</sup>	UNK
Opportunity to opt out from marketing	105			1	
from marketing Ability to limit the use	Yes <sup>7 3 0</sup>	UNK	Yes <sup>7 3 1</sup>	Yes <sup>7 3 2</sup>	Yes* <sup>7 3 3</sup>
from marketing Ability to limit the use of tracking technologies		UNK	Yes <sup>7 3 1</sup> UNK	Yes <sup>7 3 2</sup> No <sup>7 3 5</sup>	Yes* <sup>733</sup> UNK
from marketing Ability to limit the use of tracking technologies Response to "Do Not Track" signal	Yes <sup>7 3 0</sup>	UNK			
from marketing Ability to limit the use of tracking technologies Response to "Do Not Track" signal  Security of information	Yes <sup>7 3 0</sup> No <sup>7 3 4</sup> Yes <sup>7 3 6</sup>	UNK (0	UNK  6) Others  Yes 7 3 8	No <sup>735</sup> Ves <sup>739</sup>	UNK Yes <sup>7 4 0</sup>
from marketing Ability to limit the use of tracking technologies Response to "Do Not Track" signal  Security of information	Yes <sup>730</sup> No <sup>734</sup>	UNK	UNK 5) Others	No 7 3 5 Yes 7 3 9 Yes 7 4 2	UNK  Ves <sup>7 4 0</sup> Yes <sup>7 4 3</sup>
from marketing Ability to limit the use of tracking technologies Response to "Do Not Track" signal  Security of information Links to third party websites and services Information about children	Yes <sup>7 3 0</sup> No <sup>7 3 4</sup> Yes <sup>7 3 6</sup>	UNK (0	UNK  6) Others  Yes 7 3 8	No <sup>735</sup> Ves <sup>739</sup>	UNK Yes <sup>7 4 0</sup>
from marketing Ability to limit the use of tracking technologies Response to "Do Not Track" signal  Security of information Links to third party websites and services Information about	Yes <sup>7 3 0</sup> No <sup>7 3 4</sup> Yes <sup>7 3 6</sup> Yes <sup>7 4 1</sup>	UNK (0	UNK 5) Others	No 7 3 5 Yes 7 3 9 Yes 7 4 2	UNK  Ves <sup>7 4 0</sup> Yes <sup>7 4 3</sup>

#### **ENDNOTES & REFERENCES**

<sup>1</sup> Data found in the Apple App Store and Google Play Store is under the columns "AA," and "GP" respectively.

- <sup>4</sup> An app that is identified to belong in "Read Contacts" group can use user's device's contacts, which may include the ability to read and modify contacts. *See id.*
- <sup>5</sup> An app that is identified to belong in "Approximate Location (Network-Based)" group can use your device's approximate location (network-based). *See id*.
- <sup>6</sup> An app that is identified to belong in "Precise Location (GPS and Network-Based)" group can use your device's Precise location (GPS and network-based). *See id*.
- An app that is identified to belong in "Read the Contents of USB Storage" group can use files or data stored on your device. Photos/Media/Files access may include the ability to read the contents of your USB storage (example: SD card). *See id.*
- <sup>8</sup> An app that is identified to belong in "Modify or Delete the Contents of USB Storage" group can use files or data stored on your device. Photos/Media/Files access may include the ability to modify or delete the contents of your USB storage. *See id*.
- <sup>9</sup> An app that is identified to belong in "Take Pictures and Videos" group can use your device's camera. Camera access may include the ability to: Take pictures and videos. *See id*.
- <sup>10</sup> An app that is identified to belong in "View Wi-Fi Connections" group can access your device's Wi-Fi connection information, like if Wi-Fi is turned on and the name(s) of connected devices. Wi-Fi connection information access may include the ability to view Wi-Fi connections. *See id*.
- An app that is identified to belong in "Pair with Bluetooth Devices" can control Bluetooth on your device, which includes broadcasting to or getting information about nearby Bluetooth devices. *See id.*
- An app that is identified to belong in "Use Accounts on the Device" can use your account and/or profile information on your device. Identity access may include the ability to: find accounts on the device, read your own contact card (example: name and contact information), modify your own contact card, add or remove accounts. *See id*.
- To test the network requirement for each game, Fordham CLIP conducted an experiment by using airplane mode from both an Android phone and iPhone. When airplane mode was on, access to Clash of Clans, Clash Royale, Mobile Strike, Game of War Fire Age, and Pokémon Go was restricted. However, Candy Crush Saga's and

Before users download an app on devices running up to Android 5.9, users may need to give the app permission to access specific capabilities or information on the device, known as permission groups. Google Play Store displays information regarding which permission groups an app will be able to access. This information can help users in deciding whether to install the app. Once users allow an app to access a permissions group, the app may use any of the individual permissions that are part of the group. *See Review App Permissions Thru Android 5.9*, GOOGLE PLAY HELP, https://support.google.com/googleplay/answer/6014972?p=app\_permissions&rd=1 [https://perma.cc/9SJS-ZFDD] (last visited July 4, 2017).

<sup>&</sup>lt;sup>3</sup> An app that is identified to belong in "Find Accounts on the Device" group can access users device ID(s), phone number, whether users are on the phone, and the number connected by a call. Device ID & call information may include the ability to read phone status and identity. See Review App Permissions Thru Android 5.9, supra note 2.

Candy Crush Soda Saga's gaming features loaded without restriction, although some functionality such as message/chat and in-app purchases were restricted if without an internet connection.

- However, players can send a message to his or her Facebook friends.
- 15 However, players can send a message to his or her Facebook friends.
- However, players can send a message to his or her Facebook friends.
- However, players can send a message to his or her Facebook friends.
- Supercell's Privacy Policy applies to both Clash of Clans and Clash Royale. See Privacy Policy, Supercell., http://supercell.com/en/privacy-policy [http://perma.cc/2ZX5-YKRS] (last visited July 4, 2017) ("This Privacy Policy (this 'Policy') describes the ways we collect, store, use, and manage the information, including personal information, and data that you provide or we collect in connection with our websites, including www.supercell.com, www.clashofclans.com, www.clashofclans.co.m, www.clashofclans.co.kr, www.supercell.co.jp and www.supercell.net (the 'Sites') or any Supercell game provided on a mobile platform (for example, iOS and Android) (collectively, the 'Service(s)').") [hereinafter Supercell Privacy Policy].
- <sup>19</sup> King's Privacy Policy applies to both Candy Crush Saga and Candy Crush Soda Saga. *See Consumer Terms*, KING, https://about.king.com/consumer-terms/terms/en [https://perma.cc/Z8SM-G3AL] (last visited July 4, 2017) ("This policy applies to all of our games, whether played on our website www.king.com, on mobile devices, PC or on other platforms such as Facebook") [hereinafter *King Privacy Policy*].
- <sup>20</sup> Machine Zone, Inc. ("MZ") Privacy Statement, MACHINE ZONE, http://www.gameofwarapp.com/privacypolicy.html [https://perma.cc/6VLH-TPZF] (last visited July 4, 2017) [hereinafter Machine Zone Privacy Policy].
- <sup>21</sup> Epic War, LLC ("Epic War") Privacy Policy, EPIC WAR, http://www.mobilestrikeapp.com/privacypolicy.html [https://perma.cc/UJ45-XZUB] (last visited July 4, 2017) [hereinafter Epic War Privacy Policy].
- <sup>22</sup> Pokémon GO Privacy Policy, NIANTIC, https://www.nianticlabs.com/privacy/pokemongo/en [https://perma.cc/G9A8-Z2YL] (last visited July 4, 2017) [hereinafter *Pokémon GO Privacy Policy*].
- <sup>23</sup> Supercell Privacy Policy, supra note 18 ("Supercell Oy... is dedicated to protecting the privacy rights of our users").
- <sup>24</sup> King Privacy Policy, supra note 19 ("We are a company called King.com Limited.").
- <sup>25</sup> Machine Zone Privacy Policy, supra note 20 ("MZ develops and publishes online and mobile products and services, including websites, mobile applications and platform services (collectively, the 'Services'). In this policy, 'MZ' refers to Machine Zone, Inc. and its Affiliates, which shall mean subsidiaries, parent companies, joint ventures and other corporate entities under common ownership.").
- <sup>26</sup> Epic War Privacy Policy, supra note 21 ("Epic War, LLC' refers to Epic War, LLC and its Affiliates, which shall mean subsidiaries, parent companies, joint ventures and other corporate entities under common ownership.").
- <sup>27</sup> Pokémon GO Privacy Policy, supra note 22("Protecting your privacy (or the privacy of your authorized child) is really important to Niantic, Inc. ('Niantic,' 'we,' 'our,' or 'us'.)").
- <sup>28</sup> Supercell Privacy Policy, supra note 18 ("This Privacy Policy (this 'Policy') describes the ways we collect, store, use, and manage the information, including personal

information, and data that you provide or we collect in connection with our websites, including www.supercell.com, www.clashofclans.com, www.clashofclans.com, www.clashofclans.com, www.clashofclans.co.kr, www.supercell.co.jp and www.supercell.net (the 'Sites') or any Supercell game provided on a mobile platform (for example, iOS and Android) (collectively, the 'Service(s)')").

- <sup>29</sup> Epic War Privacy Policy, supra note 21 ("Epic War, LLC ('Epic War') develops and publishes social games for the web and mobile devices including Mobile Strike (the 'Service')").
- <sup>30</sup> Pokémon GO Privacy Policy, supra note 22 ("To make this Privacy Policy easier to read, our services, the App, and our website located at http://pokemongo.nianticlabs.com and http://www.pokemongolive.com (the 'Site') are collectively called the 'Services'").
- 31 King Privacy Policy, supra note 19 ("In this policy we refer to our games, websites, advertising activities and other services collectively as our 'Services'").
- <sup>32</sup> Machine Zone Privacy Policy, supra note 20 ("MZ develops and publishes online and mobile products and services, including websites, mobile applications and platform services (collectively, the 'Services')").
- 33 Supercell Privacy Policy, supra note 18 ("Our Policy Regarding Children. We do not knowingly collect or solicit personal information from anyone under the age of 13 or knowingly allow such persons to use our Service. If you are under 13, please do not send any information about yourself to us, including your name, address, telephone number, or email address. No one under the age of 13 may provide any personal information. In the event that we learn that we have collected personal information from a child under age 13, we will delete that information as quickly as possible. If you believe that we might have any information from or about a child under the age of 13, please contact us at legal-requests@supercell.com.").
- <sup>34</sup> King Privacy Policy, supra note 19 ("As set out in the terms and conditions relating to our Services, you must be at least 13 years old to access and/or use our Services. We do not knowingly collect personal data about children under the age of 13.").
- Machine Zone Privacy Policy, supra note 20 ("Our Policies Concerning Children. Our Services (including websites, games, and applications) are not intended for children under the age of 13. We do not knowingly collect or solicit any personal information from children under the age of 13 and we do not knowingly allow children under the age of 13 to register for or use the Services. Children under the age of 13 should not use our Services or send us any personal information about themselves at any time. In the event We learn that We have inadvertently gathered personal information from children under the age of 13, We will take reasonable measures to promptly erase such information from our records. If you believe that we might have information from or about a child under the age of 13, please contact us").
- <sup>36</sup> Epic War Privacy Policy, supra note 21 ("Our Services (including websites, games, and applications) are not intended for children under the age of 13. We do not knowingly collect or solicit any personal information from children under the age of 13 and we do not knowingly allow children under the age of 13 to register for or use the Services. Children under the age of 13 should not use our Services or send us any personal information about themselves at any time. In the event We learn that We have inadvertently gathered personal information from children under the age of 13, We will take reasonable measures to promptly erase such information from our records.").
- <sup>37</sup> Pokémon GO Privacy Policy, supra note 22 ("Accounts with Children. We comply with verifiable parental consent requirements mandated by the Children's Online Privacy

Protection Act (COPPA) and European data protection laws (including, without limitation, the Data Protection Directive) through a verification and consent process handled by PTC. As described in the Terms of Service ('Terms'), the parent or legal guardian ('Parent') of each child under the age of 13 must register with The Pokémon Company International, Inc. ('TPCI') through PTC before creating an Account. Registering a PTC account requires that a child's Parent provide an email address, a user name for the user and the date of birth of the user. For U.S. residents, after a Parent has registered a PTC account, TPCI will verify that the child is the Parent's child by asking for the sum of the first and last digits of the Parent's social security number and the Parent's name, date of birth, and street address. TPCI will not share that information with us. After TPCI verifies that the child is the Parent's child, it will ask the Parent to consent to the creation of an Account with us. If a Parent does not consent to a child's access to and use of the Services or does not verify the Parent's consent through the consent process, Niantic will bar that child's registration for an Account, prevent the child's access to and use of the Services, and ensure that such child's information is not accessible through the Services. Parents have the right to refuse further collection, use, and/or disclosure of their child's PII by notifying us. If we learn that we have received PII from a child under the age of 13 without the Parent providing consent, we will delete the child's Account and all other PII collected in conjunction with such Account. The Parents of children under the age of 13 understand and agree that TPCI and/or Niantic may provide information collected via the Services, to third parties who use such information for the sole purpose of administering or providing the Services (e.g., third party security monitoring services and web hosting companies).").

- <sup>38</sup> Supercell Privacy Policy, supra note 18 ("In order to use your community forum, you must register and provide a username, password and email address.").
- <sup>39</sup> King Privacy Policy, supra note 19 ("These features will enable other players to see your username, your avatar and your progress through our games and other game play related information such as high scores.").
- <sup>40</sup> Machine Zone Privacy Policy, supra note 20 ("You can control and find out more about these settings within the application. For example, MZ may access and store some or all of the following information: Your in service username, Your device's MAC address, Facebook User ID, Facebook Fan Status, Your physical location and that of your access devices.").
- <sup>41</sup> Epic War Privacy Policy, supra note 21 ("For example, Epic War may access and store some or all of the following information: Your in-Service username, Your device's MAC address, Facebook User ID, Facebook Fan Status, Your physical location and that of your access devices.").
- <sup>42</sup> Pokémon GO Privacy Policy, supra note 22 ("Registering a PTC account will require you to submit the date of birth of the user (which could be you or your authorized child) and the PTC username. This information will be shared with us (see the 'Accounts with Children' paragraph below for more information on this).").
- <sup>43</sup> Supercell Privacy Policy, supra note 18 ("In order to use your community forum, you must register and provide a username, password and email address.").
- <sup>44</sup> King Privacy Policy, supra note 19 ("If you access our Games and you allow them to interact with a social network you are giving us permission to use your email address and any other personal information which that social network shares with us that will allow us to personally identify you.").

- <sup>45</sup> Machine Zone Privacy Policy, supra note 20 ("We may allow you to 'register' with Us by using Facebook Connect or other application authentication options to create an account or profile within a Service. We may also provide a more typical registration flow where you may be required to provide the following information: your age or birthday (for age screening and/or to better understand who our users are); your e-mail address; a password and other information that helps Us confirm that it is you accessing your account.").
- <sup>46</sup> Epic War Privacy Policy, supra note 21 ("We may collect or receive information from other sources including (i) other Epic War users who choose to upload their email contacts; and (ii) third party information providers.").
- <sup>47</sup> Pokémon GO Privacy Policy, supra note 22 ("[W]e will collect PII (such as your Google email address, your PTC registered email address, and/or your Facebook registered email address) that your privacy settings with Google, PTC, or Facebook permit us to access.").
- <sup>48</sup> Supercell Privacy Policy, supra note 18 ("In addition, we may ask you to submit and we may process data that is personal to you, including but not limited to your name, profile photo, gender, age or birthday, links to your profiles on social networking websites and other third party sites, user names and e-mail and mail addresses.").
- <sup>49</sup> Machine Zone Privacy Policy, supra note 20 ("Some messages, such as invites for friends to join you in a Service, may include your name and profile photo.").
- <sup>50</sup> Epic War Privacy Policy, supra note 21 ("Some messages, such as invites for friends to join you in a Service, may include your name and profile photo.").
- Machine Zone Privacy Policy, supra note 20 ("We may also collect the name you have associated with your device, device type, telephone number, country, geo-location, and any other information you choose to provide, such as user name, character name or e-mail address.").
- <sup>52</sup> Epic War Privacy Policy, supra note 21 ("We may also collect the name you have associated with your device, device type, telephone number, country, geo-location, and any other information you choose to provide, such as user name, character name, or e-mail address.").
- <sup>53</sup> Supercell Privacy Policy, supra note 18 ("In addition, we may ask you to submit and we may process data that is personal to you, including but not limited to your name, profile photo, gender, age or birthday, links to your profiles on social networking websites and other third party sites, user names and e-mail and mail addresses.").
- <sup>54</sup> *Id*.
- Machine Zone Privacy Policy, supra note 20 ("We may allow you to 'register' with Us by using Facebook Connect or other application authentication options to create an account or profile within a Service. We may also provide a more typical registration flow where you may be required to provide the following information: your age or birthday (for age screening and/or to better understand who our users are); your e-mail address; a password and other information that helps Us confirm that it is you accessing your account.").
- <sup>56</sup> Pokémon GO Privacy Policy, supra note 22 ("Registering a PTC account will require you to submit the date of birth of the user (which could be you or your authorized child) and the PTC username. This information will be shared with us (see the 'Accounts with Children' paragraph below for more information on this).").

- Supercell Privacy Policy, supra note 18 ("In addition, we may ask you to submit and we may process data that is personal to you, including but not limited to your name, profile photo, gender, age or birthday, links to your profiles on social networking websites and other third party sites, user names and e-mail and mail addresses.").
- Pokémon GO Privacy Policy, supra note 22 ("Apple Watch Additional Terms for Apple Health App Data. In addition to the data collection practices described below in this Privacy Policy, if you use Pokémon GO with your Apple Watch, with your consent we use the Apple HealthKit APIs to read and/or write certain data (such as Step Count, Calories Burned, and Distance Walked) to the Health App Database on your device (the 'Health App Data'). We may store Health App Data on our servers in connection with your Pokémon GO user account. We use Health App Data to provide you certain functionality in the game (such as distances walked to hatch eggs), and to ensure you get 'credit' in your Apple Health App for all of the walking you do while playing Pokémon GO. We will not use Health App Data for marketing or advertising purposes. We do not store Health App Data in iCloud. Pokémon GO cannot read from or write to the Health App Database without your consent.").
- <sup>59</sup> Supercell Privacy Policy, supra note 18 ("While you are browsing Supercell's Sites, your computer's operating system, Internet Protocol (IP) address, access times, browser type and language and referring Web site addresses may be logged automatically.").
- <sup>60</sup> King Privacy Policy, supra note 19 ("for example, by providing a testimonial about one of our Services) we may publish the information you submitted, alongside your name and home country on our website(s) and social media channels . . . . ").
- Machine Zone Privacy Policy, supra note 20 ("We may also collect the name you have associated with your device, device type, telephone number, country, geo-location, and any other information you choose to provide, such as user name, character name or e-mail address.").
- <sup>62</sup> Epic War Privacy Policy, supra note 21 ("We also may collect the name you have associated with your device, device type, telephone number, country, geo-location, and any other information you choose to provide, such as user name, character name, or e-mail address.").
- <sup>63</sup> Pokémon GO Privacy Policy, supra note 22 ("When you (or your authorized child) create an Account we also will collect other information (such as country and language) that cannot be used to identify you (or your authorized child) unless combined with other identifying information.").
- <sup>64</sup> Supercell Privacy Policy, supra note 18 ("iOS and Android Platforms. When you use any of the Supercell games or applications on a mobile platform, we may collect and record certain information such as . . . your location (based on your Internet Protocol ('IP') address.").
- King Privacy Policy, supra note 19 ("[I]nformation we collect about you from our other group companies or other third party companies (including publishing partners, platforms, advertising platforms and partners and data aggregators) which may include attributes about you and your interests, as well as other games and services you use, demographic and general location information. We will use this information as described in this policy subject to any limitations in the privacy policy of the company that collected the information from you.").
- 66 Machine Zone Privacy Policy, supra note 20 ("You can control and find out more about these settings within the application. For example, MZ may access and store some or all of the following information: Your in service username, Your device's MAC

address, Facebook User ID, Facebook Fan Status, Your physical location and that of your access devices.").

- <sup>67</sup> Epic War Privacy Policy, supra note 21 ("For example, Epic War may access and store some or all of the following information: Your in-Service username, Your device's MAC address, Facebook User ID, Facebook Fan Status Your physical location and that of your access devices.").
- Pokémon GO Privacy Policy, supra note 22 ("Location Information. The App is a location based game. We collect and store information about your (or your authorized child's) location when you (or your authorized child) use our App and take game actions that use the location services made available through your (or your authorized child's) device's mobile operating system, which makes use of cell/mobile tower triangulation, wifi triangulation, and/or GPS. You understand and agree that by using our App you (or your authorized child) will be transmitting your (or your authorized child's) device location to us and some of that location information, along with your (or your authorized child's) user name, may be shared through the App. For example, when you take certain actions during gameplay, your (or your authorized child's) user name and location may be shared through the App with other users who are playing the game. We may also use location information to improve and personalize our Services for you (or your authorized child).").
- <sup>69</sup> Supercell Privacy Policy, supra note 18 ("In addition, we may ask you to submit and we may process data that is personal to you, including but not limited to your name, profile photo, gender, age or birthday, links to your profiles on social networking websites and other third party sites, user names and e-mail and mail addresses.").
- King Privacy Policy, supra note 19 ("Connecting with third party social networks. You can choose to log into your King Profile using your Facebook account details. If you do this, you will be able to use your Facebook account to log in on multiple devices and synchronise progress across those devices. We will receive some of your Facebook account information and exactly what information we receive will depend on your settings in your Facebook account. We may use this information for the purposes described in this privacy policy, including in order to advertise to you. Once connected in this way, you will also be able to see which of your friends are playing the same game and their progress through the games (and they will be able to see you and your progress). This may also allow you to access other functionality in our games and other services, such as inviting friends to play, asking other players for lives and 1-2-1 messaging. Logging in with Facebook will not allow us to post anything to your Facebook page without your permission. In the future we may also allow you to associate your King Profile with other social network accounts and use your log in details for that account to log into your King Profile. Where we do this, either we or your social network service provider will let you know what information we will receive about you from that social network. If you choose to play our games online on the desktop version of Facebook.com, your basic Facebook account information will automatically be associated with your King account. You can control how your Facebook information is used and shared with your Facebook friends in your Facebook account settings. Where you connect or associate your King Profile with any third party social network or platform, that social network applications or platform will provide certain information about you to us. These social networks and platforms are created and maintained by a third party which is not a part of, or controlled by King. We may use this data for the purposes described in this privacy policy, including in order to advertise to you. You

should ensure that you read the third party social network or platform's terms of service and privacy policies to understand how they treat your data and what information they might share with us. You can make changes to what data a third party social network or platform shares with us, or stop our Services interacting with that social network or platform by adjusting your settings with that third party provider, however you may find you are not able to enjoy all of the same features of our Services.").

- Machine Zone Privacy Policy, supra note 20 ("We may allow you to 'register' with Us by using Facebook Connect or other application authentication options to create an account or profile within a Service. We may also provide a more typical registration flow where you may be required to provide the following information: your age or birthday (for age screening and/or to better understand who our users are); your e-mail address; a password and other information that helps Us confirm that it is you accessing your account. We may also offer you the option to complete a user profile that is visible to other MZ users. Your user profile may include: a profile image; one or more Service username(s); and a MZ user ID number that is created by MZ and used to identify your profile.").
- Supercell Privacy Policy, supra note 18 ("Invite a Friend Supercell may offer you the opportunity to invite your contacts from a SN Service (such as your Facebook friends) so that those contacts can be located in Supercell games and/or you can invite them to join you in Supercell games. Such contact information will be used only for the purpose of sending communications to the addressee. You or the third party may contact us at legal-requests@supercell.com to request the removal of this information from our database to the extent Supercell stores any of this information.").
- <sup>73</sup> King Privacy Policy, supra note 19 ("information that you provide us with when you fill in forms, answer questions or complete surveys when using any of our Services, when you create an account with us or if you invite your friends to use our games and Services.").
- <sup>74</sup> Machine Zone Privacy Policy, supra note 20 ("We may also access your contacts to enable you to invite friends to join you in the Service.").
- <sup>75</sup> Epic War Privacy Policy, supra note 21 ("We may also access your contacts to enable you to invite friends to join you in the Service.").
- <sup>76</sup> Supercell Privacy Policy, supra note 18 ("The third parties may have access to information such as your device identifier, MAC address, IMEI, locale (specific location where a given language is spoken), geo-location information, and IP address for the purpose of providing their services under their respective privacy policies.").
- Machine Zone Privacy Policy, supra note 20 ("You can control and find out more about these settings within the application. For example, MZ may access and store some or all of the following information: Your in service username, Your device's MAC address, Facebook User ID, Facebook Fan Status, Your physical location and that of your access devices.").
- <sup>78</sup> Epic War Privacy Policy, supra note 21 ("For example, Epic War may access and store some or all of the following information: Your in-Service username, Your device's MAC address, Facebook User ID, Facebook Fan Status Your physical location and that of your access devices.").
- <sup>79</sup> Supercell Privacy Policy, supra note 18 ("While you are browsing Supercell's Sites, your computer's operating system, Internet Protocol (IP) address, access times, browser type and language and referring Web site addresses may be logged automatically.").

- Machine Zone Privacy Policy, supra note 20 ("If you access an MZ Service on your mobile telephone or other mobile device, including iPads and tablets, we collect information about you, including but not limited to, your mobile device identifier, MAC Address, WiFi information, and possibly your IP Address and geo-location.").
- <sup>81</sup> Epic War Privacy Policy, supra note 21 ("If you access an Epic War Service on your mobile telephone or other mobile device, including iPads and tablets, we collect information about you, including but not limited to, your mobile device identifier, MAC Address, WiFi information, and possibly your IP Address and geo-location.").
- <sup>82</sup> Pokémon GO Privacy Policy, supra note 22 ("Log Data may include information such as a User's Internet Protocol (IP) address, user agent, browser type, operating system, the web page that a User was visiting before accessing our Services, the pages or features of our Services to which a User browsed and the time spent on those pages or features, search terms, the links on our Services that a User clicked on, and other statistics.").
- Supercell Privacy Policy, supra note 18 ("iOS and Android Platforms. When you use any of the Supercell games or applications on a mobile platform, we may collect and record certain information such as your unique device ID (persistent / non-persistent), hardware type, media access control ('MAC') address, international mobile equipment identity ('IMEI'), the version of your operating system ('OS'), your device name...").
- <sup>84</sup> King Privacy Policy, supra note 19 ("Broadly the information we collect about you relates to the type of device you are using, how you play our games (such as levels attempted and purchases made), other games or apps you use on your device and may include information that you submit when creating an account with us or which you allow us to access when you connect to your social network accounts through our games or Services.").
- Machine Zone Privacy Policy, supra note 20 ("we collect information about you, including but not limited to, your mobile device identifier, MAC Address, WiFi information, and possibly your IP Address and geo-location. In certain Services we will create and assign to your device an identifier that is similar to an account number. We may also collect the name you have associated with your device, device type, telephone number, country, geo-location, and any other information you choose to provide, such as user name, character name or e-mail address.").
- <sup>86</sup> Epic War Privacy Policy, supra note 21 ("If you access an Epic War Service on your mobile telephone or other mobile device, including iPads and tablets, we collect information about you, including but not limited to, your mobile device identifier, MAC Address, WiFi information, and possibly your IP Address and geo-location.").
- Pokémon GO Privacy Policy, supra note 22 ("Information Sent by Your Mobile Device. We collect certain information that your (or your authorized child's) mobile device sends when you (or your authorized child) use our Services, like a device identifier, user settings, and the operating system of your (or your authorized child's) device, as well as information about your use of our Services while using the mobile device. We may use this information to provide the Services and to improve and personalize our Services for you (or your authorized child).").
- <sup>88</sup> Supercell Privacy Policy, supra note 18 ("Tracking Technologies. We and our marketing and outsourcing partners, affiliates, or analytics service providers use technologies such as cookies, beacons, scripts, and tags to identify a user's computer/device and to 'remember' things about your visit, such as your preferences or a

user name and password. Information contained in a cookie may be linked to your personal information, such as your user ID, for purposes such as improving the quality of our Services, tailoring recommendations to your interests, and making the Service easier to use. You can disable cookies at any time, although you may not be able to access or use features of the Service. We may feature advertisements served by third parties that deliver cookies to your computer/device so the content you access and advertisements you see can be tracked. Since the third party advertising companies associate your computer/device with a number, they will be able to recognize your computer/device each time they send you an advertisement. These advertisers may use information about your visits to our Service and third party sites and applications in order to measure advertisement performance and to provide advertisements about goods and services of interest to you. This Policy does not apply to, and we are not responsible for the data collection practices of these third party advertisers, and we encourage you to check their privacy policies to learn more about their use of cookies and other technology.").

<sup>89</sup> King Privacy Policy, supra note 19 ("...information we collect via cookies and other similar technologies, as explained further below...").

Machine Zone Privacy Policy, supra note 20 ("Cookies and Automated Information Collection. When you access the Services, We collect certain technical information in order to (i) analyze the usage of our sites and Services; (ii) provide a more personalized experience; and (iii) manage advertising. We and service providers acting on our behalf, such as Google Analytics, may use Log Files and other tracking technologies to collect and analyze certain types of technical information over time and across different websites following your use of the Service, including cookies, WiFi information, IP addresses, geo-location, device type, device identifiers, browser types, browser language, referring and exit pages, and URLs, platform type, the number of clicks, domain names, landing pages, pages viewed and the order of those pages, the amount of time spent on particular pages, Service state and the date and time of activity on our websites or Services, and other similar information. In some cases, We will associate this information with your user ID number for our internal use. Our Service currently does not respond to 'Do Not Track' (DNT) settings in your web browser and operates as described in this Privacy Policy whether or not a DNT signal is received. If we do so in the future, we will describe how we do so in this Privacy Policy. For further details regarding DNT, visit donottrack.us. We may also employ other technologies including (i) web beacons, which allow Us to know if a certain page was visited or whether an e-mail was opened; (ii) tracking pixels, which allow Us to advertise more efficiently by excluding our current users from certain promotional messages, identifying the source of a new installation or delivering ads to you on other websites; and (iii) local shared objects also known as flash cookies, which help Us to prevent fraud, remember your in-Service preferences and speed up load times. You can set your web browser to warn you about attempts to place cookies on your computer or limit the type of cookies you allow. Flash cookies operate differently than browser cookies and cookie management tools available in a web browser may not remove flash cookies. To learn more about and manage flash cookies you can visit adobe.com and make changes at the privacy settings panel. If you disable cookies, you may lose some of the features and functionality of playing our Services, as MZ cookies are necessary to track and enhance your Service activities. Please note that companies delivering advertisements in our Services or on our websites may also use cookies or other technologies, and those practices are subject to their own policies. Google Analytics uses cookies to help the website analyze how users use the Service and

enhance your experience when you use the Service. For more information on how Google uses this data, go to google.com/policies/privacy/partners/. The NAI (Network Advertising Initiative) allows for the central opting out of all its members' cookies from a single opt-out page. If you prefer not to receive relevant advertising on web pages, please click on the following link: networkadvertising.org/choices/. If you delete your cookies, use a different browser or buy a new computer, you will need to renew your opt-out choice.").

Epic War Privacy Policy, supra note 21 ("When you access the Services, We collect certain technical information in order to (i) analyze the usage of our sites and Services; (ii) provide a more personalized experience; and (iii) manage advertising. We and service providers acting on our behalf, such as Google Analytics, may use Log Files and other tracking technologies to collect and analyze certain types of technical information over time and across different websites following your use of the Service, including cookies, WiFi information, IP addresses, geo-location, device type, device identifiers, browser types, browser language, referring and exit pages, and URLs, platform type, the number of clicks, domain names, landing pages, pages viewed and the order of those pages, the amount of time spent on particular pages, Service state and the date and time of activity on our Services, and other similar information. In some cases, We will associate this information with your user ID number for our internal use. Our Service currently does not respond to 'Do Not Track' (DNT) settings in your web browser and operates as described in this Privacy Policy whether or not a DNT signal is received. If we do so in the future, we will describe how we do so in this Privacy Policy. For further details regarding DNT, visit donottrack.us. We may also employ other technologies including (i) web beacons, which allow Us to know if a certain page was visited or whether an e-mail was opened; (ii) tracking pixels, which allow Us to advertise more efficiently by excluding our current users from certain promotional messages, identifying the source of a new installation or delivering ads to you on other websites; and (iii) local shared objects also known as flash cookies, which help Us to prevent fraud, remember your in-Service preferences and speed up load times. You can set your web browser to warn you about attempts to place cookies on your computer or limit the type of cookies you allow. Flash cookies operate differently than browser cookies and cookie management tools available in a web browser may not remove flash cookies. To learn more about and manage flash cookies you can visit adobe.com and make changes at the privacy settings panel. If you disable cookies, you may lose some of the features and functionality of playing our Services, as Epic War cookies are necessary to track and enhance your Service activities. Please note that companies delivering advertisements in our Services or on our websites may also use cookies or other technologies, and those practices are subject to their own policies. Google Analytics uses cookies to help the website analyze how users use the Service and enhance your experience when you use the Service. For more information on how Google uses this data, go to google.com/policies/privacy/partners/. The NAI (Network Advertising Initiative) allows for the central opting out of all its members' cookies from a single opt-out page. If you prefer not to receive relevant advertising on web pages, please click on the following link: networkadvertising.org/choices/. If you delete your cookies, use a different browser or buy a new computer, you will need to renew your opt-out choice.").

92 Pokémon GO Privacy Policy, supra note 22 ("Information Collected Using Cookies and other Web Technologies. Like many website owners and operators, we use automated data collection tools such as Cookies and Web Beacons to collect certain

information on our Site. 'Cookies' are small text files that are placed on your hard drive by a Web server when you (or your authorized child) access our Services. We may use both session Cookies and persistent Cookies to identify that you (or your authorized child) have logged in to the Services and to tell us how and when you (or your authorized child) interact with our Services. We may also use Cookies to monitor aggregate usage and web traffic routing on our Services and to customize and improve our Services. Session Cookies are deleted when you (or your authorized child) log off from the Services and close the browser. Persistent Cookies remain on your computer and will identify how you use the Services over time. Although most browsers automatically accept Cookies, you can change your browser options to stop automatically accepting Cookies or to prompt you before accepting Cookies. Please note, however, that if you don't accept Cookies, you (or your authorized child) may not be able to access all portions or features of the Services. Some third party services providers that we engage (including third party advertisers) may also place their own Cookies on your hard drive. 'Web Beacons' (also known as web bugs, pixel tags, or clear GIFs) are tiny graphics with a unique identifier that may be included on our Services for several purposes. For example, we may use Web Beacons to deliver or communicate with Cookies, to track and measure the performance of our Services, to monitor how many visitors view our Services, and to monitor the effectiveness of our advertising. Unlike Cookies, which are stored on the user's hard drive, Web Beacons are typically embedded invisibly on web pages (or in an e-mail).").

- <sup>93</sup> Supercell Privacy Policy, supra note 18 ("Game Data Collection. Whenever you play our games, we collect data about all of your interactions with the game and with the other players inside the game via server log files. This information may be associated with your player ID, IP address or device ID for the purpose of providing you our Services and improving them. This data is stored within Amazon Web Services. With your permission, we will also collect your exact location so that we are able to match you with other players in your area.").
- <sup>94</sup> King Privacy Policy, supra note 19 ("details about how you use and interact with our games, advertising and other Services (for example, information about how and when you play our games or visit our website(s), what device you use to access our games and services or details regarding profile visits, as set out in the section entitled 'King Profile' in section 3, below)...").
- 95 Machine Zone Privacy Policy, supra note 20 ("INFORMATION ABOUT PLAYERS AND PLAY. To provide a richer game play and social experience in our Services, We collect information about your play and interaction with other players and users. The bulk of this information is collected and stored through the use of Log Files, which are files on our web servers that record actions taken on our games and websites.").
- <sup>96</sup> Epic War Privacy Policy, supra note 21 ("To provide a richer game play and social experience, We collect information about your play and interaction with other players and users. The bulk of this information is collected and stored through the use of Log Files, which are files on our web servers that record actions taken on our Services.").
- <sup>97</sup> Supercell Privacy Policy, supra note 18 ("We and our marketing and outsourcing partners, affiliates, or analytics service providers use technologies such as cookies, beacons, scripts, and tags to identify a user's computer/device and to 'remember' things about your visit, such as your preferences or a user name and password. Information contained in a cookie may be linked to your personal information, such as your user ID,

for purposes such as improving the quality of our Services, tailoring recommendations to your interests, and making the Service easier to use.").

other group companies or other third party companies (including publishing partners, platforms, advertising platforms and partners and data aggregators) which may include attributes about you and your interests, as well as other games and services you use, demographic and general location information. We will use this information as described in this policy subject to any limitations in the privacy policy of the company that collected the information from you . . . Like many companies, we may use information about you in connection with advertising. This includes using information that we have about you, such as the games you play, to try to make sure you only see advertising that might be of interest to you. For example, if we know you play Candy Crush Saga, we might suggest that you continue the adventure in Candy Crush Soda Saga by showing you an ad for Candy Crush Soda Saga. We may also use the information that we have about you to help a third party deliver advertisements that are tailored to you based on a determination of your characteristics or interests by us based on the information that we have about you.").

<sup>99</sup> Id

<sup>100</sup> King Privacy Policy, supra note 19 ("In some instances, when you make purchases on or through our website(s), we may collect certain payment information from you on behalf of our payment service providers, but this information is temporarily cached in a way that is unreadable by King. We do not collect or retain credit card information.").

Machine Zone Privacy Policy, supra note 20 ("MZ may also receive the billing and payment information that you provide when your purchase is processed by another party, such as Apple (for purchases on iOS devices), Google (for purchases on Android devices), or Amazon (for purchases on Kindle devices).").

<sup>102</sup> Epic War Privacy Policy, supra note 21 ("Epic War may also receive the billing and payment information that you provide when your purchase is processed by another party, such as Apple (for purchases on iOS devices), Google (for purchases on Android devices) or Amazon (for purchases on Kindle devices).").

<sup>103</sup> Supercell Privacy Policy, supra note 18 ("Our Web site offers publicly accessible blogs, private messages, or community forums. You should be aware that any information you provide in these areas may be read, collected, and used by others who access them.").

low King Privacy Policy, supra note 19 ("Chat. Some of our Services include player-to-player chat functionality. Users of our chat service(s) can send messages to other registered players. Your messages may be used and stored by us: (a) to convey your messages; and (b) to enable you and your recipients to view your message history. We reserve the right to review the content of your messages, including by using automatic filters, to ensure that you are complying with our terms of service and we also reserve the right to prevent your use of our chat service(s) or to block the sending of any message for any reason. We will not use the content of your chat messages for any other purpose.").

Machine Zone Privacy Policy, supra note 20 ("COMMUNICATIONS FEATURES. You may be able to take part in certain activities on our websites or games that give you the opportunity to communicate or share information not just with MZ, but also with other users of our Service. These include: Participating in player forums and message boards; Posting public comments to other users' profiles or gameboards; Sending private messages or invitations to other users, either directly on our websites or to their e-mail

accounts; Chat with other users; Posting web links; We may record and store archives of these communications on MZ's servers to protect the safety and well-being of our users and MZ's rights and property in connection with the Services. You acknowledge and consent to the recording and storage of such communications for these purposes.").

Epic War Privacy Policy, supra note 21 ("Communications Features. You may be able to take part in certain activities on our Services that give you the opportunity to communicate or share information not just with Epic War, but also with other users of our Service. These include: Participating in player forums and message boards; Posting public comments to other users' profiles or gameboards; Sending private messages or invitations to other users, either directly on our websites or to their e-mail accounts; Chat with other users; Posting web links. We may record and store archives of these communications on Epic War's servers to protect the safety and well-being of our users and Epic War's rights and property in connection with the service. You acknowledge and consent to the recording and storage of such communications for these purposes.").

<sup>107</sup> Pokémon GO Privacy Policy, supra note 22 ("Gameplay Information. During game play we will collect certain information, such as your (or your authorized child's) user name and messages sent to other users.").

Supercell Privacy Policy, supra note 18 ("Customer Service. We may collect your email address when you contact our customer service group and we may use that email address to contact you about your gaming experience with Supercell games and notify you about company news and promotions. If you no longer wish to receive certain email notifications you may opt-out at any time by following the unsubscribe link located at the bottom of each communication or by emailing us at legal-requests@supercell.com... Other Collection. We may also acquire information from you through (1) your access and participation in message boards on the Service, (2) your participation in surveys regarding the Service or (3) your participation in a sweepstakes or contest through the Service. We may provide you the opportunity to participate in a sweepstakes or contest through our Service. If you participate, we will request certain personal information from you. Participation in these sweepstakes and contests are voluntary and you therefore have a choice whether or not to disclose this information. The requested information typically includes contact information (such as name and shipping address), and demographic information (such as zip code). We use this information to notify winners and award prizes, to monitor traffic or personalize the Service. We may use a third party service provider to conduct these sweepstakes or contests; that company is prohibited from using your users' personal information for any other purpose.").

<sup>109</sup> King Privacy Policy, supra note 19 ("If you contact us, for instance through our King Care customer service channels, or respond to messages and communications that we send to you, we may keep a record of that correspondence.").

Machine Zone Privacy Policy, supra note 20 ("When you ask for assistance from our Customer Support team, we will collect and store the contact information you provide (generally your name and e-mail address), information about your activity on the Service, and your username or ID number. We will also store the correspondence and any information contained within.").

Epic War Privacy Policy, supra note 21 ("Customer Support Correspondence. When you ask for assistance from our Customer Support team, we will collect and store the contact information you provide (generally your name and e-mail address), information about your activity on the Service, and your username or ID number. We will also store the correspondence and any information contained within.").

- Supercell Privacy Policy, supra note 18 ("Supercell's primary goals in collecting and using information is to create your account, provide Services to you, improve our Service, contact you, conduct research and create reports for internal use . . . We may use this information to monitor, develop and analyze your use of the Service.").
- King Privacy Policy, supra note 19 ("Providing and optimising our Services. We use your information to enable us to provide our games, websites, advertising and other Services to you and to optimise all of them so that we can make them the best they can be for you and all our players. This will include use and analysis of aggregated data to make sure that our games work properly on all devices and are as enjoyable as they can be for all our players.").
- Machine Zone Privacy Policy, supra note 20 ("In general, We collect, store and use your information to provide you with a safe, smooth, efficient, fun, and customized experience. For example, We may, and you expressly consent for us to, use information collected from you in any one or more of the following ways: To create your Service accounts and allow access to our Services.").
- 115 Epic War Privacy Policy, supra note 21 ("In general, We collect, store and use your information to provide you with a safe, smooth, efficient, fun, and customized experience. For example, We may, and you expressly consent for us to, use information collected from you in any one or more of the following ways: To create your service accounts and allow access to our services.").
- <sup>116</sup> Pokémon GO Privacy Policy, supra note 22 ("Our primary goals in collecting information are to provide and improve our Services, to administer your (or your authorized child's) use of the Services, and to enable you (or your authorized child) to enjoy and easily navigate our Services.").
- <sup>117</sup> Supercell Privacy Policy, supra note 18 (to "identify and suggest connections with other Supercell users . . . ").
- <sup>118</sup> Machine Zone Privacy Policy, supra note 20 ("To identify and suggest connections with other MZ users . . . ").
- <sup>119</sup> Epic War Privacy Policy, supra note 21 ("To identify and suggest connections with other Epic War users . . . ").
- <sup>120</sup> Supercell Privacy Policy, supra note 18 (to "enable you to communicate with other users . . . ").
- 121 King Privacy Policy, supra note 19 ("Chat. Some of our Services include player-toplayer chat functionality. Users of our chat service(s) can send messages to other registered players. Your messages may be used and stored by us: (a) to convey your messages; and (b) to enable you and your recipients to view your message history. We reserve the right to review the content of your messages, including by using automatic filters, to ensure that you are complying with our terms of service and we also reserve the right to prevent your use of our chat service(s) or to block the sending of any message for any reason. We will not use the content of your chat messages for any other purpose.").
- <sup>122</sup> Machine Zone Privacy Policy, supra note 20 ("To enable user-to-user communications...").
- <sup>123</sup> Epic War Privacy Policy, supra note 21 ("To enable user-to-user communications...").
- Supercell Privacy Policy, supra note 18 ("We may use your email address to contact you about your experience with Supercell Sites and notify you about company news and promotions. Your gender and birthday may be used to analyze user trends and target

certain promotions. Your mail address may be used if we have merchandise or other physical promotional materials that we want to send to you.").

- 125 King Privacy Policy, supra note 19 ("Marketing and promotion. We may use your information to send you direct marketing and promotional materials relating to our Services or related products, for example sending you communications (including by email) for these purposes on our, or a third party's behalf. For example, we might send you information about merchandise relating to our Services. If you do not want us to use your information in this way please let us know by contacting us at privacy@support.king.com.").
- <sup>126</sup> Machine Zone Privacy Policy, supra note 20 ("To deliver and target advertising....").
- Epic War Privacy Policy, supra note 21 ("To deliver and target advertising . . . .").
- <sup>128</sup> Supercell Privacy Policy, supra note 18 (to "respond to your comments and questions and provide customer service....").
- 129 King Privacy Policy, supra note 19 ("Customer Services. We use your information, including data that you provide directly to us in communications, to provide you with support through our customer service channels when you need it. We may also use it to contact you, for example as part of customer service or to send you updates about our games and services. Finally, we will use your data to manage your account and relationship with us and improving your experience when you use our Services.").
- <sup>130</sup> Machine Zone Privacy Policy, supra note 20 ("To provide technical support and respond to user inquiries . . . .").
- Epic War Privacy Policy, supra note 21 ("To provide technical support and respond to user inquiries . . . .").
- <sup>132</sup> Supercell Privacy Policy, supra note 18 ("Supercell's primary goals in collecting and using information is to create your account, provide Services to you, improve our Service, contact you, conduct research and create reports for internal use . . . We may use this information to monitor, develop and analyze your use of the Service.").
- King Privacy Policy, supra note 19 ("Analytics and Research. We use analytics tools, which may include third party analytics tools, to collect information about how you play our games and those tools may use cookies or other similar tracking technologies. We may use your data to carry out research, surveys or to engage directly with you, for example by sending you communications (including by email), for these purposes. We may also create reports, analysis or similar services for use by us for the purposes of research or business intelligence, for example to track potential problems or trends with our Services, or to test out new game features and content.").
- Machine Zone Privacy Policy, supra note 20 ("When you access the Services, We collect certain technical information in order to (i) analyze the usage of our sites and Services; (ii) provide a more personalized experience; and (iii) manage advertising.").
- Epic War Privacy Policy, supra note 21 ("When you access the Service, we collect certain technical information in order to (i) analyze the usage of our sites and services; (ii) provide a more personalized experience; and (iii) manage advertising.").
- <sup>136</sup> Pokémon GO Privacy Policy, supra note 22("We may share aggregated information and non-identifying information with third parties for research and analysis, demographic profiling, and other similar purposes. This information will not include your (or your authorized child's) PII.").
- Supercell Privacy Policy, supra note 18 ("We may release your information as permitted by law, such as to comply with a subpoena, or when we believe that release is

appropriate to comply with the law; investigate fraud, respond to a government request, enforce or apply our rights; or protect the rights, property, or safety of us or our users, or others. This includes exchanging information with other companies and organizations for fraud protection.").

- <sup>138</sup> King Privacy Policy, supra note 19 ("Cheating, crime and fraud prevention. We may use personal data that we hold to prevent cheating, crime or fraud. We may also need to pass your information to fraud prevention agencies and other organisations involved in crime and fraud prevention, such as the police.").
- <sup>139</sup> Machine Zone Privacy Policy, supra note 20 ("To prevent fraud or potentially illegal activities, and enforce our Terms of Service...").
- <sup>140</sup> Epic War Privacy Policy, supra note 21 ("To prevent fraud or potentially illegal activities, and enforce our Terms of Service....").
- Supercell Privacy Policy, supra note 18 ("We may release your information as permitted by law, such as to comply with a subpoena, or when we believe that release is appropriate to comply with the law; investigate fraud, respond to a government request, enforce or apply our rights; or protect the rights, property, or safety of us or our users, or others. This includes exchanging information with other companies and organizations for fraud protection.").
- <sup>142</sup> King Privacy Policy, supra note 19 ("Legal uses. We may use your data as required or permitted by any applicable law. As a specific example, if you live in the European Union, this would include for the purpose of providing VAT invoices where we are required to do so by law or where requested by you.").
- Machine Zone Privacy Policy, supra note 20 ("Your information, and the contents of all of your online communications (including without limitation chat text, voice communications, IP addresses and your personal information) may be accessed and monitored as necessary to provide the Service and may be disclosed: (i) when We have a good faith belief that We are required to disclose the information in response to legal process (for example, a court order, search warrant or subpoena); (ii) to satisfy any applicable laws or regulations; (iii) where We believe that the Service is being used in the commission of a crime, including to report such criminal activity or to exchange information with other companies and organizations for the purposes of fraud protection and credit risk reduction; (iv) when We have a good faith belief that there is an emergency that poses a threat to the health and/or safety of you, another person or the public generally; and (v) in order to protect the rights or property of MZ.").
- 144 Epic War Privacy Policy, supra note 21 ("Your information, and the contents of all of your online communications (including without limitation chat text, voice communications, IP addresses and your personal information) may be accessed and monitored as necessary to provide the Service and may be disclosed: (i) when We have a good faith belief that We are required to disclose the information in response to legal process (for example, a court order, search warrant or subpoena); (ii) to satisfy any applicable laws or regulations; (iii) where We believe that the Service is being used in the commission of a crime, including to report such criminal activity or to exchange information with other companies and organizations for the purposes of fraud protection and credit risk reduction; (iv) when We have a good faith belief that there is an emergency that poses a threat to the health and/or safety of you, another person or the public generally; and (v) in order to protect the rights or property of Epic War.").

- Protection and the Protection of Others. We cooperate with government and law enforcement officials or private parties to enforce and comply with the law. We may disclose any information about you (or your authorized child) that is in our possession or control to government or law enforcement officials or private parties as we, in our sole discretion, believe necessary or appropriate: (a) to respond to claims, legal process (including subpoenas); (b) to protect our property, rights, and safety and the property, rights, and safety of a third party or the public in general; and © to identify and stop any activity that we consider illegal, unethical, or legally actionable activity.").
- <sup>146</sup> Supercell Privacy Policy, supra note 18 ("We may share aggregate or anonymous information about you with advertisers, publishers, business partners, sponsors, and other third parties.").
- <sup>147</sup> King Privacy Policy, supra note 19 ("information we collect about you from our other group companies or other third party companies (including publishing partners, platforms, advertising platforms and partners and data aggregators) which may include attributes about you and your interests, as well as other games and services you use, demographic and general location information. We will use this information as described in this policy subject to any limitations in the privacy policy of the company that collected the information from you.").
- Supercell Privacy Policy, supra note 18 ("We may share aggregate or anonymous information about you with advertisers, publishers, business partners, sponsors, and other third parties... Ad Networks. We may feature advertising within our Service. The advertisers may collect and use information about you, such as your Service session activity, device identifier, MAC address, IMEI, geo-location information and IP address. They may use this information to provide advertisements of interest to you. Please refer to our list of partners within the Services and for more information on how to opt out at: http://www.supercell.net/partner-opt-out. In addition, you may see our games advertised in other services. After clicking on one of these advertisements and installing our game, you will become a user of our Service. In order to verify the installs, a device identifier may be shared with the advertiser.").
- <sup>149</sup> King Privacy Policy, supra note 19 ("Like many companies, we may use information about you in connection with advertising . . . Advertising partners. When we advertise our games in games or media published by other companies, we may use various third party advertising partners, including ad exchanges, ad networks and ad servers.").
- Machine Zone Privacy Policy, supra note 20 ("We will provide your information to third party companies to perform services on our behalf, including payment processing, data analysis, e-mail delivery, hosting services, customer service, placement of ads and assisting Us in other marketing efforts.").
- <sup>151</sup> Epic War Privacy Policy, supra note 21 ("Third Party Service Providers. We will provide your information to third party companies to perform services on our behalf, including payment processing, data analysis, e-mail delivery, hosting services, customer service, placement of ads and assisting us in other marketing efforts.").
- <sup>152</sup> Pokémon GO Privacy Policy, supra note 22 ("Some third party services providers that we engage (including third party advertisers) may also place their own Cookies on your hard drive.").
- Supercell Privacy Policy, supra note 18 ("We may release your information as permitted by law, such as to comply with a subpoena, or when we believe that release is

appropriate to comply with the law; investigate fraud, respond to a government request, enforce or apply our rights; or protect the rights, property, or safety of us or our users, or others. This includes exchanging information with other companies and organizations for fraud protection.").

- King Privacy Policy, supra note 19 ("We will share your information... as we reasonably believe is permitted by law or regulation or as is necessary to comply with any legal obligation, or in order to enforce or apply our terms and conditions and/or any other agreement with you; or to protect the rights, property, or safety of King, our users, or others.").
- <sup>155</sup> Machine Zone Privacy Policy, supra note 20 ("As a result, it is possible that your information could be accessed by foreign governmental authorities, or otherwise, in accordance with applicable local laws.").
- <sup>156</sup> Epic War Privacy Policy, supra note 21 ("As a result, it is possible that your information could be accessed by foreign governmental authorities, or otherwise, in accordance with applicable local laws.").
- Pokémon GO Privacy Policy, supra note 22 ("Information Disclosed for Our Protection and the Protection of Others. We cooperate with government and law enforcement officials or private parties to enforce and comply with the law. We may disclose any information about you (or your authorized child) that is in our possession or control to government or law enforcement officials or private parties as we, in our sole discretion, believe necessary or appropriate: (a) to respond to claims, legal process (including subpoenas); (b) to protect our property, rights, and safety and the property, rights, and safety of a third party or the public in general; and © to identify and stop any activity that we consider illegal, unethical, or legally actionable activity.").
- <sup>158</sup> Supercell Privacy Policy, supra note 18 ("Supercell may share your information in connection with any merger, sale of our assets, or a financing or acquisition of all or a portion of our business to another company. You will be notified via email and/or notice on our site of any change in ownership or users of your personal information.").
- 159 King Privacy Policy, supra note 19 ("We will share your information . . . if there is a sale of the assets of King or corporate restructuring, or as a result of a change of control of King or one of its group companies, or in preparation of any of these events. Any third party to which King transfers of sells King's assets will have the right to continue to use the personal and other information that you provide to us in the manner set out in this Privacy Policy.").
- Machine Zone Privacy Policy, supra note 20 ("In the event that MZ undergoes a business transition, such as a merger, acquisition by another company, or sale of all or a portion of its assets, We may transfer all of your information, including personal information, to the successor organization in such transition. If material changes to MZ's privacy practices will occur as a result of the business transition, We will notify you and other users (in the manner described in Changes to Our Privacy Policy below) of the business transition prior to transferring your personal information.").
- Epic War Privacy Policy, supra note 21 ("In the event that Epic War undergoes a business transition, such as a merger, acquisition by another company, or sale of all or a portion of its assets, We may transfer all of your information, including personal information, to the successor organization in such transition. If material changes to Epic War's privacy practices will occur as a result of the business transition, we will notify you and other users (in the manner described in Changes to Our Privacy Policy below) of the business transition prior to transferring your personal information.").

Pokémon GO Privacy Policy, supra note 22 ("Information Disclosed in Connection with Business Transactions. Information that we collect from our users, including PII, is considered to be a business asset. Thus, if we are acquired by a third party as a result of a transaction such as a merger, acquisition, or asset sale or if our assets are acquired by a third party in the event we go out of business or enter bankruptcy, some or all of our assets, including your (or your authorized child's) PII, may be disclosed or transferred to a third party acquirer in connection with the transaction. In the event of such a transaction, we will give you notice of the transaction and the opportunity for a period of 30 days to refuse disclosure or transfer of your (or your authorized child's) PII to the third party acquirer in connection with the transaction.").

163 King Privacy Policy, supra note 19 ("Our games and our websites include social features that enable you to interact with other players. These features will enable other players to see your username, your avatar and your progress through our games and other game play related information such as high scores. Depending on your settings in your social network or King account, other information in your profile may be shared with other players.").

Supercell Privacy Policy, supra note 18 ("Third Party Services. Our services may contain third party tracking tools from our service providers, examples of which include Google Analytics and MobileApp Tracking by Tune. Such third parties may use cookies, APIs, and SDKs in our services to enable them to collect and analyze user information on our behalf. The third parties may have access to information such as your device identifier, MAC address, IMEI, locale (specific location where a given language is spoken), geo-location information, and IP address for the purpose of providing their services under their respective privacy policies. Our privacy policy does not cover the use of tracking tools from third parties. We do not have access or control over these third parties. Please refer to our list of analytics partners within the Services and for more information on how to opt out at: http://www.supercell.com/partner-opt-out.").

<sup>165</sup> King Privacy Policy, supra note 19 ("We may share your information with our service providers if necessary to enable them to provide services to us.").

Machine Zone Privacy Policy, supra note 20 ("We will provide your information to third party companies to perform services on our behalf, including payment processing, data analysis, e-mail delivery, hosting services, customer service, placement of ads and assisting Us in other marketing efforts. We direct all such third party service providers to maintain the confidentiality of the information disclosed to them and to not use your information for any purpose other than to provide services on MZ's behalf.").

167 Epic War Privacy Policy, supra note 21 ("Third Party Service Providers. We will provide your information to third party companies to perform services on our behalf, including payment processing, data analysis, e-mail delivery, hosting services, customer service, placement of ads and assisting us in other marketing efforts. We direct all such third party service providers to maintain the confidentiality of the information disclosed to them and to not use your information for any purpose other than to provide services on Epic War's behalf.").

Pokémon GO Privacy Policy, supra note 22 ("Information Shared with Our Services Providers. We may engage third party service providers to work with us to administer and provide the Services. These third party service providers have access to your (or your authorized child's) PII only for the purpose of performing services on our behalf and are expressly obligated to secure your (or your authorized child's) PII and not to disclose or use your (or your authorized child's) PII for any other purpose.").

<sup>169</sup> Supercell Privacy Policy, supra note 18 ("Access to Personal Information. If your personal information changes, or if you no longer desire our service, you may correct, update, or delete inaccuracies by making the change within your account settings or by contacting us at legal-requests@supercell.com. We will respond to your access request within 30 days.").

170 King Privacy Policy, supra note 19 ("Your rights in relation to your information. You have certain rights in connection with your personal information and how we handle it. Details of those rights and how to exercise them are contained in this section. You have certain rights in relation to the personal information that we hold about you. Those rights include: Right of access. You have a right to know what information we hold about you and in some cases to have the information communicated to you. If you wish to exercise this right please contact us letting us know that you wish to exercise your right of access and what information in particular you would like to receive. We reserve the right to ask for reasonable evidence to verify your identity before we provide you with any information, and the law permits us to charge a fee for exercising this right of access. Please note that we may not be able to provide all the information you ask for, for instance if the information includes personal information about another person. Where we are not able to provide you with information that you have asked for, we will endeavour to tell you why. We will try to respond to any request for a right of access as soon as possible, but we will always do so within 40 days of receipt of your request, evidence of ID and any applicable fee.").

Machine Zone Privacy Policy, supra note 20 ("Users in certain jurisdictions have a right to access personal information held about them. Your right of access can be exercised in accordance with applicable law. At your request, and per applicable law, we will use commercially reasonable efforts to correct inaccurate personal information or delete personal information, but please note that we may be required to retain personal information by law or for legitimate business purposes. When we delete any information, it will be deleted from our active databases but may remain in our archives. Please note that we may also decline to process requests that are frivolous, vexatious, that jeopardize the privacy of others, are extremely impractical, or for which access is not otherwise required by local law. Please submit any requests related to access, correction, or deletion of your personal data in writing to support@mz.com.").

172 Epic War Privacy Policy, supra note 21 ("Right to Access. Users in certain jurisdictions have a right to access personal information held about themselves. Your right of access can be exercised in accordance with applicable law... Please submit any requests related to access, correction, or deletion of your personal data in writing to support@epicwar-online.com.").

Your Information. Parents may request and obtain access to PII stored about their children who are under the age of 13 by contacting us at pokemongo-privacy@nianticlabs.com. If you want us to modify or delete your (or your authorized child's) PII and/or your (or your authorized child's) Account, or discontinue the provision of your (or your authorized child's) PII to third parties, please contact us at pokemongo-privacy@nianticlabs.com with your request. We'll take steps to modify or delete your (or your authorized child's) information as soon we can (unless otherwise permitted by applicable law). Please note, however, that some information may remain in archived/backup copies for our records or as otherwise required by law.").

Supercell Privacy Policy, supra note 18 ("Access to Personal Information. If your personal information changes, or if you no longer desire our service, you may correct, update, or delete inaccuracies by making the change within your account settings or by contacting us at legal-requests@supercell.com. We will respond to your access request within 30 days.").

<sup>175</sup> King Privacy Policy, supra note 19 ("Right to correct personal information. We try to keep the information that we hold about you accurate and up to date. Should you realise that any of the information that we hold about you is incorrect, please let us know at privacy@support.king.com and we will correct it as soon as we can.").

Machine Zone Privacy Policy, supra note 20 ("If you wish to review, change or correct the information MZ has about you, e-mail Us at the address provided herein.").

<sup>177</sup> Epic War Privacy Policy, supra note 21 ("If you wish to review, change or correct the information Epic War has about you, e-mail us at support@epicwar-online.com.").

Your Information. Parents may request and obtain access to PII stored about their children who are under the age of 13 by contacting us at pokemongo-privacy@nianticlabs.com. If you want us to modify or delete your (or your authorized child's) PII and/or your (or your authorized child's) Account, or discontinue the provision of your (or your authorized child's) PII to third parties, please contact us at pokemongo-privacy@nianticlabs.com with your request. We'll take steps to modify or delete your (or your authorized child's) information as soon we can (unless otherwise permitted by applicable law). Please note, however, that some information may remain in archived/backup copies for our records or as otherwise required by law.").

<sup>179</sup> Supercell Privacy Policy, supra note 18 ("Access to Personal Information. If your personal information changes, or if you no longer desire our service, you may correct, update, or delete inaccuracies by making the change within your account settings or by contacting us at legal-requests@supercell.com. We will respond to your access request within 30 days.").

180 King Privacy Policy, supra note 19 ("In some circumstances you have a right to have some of the personal information that we hold about you deleted. Should you wish to have any information about you deleted, please contact us using the information below. Please note that to ensure that we do not collect any further information you should also delete our games from your mobile devices and clear our cookies from any device where you have played our games in a web browser. Where we delete personal information about you, we may still retain some or all of that information for other purposes such as maintaining financial records, protecting or enforcing legal rights, maintaining marketing suppression lists or for technical reasons such as maintaining technical security or our database integrity. We may also retain your information in an anonymised form.").

Machine Zone Privacy Policy, supra note 20 ("If you no longer want MZ to make active use of your information, you may send an e-mail to support@mz.com. Place 'Delete My Account' in the subject line and include your first name, last name, e-mail address and user ID number from which you access our Services (if applicable) in the body of the e-mail. We will respond to your request within thirty (30) days. MZ may use your information unless and until you send MZ such a request. Please note that your information, for example those records pertaining to payments or customer service matters, may be retained for legal and accounting purposes. If you have sent or posted content on the Service, We may not be able to delete it.").

182 Epic War Privacy Policy, supra note 21 ("Other Methods of Accessing and Controlling Your Information. If you no longer want Epic War to make active use of your information, you may send an e-mail to support@epicwar-online.com. Place 'Delete My Account' in the subject line and include your first name, last name, e-mail address and user ID number from which you access our games (if applicable) in the body of the e-mail. We will respond to your request within thirty (30) days. Epic War may use your information unless and until you send Epic War such a request. Please note that your information, for example those records pertaining to payments or customer service matters, may be retained for legal and accounting purposes. If you have sent or posted content on the Service, we may not be able to delete it.").

Pokémon GO Privacy Policy, supra note 22 ("Accessing, Modifying, and Deleting Your Information. Parents may request and obtain access to PII stored about their children who are under the age of 13 by contacting us at pokemongo-privacy@nianticlabs.com. If you want us to modify or delete your (or your authorized child's) PII and/or your (or your authorized child's) Account, or discontinue the provision of your (or your authorized child's) PII to third parties, please contact us at pokemongo-privacy@nianticlabs.com with your request. We'll take steps to modify or delete your (or your authorized child's) information as soon we can (unless otherwise permitted by applicable law). Please note, however, that some information may remain in archived/backup copies for our records or as otherwise required by law.").

<sup>184</sup> Machine Zone Privacy Policy, supra note 20 ("Our Service currently does not respond to 'Do Not Track' (DNT) settings in your web browser and operates as described in this Privacy Policy whether or not a DNT signal is received. If we do so in the future, we will describe how we do so in this Privacy Policy. For further details regarding DNT, visit donottrack.us.").

<sup>185</sup> Epic War Privacy Policy, supra note 21 ("Our Service currently does not respond to 'Do Not Track' (DNT) settings in your web browser and operates as described in this Privacy Policy whether or not a DNT signal is received. If we do so in the future, we will describe how we do so in this Privacy Policy. For further details regarding DNT, visit donottrack.us.").

<sup>186</sup> Pokémon GO Privacy Policy, supra note 22 ("Our Services do not have the capability to respond to 'Do Not Track' signals received from various web browsers. To learn more about browser tracking signals and 'Do Not Track' please visit http://allaboutdnt.org.").

<sup>187</sup> King Privacy Policy, supra note 19 ("There are other ways in which you can control the personal information that we collect about you. For instance, you could disconnect your Facebook or other social network account from our games, or delete our games from your mobile device. You could also reset your mobile advertising identifier or limit ad tracking altogether using the settings in your phone. Finally, you could limit or prevent the use of cookies in your web browsers.").

<sup>188</sup> Supercell Privacy Policy, supra note 18 ("You can disable cookies at any time, although you may not be able to access or use features of the Service.").

<sup>189</sup> King Privacy Policy, supra note 19 ("There are other ways in which you can control the personal information that we collect about you. For instance, you could disconnect your Facebook or other social network account from our games, or delete our games from your mobile device. You could also reset your mobile advertising identifier or limit ad tracking altogether using the settings in your phone. Finally, you could limit or prevent the use of cookies in your web browsers.").

Machine Zone Privacy Policy, supra note 20 ("You can set your web browser to warn you about attempts to place cookies on your computer or limit the type of cookies you allow. Flash cookies operate differently than browser cookies and cookie management tools available in a web browser may not remove flash cookies. To learn more about and manage flash cookies you can visit adobe.com and make changes at the privacy settings panel. If you disable cookies, you may lose some of the features and functionality of playing our Services, as MZ cookies are necessary to track and enhance your Service activities. Please note that companies delivering advertisements in our Services or on our websites may also use cookies or other technologies, and those practices are subject to their own policies.").

Epic War Privacy Policy, supra note 21 ("You can set your web browser to warn you about attempts to place cookies on your computer or limit the type of cookies you allow. Flash cookies operate differently than browser cookies and cookie management tools available in a web browser may not remove flash cookies. To learn more about and manage flash cookies you can visit adobe.com and make changes at the privacy settings panel. If you disable cookies, you may lose some of the features and functionality of playing our games, as Epic War cookies are necessary to track and enhance your game activities. Please note that companies delivering advertisements in our games or on our websites may also use cookies or other technologies, and those practices are subject to their own policies.").

<sup>192</sup> Pokémon GO Privacy Policy, supra note 22 ("Although most browsers automatically accept Cookies, you can change your browser options to stop automatically accepting Cookies or to prompt you before accepting Cookies.").

Supercell Privacy Policy, supra note 18 ("Opting Out of Marketing. You may optout of receiving promotional emails from us by following the instructions in those emails by emailing us at legal-requests@supercell.com. If you opt-out, we may still send you non-promotional emails, such as emails about your accounts or our ongoing business relations. You may also opt-out of receiving SMS notifications from us, either via SMS or by emailing us at legal-requests@supercell.com.").

King Privacy Policy, supra note 19 ("If you have elected to receive direct marketing communications from us, you can change your mind at any time by following the opt out link in any marketing communication that is sent to you. If you have elected to receive more than one type of marketing communications from us, you may need to opt out of all of them individually. It may take a few days for us to update our records before any opt out is effective.").

Pokémon GO Privacy Policy, supra note 22 ("Opt-Out. For residents of member states of the European Union and Parents of authorized children, if you elect to subscribe to our mailing list (or elect to subscribe your authorized child to our mailing list) during Account registration, we will periodically send you (or your authorized child) free newsletters and e-mails that directly promote our Services. For all other users, if you do not opt out of subscription to our mailing list (or opt out of subscription for your authorized child to our mailing list) during Account registration, we will periodically send you (or your authorized child) free newsletters and e-mails that directly promote our Services. When you (or your authorized child) receive such promotional communications from us, you (or your authorized child) will have the opportunity to opt out (either through your (or your authorized child's) Account or by following the unsubscribe instructions provided in the e-mail you (or your authorized child) receive). We will need to send you (or your authorized child) certain communications regarding the Services and

you (or your authorized child) will not be able to opt out of those communications (e.g., communications regarding updates to this Privacy Policy).").

196 Supercell Privacy Policy, supra note 18 ("Security. Supercell takes reasonable measures to protect your information from unauthorized access or against loss, misuse or alteration by third parties. Although we make good faith efforts to store the information collected on the Service in a secure operating environment that is not available to the public, we cannot guarantee the absolute security of that information during its transmission or its storage on our systems. Further, while we attempt to ensure the integrity and security of our network and systems, we cannot guarantee that our security measures will prevent third-party 'hackers' from illegally obtaining access to this information. We do not warrant or represent that your information will be protected against, loss, misuse, or alteration by third parties. No method of transmission over the Internet, or method of electronic storage, is 100% secure, however. Therefore, we cannot guarantee its absolute security.").

Machine Zone Privacy Policy, supra note 20 ("MZ implements reasonable security measures to protect the security of your information both online and offline, and We are committed to the protection of customer information. While We take reasonable precautions against possible security breaches of our Services and our customer databases and records, We cannot guarantee that unauthorized access, hacking, data loss, or other breaches will never occur. Unfortunately, the transmission of information over the Internet is not completely secure. Although we strive to protect your personal data, we cannot guarantee the security of your data while it is being transmitted to our site; any transmission is at your own risk. Once we have received your information, we have procedures and security features in place to try to prevent unauthorized access. We urge you to take steps to keep your personal information safe (including your account password), and to log out of your account after use. If your account is hacked, this may lead to unauthorized access to your MZ Services, so be careful to keep your account information secure. If you have questions about the security of our Services, please contact us at support@mz.com.").

Epic War Privacy Policy, supra note 21 ("Epic War implements reasonable security measures to protect the security of your information both online and offline, and we are committed to the protection of customer information. While we take reasonable precautions against possible security breaches of our websites and our customer databases and records, we cannot guarantee that unauthorized access, hacking, data loss, or other breaches will never occur. Unfortunately, the transmission of information over the Internet is not completely secure. Although we strive to protect your personal data, we cannot guarantee the security of your data while it is being transmitted to our site; any transmission is at your own risk. Once we have received your information, we have procedures and security features in place to try to prevent unauthorized access. We urge you to take steps to keep your personal information safe (including your account password), and to log out of your account after use. If your account is hacked, this may lead to unauthorized play of your Epic War games, so be careful to keep your account information secure. If you have questions about the security of our websites, please contact us at support@epicwar-online.com.").

199 Pokémon GO Privacy Policy, supra note 22 ("We take appropriate administrative, physical, and electronic measures designed to protect the information that we collect from or about you or your authorized child from accidental or unlawful destruction,

accidental loss or unauthorized access, use, modification, interference, or disclosure. Please be aware, however, that no method of transmitting information over the Internet or storing information is completely secure. Accordingly, we cannot guarantee the absolute security of any information.").

Supercell Privacy Policy, supra note 18 ("We will retain and use your information as necessary to comply with our legal obligations, resolve disputes, and enforce our agreements.").

<sup>201</sup> King Privacy Policy, supra note 19 ("[W]e may still retain some or all of that information for other purposes such as maintaining financial records, protecting or enforcing legal rights, maintaining marketing suppression lists or for technical reasons such as maintaining technical security or our database integrity. We may also retain your information in an anonymised form.").

<sup>202</sup> Machine Zone Privacy Policy, supra note 20 ("Please note that your information, for example those records pertaining to payments or customer service matters, may be retained for legal and accounting purposes. If you have sent or posted content on the Service, We may not be able to delete it.").

<sup>203</sup> Epic War Privacy Policy, supra note 21 ("Please note that your information, for example those records pertaining to payments or customer service matters, may be retained for legal and accounting purposes. If you have sent or posted content on the Service, we may not be able to delete it.").

Pokémon GO Privacy Policy, supra note 22 ("Keeping Your Information. Following termination or deactivation of your (or your authorized child's) Account, Niantic, its clients, affiliates, or service providers may retain information (including your (or your authorized child's) profile information) and user content for a commercially reasonable time period for backup, archival, and/or audit purposes. If you have any questions about termination or deactivation of your (or your authorized child's) Account, please contact us directly at pokemongo-privacy@nianticlabs.com.").

<sup>205</sup> Supercell Privacy Policy, supra note 18 ("Data Retention. We will retain your information for as long as your account is active or as needed to provide you services. If you wish to cancel your account or request that we no longer use your information to provide you services, contact us at legal-requests@supercell.com. We will retain and use your information as necessary to comply with our legal obligations, resolve disputes, and enforce our agreements.").

<sup>206</sup> King Privacy Policy, supra note 19 ("How long do we keep your information and where do we store it? We will keep your information for as long as we consider necessary for the purposes described above, or as long as the law allows.").

<sup>207</sup> Pokémon GO Privacy Policy, supra note 22 ("Keeping Your Information. Following termination or deactivation of your (or your authorized child's) Account, Niantic, its clients, affiliates, or service providers may retain information (including your (or your authorized child's) profile information) and user content for a commercially reasonable time period for backup, archival, and/or audit purposes.").

<sup>208</sup> Supercell Privacy Policy, supra note 18 ("We store information on servers located in the United States via Amazon Web Services and may store information on servers and equipment in other countries.").

<sup>209</sup> King Privacy Policy, supra note 19 ("We store your information on servers that we control which are primarily based in the European Union. We may also use servers that are located outside the European Union and we may engage partners outside the

European Union who will also process and store your information to provide services to us.").

Supercell Privacy Policy, supra note 18 ("International Transfer. We may transfer information that we collect about you to affiliated entities, or to other third parties across borders and from your country or jurisdiction to other countries or jurisdictions around the world. Please note that these countries and jurisdictions may not have the same data protection laws as your own jurisdiction, and we take steps to ensure adequate safeguards are in place to enable transfer of information to the U.S. and elsewhere and the use and disclosure of information about you, including personal information, as described in this Policy.").

Machine Zone Privacy Policy, supra note 20 ("Any information you provide to us, or that we collect through your use of the Services or otherwise, may be stored, processed, and transferred within, or to, the United States, or any other country in which we or our affiliated companies or third party partners maintain facilities. As a result, it is possible that your information could be accessed by foreign governmental authorities, or otherwise, in accordance with applicable local laws. By using the Services, you consent to the collection, storage, processing, and transfer of your information in and to the United States, and/or other countries and territories. Please be aware that countries and jurisdictions other than the one in which you are located may not have the same data protection laws as your own jurisdiction. If we transfer your information outside of your country of residence, we will protect that information as described in this Privacy Policy. If you are located in the European Economic Area or Switzerland, we comply with applicable legal requirements providing adequate protection for the transfer of personal information to countries outside of the EEA or Switzerland.").

Epic War Privacy Policy, supra note 21 ("Any information you provide to us, or that we collect through your use of the Services or otherwise, may be stored, processed, and transferred within, or to, the United States, or any other country in which we or our affiliated companies or third party partners maintain facilities. As a result, it is possible that your information could be accessed by foreign governmental authorities, or otherwise, in accordance with applicable local laws. By using the Services, you consent to the collection, storage, processing, and transfer of your information in and to the United States, and/or other countries and territories. Please be aware that countries and jurisdictions other than the one in which you are located may not have the same data protection laws as your own jurisdiction. If we transfer your information outside of your country of residence, we will protect that information as described in this Privacy Policy. If you are located in the European Economic Area or Switzerland, we comply with applicable legal requirements providing adequate protection for the transfer of personal information to countries outside of the EEA or Switzerland.").

213 Pokémon GO Privacy Policy, supra note 22 ("International Transfer. Your (or your authorized child's) PII may be transferred to, and maintained on, computers located outside of your state, province, country, or other governmental jurisdiction where the privacy laws may not be as protective as those in your jurisdiction. If you're located outside the United States and choose to provide your (or your authorized child's) PII to us, we may transfer your (or your authorized child's) PII to the United States and process it there. Whenever we transfer your (or your authorized child) are located, we ensure that appropriate safeguards are in place in relation to its security. You may request us not to transfer your (or your authorized child's) PII to the United States, but if you do so, we

may not be able to provide some or all of the Services to you (or your authorized child).").

Supercell Privacy Policy, supra note 18 ("Supercell has received TRUSTe's Privacy Seal signifying that this privacy statement and our practices have been reviewed for compliance with the TRUSTe program viewable on the validation page available by clicking the TRUSTe seal. The TRUSTe certification only covers information through our sites www.supercell.com, clashofclans.com, haydaygame.com, boombeach.com, clashofclans.co.kr, supercell.co.jp and www.supercell.net and our Boom Beach, Clash Royale, Clash of Clans and Hay Day mobile applications. Supercell's privacy practices on our sites and through our Mobile applications are in compliance with TRUSTe's Privacy certification standards.").

Supercell Privacy Policy, supra note 18 ("Supercell is not responsible for the actions of third party people or companies, the content of their sites, the use of information you provide to them, or any products or services they may offer. Any link to those sites does not constitute our sponsorship of, or affiliation with, those people or companies.").

<sup>216</sup> King Privacy Policy, supra note 19 ("Links to third party websites and services. We may provide links to third party applications, services or websites from our Services (including advertising that may link to a third party). You understand that when you click on these links any data which you provide afterwards is subject to that third party's privacy policy and not to ours. We can take no responsibility for the content, safety, privacy or security of any third party application, service or website.").

Machine Zone Privacy Policy, supra note 20 ("Our Services may contain links to third-party websites. We are not responsible for the privacy practices or the content of such websites. If you have any questions about how these other websites use your information, you should review their policies and contact them directly.").

<sup>218</sup> Epic War Privacy Policy, supra note 21 ("Our Services may contain links to third-party websites. We are not responsible for the privacy practices or the content of such websites. If you have any questions about how these other websites use your information, you should review their policies and contact them directly.").

<sup>219</sup> Pokémon GO Privacy Policy, supra note 22 ("Our Services may contain links to websites and services that are owned or operated by third parties (each, a 'Third Party Service'). Any information that you (or your authorized child) provide on or to a Third Party Service or that is collected by a Third Party Service (including Google, Facebook and PTC) is provided directly to the owner or operator of the Third Party Service and is subject to the owner's or operator's privacy policy. We're not responsible for the content, privacy, or security practices and policies of any Third Party Service. To protect your (or your authorized child's) information we recommend that you carefully review the privacy policies of all Third Party Service that you (or your authorized child) access via our Services.").

Supercell Privacy Policy, supra note 18 ("Changes to the Policy. We may update this privacy policy to reflect changes to our information practices. If we make any material changes we will notify you by email (sent to the e-mail address specified in your account) or by means of a notice on this Site prior to the change becoming effective. We encourage you to periodically review this page for the latest information on our privacy practices.").

<sup>221</sup> King Privacy Policy, supra note 19 ("Changes to the policy. The privacy policy and this summary may change over time. We will post the updated privacy policy on this page. Please come back to this page every now and then to make sure you are familiar

with the latest version. Any new policy will be effective from the date it is published by us.").

Machine Zone Privacy Policy, supra note 20 ("If We decide to make material changes to our Privacy Policy, We will notify you and other users by placing a notice on www.mz.com or by sending you a notice to the e-mail address We have on file for you. We may supplement this process by placing notices in our Services and on other MZ websites. It is your responsibility to periodically check http://www.mz.com and this privacy page for updates.").

Epic War Privacy Policy, supra note 21 ("If We decide to make material changes to our Privacy Policy, We will notify you and other users by placing a notice on epicwaronline.com or by sending you a notice to the e-mail address We have on file for you. We may supplement this process by placing notices in our Services and on other Epic War websites. It is your responsibility to periodically check this privacy page for updates.").

Pokémon GO Privacy Policy, supra note 22 ("Revisions to this Privacy Policy. Any information that is collected via our services is covered by the privacy policy in effect at the time such information is collected. We may revise this privacy policy from time to time. If we make any material changes to this privacy policy, including any change that we propose that will have retroactive effect, we'll notify you of those changes by posting them on the services or by sending you an email or other notification, and we'll update the 'Last Updated Date' above to indicate when those changes were made.").

<sup>225</sup> Terms of Service, SUPERCELL, https://supercell.com/en/terms-of-service/ [https://perma.cc/Q79E-KUJF] (last visited Oct. 26, 2018) ("Dispute Resolution and Law. If a dispute arises between you and Supercell, we strongly encourage you to first contact us directly to seek a resolution by going to our customer support site at https://support.supercell.com/. If you are a resident of the United States, these Terms of Service and any dispute arising out of or related to it or Privacy Policy or the Service shall be governed in all respects by California law, without regard to conflict of law provisions. You agree that any claim or dispute you may have against Supercell must be resolved exclusively by a court located in San Francisco, California. If you are a resident outside of the United States, you agree that all disputes between you and Supercell shall be governed by the laws of Finland, without regard to conflict of law provisions. You agree that any claim or dispute you may have against Supercell must be resolved exclusively by a court located in Helsinki, Finland.") [hereinafter Supercell Terms of Service].

<sup>226</sup> King Privacy Policy, supra note 19 ("For residents in the United States. If you are resident in the United States then you are contracting with King.com (US) LLC, whose address is 3100 Ocean Park Boulevard, Santa Monica, CA 90405-3032 and any and all claims arising out of or relating to these terms (including their interpretation, claims for breach and all other claims (including consumer protection, unfair competition, and tort claims)), the parties' relationship with each other and/or your use of our Games or other Services will be subject to the laws of the State of Delaware, without reference to conflict of laws principles. If any court or arbitrator determines that the 'Class Action Waiver' paragraph set forth above is void or unenforceable for any reason or that an arbitration can proceed on a class basis, then any and all claims arising out of these terms (including interpretation, claims for breach, and all other claims (including consumer protection, unfair competition, and tort claims)) shall be decided under the laws of the state where you were a citizen at the time you downloaded, accessed or commenced use of the

Service that was subject to these terms. In addition, you and we irrevocably consent to the exclusive jurisdiction and venue of state or federal courts in Los Angeles County, California to resolve any claims that are subject to exceptions to the arbitration agreement described in BINDING ARBITRATION AND CLASS ACTION WAIVER above, or otherwise determined not to be arbitrable.").

Machine Zone, Inc. Terms of Use, Machine Zone, http://www.gameofwarapp.com:80/termsofservice.html [https://perma.cc/Z99D-RHKP] (last updated Apr. 15, 2016) ("APPLICABLE LAW. For Users other than EU Users. You agree that these Terms of Use shall be deemed to have been made and executed in the State of California, U.S.A. and that any dispute arising under the Terms of Use, as well as any other dispute or claim that may arise between you and us, shall be governed by and resolved in accordance with the laws of the State of California, without regard to conflict of law provisions or principals. For claims not required to be arbitrated under Section 14, or in the event the arbitration provision in Section 14 is deemed unenforceable or voided, you agree that any claim asserted in any legal proceeding by you against us shall be commenced and maintained exclusively in any state or federal court located in Santa Clara County, California having subject matter jurisdiction with respect to the dispute between the parties and you hereby consent to the exclusive jurisdiction of such courts. In any dispute arising between us, the prevailing party will be entitled to attorneys' fees and expenses.") [hereinafter Machine Zone Terms of Use].

Epic War Terms of Use, EPIC WAR, https://www.mobilestrikeapp.com/terms-of-use-general [https://perma.cc/9H9H-3GL4] (last updated Aug. 16, 2018) ("Applicable Law. You agree that these Terms of Use shall be deemed to have been made and executed in the State of California, U.S.A. and that any dispute arising under the Terms of Use, as well as any other dispute or claim that may arise between you and us, shall be governed by and resolved in accordance with the laws of the State of California, without regard to conflict of law provisions or principals. For claims not required to be arbitrated under Section 14, or in the event the arbitration provision in Section 14 is deemed unenforceable or voided, you agree that any claim asserted in any legal proceeding by you against us shall be commenced and maintained exclusively in any state or federal court located in Santa Clara County, California having subject matter jurisdiction with respect to the dispute between the parties and you hereby consent to the exclusive jurisdiction of such courts. In any dispute arising between us, the prevailing party will be entitled to attorneys' fees and expenses.")

<sup>229</sup> Niantic Terms of Service, NIANTIC LABS, https://www.nianticlabs.com/terms/en/ [https://perma.cc/X2HR-TBMZ] (last updated Oct. 1, 2018) (Niantic's terms of service, the developer and publisher of Pokémon Go, state: "These Terms and the use of the Services and any action related thereto will be governed by the laws of the State of California, excluding its conflict-of-laws rules.").

<sup>230</sup> Pokémon GO Privacy Policy, supra note 22 ("We comply with verifiable parental consent requirements mandated by the Children's Online Privacy Protection Act (COPPA) and European data protection laws (including, without limitation, the Data Protection Directive) through a verification and consent process handled by PTC.").

Pokémon GO Privacy Policy, supra note 22 ("We comply with verifiable parental consent requirements mandated by the Children's Online Privacy Protection Act (COPPA) and European data protection laws (including, without limitation, the Data Protection Directive) through a verification and consent process handled by PTC.").

<sup>232</sup> Machine Zone Privacy Policy, supra note 20 ("YOUR CALIFORNIA PRIVACY RIGHTS. We do not share personal information with third parties for their direct marketing purposes unless you affirmatively agree to such disclosure, typically by 'opting in' to receive information from a third party that is participating in a sweepstakes or other promotion on one of our sites. If you do ask us to share your personal information with a third party for its marketing purposes, we will only share information in connection with that specific promotion, as we do not share information with any third party (other than our service providers) on a continual basis. To prevent disclosure of your personal information for use in direct marketing by a third party, do not opt in to such use when you provide personal information on one of our sites. Your access to the Services will not be affected if you do not 'opt in' to receive information from such third parties. California Civil Code Section 1798.83, also known as the 'Shine The Light' law, permits our customers who are California residents to request and obtain from us once a year, free of charge, information about the personal information (if any) we disclosed to third parties for direct marketing purposes in the preceding calendar year. If applicable, this information would include a list of the categories of personal information that was shared and the names and addresses of all third parties with which we shared information in the immediately preceding calendar year. If you are a California resident and would like to make such a request, please submit your request in writing to: MZ Legal, 2225 E. Bayshore Road, Suite 200, Palo Alto CA 94303.").

233 Epic War Privacy Policy, supra note 21 ("YOUR CALIFORNIA PRIVACY RIGHTS. We do not share personal information with third parties for their direct marketing purposes unless you affirmatively agree to such disclosure, typically by 'opting in' to receive information from a third party that is participating in a sweepstakes or other promotion on one of our sites. If you do ask us to share your personal information with a third party for its marketing purposes, we will only share information in connection with that specific promotion, as we do not share information with any third party (other than our service providers) on a continual basis. To prevent disclosure of your personal information for use in direct marketing by a third party, do not opt in to such use when you provide personal information on one of our sites. Your access to the Services will not be affected if you do not 'opt in' to receive information from such third parties. California Civil Code Section 1798.83, also known as the 'Shine The Light' law, permits our customers who are California residents to request and obtain from us once a year, free of charge, information about the personal information (if any) we disclosed to third parties for direct marketing purposes in the preceding calendar year. If applicable, this information would include a list of the categories of personal information that was shared and the names and addresses of all third parties with which we shared information in the immediately preceding calendar year. If you are a California resident and would like to make such a request, please submit your request in writing to: Customer Service c/o Epic War, LLC, 2225 E. Bayshore Road, Suite 200, Palo Alto, CA 94303").

Machine Zone Privacy Policy, supra note 20 ("REGION-SPECIFIC ADDENDUM TO PRIVACY POLICY: The following additional information applies, and supplements the above Privacy Policy, if your personal information is collected from one of the countries below: Canada: Personal information maintained and processed by us and third party service providers in the U.S. and other foreign jurisdictions may be subject to disclosure pursuant to a lawful access request by U.S. or foreign courts or government authorities. We will not provide your information to third parties for marketing purposes without your prior consent.").

- 235 Epic War Privacy Policy, supra note 21 ("REGION-SPECIFIC ADDENDUM TO PRIVACY POLICY: The following additional information applies, and supplements the above Privacy Policy, if your personal information is collected from one of the countries below: Canada: Personal information maintained and processed by us and third party service providers in the U.S. and other foreign jurisdictions may be subject to disclosure pursuant to a lawful access request by U.S. or foreign courts or government authorities. We will not provide your information to third parties for marketing purposes without your prior consent.").
- King Privacy Policy, supra note 19 ("If you live in South Korea, a different privacy policy applies to the data we collect about you. Please see http://about.king.com/consumer-terms/terms/ko#privacy.").
- 237 Machine Zone Privacy Policy, supra note 20 ("Japan: We comply with Japanese laws and regulations, including the Act on the Protection of Personal Information. We are primarily responsible for the management of the personal information that is jointly used with our affiliates or third parties. We will not provide your information to third parties for marketing purposes without your prior consent").
- <sup>238</sup> Epic War Privacy Policy, supra note 21 ("REGION-SPECIFIC ADDENDUM TO PRIVACY POLICY: The following additional information applies, and supplements the above Privacy Policy, if your personal information is collected from one of the countries below: Japan: We comply with Japanese laws and regulations, including the Act on the Protection of Personal Information. We are primarily responsible for the management of the personal information that is jointly used with our affiliates or third parties. We will not provide your information to third parties for marketing purposes without your prior consent.").
- <sup>239</sup> Supercell Privacy Policy, supra note 18 ("Contact Information Supercell Oy (Business ID 2336509-6), Itämerenkatu 11-13, FI-00180 Helsinki, Finland. If you have any questions about this Policy, please contact us at legal-requests@supercell.com.").
- <sup>240</sup> King Privacy Policy, supra note 19 ("If you want to contact us about any of the matters in relation to this privacy policy, including to exercise any of your rights, then please contact our customer services department by emailing privacy @support.king.com.").
- <sup>241</sup> Machine Zone Privacy Policy, supra note 20 ("CONTACT US. If you have any questions, comments or concerns regarding our Privacy Policy and/or practices, please send an e-mail to support@mz.com. We will seek to respond to any complaints within 30 Days.").
- <sup>242</sup> Epic War Privacy Policy, supra note 21 ("CONTACT US. If you have any questions, comments or concerns regarding our Privacy Policy and/or practices, please send an e-mail to support@epicwar-online.com. We will seek to respond to any complaints within 30 Days.").
- <sup>243</sup> Pokémon GO Privacy Policy, supra note 22 ("Questions? Please contact us at pokemongo-privacy@nianticlabs.com if you have any questions about our Privacy Policy, or if you wish to make a complaint about our collection, use, or disclosure of your (or your authorized child's) PII under this Privacy Policy. We will use our reasonable endeavors to address any complaint you may have as soon as possible.").
- The Nintendo Switch Will Launch on March 3rd for \$266, THE VERGE (Jan. 12, 2017), https://www.theverge.com/2017/1/12/14237060/nintendo-switch-console-launch-date-price-announced [https://perma.cc/QU6U-XHM8].

- <sup>245</sup> Sam Byford, *Sony Has Sold over 2.1 Million PlayStation 4 Consoles since Launch*, THE VERGE (Dec. 3, 2013) https://www.theverge.com/2013/12/3/5169646/sony-announces-november-ps4-sales [https://perma.cc/6PEE-URYL].
- <sup>246</sup> Lance Whitney, *Xbox One S 500GB, 1TB Bundles to Launch on August 23*, CNET (July 27, 2016), https://www.cnet.com/news/xbox-one-s-500gb-1tb-bundles-to-launch-on-august-23 [https://perma.cc/55ES-P7NA].
- <sup>247</sup> Rob Crossley, *New Nintendo 3DS Release Date Confirmed Only XL Version Coming to US*, GAME SPOT (Jan. 15, 2015), https://www.gamespot.com/articles/new-nintendo-3ds-release-date-confirmed-only-xl-ve/1100-6424634 [https://perma.cc/8PAH-7DZK].
- <sup>248</sup> Christopher Grant, *Nintendo Wii U Release Date Is November 18th In US Starting at \$299.99, November 30th In Europe*, POLYGON (Sept. 13, 2012), https://www.polygon.com/gaming/2012/9/13/3321864/nintendo-wii-u-release-date-price [https://perma.cc/G4AN-AE2J].
- However, camera is available as an additional accessory.
- However, camera is available as an additional accessory.
- <sup>251</sup> PS4 Tech Specs, PLAYSTATION, https://www.playstation.com/en-gb/explore/ps4/tech-specs [https://perma.cc/QDA5-3GCG] (last visited July 12, 2017).
- Nintendo 3DS is handheld console which does not require additional controller. *See What Is Nintendo 3DS*, NINTENDO, http://www.nintendo.com/3ds/what-is-nintendo-3ds [https://perma.cc/88YW-H4CY] (last visited July 12, 2017).
- <sup>253</sup> Xbox Wireless Controller, MICROSOFT, http://www.xbox.com/en-US/xbox-one/accessories/controllers/xbox-wireless-controller [https://perma.cc/DXN6-B4ZT] (last visited July 12, 2017).
- <sup>254</sup> Switch Accessories, NINTENDO, http://www.nintendo.com/switch/buy-now/accessories [https://perma.cc/25GV-DSZF] (last visited July 12, 2017).
- <sup>255</sup> *PS4 Accessories*, PLAYSTATION, https://www.playstation.com/en-us/explore/ps4/accessories [https://perma.cc/K3F6-8VJS] (last visited Nov. 1, 2018).
- <sup>256</sup> Xbox One Accessories, MICROSOFT, http://www.xbox.com/en-US/xbox-one/accessories?xr=shellnav [https://perma.cc/B6DQ-5MM6] (last visited July 12, 2017).
- <sup>257</sup> Wii U Accessories, NINTENDO, http://www.nintendo.com/wiiu/accessories [https://perma.cc/SG3L-T2UG] (last visited July 12, 2017).
- <sup>258</sup> PS4 Accessories, supra note 255.
- 259 Xbox One Accessories, supra note 256.
- <sup>260</sup> Wii U Accessories, supra note 257.
- <sup>261</sup> PS4 Accessories, supra note 255.
- 262 Xbox One Accessories, supra note 256.
- <sup>263</sup> 3DS Accessories, NINTENDO, http://www.nintendo.com/3ds/buynow/accessories [https://perma.cc/X7C6-RZFC] (last visited July 12, 2017).
- Wii U Accessories, supra note 257.
- <sup>265</sup> PS4 Accessories, supra note 255.
- <sup>266</sup> Xbox Kinect, XBOX, http://www.xbox.com/en-US/xbox-one/accessories/kinect [https://perma.cc/8ADY-PYWJ] (last visited July 13, 2017). The Kinect product was discontinued in 2017, but remains in circulation use amongst existing users and its technology is looking to be re-used in future products. See Alex Cranz, Kinect Refuses to Die, GIZMODO (May 10, 2018), https://gizmodo.com/microsoft-kinect-refuses-to-die-1825847023 [http://perma.cc/9NCH-6UUQ].

- <sup>267</sup> See Liam Martin, Playstation VR Comes to Xbox One and Wii U: How to Play VR away from PS4, EXPRESS (Oct. 16, 2016), https://www.express.co.uk/entertainment/gaming/721070/PlayStation-VR-Xbox-One-Wii-U-unlock-guide [https://perma.cc/7LTS-FOLV].
- <sup>268</sup> Use Keyboard and Mouse with PS4, PLAYSTATION SUPPORT, https://support.playstation.com/s/article/Use-Keyboard-and-Mouse-with-PS4?language = en US [https://perma.cc/N6WA-DMFR] (last visited Nov. 10, 2018).
- <sup>269</sup> See Kyle Orland, Keyboard and Mouse Controls Finally Hit Xbox One this Week, ARS TECHNICA (Nov. 12, 2018) https://arstechnica.com/gaming/2018/11/fortnite-among-xbox-ones-first-keyboardmouse-games-this-week/ [https://perma.cc/326N-ML4L].
- <sup>270</sup> Switch Accessories, supra note 254.
- <sup>271</sup> PS4 Accessories, supra note 255.
- 272 Xbox One Accessories, supra note 256.
- <sup>273</sup> Wii U Accessories, supra note 257.
- <sup>274</sup> Nintendo Privacy Policy, NINTENDO, http://www.nintendo.com/privacy-policy [https://perma.cc/24QV-J3BM] (last visited July 13, 2017) [hereinafter 2017 Nintendo Privacy Policy].
- <sup>275</sup> Nintendo Privacy Policy, NINTENDO, http://www.nintendo.com/consumer/info/en\_na/docs.jsp [https://perma.cc/UFB9-A68J] (last visited Dec., 2015) [hereinafter 2015 Nintendo Privacy Policy].
- <sup>276</sup> Privacy Policy, SONY INTERACTIVE ENTERTAINMENT, https://www.playstation.com/en-us/network/legal/privacy-policy [https://perma.cc/7BFY-XFDF] (last visited July 11, 2017) [hereinafter Sony Interactive Entertainment Privacy Policy].
- <sup>277</sup> Microsoft Privacy Statement, MICROSOFT, https://privacy.microsoft.com/en-us/privacystatement [https://perma.cc/D3JK-Q9T9] (last visited July 12, 2017) [hereinafter Microsoft Privacy Statement].
- <sup>278</sup> 2015 Nintendo Privacy Policy, supra note 275 ("By using a Nintendo product or service you are accepting the practices described in this Privacy Notice.").
- <sup>279</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Scope. When you connect with Sony Interactive Entertainment LLC ("SIE LLC") online by using our websites, the PlayStation Network and Sony Entertainment Network (collectively "SEN"), or certain hardware or software which utilizes SEN for data collection and refers to this Privacy Policy (all collectively, "SIE LLC Network").").
- <sup>280</sup> Microsoft Privacy Statement, supra note 277 ("The product-specific details sections provide additional information relevant to particular Microsoft products. This statement applies to the Microsoft products listed below, as well as other Microsoft products that display this statement. References to Microsoft products in this statement include Microsoft services, websites, apps, software and devices.").
- Microsoft Privacy Statement, supra note 277 ("Xbox consoles are hardware devices that you can use to access and play games, movies, music, and other forms of digital entertainment. Xbox Live (including Games for Windows Live) is Microsoft's online gaming and entertainment service and social network. It provides ways for you to connect with your friends on Xbox Live and other gaming and social networks. Xbox services can be accessed from a variety of devices, including Xbox consoles, PCs (including via xbox.com and the Xbox app), and mobile devices.").
- <sup>282</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Types of information we collect. Information that you give to us. When you register for and use our services we collect the

information that you give to us. This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").

- <sup>283</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We collect information that you provide to us when you use our products and services or anytime you are in contact with us. Some types of information you may provide include: Registration information that you may be required to provide when you sign up to use our services, including your name, address, telephone number, and email address.").
- <sup>284</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("This type of collection often occurs through our business support processes, such as: Registration or Account Creation Processes, where we ask you to provide information such as: Contact info (e.g. name, email or mailing address, or phone number).").
- <sup>285</sup> Microsoft Privacy Statement, supra note 277 ("We collect your first and last name, email address, postal address, phone number, and other similar contact data.").
- <sup>286</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").
- <sup>287</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We collect information that you provide to us when you use our products and services or anytime you are in contact with us. Some types of information you may provide include: Registration information that you may be required to provide when you sign up to use our services, including your name, address, telephone number, and email address.").
- <sup>288</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").
- <sup>289</sup> *Microsoft Privacy Statement, supra* note 277 ("We collect your first and last name, email address, postal address, phone number, and other similar contact data.").
- <sup>290</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").
- <sup>291</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We collect information that you provide to us when you use our products and services or anytime you are in contact with us. Some types of information you may provide include: Registration information that you may be required to provide when you sign up to use our services, including your name, address, telephone number, and email address.").
- <sup>292</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").
- <sup>293</sup> *Microsoft Privacy Statement, supra* note 277 ("We collect your first and last name, email address, postal address, phone number, and other similar contact data.").
- <sup>294</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This could include payment information, such as your credit card number, account authentication information and contact information like your billing and shipping address.").
- <sup>295</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We collect information that you provide to us when you use our products and services or anytime you are in contact with us. Some types of information you may provide include: Registration information that you may be required to provide when you sign up to use our services, including your name, address, telephone number, and email address.").
- <sup>296</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").

- <sup>297</sup> *Microsoft Privacy Statement, supra* note 277 ("We collect your first and last name, email address, postal address, phone number, and other similar contact data.").
- <sup>298</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").
- <sup>299</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Demographic information about you, including your age, gender, hobbies, interests, and country of residence.").
- <sup>300</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("A parent only needs to provide limited information about their child (an email address and date-of-birth) to create a sub-account for their child.").
- Microsoft Privacy Statement, supra note 277 ("Demographic data. We collect data about you such as your age, gender, country, and preferred language.").
- <sup>302</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").
- <sup>303</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Demographic information about you, including your age, gender, hobbies, interests, and country of residence").
- <sup>304</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Physical or geographic location data, such as country, region, city, or latitude and longitude. For example, to provide location based game matching services, we may collect latitude and longitude.").
- <sup>305</sup> Microsoft Privacy Statement, supra note 277 ("Demographic data. We collect data about you such as your age, gender, country, and preferred language.").
- <sup>306</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").
- <sup>307</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information we collect automatically. We collect some information automatically when you use our products and services. Some types of information we collect automatically include: Information about your use of our products, services and websites, including your browser type, operating system, platform, IP address, MAC address, language and region.").
- Microsoft Privacy Statement, supra note 277 ("Demographic data. We collect data about you such as your age, gender, country, and preferred language.").
- <sup>309</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This may include information like your name, email address, phone number, date of birth, country of residence, language, gender, and time zone.").
- <sup>310</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Demographic information about you, including your age, gender, hobbies, interests, and country of residence.").
- Microsoft Privacy Statement, supra note 277 ("Demographic data. We collect data about you such as your age, gender, country, and preferred language.").
- <sup>312</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Login information that you use to sign in to our services, such as your username and password.").
- <sup>313</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 (the "SIE LLC Network may be able to see your username.").
- 314 Microsoft Privacy Statement, supra note 277 ("When you are signed in, some products will display your name or username and your profile photo (if you have added

one to your profile) as part of your use of Microsoft products, including in your communications, social interactions and public posts.").

- <sup>315</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Demographic information about you, including your age, gender, hobbies, interests, and country of residence;").
- 316 Microsoft Privacy Statement, supra note 277; ("We collect data about your interests and favorites, such as the teams you follow in a sports app, the stocks you track in a finance app, or the favorite cities you add to a weather app. In addition to those you explicitly provide, your interests and favorites may also be inferred or derived from other data we collect.").
- <sup>317</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Information we collect when you use our services. We also collect and process information about your use of our services. This can include information about your device, your location, your interaction with our services and other Nintendo users, your content and your purchases.").
- <sup>318</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information we collect automatically. We collect some information automatically when you use our products and services. Some types of information we collect automatically include: Information about your use of our products, services and websites, including your browser type, operating system, platform, IP address, MAC address, language and region.").
- <sup>319</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Network connected hardware (e.g. computer, gaming console, or mobile device) data, such as a unique device identifier, type, model, version, error related data, status, capability, configuration, functionality, performance data, and connection type.").
- 320 Microsoft Privacy Statement, supra note 277 ("All such data is stored with the Xbox console's unique identifier and associated with your personal data. When your Xbox is connected to the Internet, we identify which console and which version of the Xbox operating system you are currently using.").
- <sup>321</sup> 2017 Nintendo Privacy Policy, supra note 274 ("When you use our services we may collect specific information about your device, and across your devices, such as the product model, serial number, operating system, device settings, device performance, Internet service provider, IP address and other unique identifiers.").
- <sup>322</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information we collect automatically. We collect some information automatically when you use our products and services. Some types of information we collect automatically include: Information about your use of our products, services and websites, including your browser type, operating system, platform, IP address, MAC address, language and region.").
- <sup>323</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data.").
- 324 Microsoft Privacy Statement, supra note 277 ("All such data is stored with the Xbox console's unique identifier and associated with your personal data. When your Xbox is connected to the Internet, we identify which console and which version of the Xbox operating system you are currently using.").
- <sup>325</sup> 2017 Nintendo Privacy Policy, supra note 274 ("When you use our services we may collect specific information about your device, and across your devices, such as the product model, serial number, operating system, device settings, device performance, Internet service provider, IP address and other unique identifiers.").
- <sup>326</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information we collect automatically. We collect some information automatically when you use our products and

services. Some types of information we collect automatically include: Information about your use of our products, services and websites, including your browser type, operating system, platform, IP address, MAC address, language and region.").

- <sup>327</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data.").
- <sup>328</sup> Microsoft Privacy Statement, supra note 277 ("Service providers that help us determine a location based on your IP address in order to customize certain products to your location.").
- <sup>329</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information we collect automatically. We collect some information automatically when you use our products and services. Some types of information we collect automatically include: Information about your use of our products, services and websites, including your browser type, operating system, platform, IP address, MAC address, language and region.").
- <sup>330</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data").
- 331 Microsoft Privacy Statement, supra note 277 ("When you opt out, your selection will be stored in a cookie that is specific to the web browser you are using.").
- <sup>332</sup> 2017 Nintendo Privacy Policy, supra note 274 ("With your consent, we may collect and process information about your precise location. When we have your location information, we use it to tailor our services for you and others, like helping you establish friend relationships with other Nintendo users or telling your existing friends that you are nearby.").
- <sup>333</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Physical or geographic location data, such as country, region, city, or latitude and longitude. For example, to provide location based game matching services, we may collect latitude and longitude.").
- <sup>334</sup> Microsoft Privacy Statement, supra note 277 ("Service providers that help us determine a location based on your IP address in order to customize certain products to your location.").
- <sup>335</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We collect certain information about your interaction with our services or with other Nintendo users through our services. This could include information about your gameplay, your online status, your service use history, your connections with other Nintendo users and the content that you share with them.").
- <sup>336</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information about your game play, online status, use of our online services, friends and friend codes, purchases, and other information about your interactions with our products and services.").
- <sup>337</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Network connected software data, such as application utilization, game play, game or system video and audio, progress, utilization, performance, peripheral and device use, services requested and used, or content downloaded and viewed.").
- <sup>338</sup> Microsoft Privacy Statement, supra note 277 ("We collect data about your use of Xbox services, such as: When you sign in and sign out, the games you play, your game and score statistics, and the purchases you make and content you obtain.").

- <sup>339</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We collect certain information about your interaction with our services or with other Nintendo users through our services. This could include information about your gameplay, your online status, your service use history, your connections with other Nintendo users and the content that you share with them.").
- <sup>340</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Information about your game play, online status, use of our online services, friends and friend codes, purchases, and other information about your interactions with our products and services;").
- <sup>341</sup> Microsoft Privacy Statement, supra note 277 ("We collect data about your contacts and relationships if you use a Microsoft product to manage contacts, or to communicate or interact with other people or organizations.").
- <sup>342</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Correspondence you send directly to us; and Information you provide to us offline (through, for example, regular mail, inperson sweepstakes entry forms, and consumer service transactions such as repairs, part orders and direct purchases).").
- <sup>343</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Technical and Customer Support Processes, where we may ask you to provide contact info and information related to the issue you are contacting us about.").
- Microsoft Privacy Statement, supra note 277 ("We collect data about the performance of the products and any problems you experience with them. This data helps us to diagnose problems in the products you use, and to improve our products and provide solutions. Depending on your product and settings, error reports can include data such as the type or severity of the problem, details of the software or hardware related to an error, contents of files you were using when an error occurred, and data about other software on your device. Support Data. When you engage Microsoft for support, we collect data about you and your hardware, software, and other details related to the support incident. Such data includes contact or authentication data, the content of your chats and other communications with Microsoft support, data about the condition of the machine and the application when the fault occurred and during diagnostics, and system and registry data about software installations and hardware configurations.").
- <sup>345</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Our services may allow you to create, upload or share content such as text, images, audio, video, or other content that you create or is licensed to you. When you use any of our services that include these or other similar capabilities we may collect your content in accordance with our user agreements or terms of use and this policy.").
- <sup>346</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Messages, photos, videos, drawings, audio recordings and other information shared by you through the interactive features of our products and services.").
- <sup>347</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("In addition, we collect the information that you provide by entering it into certain SIE LLC Network features. For example, when you want to post in a forum, you provide us the content for the post (which could contain personally identifying information) which we collect and then display for you on the forum. Likewise, when you use other features such voice or text chat, blogs, surveys, user-generated content, activity streams, or social media, we may first collect the information you enter into the feature.").
- <sup>348</sup> Microsoft Privacy Statement, supra note 277 ("We collect data about your use of Xbox services, such as: When you sign in and sign out, the games you play, your game and score statistics, and the purchases you make and content you obtain.").

- <sup>349</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Some of our services allow you to make purchases. If you use any of our services to make a purchase, we may collect information about the purchase. This could include payment information, such as your credit card number, account authentication information and contact information like your billing and shipping address.").
- <sup>350</sup> 2015 Nintendo Privacy Policy, supra note 275 ("Payment information that you submit, including your credit card number, expiration date, and credit card security code, where needed to complete a transaction you have initiated.").
- <sup>351</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Billing Info (e.g. credit card or other payment number, billing address) Purchase Processes, where we may ask you to provide your name and billing info.").
- 352 Microsoft Privacy Statement, MICROSOFT, https://privacy.microsoft.com/en-US/privacystatement#mainmicrosoftaccountmodule, [https://perma.cc/Q9M3-659U] (last visited Feb. 2, 2019) ("name and contact data, payment data, device and usage data....").
- <sup>353</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Some of our services allow you to make purchases. If you use any of our services to make a purchase, we may collect information about the purchase. This could include payment information, such as your credit card number, account authentication information and contact information like your billing and shipping address.").
- <sup>354</sup> 2015 Nintendo Privacy Policy, supra note 275; Pareno, supra note 340 ("Information about your game play, online status, use of our online services, friends and friend codes, purchases, and other information about your interactions with our products and services.").
- 355 Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have the option of sharing your personal information with the public or with certain third parties using features available on certain Sony products, services, and devices. For example, . . . Sharing your activities, including purchases, software used (e.g. games played), and content consumed (e.g. movies watched) with the public through activity feeds").
- 356 Microsoft Privacy Statement, supra note 277 ("We collect data about your use of Xbox services, such as: When you sign in and sign out, the games you play, your game and score statistics, and the purchases you make and content you obtain.").
- 357 2017 Nintendo Privacy Policy, supra note 274 ("We may use cookies, or other similar technologies, on some of the features of our services. Cookies are small files that are typically downloaded to the browser application on your device. Cookies help us to ensure the safety and smooth functioning of certain features of our services and they also help us to collect information about your user preferences. We sometimes use information collected from cookies to improve your user experience and the quality of our services. For example, by saving your user preferences, we may be able to customize our services in ways that you prefer. You may be able to disable cookies in your browser settings or set your browser to alert you when cookies are being used. If you disable cookies, you may not be able to use all of the features of our services. Some web browsers may transmit 'do not track' signals. We currently do not take action in response to these signals.").
- <sup>358</sup> 2015 Nintendo Privacy Policy, supra note 275 ("In order to collect some of the information described above, we may use web beacons, cookies, log files, and similar technologies in some of our products and services, including our emails.").

- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Technologies used on the SIE LLC Network to passively collect such information may include: Cookies. Small data files placed on a devices hard drive. Web Beacons. Small graphic images or other web programming code called web beacons, (also known as '1x1 GIFs' or 'clear GIFs') may be included on our websites or in our e-mail messages. Embedded Scripts. Programming code that is temporarily downloaded onto a device, and is active only while you are connected to our website, and is deactivated or deleted thereafter.").
- 360 Microsoft Privacy Statement, supra note 277 ("Microsoft uses cookies (small text files placed on your device) and similar technologies to provide our websites and online services and to help collect data. The text in a cookie often consists of a string of numbers and letters that uniquely identifies your computer, but it can contain other information as well. Microsoft apps use other identifiers, such as the advertising ID in Windows, for similar purposes, and many of our websites and applications also contain web beacons or other similar technologies, as described below.").
- <sup>361</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We use the information that you give us and the information we collect to deliver, maintain and improve our services").
- <sup>362</sup> 2015 Nintendo Privacy Policy, supra note 275 ("(iii) facilitate your use of our products, services and websites; (iv) enable your participation in online games, contests, sweepstakes, surveys, public forums, and other features offered through our products, services and websites . . . ").
- <sup>363</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("[W]e may use personal information to ... [p]rovide requested products and services such as online video, music or video game services ...").
- 364 Microsoft Privacy Statement, supra note 277 ("Providing and improving our products. We use data to provide and improve the products we offer and perform essential business operations. This includes operating the products, maintaining and improving the performance of the products, including developing new features, research, and providing customer support. Examples of such uses include the following . . . ").
- <sup>365</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We also use this information to provide you with services that you request, develop new services, suggest personally relevant features, offer you customized content, provide you with tailored advertising, protect Nintendo and our users, and investigate and prevent activities that are potentially illegal or that violate our user agreements or terms of use.").
- <sup>366</sup> 2015 Nintendo Privacy Policy, supra note 275 ("(ii) contact you in connection with our products and services, including for marketing and promotional purposes . . . ").
- <sup>367</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Deliver contextual or targeted advertising...").
- 368 Microsoft Privacy Statement, supra note 277 ("Advertising. Many of our products are supported by advertising. We share the data we collect with third parties such as AOL and AppNexus so that they can select and deliver some of the ads you see on our sites and apps, as well as other sites and apps serviced by these partners. The ads that you see may be selected based on your current location, search query, or the content you are viewing. Other ads are targeted based on your likely interests or other information learned about you over time using demographic data, search queries, interests and favorites, usage data from our own sites and apps and the sites and apps of our advertisers and partners, and location data which we refer to as 'interest-based advertising' in this statement. To provide interest-based advertising, we combine cookies placed on your

device using information that we collect (such as IP address) when your browser interacts with our websites. If you opt out of receiving interest-based advertising, data associated with these cookies will not be used. Microsoft does not use what you say in email, chat, video calls or voice mail, or your documents, photos or other personal files to target ads to you. You can opt out of receiving interest-based advertising from Microsoft by visiting our opt-out page. More information about advertising controls is available in the Access and Controls section of this privacy statement. Further details regarding our advertising-related uses of data include . . . ").

<sup>369</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Whenever you contact us, we use the information that you provide to us to help resolve issues you might be having when you use our services. We also use information, such as your email address, to respond to you when you contact us, to let you know about changes to our policies and terms, to let you know about changes or improvements to our services and to inform you about other services that we offer.").

<sup>370</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We may use your information in order for us, our affiliated companies, or our third party partners, to: (i) fulfill your requests for products, services, and information, including to send you commercial and non-commercial messages and to process orders you have placed; (vi) set up repair orders and respond to consumer service inquiries; (vii) provide back-end services, including system updates and system messages ...").

<sup>371</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("First, we use PII for the purpose for which it was collected. For example, PII that you provide through any of our business support processes (including customer service) will be used to complete that process, and personal information entered by you through the features of our products and services will be used for the operation and delivery of those features.").

<sup>372</sup> Microsoft Privacy Statement, supra note 277 ("Customer support. We use data to diagnose product problems, repair customers' devices, and provide other customer care and support services.").

<sup>373</sup> 2017 Nintendo Privacy Policy, supra note 274 ("When we have your location information, we use it to tailor our services for you and others, like helping you establish friend relationships with other Nintendo users or telling your existing friends that you are nearby.").

<sup>374</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We also use this information to provide you with services that you request, develop new services, suggest personally relevant features, offer you customized content, provide you with tailored advertising, protect Nintendo and our users, and investigate and prevent activities that are potentially illegal or that violate our user agreements or terms of use.").

<sup>375</sup> 2015 Nintendo Privacy Policy, supra note 275 ("...(xii) prevent potentially illegal or offensive activities... (xiv) verify your identity and prevent fraudulent transactions...").

<sup>376</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("In order to help protect you and others, we may use the data we collect in order to identify fraudulent activities and transactions; prevent abuse of and investigate and/or prosecute any potential threat to or misuse of the SIE LLC Network; ensure compliance with the applicable terms of service and this privacy policy; investigate violations of or enforce these agreements; and protect the rights and property of Sony, its partners, and customers. If you do not consent to these conditions, you must discontinue your use of the SIE LLC Network").

- 377 Microsoft Privacy Statement, supra note 277 ("Security, Safety and Dispute Resolution. We use data to protect the security and safety of our products and our customers, to detect and prevent fraud, to confirm the validity of software licenses, to resolve disputes and enforce our agreements. Our security features and products can disrupt the operation of malicious software and notify users if malicious software is found on their devices. For example, many of our communications and file syncing products systematically scan content in an automated manner to identify suspected spam, viruses, abusive actions, or URLs that have been flagged as fraud, phishing or malware links; and we may block delivery of a communication or remove content if it violates our terms").
- <sup>378</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We also use this information to provide you with services that you request, develop new services, suggest personally relevant features, offer you customized content, provide you with tailored advertising.").
- <sup>379</sup> 2015 Nintendo Privacy Policy, supra note 275 ("(ix) analyze and facilitate the use of our products, services and websites; (x) conduct demographic studies; (xi) understand, improve, and develop our products, services and websites . . .").
- <sup>380</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Conduct demographic studies for marketing, sales, or product development . . . ").
- Microsoft Privacy Statement, supra note 277 ("Product Improvement. We use data to continually improve our products, including adding new features or capabilities, such as using error reports to improve security features, using search queries and clicks in Bing to improve the relevancy of the search results, using usage data to determine what new features to prioritize, or using audio recordings from voice input features to improve speech recognition accuracy.").
- <sup>382</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We may also share your information for other legal and business purposes, such as complying with legal process, responding to claims or inquiries, enforcing our terms, or protecting the rights, property or personal safety of our operations, our users, or the public.").
- <sup>383</sup> 2015 Nintendo Privacy Policy, supra note 275 ("(xiii) enforce our rights or the rights of our users . . . ").
- <sup>384</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("When we believe in good faith that the law requires disclosure or that disclosure is necessary to protect or enforce the rights, property, safety, or security of ourselves or others.").
- <sup>385</sup> Microsoft Privacy Statement, supra note 277 ("Microsoft retains personal data for as long as necessary to provide the products and fulfill the transactions you have requested, or for other essential purposes such as complying with our legal obligations, resolving disputes, and enforcing our agreements.").
- <sup>386</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We sometimes share your information within our family of Nintendo companies and with trusted third-party partners outside of Nintendo for processing.").
- <sup>387</sup> 2015 Nintendo Privacy Policy, supra note 275 ("At times we may make certain information that we collect available to our affiliated companies, to our third party partners, to other Nintendo users, and for other legal and business purposes. For example: Nintendo Affiliates. We may share information with other Nintendo affiliated companies that use it consistent with this Privacy Notice.").
- <sup>388</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may share your information within and among the Sony group of companies for purposes related to

providing you with content, products, or services, including games, videos, music, software and software applications; community administration or development; to support various business processes; security; research and development; and so that other Sony companies may contact you about products, services or other offerings that may be of interest to you.").

<sup>389</sup> *Microsoft Privacy Statement*, *supra* note 277 ("In addition, we share personal data among Microsoft-controlled affiliates and subsidiaries.").

<sup>390</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Some of our services allow you to share information and content with others. When you decide to use these services, the information or content that you share, your online status, and your gameplay information may be visible to Nintendo and its trusted business partners, other Nintendo users, and in some cases the public.").

<sup>391</sup> 2015 Nintendo Privacy Policy, supra note 275 ("At times we may make certain information that we collect available to our affiliated companies, to our third party partners, to other Nintendo users, and for other legal and business purposes. For example: Other Users and Friends. We may share information, including, for example, your user name, Mii profile information, online status, Mii greeting, and other game play information, with other Nintendo users when you use the online features of our products and services.").

<sup>392</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Certain elements of your personal information and certain information about your use of the SIE LLC Network are publicly accessible to other users of the SIE LLC Network. For example: other users of the SIE LLC Network may be able to see your username; your profile picture (if you choose to upload a picture); and your user bio (if you choose to provide a bio). We may also publicly display other information derived from your activity on the SIE LLC Network.").

<sup>393</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Analytics providers are third-party companies that collect information when you use some of our services. These companies use cookies, web beacons, software development kits (SDKs), and similar technologies to collect and analyze crash reports, keep track of what content or ads you view, how long you spend on different pages, how you arrived on a particular page and how you respond to the ads we show you. Analytics providers may combine the information they collect from our services with other information they collect from other sites and services. The practices of these third-party analytics providers are governed by their own privacy policies. The analytics providers with whom we work include, but are not limited to, the companies listed below. Some of these companies, including those listed on the page linked below, may give users choices about how they collect and use your information. http://www.nintendo.com/analytics-providers.").

<sup>394</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We may share information with our third party partners to help us perform various functions necessary to operate our business or fulfill your requests (for example, helping you process your downloads or purchases, and developing and executing marketing campaigns). We also may share such information to, for example, complete your transactions, provide you with advertising and other promotional materials, and assist in the creation of user accounts with third parties.").

<sup>395</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("With persons or companies we retain to carry out or provide support to business operations, including uses described above in the Information Use section.").

Microsoft Privacy Statement, supra note 277 ("We also share personal data with vendors or agents working on our behalf for the purposes described in this statement. For example, companies we've hired to provide customer service support or assist in protecting and securing our systems and services may need access to personal data in order to provide those functions. In such cases, these companies must abide by our data privacy and security requirements and are not allowed to use personal data they receive from us for any other purpose... Xbox Live data shared with game or app publishers. When you use an Xbox Live-enabled game or app, the publisher or service provider for that game or app has access to data about your usage of Xbox Live and that game or app, and may disclose or display (such as on leaderboards) such data. This data includes, for example, your game scores, data about your game play sessions (for example, types of vehicles used in the game), your presence on Xbox Live, the time you spend playing the game or app, rankings, statistics, gamer profiles, avatars, and other content that you may create or submit within the game or app.").

<sup>397</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We also may permit our third-party partners to set cookies and use web beacons, SDKs, and similar technologies within our services to help us perform various internal functions necessary to operate our business and to collect information about your use of our and others' services across your devices. These third parties may use that information to provide you advertisements, across the Internet and mobile applications and devices, about goods and services that may be of interest to you. Some of these third parties may offer you a way to opt-out of this type of targeted advertising through industry choice mechanisms. To learn more about third parties that participate in these choice offerings and to exercise choices that may be available to you, you can visit www.networkadvertising.org and www.aboutads.info. You may be able to opt out from targeted advertising through the advertising settings for your mobile device.").

<sup>398</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We also may permit our third party partners to set cookies and web beacons and similar technologies on our websites, or within emails sent on our behalf, to help us perform various internal functions necessary to operate our business. These third parties may also use these cookies and web beacons and other technologies to collect information about your visits to our websites and elsewhere on the Internet and may use that information during, or after, your visits to our websites to provide you advertisements across the Internet about goods and services that may be of interest to you. Some of these third parties may offer you a way to opt-out of this type ad targeting through industry choice mechanisms. To learn more about third parties that participate in these choice offering and to exercise choices that may be available to you, you can visit www.networkadvertising.org and www.aboutads.info").

<sup>399</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Third parties with whom we are jointly delivering services or features, such as sweepstakes, contests, promotions, or advertising.").

<sup>400</sup> Microsoft Privacy Statement, supra note 277 ("Advertising. Many of our products are supported by advertising. We share the data we collect with third parties such as AOL and AppNexus so that they can select and deliver some of the ads you see on our sites and apps, as well as other sites and apps serviced by these partners. The ads that you see may be selected based on your current location, search query, or the content you are viewing. Other ads are targeted based on your likely interests or other information learned about you over time using demographic data, search queries, interests and favorites, usage data from our own sites and apps and the sites and apps of our advertisers

and partners, and location data - which we refer to as 'interest-based advertising' in this statement. To provide interest-based advertising, we combine cookies placed on your device using information that we collect (such as IP address) when your browser interacts with our websites. If you opt out of receiving interest-based advertising, data associated with these cookies will not be used. Microsoft does not use what you say in email, chat, video calls or voice mail, or your documents, photos or other personal files to target ads to you. You can opt out of receiving interest-based advertising from Microsoft by visiting our opt-out page. More information about advertising controls is available in the Access and Controls section of this privacy statement. Further details regarding our advertising-related uses of data include.").

- <sup>401</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("When we believe in good faith that the law requires disclosure or that disclosure is necessary to protect or enforce the rights, property, safety, or security of ourselves or others.").
- <sup>402</sup> Microsoft Privacy Statement, supra note 277 ("when required by law or to respond to legal process; to protect our customers; to protect lives; to maintain the security of our products; and to protect the rights or property of Microsoft.").
- <sup>403</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Your information may also be shared as part of any sale or transfer of company assets, if legally permitted.").
- <sup>404</sup> 2015 Nintendo Privacy Policy, supra note 275 ("At times we may make certain information that we collect available to our affiliated companies, to our third party partners, to other Nintendo users, and for other legal and business purposes. For example: Legal and Business Purposes. We may disclose your information in order to comply with legal process, to respond to claims or inquiries, or to protect the rights, property or personal safety of Nintendo, our users, or the public. Your information may also be disclosed as part of any sale or transfer of company assets, if legally permitted.").
- <sup>405</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("In connection with sale of the applicable business, a portion of the business, or certain stock and/or assets, or a corporate merger, consolidation, restructuring, or other corporate change including, without limitation, during the course of any due diligence process.").
- <sup>406</sup> Microsoft Privacy Statement, supra note 277 ("We may also disclose personal data as part of a corporate transaction such as a merger or sale of assets.").
- <sup>407</sup> 2015 Nintendo Privacy Policy, supra note 275 ("You may review, and have deleted, the personal information we have collected from your child, and you may refuse to permit our further collection or use of your child's personal information, by contacting a Nintendo Privacy Administrator via email at privacypolicy@noa.nintendo.com, by phone at 1-888-977-7627, or by regular mail at Nintendo of America Inc., Attn: Nintendo Privacy Administrator, 4600 150th Avenue NE, Redmond, WA 98052, U.S.A.").
- <sup>408</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have certain choices about how your information is collected and used. You can access, amend or have your information deleted through your account settings page.").
- <sup>409</sup> Microsoft Privacy Statement, supra note 277 ("You can view, edit, or delete your personal data online for many Microsoft products. You can also make choices about Microsoft's collection and use of your data. How you can access or control your personal data will depend on which products you use.").
- <sup>410</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We may offer you certain controls and choices regarding the information we collect, how the information is used, and how it is shared. These controls and choices may include the ability to update, correct or delete

information that you have provided to us or information that we have collected through your use of our service.").

- 411 Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have certain choices about how your information is collected and used. You can access, amend or have your information deleted through your account settings page.").
- <sup>412</sup> Microsoft Privacy Statement, supra note 277 ("If you use Xbox Live or Xbox.com, you can view or edit your personal data, including billing and account information, privacy settings, online safety and data sharing preferences by accessing My Xbox on the Xbox console or on the Xbox.com website.").
- <sup>413</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We may offer you certain controls and choices regarding the information we collect, how the information is used, and how it is shared. These controls and choices may include the ability to update, correct or delete information that you have provided to us or information that we have collected through your use of our service.").
- 414 2015 Nintendo Privacy Policy, supra note 275 ("You may review, and have deleted, the personal information we have collected from your child, and you may refuse to permit our further collection or use of your child's personal information, by contacting a Nintendo Privacy Administrator via email at privacypolicy@noa.nintendo.com, by phone at 1-888-977-7627, or by regular mail at Nintendo of America Inc., Attn: Nintendo Privacy Administrator, 4600 150th Avenue NE, Redmond, WA 98052, U.S.A.").
- 415 Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have certain choices about how your information is collected and used. You can access, amend or have your information deleted through your account settings page.").
- 416 Microsoft Privacy Statement, supra note 277 ("You can view, edit, or delete your personal data online for many Microsoft products. You can also make choices about Microsoft's collection and use of your data. How you can access or control your personal data will depend on which products you use.... If you cannot access certain personal data collected by Microsoft via the links above or directly through the Microsoft products you use, you can always contact Microsoft by using our web form. We will respond to requests to access or delete your personal data within 30 days.").
- be stored on your Nintendo device. For your protection, before selling, transferring, or otherwise disposing of your Nintendo device, please remove all stored information, including information stored on any of the device's accessories. For instructions on how to remove stored information from your Nintendo device, please see the user manual or visit support.nintendo.com. If you transfer data from one Nintendo device to another, using any of our system transfer tools or features, any information about you, that is stored on that device, will be transferred as part of the process.").
- 418 2015 Nintendo Privacy Policy, supra note 275 ("Any information you provide, or that is collected through use of our products, services and websites may be stored, processed, and transferred within, or to, the United States, or any other country in which we or our affiliated companies or third party partners maintain facilities. As a result, it is possible that your information could be accessed by foreign governmental authorities, or otherwise, in accordance with applicable local laws. By using our US based website, or by designating the United States as the region for your Nintendo device, you consent to the collection, storage, processing, and transfer of your information in and to the United States, or other countries and territories, pursuant to the laws of the United States. We

abide by the U.S.-EU Safe Harbor Framework and the U.S.-Swiss Safe Harbor Framework, as set forth by the U.S. Department of Commerce regarding the collection, use, and retention of data from the European Economic Area, and Switzerland. For more information about the Safe Harbor program, and to view our certification, visit the U.S. Department of Commerce's Safe Harbor website.").

Network is operated in the United States and other countries around the world. Please be aware that information we collect, including personal information, will be transferred to, processed and stored in the United States and other countries around the world and, as such, courts, law enforcement, and other authorities in the United States and other countries may, in certain circumstances, be entitled to access your personal information. By using the SIE LLC Network or providing us with any information through the SIE LLC Network, you consent to this transfer, processing and storage of your information in the United States and in other countries around the world, jurisdictions in which the privacy laws may not be as comprehensive as those in the country where you reside or are a citizen.").

Microsoft Privacy Statement, supra note 277 ("Personal data collected by Microsoft may be stored and processed in your region, in the United States or in any other country where Microsoft or its affiliates, subsidiaries or service providers maintain facilities. Microsoft maintains major data centers in the United States, Canada, Brazil, Ireland, the Netherlands, Austria, Finland, India, Singapore, Malaysia, Hong Kong, Japan, and Australia. Typically, the primary storage location is in the customer's region or in the United States, often with a backup to a data center in another region. The storage location(s) are chosen in order to operate efficiently, to improve performance, and to create redundancies in order to protect the data in the event of an outage or other problem. We take steps to ensure that the data we collect under this privacy statement is processed according to the provisions of this statement and the requirements of applicable law wherever the data is located.").

<sup>421</sup> 2017 Nintendo Privacy Policy, supra note 274 ("They may also include the ability to opt-out of receiving notifications, promotions, offers or other advertising from us.").

<sup>422</sup> 2015 Nintendo Privacy Policy, supra note 275 ("You may use a Nintendo device without providing us your information; however, some features and applications may not be available to you. You can opt-out of the collection of certain information by not using our services. You also may be able to opt-out of certain types of information collection through your Nintendo device settings, parental controls or other opt-out mechanisms we make available to you. Certain aggregated technical information about your Nintendo device may still be automatically collected when you, or another user of your device, connects to the internet. You may opt out of receiving commercial email messages from Nintendo by following the instructions contained in those email messages.").

<sup>423</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Please note that we reserve the right to send you certain communications relating to your account or use of the SIE LLC Network and these transactional account messages may be unaffected if you choose to opt-out from marketing communications.").

<sup>424</sup> Microsoft Privacy Statement, supra note 277 ("You can opt out of receiving interest-based advertising from Microsoft by visiting our opt-out page.").

<sup>425</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Some web browsers may transmit 'do not track' signals. We currently do not take action in response to these signals.").

- 426 Microsoft Privacy Statement, supra note 277 ("Some browsers have incorporated 'Do Not Track' (DNT) features that can send a signal to the websites you visit indicating you do not wish to be tracked. Because there is not yet a common understanding of how to interpret the DNT signal, Microsoft services do not currently respond to browser DNT signals. We continue to work with the online industry to define a common understanding of how to treat DNT signals. In the meantime, you can use the range of other tools we provide to control data collection and use, including the ability to opt out of receiving interest-based advertising from Microsoft as described above.").
- <sup>427</sup> 2017 Nintendo Privacy Policy, supra note 274 ("You may be able to disable cookies in your browser settings or set your browser to alert you when cookies are being used. If you disable cookies, you may not be able to use all of the features of our services.").
- <sup>428</sup> 2015 Nintendo Privacy Policy, supra note 275 ("You can set your certain browsers to reject cookies or to notify you when you are sent a cookie. However, not utilizing cookies may prevent you from using certain functions and features of our products and services.").
- <sup>429</sup> Microsoft Privacy Statement, supra note 277 ("Internet Explorer (versions 9 and up) has a feature called Tracking Protection that will block third-party content, including cookies, from any site that is listed in a Tracking Protection List you add. By limiting calls to these sites, the browser will limit the information these third-party sites can collect about you.").
- 430 Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may retain information about you as long as it is necessary for us to fulfill the purposes outlined in this policy. In addition, we may retain your information for an additional period as is permitted or required to, among other things, comply with our legal obligations, resolve disputes, and enforce agreements. Where required by applicable law, we shall delete your information when the information is no longer necessary or requested to do so. Even if we delete your information from active databases, the information may remain on backup or archival media as well as other information systems.").
- <sup>431</sup> Microsoft Privacy Statement, supra note 277 ("Microsoft retains personal data for as long as necessary to provide the products and fulfill the transactions you have requested, or for other essential purposes such as complying with our legal obligations, resolving disputes, and enforcing our agreements. Because these needs can vary for different data types in the context of different products, actual retention periods can vary significantly.").
- <sup>432</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We have implemented administrative, physical and technical security measures that are designed to protect your information from loss, theft, misuse, unauthorized access, disclosure, alteration and destruction. You should understand though that, despite our efforts, no security can be guaranteed as impenetrable.").
- 433 2015 Nintendo Privacy Policy, supra note 275 ("Nintendo uses reasonable measures, and has established reasonable safeguards, to help protect your information from loss, theft, misuse, and unauthorized access, disclosure, alteration and destruction. You should understand that no data storage system or transmission of data over the Internet or any other public network can be guaranteed to be 100% secure. Please note that information collected by third parties may not have the same security protections as information you submit to us or that we collect, and we are not responsible for protecting the security of such information. If you install unauthorized applications or content on, or make unauthorized modifications to, your Nintendo device or its software, your

information may be compromised. Nintendo is not responsible for any collection, use or disclosure of information from any Nintendo device that has unauthorized modifications or contains unauthorized software or content.").

434 Sony Interactive Entertainment Privacy Policy, supra note 276 ("We seek to maintain reasonable security measures to help protect your information against unauthorized or accidental disclosure, access, misuse, loss, or alteration. Although we strive to protect your information, we cannot ensure or warrant the security of such information. There is no such thing as perfect security.").

435 Microsoft Privacy Statement, supra note 277 ("Microsoft is committed to protecting the security of your personal data. We use a variety of security technologies and procedures to help protect your personal data from unauthorized access, use or disclosure. For example, we store the personal data you provide on computer systems that have limited access and are in controlled facilities. When we transmit highly confidential data (such as a credit card number or password) over the Internet, we protect it through the use of encryption.").

<sup>436</sup> 2017 Nintendo Privacy Policy, supra note 274 ("We do not knowingly collect, use or share personal information from children under the age of 13 without verifiable parental consent or as permitted by law. Where a parent or legal guardian has provided consent... [that parent] may review, modify, or delete the child's personal information, or withdraw consent, by contacting us using the contact information provided at the end of this privacy policy.").

2015 Nintendo Privacy Policy, supra note 275 ("In accordance with applicable law, we obtain consent from parents for the collection of personal information from their children. You can find information about how we collect, use, and disclose personal information from our users, including children under the age of 13, in the sections above titled YOUR INFORMATION, USE OF INFORMATION, DISCLOSURE OF INFORMATION. You may review, and have deleted, the personal information we have collected from your child, and you may refuse to permit our further collection or use of your child's personal information, by contacting a Nintendo Privacy Administrator via email at privacypolicy@noa.nintendo.com, by phone at 1-888-977-7627, or by regular mail at Nintendo of America Inc., Attn: Nintendo Privacy Administrator, 4600 150th Avenue NE, Redmond, WA 98052, U.S.A. Before responding to your request to review personal information collected from your child, we may require that you follow reasonable procedures to help verify your identity as the child's parent or legal guardian. We may deny any request that fails to follow these procedures. If you choose to have your child's personal information deleted, or refuse to permit further collection or use of your child's personal information, certain features of our products and services may be limited or unavailable. Please note that third-party game publishers, application providers, and content providers may collect, use, and disclose your child's personal information through our products and services when your child uses third-party services or content. Nintendo is not responsible for the privacy practices of these third parties, and we recommend that you review their privacy notices before your child provides or exchanges any personal information through third-party services or content. We strongly recommend that you supervise your child's use of our products and services at all times. You can restrict your child's use of certain features of our products and services by setting up the parental controls on your Nintendo device. For a detailed description of these parental control features, please see the user manual for your Nintendo device.").

<sup>438</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("SIE LLC is committed to respecting children's privacy. We will not collect personal information from anyone under the age of 13 without their parent's consent. With parental consent, we will collect, use and share information collected from or about children in accordance with the practices described in this document...").

439 Microsoft Privacy Statement, supra note 277 ("When a Microsoft product collects age it will either block users under 13 or will ask them to provide consent from a parent or guardian before they can use it. We will not knowingly ask children under 13 to provide more data than is necessary to provide the product. Once parental consent is granted, the child's account is treated much like any other account. The child may have access to communication services like email, instant messaging and online message boards and may be able to communicate freely with other users of all ages. Parents can change or revoke the consent choices previously made, and review, edit or request the deletion of their children's personal data. For example, parents can access their personal Microsoft account and click on 'Permissions.' For users of Minecraft and other Mojang games, parents can contact us at account.mojang.com/terms#contact.").

<sup>440</sup> Microsoft Privacy Statement, supra note 277 ("If you have children who use Xbox services, you can set up child accounts for them. Children 17 and younger cannot create an account on Xbox Live without parental consent. Adults in the family can change consent choices and online safety settings for child accounts on xbox.com.").

<sup>441</sup> 2017 Nintendo Privacy Policy, supra note 274 ("This privacy policy and the certification seal located on our websites that link to this policy confirms that we are a valid licensee, and participating member, of the Entertainment Software Rating Board's Privacy Certified Program. To help protect your privacy, we have voluntarily undertaken this privacy initiative. As a licensee in this privacy certification program, we are subject to frequent audits of our websites and other enforcement and accountability mechanisms administered independently by the ESRB. All of our sites containing the ESRB certification seal have been reviewed, and certified, by ESRB to meet established online information collection and use practices.").

<sup>442</sup> 2015 Nintendo Privacy Policy, supra note 275 ("This Privacy Notice and the certification seal located on our website confirms that we are a valid licensee, and participating member, of the Entertainment Software Rating Board's Privacy Certified Program. To help protect your privacy, we have voluntarily undertaken this privacy initiative. As a licensee in this privacy certification program, we are subject to frequent audits of our websites and other enforcement and accountability mechanisms administered independently by the ESRB. All of our sites containing the ESRB certification seal have been reviewed, and certified, by ESRB to meet established online information collection and use practices.").

<sup>443</sup> 2017 Nintendo Privacy Policy, supra note 274 ("If you have any questions, concerns or comments regarding this privacy policy, or any of our privacy practices, please contact us via email at privacypolicy@noa.nintendo.com, via phone at 1-888-977-7627, or via regular mail at Nintendo of America Inc., Attn: Privacy Administrator, 4600 150th Avenue NE, Redmond, WA 98052, U.S.A. You may also contact ESRB Privacy Certified via email at privacy@esrb.org, or via regular mail at ESRB Privacy Certified, Attn: Privacy Certified Program, 420 Lexington Avenue, Suite 2024, New York, NY 10170.").

444 2015 Nintendo Privacy Policy, supra note 275 ("If you have any questions, complaints or comments regarding this Privacy Notice, or any of our privacy practices, please contact a Nintendo Privacy Administrator via email at privacypolicy@noa.nintendo.com, via phone at 1-888-977-7627, or via regular mail at Nintendo of America Inc., Attn: Privacy Administrator, 4600 150th Avenue NE, Redmond, WA 98052, U.S.A. You may also contact ESRB Privacy Certified via email at privacy@esrb.org, or via regular mail at ESRB Privacy Certified, Attn: Privacy Certified Program, 420 Lexington Avenue, Suite 2024, New York, NY 10170.").

<sup>445</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("For further information on our privacy policy, or for questions on information that we may have collected from you, or should you wish to have your SEN account closed, please contact us by either of the following methods and we will be happy to review, update, or change your record status as appropriate . . . .").

446 Microsoft Privacy Statement, supra note 277 ("If you have a technical or support question, please visit support.microsoft.com to learn more about Microsoft Support offerings. If you have a personal Microsoft account password question, please visit Microsoft account support. If you have a privacy concern or a question for the Chief Privacy Officer/Data Protection Officer of Microsoft, please contact us by using our Web form. We will respond to questions or concerns within 30 days. Unless otherwise stated, Microsoft Corporation is a data controller for personal data we collect through the products subject to this statement. Our address is Microsoft Privacy, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052, USA. Telephone: (+1) 425-882-8080. Microsoft Ireland Operations Limited is our data protection representative for the European Economic Area and Switzerland. The data protection officer of Microsoft Ireland Operations Limited can be reached at the following address: Microsoft Ireland Operations, Ltd., Attn: Data Protection, Carmenhall Road, Sandyford, Dublin 18, Ireland. Skype Communications S.à.r.l. 23-29 Rives de Clausen L-2165 Luxembourg, Luxembourg is a data controller for Skype. To contact us in relation to Skype software or products, please submit a support request to the Skype customer support team. To find Microsoft subsidiary in the your country region, www.microsoft.com/worldwide.").

<sup>447</sup> 2017 Nintendo Privacy Policy, supra note 274 ("Nintendo may update this privacy policy from time to time. When we update it, we will revise the 'Last Updated' date above. If we make material changes in the way we collect, use, retain or share your personal information, we will notify you by sending you an email at the last email address that you provided us, or by posting notice of the changes on the services covered by this privacy policy.").

<sup>448</sup> 2015 Nintendo Privacy Policy, supra note 275 ("We may update this Privacy Notice from time to time. When we update this Privacy Notice, we will revise the 'Last Updated' date above. Updates will be posted at support.nintendo.com. We recommend that you review this Privacy Notice each time you use our products, services or websites to help you stay informed of our privacy practices.").

<sup>449</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may revise this statement at any time. We will post any revisions to this policy, and the changes are effective when we post them here. By continuing to access or use the Services after those changes become effective, you agree to be bound by the revised Privacy Policy.").

<sup>450</sup> Microsoft Privacy Statement, supra note 277 ("We will update this privacy statement when necessary to reflect customer feedback and changes in our products.

When we post changes to this statement, we will revise the "last updated" date at the top of the statement and describe the changes in the Change History page. If there are material changes to the statement or in how Microsoft will use your personal data, we will notify you either by prominently posting a notice of such changes before they take effect or by directly sending you a notification. We encourage you to periodically review this privacy statement to learn how Microsoft is protecting your information.").

- <sup>451</sup> New Gear VR with Controller Available Now With 20+ Titles, OCULUS BLOG (Apr. 21, 2017), https://www.oculus.com/blog/new-gear-vr-with-controller-available-now-with-20-titles [ps://perma.cc/92KF-PPCR].
- <sup>452</sup> In Detail Full Specifications, PLAYSTATION, https://www.playstation.com/en-us/explore/playstation-vr/tech-specs [https://perma.cc/ANE5-6FMT] (last visited July 20, 2017).
- Mike Jazayeri, *Daydream View Coming To Stores November 10<sup>th</sup>*, GOOGLE (Nov. 1, 2016), https://www.blog.google/products/google-vr/daydream-view-coming-stores-november-10th [https://perma.cc/RR78-6LFH].
- <sup>454</sup> HTC Vive Marks First Anniversary on April 5th With "Vive Day" Celebration For Fans, HTC (Apr. 3, 2017), https://www.vive.com/nz/newsroom/2017-04-04 [https://perma.cc/C6U4-5G64].
- Doug Bolton, Oculus Rift Starts Shipping to Customers in Time for 28 March Launch Date, INDEPENDENT (Mar. 25, 2016), http://www.independent.co.uk/life-style/gadgets-and-tech/news/oculus-rift-launch-shipping-date-vr-vive-games-release-a6952526.html [https://perma.cc/F8RQ-BERE].
- <sup>456</sup> *Gear VR with Controller*, SAMSUNG, http://www.samsung.com/us/mobile/virtual-reality/gear-vr/gear-vr-with-controller-sm-r324nzaaxar [https://perma.cc/5GKP-WREP] (last visited July 13, 2017).
- <sup>457</sup> Sony PSVR, BEST BUY, http://www.bestbuy.com/site/sony-playstationvr-bundle /5727203.p?skuId=5727203 [https://perma.cc/83UR-8B65] (last visited July 13, 2017).
- <sup>458</sup> DayDream View, GOOGLE, https://store.google.com/product/daydream\_view?utm \_source=daydream&utm\_medium=MS&utm\_campaign=daydream\_ms [https://perma.cc/R4DM-YCMU] (last visited July 13, 2017).
- <sup>459</sup> Vlad Savov, *HTC Vive Priced at \$799, Available in Early April*, THEVERGE.COM, https://www.theverge.com/2016/2/21/11081462/htc-vive-consumer-edition-price-release-date-mwc-2016 [https://perma.cc/4LTZ-94XG] (last visited Jan. 31, 2018).
- <sup>460</sup> Sam Byford, *Oculus Rift and Touch Bundle Will Be \$499 After \$399 Summer Sale End*, THEVERGE.COM (Jul. 14 2017) https://www.theverge.com/2017/7/14/15970296 /oculus-rift-touch-bundle-price-drop-hike [https://perma.cc/M2U8-YKTK].
- 461 Sony PSVR, supra note 457.
- <sup>462</sup> DayDream View, supra note 458.
- <sup>463</sup> *HTC Vive Cart*, HTC, https://store.us.vive.com/store/htcus/en\_US/buy/productID .5091604000/themeID.4773718000/currency.USD [https://perma.cc/Q6P2-Z9BJ] (last visited July 13, 2017).
- <sup>464</sup> Oculus Rift, OCULUS, https://www.oculus.com/rift [https://perma.cc/AN2U-32Z9] (last visited Nov. 10, 2018).
- <sup>465</sup> *Phones Built For Virtual Reality*, GOOGLE, https://vr.google.com/daydream/smartphonevr/phones [https://perma.cc/L8G7-TSX4] (last visited July 20, 2017).
- <sup>466</sup> Vive Ready Computers, HTC, https://www.vive.com/us/ready [https://perma.cc/GA3Q-2E3V] (last visited July 20, 2017).
- Oculus Rift, supra note 464.

<sup>&</sup>lt;sup>468</sup> *Phones Built For Virtual Reality, supra* note 465.

<sup>&</sup>lt;sup>469</sup> Oculus Rift, supra note 464.

<sup>&</sup>lt;sup>470</sup> *Id*.

<sup>&</sup>lt;sup>471</sup> *Id*.

<sup>&</sup>lt;sup>472</sup> *Id*.

<sup>&</sup>lt;sup>473</sup> *Id*.

<sup>&</sup>lt;sup>474</sup> Id.

<sup>&</sup>lt;sup>475</sup> Spec Comparison: Does The Rift's Touch Update Make It A True Vive Competitor?, DIGITAL TRENDS (Oct. 16, 2016), https://www.digitaltrends.com/virtual-reality/oculus-rift-vs-htc-vive [https://perma.cc/UFD7-TUQZ].

<sup>476</sup> Id.

<sup>&</sup>lt;sup>477</sup> *In Detail Full Specifications*, *supra* note 452.

Will Nicol, *The Battle of The Entry-Level Headsets: Google's Daydream View Vs. Samsung's Gear VR*, DIGITAL TRENDS (May 13, 2017), https://www.digitaltrends.com/virtual-reality/google-daydream-view-vs-samsung-gear-vr [https://perma.cc/UQK3-7Q3T].

<sup>&</sup>lt;sup>479</sup> Spec Comparison: Does The Rift's Touch Update Make It A True Vive Competitor?, supra note 475.

<sup>&</sup>lt;sup>480</sup> *Id*.

<sup>&</sup>lt;sup>481</sup> Jen Karner, *Specs comparison: Playstation VR, Oculus Rift, HTC Vive, and Gear VR*, Android Central (May 18, 2016), https://www.androidcentral.com/comparing-playstation-vr-occulus-rift-htc-vive-and-samsung-gear-vr [https://perma.cc/52E3-RRW4].

<sup>&</sup>lt;sup>482</sup> *Id*.

<sup>&</sup>lt;sup>483</sup> Oculus Rift vs. Google Daydream View, VR BOUND, https://www.vrbound.com/compare/oculus/rift/vs/google/daydream-view [https://perma.cc/3YM5-G9VJ] (last visited July 20, 2017).

<sup>&</sup>lt;sup>484</sup> Spec Comparison: Does The Rift's Touch Update Make It A True Vive Competitor?, supra note 475.

<sup>&</sup>lt;sup>485</sup> *Id*.

Alex Davies, *Oculus Rift Vs. HTC Vive Vs. PlayStation VR*, Tom's HARDWARE (May 16, 2016), http://www.tomshardware.co.uk/vive-rift-playstation-vr-comparison,review-33556-3.html [https://perma.cc/P34W-F2MN].

<sup>&</sup>lt;sup>487</sup> *Id*.

<sup>&</sup>lt;sup>488</sup> *Id*.

<sup>489</sup> Id

 $<sup>^{490}</sup>$  Spec Comparison: Does The Rift's Touch Update Make It A True Vive Competitor?, supra note 475.

<sup>&</sup>lt;sup>491</sup> *Id*.

<sup>&</sup>lt;sup>492</sup> Davies, *supra* note 486.

<sup>&</sup>lt;sup>493</sup> Spec Comparison: Does The Rift's Touch Update Make It A True Vive Competitor?, supra note 475.

<sup>&</sup>lt;sup>494</sup> *Id*.

Positional tracking indicates that if users stand, walk around or lean while using the device, user's entire virtual world will move with the user. *See* Will Shanklin, *Oculus Rift vs. Gear VR (2017)*, NEW ATLAS, (Apr. 14, 2017), http://newatlas.com/gear-vr-vs-oculus-rift-specs-comparison-2017/49015 [https://perma.cc/8XFN-54XA].

<sup>496</sup> Id.

<sup>497</sup> *Id*.

<sup>498</sup> *Gear* 360, SAMSUNG, http://www.samsung.com/us/mobile/virtual-reality/gear-360/gear-360-sm-r210nzwaxar [http://perma.cc/82H2-K9N7] (last visited July 21, 2017).

<sup>499</sup> *PlayStation Camera*, PLAYSTATION, https://www.playstation.com/en-us/explore/accessories/playstation-camera-ps4 [https://perma.cc/8PX4-8QTB] (last visited July 13, 2017).

Vive has a built-in camera in the headset. *Activating The Front-Facing Camera*, https://www.vive.com/eu/support/vive/category\_howto/activating-the-front-facing-camera.html [https://perma.cc/JR75-D8Y7] (last visited Feb. 22, 2019).

<sup>501</sup> Samsung Privacy Policy, SAMSUNG, http://www.samsung.com/us/common/privacy.html [https://perma.cc/G42S-R999] (last visited July 24, 2017) ("This Privacy Policy applies to any Samsung device, website or online application that refers to or links to the Privacy Policy (collectively, our 'Services').") [hereinafter Samsung Privacy Policy].

Sony Interactive Entertainment Privacy Policy, supra note 276 ("When you connect with Sony Interactive Entertainment LLC ('SIE LLC') online by using our websites, the PlayStation Network and Sony Entertainment Network (collectively 'SEN'), or certain hardware or software which utilizes SEN for data collection and refers to this Privacy Policy (all collectively, 'SIE LLC Network'), we collect and handle information as described below. Your use of the SIE LLC Network constitutes your consent to the practices described below.").

<sup>503</sup> Privacy Policy, GOOGLE, https://www.google.com/intl/en/policies/privacy [https://perma.cc/3TPD-UKQH] (last visited July 24, 2017) ("When you use Google services, you trust us with your information. This Privacy Policy is meant to help you understand what data we collect, why we collect it, and what we do with it") [hereinafter Google Privacy Policy].

<sup>504</sup> Privacy Policy, HTC, https://www.htc.com/us/terms/privacy [https://perma.cc /VTP4-FJ8A] (last visited July 24, 2017) ("This privacy policy (the 'Policy') describes how HTC Corporation, HTC America, Inc. and their related companies ('HTC' or 'we/our/us') collect, use and share personal information that we collect from you as a user of HTC websites, devices, applications and services (together, the 'Services').") [hereinafter HTC Privacy Policy].

<sup>505</sup> Oculus Privacy Policy, OCULUS, https://www.oculus.com/legal/privacy-policy [https://perma.cc/6CBQ-MGM4] (last visited July 24, 2017) ("Oculus . . . makes virtual reality products and operates a platform where users can download and submit content for and obtain services related to our products.") [hereinafter Oculus Privacy Policy] .

- 506 Samsung Privacy Policy, supra note 501.
- 507 Sony Interactive Entertainment Privacy Policy, supra note 276.
- <sup>508</sup> Google Privacy Policy, supra note 503.
- 509 HTC Privacy Policy, supra note 504.
- <sup>510</sup> Oculus Privacy Policy, supra note 505.
- 511 Samsung Privacy Policy, supra note 501.
- 512 Sony Interactive Entertainment Privacy Policy, supra note 276.

- <sup>513</sup> Google Privacy Policy, supra note 503.
- <sup>514</sup> HTC Privacy Policy, supra note 504.
- <sup>515</sup> Oculus Privacy Policy, supra note 505.
- Samsung Privacy Policy, supra note 501 ("This Privacy Policy applies to any Samsung device, website or online application that refers to or links to the Privacy Policy (collectively, our 'Services'). The Privacy Policy applies regardless of whether you use a computer, mobile phone, tablet, TV, or other device to access our Services.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("When you connect with Sony Interactive Entertainment LLC ('SIE LLC') online by using our websites, the PlayStation Network and Sony Entertainment Network (collectively 'SEN'), or certain hardware or software which utilizes SEN for data collection and refers to this Privacy Policy (all collectively, 'SIE LLC Network')").
- Google Privacy Policy, supra note 503 ("Our Privacy Policy applies to all of the services offered by Google Inc. and its affiliates, including YouTube, services Google provides on Android devices, and services offered on other sites (such as our advertising services), but excludes services that have separate privacy policies that do not incorporate this Privacy Policy. Our Privacy Policy does not apply to services offered by other companies or individuals, including products or sites that may be displayed to you in search results, sites that may include Google services, or other sites linked from our services. Our Privacy Policy does not cover the information practices of other companies and organizations who advertise our services, and who may use cookies, pixel tags and other technologies to serve and offer relevant ads.").
- 519 HTC Privacy Policy, supra note 504 ("[this Policy] describes how HTC Corporation, HTC America, Inc. and their related companies ('HTC' or 'we/our/us') collect, use and share personal information that we collect from you as a user of HTC websites, devices, applications and services (together, the 'Services').").
- Oculus Privacy Policy, supra note 505 ("Collectively, we describe our products and services—including our websites, mobile apps, platform, content and hardware—as our 'Services.' This Privacy Policy explains how we treat information from or about our users, including how we collect, use, and share information in connection with our Services. By visiting or using our Services, you consent to the practices described in this Privacy Policy. If you have questions about this Privacy Policy, please contact us at privacy@oculus.com.").
- Samsung Privacy Policy, supra note 501 ("A number of our Services enable users to create accounts or profiles. In connection with these Services, we may ask you to provide certain information about yourself to set up the account or profile. For example, you can submit certain information about yourself, such as your name and email address, when you create a Samsung Account.").
- 522 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").
- Google Privacy Policy, supra note 503 ("For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for personal information, like your name, email address, telephone number or credit card to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.").
- 524 HTC Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email

address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").

- <sup>525</sup> Oculus Privacy Policy, supra note 505 ("We collect the information you give us when using our Services. For example: When you register to use our Services, we ask for information such as your name, email address, phone number, and date of birth.").
- Samsung Privacy Policy, supra note 501 ("A number of our Services enable users to create accounts or profiles. In connection with these Services, we may ask you to provide certain information about yourself to set up the account or profile. For example, you can submit certain information about yourself, such as your name and email address, when you create a Samsung Account.").
- 527 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").
- Google Privacy Policy, supra note 503 ("For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for personal information, like your name, email address, telephone number or credit card to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.").
- httc Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- Oculus Privacy Policy, supra note 505 ("We collect the information you give us when using our Services. For example: When you register to use our Services, we ask for information such as your name, email address, phone number, and date of birth.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").
- Google Privacy Policy, supra note 503 ("For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for personal information, like your name, email address, telephone number or credit card to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.").
- httc Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- Oculus Privacy Policy, supra note 505 ("We collect the information you give us when using our Services. For example: When you register to use our Services, we ask for information such as your name, email address, phone number, and date of birth.").
- 535 Sony Interactive Entertainment Privacy Policy, supra note 276 ("A parent only needs to provide limited information about their child (an email address and date-of-

birth) to create a sub-account for their child. Providing gender is optional. Language, state, and country are added based upon the Master Account.").

- information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- <sup>537</sup> Oculus Privacy Policy, supra note 505 ("We collect the information you give us when using our Services. For example: When you register to use our Services, we ask for information such as your name, email address, phone number, and date of birth.").
- 538 Samsung Privacy Policy, supra note 501 ("If you order a product or paid service from us, we may ask for your name, contact information, shipping and billing address(es), and credit card information in order to process your order.").
- 539 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Contact info (e.g. name, email or mailing address, or phone number).").
- <sup>540</sup> HTC Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- Oculus Privacy Policy, supra note 505 ("If you buy something on or through our Services, we collect information about the transaction. This can include your payment information, purchase activity, and shipping and contact details.").
- <sup>542</sup> HTC Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- <sup>543</sup> *Id.* ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- <sup>544</sup> *Id.* ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- <sup>545</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("A parent only needs to provide limited information about their child (an email address and date-of-birth) to create a sub-account for their child. Providing gender is optional. Language, state, and country are added based upon the Master Account.").
- Google Privacy Policy, supra note 503 ("We collect information to provide better services to all of our users from figuring out basic stuff like which language you speak,

to more complex things like which ads you'll find most useful, the people who matter most to you online, or which YouTube videos you might like.").

- <sup>547</sup> HTC Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- <sup>548</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Displaying your real name or photograph within games.").
- Google Privacy Policy, supra note 503 ("For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for personal information, like your name, email address, telephone number or credit card to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.").
- <sup>550</sup> HTC Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- 551 Samsung Privacy Policy, supra note 501 ("If you order a product or paid service from us, we may ask for your name, contact information, shipping and billing address(es), and credit card information in order to process your order.").
- 552 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Billing Info (e.g. credit card or other payment number, billing address).").
- Google Privacy Policy, supra note 503 ("For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for personal information, like your name, email address, telephone number or credit card to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible Google Profile, which may include your name and photo.").
- 554 HTC Privacy Policy, supra note 504 ("If you purchase Services from us, we may also store your credit card numbers or other payment information, as required.").
- Oculus Privacy Policy, supra note 505 ("If you buy something on or through our Services, we collect information about the transaction. This can include your payment information, purchase activity, and shipping and contact details.").
- <sup>556</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Purchase Processes, where we may ask you to provide your name and billing info.").
- 557 Google Payments Privacy Policy, GOOGLE, https://payments.google.com/payments/apis-secure/u/0/get\_legal\_document?ldo=0&ldt=privacynotice&ldl=en-GB [https://perma.cc/PW2W-R852] (last updated Sept. 23, 2018) ("When you use Google Payments to conduct a transaction, we may collect information about the transaction, including the date, time and amount of the transaction, the merchant's location and description, a description provided by the seller of the goods or services purchased, any photo you choose to associate with the transaction, the names and email addresses of the

- seller and buyer (or sender and recipient), the type of payment method used, your description of the reason for the transaction and the offer associated with the transaction, if any.").
- <sup>558</sup> Oculus Privacy Policy, supra note 505 ("If you buy something on or through our Services, we collect information about the transaction. This can include your payment information, purchase activity, and shipping and contact details.").
- 559 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Technical and Customer Support Processes, where we may ask you to provide contact info and information related to the issue you are contacting us about.").
- <sup>560</sup> Google Privacy Policy, supra note 503 ("When you contact Google, we keep a record of your communication to help solve any issues you might be facing. We may use your email address to inform you about our services, such as letting you know about upcoming changes or improvements.").
- Oculus Privacy Policy, supra note 505 ("When you communicate with Oculus, you provide us with information like your email address.").
- <sup>562</sup> Samsung Privacy Policy, supra note 501 ("Some of our Services enable you to communicate with other people. Those communications will be transmitted through and stored on our systems.").
- <sup>563</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("You may share personal information with others through chat, text, email or communications features.").
- Oculus Privacy Policy, supra note 505("When you post, share or communicate with other Oculus users on our Services, we receive and store those communications and information associated with them, such as the date a post was created.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("For example, when you want to post in a forum, you provide us the content for the post (which could contain personally identifying information) which we collect and then display for you on the forum. Likewise, when you use other features such voice or text chat, blogs, surveys, user-generated content, activity streams, or social media, we may first collect the information you enter into the feature.").
- <sup>566</sup> HTC Privacy Policy, supra note 504 ("The Services may allow you to connect and share your actions, comments, content and information publicly or with people you specify.").
- <sup>567</sup> Oculus Privacy Policy, supra note 505 ("When you post, share or communicate with other Oculus users on our Services, we receive and store those communications and information associated with them, such as the date a post was created.").
- <sup>568</sup> *Id.* ("When you use our Services, you may have the option of submitting information about your physical features and dimensions.").
- <sup>569</sup> *Id.* ("Information about your physical movements and dimensions when you use a virtual reality headset.").
- 570 Samsung Privacy Policy, supra note 501 ("Voice information—such as recordings of your voice that we make (and may store on our servers) when you use voice commands to control a Service. (Note that we work with a third-party service provider that provides speech-to-text conversion services on our behalf. This provider may receive and store certain voice commands.).").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("[W]hen you use other features such voice or text chat, blogs, surveys, user-generated content, activity streams, or social media, we may first collect the information you enter into the feature.").

- <sup>572</sup> Samsung Privacy Policy, supra note 501 ("Location information—such as your device's GPS signal or information about nearby WiFi access points and cell towers that may be transmitted to us when you use certain Services.").
- <sup>573</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Physical or geographic location data, such as country, region, city, or latitude and longitude. For example, to provide location based game matching services, we may collect latitude and longitude.").
- Google Privacy Policy, supra note 503 ("When you use Google services, we may collect and process information about your actual location. We use various technologies to determine location, including IP address, GPS, and other sensors that may, for example, provide Google with information on nearby devices, Wi-Fi access points and cell towers.").
- 575 HTC Privacy Policy, supra note 504 ("When you use certain Services, we may collect, process, store and share your precise location data. This location information may include real-time geographic location of your device. It may also include the names of places that you have been, where you choose to 'check-in', to determine, log or share your location, places that you mark on a map, the geographic location, dates and other metadata of photos that you've taken, routes that you have travelled, how close you are to other devices, such as Bluetooth-enabled devices, Wi-Fi routers and services that use those devices (such as a store's tracking of your movement for data collection and marketing purposes) and the dates and times that you were at certain locations. HTC may share your location data with application providers who show that they have the right permissions. HTC may associate location data with personally identifiable or identifying information, such as your device ID and your account information. Our Services may also collect precise location data in a de-identified form, and we may share this data with partners and carriers to improve features and services.").
- <sup>576</sup> Oculus Privacy Policy, supra note 505 ("Location information, which can be derived from information such as your device's IP address. If you're using a mobile device, we may collect information about the device's precise location, which is derived from sources such as the device's GPS signal and information about nearby WiFi networks and cell towers.").
- 577 Samsung Privacy Policy, supra note 501 ("Device information—such as your hardware model, IMEI number and other unique device identifiers, MAC address, IP address, operating system version, and settings of the device you use to access the Services.").
- <sup>578</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data.").
- Google Privacy Policy, supra note 503 ("When you use Google services, we may collect and process information about your actual location. We use various technologies to determine location, including IP address, GPS, and other sensors that may, for example, provide Google with information on nearby devices, Wi-Fi access points and cell towers.").
- <sup>580</sup> HTC Privacy Policy, supra note 504 ("When you visit our websites, information we may automatically log includes, for example, your operating system, Internet Protocol (IP) address, access times, browser type and language and the website that you visited before visiting our website.").

- Oculus Privacy Policy, supra note 505 ("Location information, which can be derived from information such as your device's IP address. If you're using a mobile device, we may collect information about the device's precise location, which is derived from sources such as the device's GPS signal and information about nearby WiFi networks and cell towers.").
- <sup>582</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Network connected hardware (e.g. computer, gaming console, or mobile device) data, such as a unique device identifier, type, model, version, error related data, status, capability, configuration, functionality, performance data, and connection type.").
- <sup>583</sup> HTC Privacy Policy, supra note 504 ("In addition to the information we automatically collect, as described above, we may collect more detailed de-identified data about your device usage and error report data about your device (formerly called Tell HTC Experience and Tell HTC Error Report on older devices). When you participate in these programmes, you help us to understand how you use your device and improve HTC devices and other HTC and trusted partner products and services. HTC may re-identify this data when appropriate; for example, when you request technical support, choose to use a specific HTC service or app, or create an HTC Account. To learn more about usage and error reporting on your device, and/or to change your option to participate, go to 'Settings' on your device. Usage and error data settings will not affect HTC's collection of de-identified activation data or data about specific HTC apps and services you choose to use, including HTC Account, and are otherwise subject to limitations described in this Policy.").
- 584 Samsung Privacy Policy, supra note 501 ("Device information—such as your hardware model, IMEI number and other unique device identifiers, MAC address, IP address, operating system version, and settings of the device you use to access the Services.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Network connected hardware (e.g. computer, gaming console, or mobile device) data, such as a unique device identifier, type, model, version, error related data, status, capability, configuration, functionality, performance data, and connection type.").
- Google Privacy Policy, supra note 503 ("We collect device-specific information (such as your hardware model, operating system version, unique device identifiers, and mobile network information including phone number). Google may associate your device identifiers or phone number with your Google Account.").
- <sup>587</sup> HTC Privacy Policy, supra note 504 ("We may log, for example, the date you activate your device, your location, phone number, device type, serial number, device identifiers (e.g., IMEI, MEID, serial number, CID, MID and MCC ID Number or SIM card ID), the types and versions of mobile operating systems on your device, applications and software you install and use and how you use them, content you view or use and time-stamped logs of data exchanges.").
- Oculus Privacy Policy, supra note 505 ("Information about how you access our Services, including information about the type of device you're using (such as a headset, PC, or mobile device), your browser or operating system, your Internet Protocol ('IP') address, and certain device identifiers that may be unique to your device.").
- <sup>589</sup> Samsung Privacy Policy, supra note 501 ("Device information—such as your hardware model, IMEI number and other unique device identifiers, MAC address, IP address, operating system version, and settings of the device you use to access the Services.").

- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Network connected hardware (e.g. computer, gaming console, or mobile device) data, such as a unique device identifier, type, model, version, error related data, status, capability, configuration, functionality, performance data, and connection type.").
- <sup>591</sup> Google Privacy Policy, supra note 503 ("We collect device-specific information (such as your hardware model, operating system version, unique device identifiers, and mobile network information including phone number). Google may associate your device identifiers or phone number with your Google Account.").
- <sup>592</sup> HTC Privacy Policy, supra note 504 ("When you use our Services, you may provide information to us, both online and offline, including, for example: your name, email address, street address, phone numbers, fax number, date of birth, device identifiers, location data, your provider information, photos, videos and demographics (gender, company or organisation name, occupation, language preference, city, country, postcode, area code, time zone, etc.).").
- <sup>593</sup> Oculus Privacy Policy, supra note 505 ("Information about how you access our Services, including information about the type of device you're using (such as a headset, PC, or mobile device), your browser or operating system, your Internet Protocol ('IP') address, and certain device identifiers that may be unique to your device.").
- 594 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data").
- <sup>595</sup> Google Privacy Policy, supra note 503 ("device event information such as crashes, system activity, hardware settings, browser type, browser language, the date and time of your request and referral URL.").
- <sup>596</sup> HTC Privacy Policy, supra note 504 ("When you visit our websites, information we may automatically log includes, for example, your operating system, Internet Protocol (IP) address, access times, browser type and language and the website that you visited before visiting our website.").
- <sup>597</sup> Oculus Privacy Policy, supra note 505 ("Information about how you access our Services, including information about the type of device you're using (such as a headset, PC, or mobile device), your browser or operating system, your Internet Protocol ('IP') address, and certain device identifiers that may be unique to your device.").
- <sup>598</sup> Samsung Privacy Policy, supra note 501 ("Device information—such as your hardware model, IMEI number and other unique device identifiers, MAC address, IP address, operating system version, and settings of the device you use to access the Services.").
- <sup>599</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data.").
- Google Privacy Policy, supra note 503 ("We collect device-specific information (such as your hardware model, operating system version, unique device identifiers, and mobile network information including phone number). Google may associate your device identifiers or phone number with your Google Account.").
- 601 HTC Privacy Policy, supra note 504 ("When you visit our websites, information we may automatically log includes, for example, your operating system, Internet Protocol (IP) address, access times, browser type and language and the website that you visited before visiting our website.").

- <sup>602</sup> Oculus Privacy Policy, supra note 505 ("Information about how you access our Services, including information about the type of device you're using (such as a headset, PC, or mobile device), your browser or operating system, your Internet Protocol ('IP') address, and certain device identifiers that may be unique to your device.").
- 603 Samsung Privacy Policy, supra note 501 ("Log information—such as the time and duration of your use of the Service, search query terms you enter through the Services, and any information stored in cookies that we have set on your device.").
- <sup>604</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Web browsing, network or service usage data, such as browser type, internet service provider (ISP), IP address, referring/exit pages, operating system, date/time stamp, and clickstream data.").
- <sup>605</sup> Google Privacy Policy, supra note 503 ("details of how you used our service, such as your search queries.").
- 606 HTC Privacy Policy, supra note 504 ("[W]hen you visit our websites, information we may automatically log includes, for example, your operating system, Internet Protocol (IP) address, access times, browser type and language and the website that you visited before visiting our website.").
- 607 Samsung Privacy Policy, supra note 501 ("[D]evice information—such as your hardware model, IMEI number and other unique device identifiers, MAC address, IP address, operating system version, and settings of the device you use to access the Services.").
- <sup>608</sup> Google Privacy Policy, supra note 503 ("[D]evice event information such as crashes, system activity, hardware settings, browser type, browser language, the date and time of your request and referral URL.").
- 609 HTC Privacy Policy, supra note 504 ("If you use the Services to back up and store your device data and content with an independent third party service provider, we will collect certain information needed to help restore your data and content to your device, such as your device settings and the names of files and applications that you wish to back up.").
- 610 Samsung Privacy Policy, supra note 501 ("Log information—such as the time and duration of your use of the Service, search query terms you enter through the Services, and any information stored in cookies that we have set on your device.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Technologies used on the SIE LLC Network to passively collect such information may include: Cookies. Small data files placed on a devices hard drive. Web Beacons. Small graphic images or other web programming code called web beacons, (also known as '1x1 GIFs' or 'clear GIFs') may be included on our websites or in our e-mail messages. Embedded Scripts. Programming code that is temporarily downloaded onto a device, and is active only while you are connected to our website, and is deactivated or deleted thereafter.").
- Google Privacy Policy, supra note 503 ("We and our partners use various technologies to collect and store information when you visit a Google service, and this may include using cookies or similar technologies to identify your browser or device. We also use these technologies to collect and store information when you interact with services we offer to our partners, such as advertising services or Google features that may appear on other sites. Our Google Analytics product helps businesses and site owners analyze the traffic to their websites and apps. When used in conjunction with our advertising services, such as those using the DoubleClick cookie, Google Analytics

information is linked, by the Google Analytics customer or by Google, using Google technology, with information about visits to multiple sites.").

- <sup>613</sup> HTC Privacy Policy, supra note 504 ("We may also log information about you using web beacons, cookies, local shared objects (LSOs) and similar methods... We may automatically link any of the information that we collect about you using these methods to information that you provide us and any other information that we collect about you in accordance with this Policy.").
- Oculus Privacy Policy, supra note 505 ("Information about your interactions with our Services, like information about the games, content, apps or other experiences you interact with, and information collected in or through cookies, local storage, pixels, and similar technologies (additional information about these technologies is available at https://www.oculus.com/legal/cookies-pixels-and-other-technologies/).").
- 615 Samsung Privacy Policy, supra note 501 ("In addition to the information you provide, we may collect information about your use of our Services through software on your device and other means.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Network connected software data, such as application utilization, game play, game or system video and audio, progress, utilization, performance, peripheral and device use, services requested and used, or content downloaded and viewed.").
- 617 Google Privacy Policy, supra note 503 ("Information we get from your use of our services. We collect information about the services that you use and how you use them, like when you watch a video on YouTube, visit a website that uses our advertising services, or view and interact with our ads and content.").
- 618 HTC Privacy Policy, supra note 504 ("We may collect information about your usage of and activity on our Services.").
- Oculus Privacy Policy, supra note 505 ("Information about your interactions with our Services, like information about the games, content, apps or other experiences you interact with, and information collected in or through cookies, local storage, pixels, and similar technologies (additional information about these technologies is available at https://www.oculus.com/legal/cookies-pixels-and-other-technologies/).").
- 620 Samsung Privacy Policy, supra note 501 ("We may receive information about you from publicly and commercially available sources (as permitted by law), which we may combine with other information we receive from or about you. We also may receive information about you from third-party social networking services when you choose to connect with those services.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may also supplement the information that we collect with information that we obtain from third parties. For example, if you link your SEN accounts to your game, social media, or other accounts, we may receive data from the providers of those accounts. Likewise, if other users give us access to their profiles, we may receive information about you if you are one of their connections or information about you is otherwise accessible through their profile. Alternatively, we may supplement the information we collect about you with outside records from third parties. We may combine the information we receive from these third parties with the information we directly collect, in which case we will handle it in accordance with this policy.").
- 622 Google Privacy Policy, supra note 503 ("Information we collect when you are signed in to Google, in addition to information we obtain about you from partners, may be associated with your Google Account.").

- 623 HTC Privacy Policy, supra note 504 ("We may hold and associate any information you provide us with information gathered from other sources, including the social accounts that you choose to associate with your use of the Services, or with information we receive from other companies.").
- <sup>624</sup> Oculus Privacy Policy, supra note 505 ("Information from other sources. We may also receive additional information about you from third parties, including partners that provide us information that is publicly or commercially available, and may combine that information with the other information we collect about you.").
- 625 Samsung Privacy Policy, supra note 501 ("AdHub may share information about the number of users who see particular ads (or ad campaigns) with our third-party partners. This information is shared in aggregate form only, meaning that no device information is shared with the advertiser.").
- 626 Sony Interactive Entertainment Privacy Policy, supra note 276 ("while we strive to minimize our use of PII, or otherwise anonymize or aggregate it before use, we may use personal information.").
- Google Privacy Policy, supra note 503 ("We may share non-personally identifiable information publicly and with our partners like publishers, advertisers or connected sites. For example, we may share information publicly to show trends about the general use of our services.").
- 628 HTC Privacy Policy, supra note 504 ("We may share aggregated and de-identified data with others for any purpose.").
- 629 Oculus Privacy Policy, supra note 505 ("We may also share de-identified or aggregate data with others for any purpose. De-identified data means information where we have removed your name or contact information. Aggregate data is data that has been combined with other data so that it doesn't identify any specific person.").
- 630 Samsung Privacy Policy, supra note 501 ("to provide maintenance services for your device.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("we use PII for the purpose for which it was collected. For example, PII that you provide through any of our business support processes (including customer service) will be used to complete that process, and personal information entered by you through the features of our products and services will be used for the operation and delivery of those features.").
- <sup>632</sup> Google Privacy Policy, supra note 503 ("We use the information we collect from all of our services to provide, maintain, protect and improve them, to develop new ones, and to protect Google and our users.").
- <sup>633</sup> HTC Privacy Policy, supra note 504 ("operate and improve our websites, products, Services and marketing.").
- Oculus Privacy Policy, supra note 505 ("We use the information we collect to provide you with the Services you use or request. For example, we use this information to: Provide you with hardware, content, games, apps, and other experiences; Create accounts and user profiles; Communicate with you about our Services; Enable user-to-user communications; Provide technical support; Notify you about updates to our Services; and Customize your experiences based on your online activities, including the content, games, apps, and other experiences you interact with; the other online services you use; and other information we collect.").
- 635 Samsung Privacy Policy, supra note 501 ("to provide customized content and make recommendations based on your past activities on our Services.").

- <sup>636</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Conduct demographic studies for marketing, sales, or product development; . . . Deliver contextual or targeted advertising").
- 637 Google Privacy Policy, supra note 503 ("We also use this information to offer you tailored content like giving you more relevant search results and ads.").
- 638 HTC Privacy Policy, supra note 504 ("HTC may use your information, including personal information [to]... provide you with a personalised and customised experience, content, marketing and recommendations across all our Services.").
- Oculus Privacy Policy, supra note 505 ("We use the infromation to ... customize your experiences based on your online activities, including the content, games, apps, and other experiences you interact with; the other online services you use; and other information we collect.").
- 640 *Id.* ("Enable user-to-user communications.").
- Google Privacy Policy, supra note 503 ("We may combine personal information from one service with information, including personal information, from other Google services for example to make it easier to share things with people you know. Depending on your account settings, your activity on other sites and apps may be associated with your personal information in order to improve Google's services and the ads delivered by Google.").
- <sup>642</sup> HTC Privacy Policy, supra note 504 ("HTC may use your information, including personal information [to]... facilitate sharing of information and content that you upload via social media.").
- <sup>643</sup> Samsung Privacy Policy, supra note 501 ("to provide a Service or feature you request.").
- 644 Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may use personal information to . . . assist in customer service and transactions . . . ").
- <sup>645</sup> Google Privacy Policy, supra note 503 ("When you contact Google, we keep a record of your communication to help solve any issues you might be facing. We may use your email address to inform you about our services, such as letting you know about upcoming changes or improvements.").
- 646 HTC Privacy Policy, supra note 504 ("HTC may use your information, including personal information [to]... respond to your comments and questions and provide customer service; provide and deliver products and Services that you request").
- <sup>647</sup> Oculus Privacy Policy, supra note 505 ("Provide technical support;").
- <sup>648</sup> Samsung Privacy Policy, supra note 501 ("for assessment and analysis of our market, customers, products, and services (including asking you for your opinions on our products and services and carrying out customer surveys)").
- <sup>649</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("Conduct demographic studies for marketing, sales, or product development").
- <sup>650</sup> Google Privacy Policy, supra note 503 ("We use the information we collect from all of our services to provide, maintain, protect and improve them, to develop new ones, and to protect Google and our users.").
- 651 HTC Privacy Policy, supra note 504 ("HTC may use your information, including personal information [to]... compile usage and other statistics and insights relating to the Services").
- <sup>652</sup> Oculus Privacy Policy, supra note 505 ("We also use the information we collect to understand and improve our Services and to develop the virtual reality ecosystem. For example, we may use the information to: Solicit and analyze input and feedback about

our Services; Identify and address technical issues on our Services; Conduct and learn from research about the ways in which people use our Services; and Improve services offered by others, such as third parties that offer content, games, apps and other experiences on our platform.").

- 653 Samsung Privacy Policy, supra note 501 ("for advertising, such as providing customized advertisements and sponsored content (including through our advertising service, AdHub, whose practices you can learn more about here) and sending you promotional communications").
- 654 Sony Interactive Entertainment Privacy Policy, supra note 276 ("Send you marketing communications").
- 655 Google Privacy Policy, supra note 503 ("We also use this information to offer you tailored content like giving you more relevant search results and ads.").
- 656 HTC Privacy Policy, supra note 504 ("HTC may use your information, including personal information [to]... link or combine your personal information with other information we get about your use of other HTC Services and from third parties for the purposes that we disclose in this policy, including to help understand you and your needs, and provide you with recommendations, better service and customised marketing.").
- Oculus Privacy Policy, supra note 505 ("To market to you. We use the information we collect to send you promotional messages and content and otherwise market to you on and off our Services. We also use this information to measure how users respond to our marketing efforts.").
- 658 Samsung Privacy Policy, supra note 501 ("There may be instances when we disclose your information to other parties: to comply with the law or respond to compulsory legal process (such as a search warrant or other court order); to verify or enforce compliance with the policies governing our Services; and to protect the rights, property, or safety of Samsung, or any of our respective affiliates, business partners, or customers.").
- 659 Sony Interactive Entertainment Privacy Policy, supra note 276 ("In order to help protect you and others, we may use the data we collect in order to identify fraudulent activities and transactions; prevent abuse of and investigate and/or prosecute any potential threat to or misuse of the SIE LLC Network; ensure compliance with the applicable terms of service and this privacy policy; investigate violations of or enforce these agreements; and protect the rights and property of Sony, its partners, and customers. If you do not consent to these conditions, you must discontinue your use of the SIE LLC Network.").
- 660 Google Privacy Policy, supra note 503 ("detect, prevent, or otherwise address fraud, security or technical issues.").
- <sup>661</sup> HTC Privacy Policy, supra note 504 ("protect, investigate and deter against fraudulent, unauthorised or illegal activity").
- <sup>662</sup> Oculus Privacy Policy, supra note 505 ("To promote safety and security. We use the information we collect to help promote safety and security, such as by investigating suspicious activity or violations of our terms or policies and protecting our or others' rights or property.").
- 663 Samsung Privacy Policy, supra note 501 ("There may be instances when we disclose your information to other parties: to comply with the law or respond to compulsory legal process (such as a search warrant or other court order); to verify or enforce compliance with the policies governing our Services; and to protect the rights,

property, or safety of Samsung, or any of our respective affiliates, business partners, or customers.").

664 Sony Interactive Entertainment Privacy Policy, supra note 276 ("When we believe in good faith that the law requires disclosure or that disclosure is necessary to protect or enforce the rights, property, safety, or security of ourselves or others.").

665 Google Privacy Policy, supra note 503 ("meet any applicable law, regulation, legal process or enforceable governmental request.").

666 HTC Privacy Policy, supra note 504 ("for legal, protection, security and safety purposes, including: to comply with laws or regulatory requirements and to respond to lawful requests and legal processes").

Oculus Privacy Policy, supra note 505 ("We may access, preserve and share information in response to a legal request (like a search warrant, court order or subpoena) if we have a good faith belief that the law requires us to do so. This may include responding to legal requests from jurisdictions outside of the United States where we have a good faith belief that the response is required by law in that jurisdiction, affects users in that jurisdiction, and is consistent with internationally recognized standards. We may also access, preserve and share information when we have a good faith belief it is necessary to: detect, prevent and address fraud or other illegal activity; to protect Oculus, our Services, you and others, including as part of investigations; or to prevent death or imminent bodily harm. Information we receive about you, including financial transaction data related to purchases made on or through our Services, may be accessed, processed and retained for an extended period of time when it is the subject of a legal request or obligation, governmental investigation, or investigations concerning possible violations of our terms or policies, or otherwise to prevent harm. We also may retain information from accounts disabled for violations of our terms for at least a year to prevent repeat abuse or other violations of our terms.").

668 Samsung Privacy Policy, supra note 501 ("There may be instances when we disclose your information to other parties: to comply with the law or respond to compulsory legal process (such as a search warrant or other court order); to verify or enforce compliance with the policies governing our Services; and to protect the rights, property, or safety of Samsung, or any of our respective affiliates, business partners, or customers.").

669 Sony Interactive Entertainment Privacy Policy, supra note 276 ("When we believe in good faith that the law requires disclosure or that disclosure is necessary to protect or enforce the rights, property, safety, or security of ourselves or others.").

Google Privacy Policy, supra note 503 ("We will share personal information with companies, organizations or individuals outside of Google if we have a good-faith belief that access, use, preservation or disclosure of the information is reasonably necessary to: meet any applicable law, regulation, legal process or enforceable governmental request . . . enforce applicable Terms of Service, including investigation of potential violations.").

<sup>671</sup> HTC Privacy Policy, supra note 504 ("For legal, protection, security and safety purposes, including: to comply with laws or regulatory requirements and to respond to lawful requests and legal processes.").

<sup>672</sup> Oculus Privacy Policy, supra note 505 ("We may access, preserve and share information in response to a legal request (like a search warrant, court order or subpoena) if we have a good faith belief that the law requires us to do so. This may include responding to legal requests from jurisdictions outside of the United States where we

have a good faith belief that the response is required by law in that jurisdiction, affects users in that jurisdiction, and is consistent with internationally recognized standards. We may also access, preserve and share information when we have a good faith belief it is necessary to: detect, prevent and address fraud or other illegal activity; to protect Oculus, our Services, you and others, including as part of investigations; or to prevent death or imminent bodily harm. Information we receive about you, including financial transaction data related to purchases made on or through our Services, may be accessed, processed and retained for an extended period of time when it is the subject of a legal request or obligation, governmental investigation, or investigations concerning possible violations of our terms or policies, or otherwise to prevent harm. We also may retain information from accounts disabled for violations of our terms for at least a year to prevent repeat abuse or other violations of our terms.").

- 673 Samsung Privacy Policy, supra note 501 ("Your information may be shared among Samsung affiliates.").
- 674 Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may share your information within and among the Sony group of companies for purposes related to providing you with content, products, or services, including games, videos, music, software and software applications; community administration or development; to support various business processes; security; research and development; and so that other Sony companies may contact you about products, services or other offerings that may be of interest to you.")
- <sup>675</sup> Google Privacy Policy, supra note 503 ("We provide personal information to our affiliates or other trusted businesses or persons to process it for us, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures.").
- 676 HTC Privacy Policy, supra note 504 ("This privacy policy... describes how HTC Corporation, HTC America, Inc. and their related companies ('HTC' or 'we/our/us') collect, use and share personal information that we collect from you as a user of HTC websites, devices, applications and services.").
- 677 Oculus Privacy Policy, supra note 505 ("We may share information within the family of related companies that are legally part of the same group of companies that Oculus is part of, or that become part of that group, such as Facebook. For a list of our related companies, please see https://www.oculus.com/legal/related-companies").
- 678 Samsung Privacy Policy, supra note 501 ("The term 'affiliates' refers to companies related to Samsung Electronics Co. Ltd. by common ownership or control. Our affiliates include companies with the Samsung Electronics name, such as Samsung Electronics (UK) Limited. Affiliates may also include other companies related by common ownership or control, such as Samsung Information Systems America.").
- 679 Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may share your information within and among the Sony group of companies for purposes related to providing you with content, products, or services, including games, videos, music, software and software applications; community administration or development; to support various business processes; security; research and development; and so that other Sony companies may contact you about products, services or other offerings that may be of interest to you.").
- 680 Google Privacy Policy, supra note 503 ("Our Privacy Policy applies to all of the services offered by Google Inc. and its affiliates, including YouTube, services Google provides on Android devices, and services offered on other sites (such as our advertising

services), but excludes services that have separate privacy policies that do not incorporate this Privacy Policy.").

- Oculus Privacy Policy, supra note 505 ("We may share information within the family of related companies that are legally part of the same group of companies that Oculus is part of, or that become part of that group, such as Facebook. For a list of our related companies, please see https://www.oculus.com/legal/related-companies.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("Certain elements of your personal information and certain information about your use of the SIE LLC Network are publicly accessible to other users of the SIE LLC Network. For example: other users of the SIE LLC Network may be able to see your username; your profile picture (if you choose to upload a picture); and your user bio (if you choose to provide a bio). We may also publicly display other information derived from your activity on the SIE LLC Network.").
- <sup>683</sup> Google Privacy Policy, supra note 503 ("If other users already have your email, or other information that identifies you, we may show them your publicly visible Google Profile information, such as your name and photo.").
- Oculus Privacy Policy, supra note 505 ("Certain information you post to your Oculus profile, such as your Oculus ID (also known as your Oculus Username), your system-generated user ID, and avatar, will be public and visible to people on and off our Services. Your Oculus ID is a unique identifier you choose to identify yourself on our Services. Your system-generated internal-ID is an opaque string of characters generated by the Oculus system that identifies your Oculus profile. Information you post to public areas of our Services, such as a forum, blog, or other community tool, will also be visible to people on and off our Services. If you post information to these interactive features, it will be publicly available. Certain information associated with your public posts, such as the time of your post, may also be published and publicly available.").
- 685 Samsung Privacy Policy, supra note 501 ("We may disclose your information to a third party as part of a merger or transfer, or in the event of a bankruptcy.").
- Sony Interactive Entertainment Privacy Policy, supra note 276 ("In connection with sale of the applicable business, a portion of the business, or certain stock and/or assets, or a corporate merger, consolidation, restructuring, or other corporate change including, without limitation, during the course of any due diligence process.").
- <sup>687</sup> Google Privacy Policy, supra note 503 ("If Google is involved in a merger, acquisition or asset sale, we will continue to ensure the confidentiality of any personal information and give affected users notice before personal information is transferred or becomes subject to a different privacy policy.").
- <sup>688</sup> HTC Privacy Policy, supra note 504 ("For the purposes of a business deal (or negotiation of a business deal) involving sale or transfer of all or a part of our business or assets. Business deals may include any merger, financing, acquisition or bankruptcy transaction or proceeding.").
- <sup>689</sup> Oculus Privacy Policy, supra note 505 ("In the event that the ownership of Oculus (or any portion of our assets) changes as a result of a merger, acquisition, or in the event of a bankruptcy, information from or about you or your device may be transferred to another company.").
- <sup>690</sup> Samsung Privacy Policy, supra note 501 ("We also may disclose your information to companies that provide services for or on behalf of us, such as companies that help us

with billing or that send emails on our behalf. These entities are limited in their ability to use your information for purposes other than providing services for us.").

691 Sony Interactive Entertainment Privacy Policy, supra note 276 ("With persons or companies we retain to carry out or provide support to business operations, including uses described above in the Information Use section.").

<sup>692</sup> Google Privacy Policy, supra note 503 ("We provide personal information to our affiliates or other trusted businesses or persons to process it for us, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures.").

693 HTC Privacy Policy, supra note 504 ("We may share your personal information . . . with those who use the information to provide services to us or on our behalf.").

Oculus Privacy Policy, supra note 505 ("We may share the information we collect with vendors, service providers, researchers and other partners, who work at our direction to support the Services (such as hosting our Services, fulfilling orders, facilitating payments, analyzing the way people use our Services, processing credit card payments, providing customer service, or sending electronic communications for us).").

695 Samsung Privacy Policy, supra note 501 ("We also may share your information with trusted business partners, including wireless carriers. These entities may use your information to provide you with services you request (e.g., video content provided by Netflix through SmartTV), make predictions about your interests and may provide you with promotional materials, advertisements and other materials").

<sup>696</sup> HTC Privacy Policy, supra note 504 ("We may share your information... with wireless carriers. Their use of your information is subject to their privacy policies.").

697 Samsung Privacy Policy, supra note 501 ("There may be instances when we disclose your information to other parties: to comply with the law or respond to compulsory legal process (such as a search warrant or other court order); to verify or enforce compliance with the policies governing our Services; and to protect the rights, property, or safety of Samsung, or any of our respective affiliates, business partners, or customers.").

<sup>698</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("When we believe in good faith that the law requires disclosure or that disclosure is necessary to protect or enforce the rights, property, safety, or security of ourselves or others.").

<sup>699</sup> Google Privacy Policy, supra note 503 ("meet any applicable law, regulation, legal process or enforceable governmental request.").

<sup>700</sup> HTC Privacy Policy, supra note 504 ("For legal, protection, security and safety purposes, including: to comply with laws or regulatory requirements and to respond to lawful requests and legal processes").

Oculus Privacy Policy, supra note 505 ("We may access, preserve and share information in response to a legal request (like a search warrant, court order or subpoena) if we have a good faith belief that the law requires us to do so. This may include responding to legal requests from jurisdictions outside of the United States where we have a good faith belief that the response is required by law in that jurisdiction, affects users in that jurisdiction, and is consistent with internationally recognized standards. We may also access, preserve and share information when we have a good faith belief it is necessary to: detect, prevent and address fraud or other illegal activity; to protect Oculus, our Services, you and others, including as part of investigations; or to prevent death or imminent bodily harm. Information we receive about you, including financial transaction data related to purchases made on or through our Services, may be accessed, processed

and retained for an extended period of time when it is the subject of a legal request or obligation, governmental investigation, or investigations concerning possible violations of our terms or policies, or otherwise to prevent harm. We also may retain information from accounts disabled for violations of our terms for at least a year to prevent repeat abuse or other violations of our terms.").

<sup>702</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have certain choices about how your information is collected and used. You can access, amend or have your information deleted through your account settings page.").

Google Privacy Policy, supra note 503 ("Whenever you use our services, we aim to provide you with access to your personal information. If that information is wrong, we strive to give you ways to update it quickly or to delete it – unless we have to keep that information for legitimate business or legal purposes. When updating your personal information, we may ask you to verify your identity before we can act on your request. We may reject requests that are unreasonably repetitive, require disproportionate technical effort (for example, developing a new system or fundamentally changing an existing practice), risk the privacy of others, or would be extremely impractical (for instance, requests concerning information residing on backup systems). Where we can provide information access and correction, we will do so for free, except where it would require a disproportionate effort. We aim to maintain our services in a manner that protects information from accidental or malicious destruction. Because of this, after you delete information from our services, we may not immediately delete residual copies from our active servers and may not remove information from our backup systems.")

<sup>704</sup> HTC Privacy Policy, supra note 504 ("You may send requests about your personal information to us through our contact information below. You can request to change contact choices or marketing choices and to update, access, delete or make other changes regarding your personal information or content that you post on the Services. We may not honour all such requests unless required by law.").

<sup>705</sup> Oculus Privacy Policy, supra note 505 ("If you have any questions about this Privacy Policy, or if you would like to deactivate or delete your account or access data associated with it, please contact us at privacy@oculus.com. Content deleted from the Services may remain in backup copies and logs for a period of time.").

<sup>706</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have certain choices about how your information is collected and used. You can access, amend or have your information deleted through your account settings page.").

Google Privacy Policy, supra note 503 ("Whenever you use our services, we aim to provide you with access to your personal information. If that information is wrong, we strive to give you ways to update it quickly or to delete it – unless we have to keep that information for legitimate business or legal purposes.").

<sup>708</sup> HTC Privacy Policy, supra note 504 ("You may send requests about your personal information to us through our contact information below. You can request to change contact choices or marketing choices and to update, access, delete or make other changes regarding your personal information or content that you post on the Services. We may not honour all such requests unless required by law.").

<sup>709</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("You have certain choices about how your information is collected and used. You can access, amend or have your information deleted through your account settings page.").

Google Privacy Policy, supra note 503 ("Whenever you use our services, we aim to provide you with access to your personal information. If that information is wrong, we

strive to give you ways to update it quickly or to delete it – unless we have to keep that information for legitimate business or legal purposes.").

<sup>711</sup> HTC Privacy Policy, supra note 504 ("You may send requests about your personal information to us through our contact information below. You can request to change contact choices or marketing choices and to update, access, delete or make other changes regarding your personal information or content that you post on the Services. We may not honour all such requests unless required by law.").

Oculus Privacy Policy, supra note 505 ("If you have any questions about this Privacy Policy, or if you would like to deactivate or delete your account or access data associated with it, please contact us at privacy@oculus.com. Content deleted from the Services may remain in backup copies and logs for a period of time.").

Sony Interactive Entertainment Privacy Policy, supra note 276 ("In some cases, your choices to change or delete information you provide may affect our ability to deliver our products, services, or websites, or your user experience. We may decline to process requests which are not otherwise required by law. Please note that we reserve the right to send you certain communications relating to your account or use of the SIE LLC Network and these transactional account messages may be unaffected if you choose to opt-out from marketing communications.").

<sup>714</sup> Google Privacy Policy, supra note 503 ("Because of this, after you delete information from our services, we may not immediately delete residual copies from our active servers and may not remove information from our backup systems.").

<sup>715</sup> Oculus Privacy Policy, supra note 505 ("If you have any questions about this Privacy Policy, or if you would like to deactivate or delete your account or access data associated with it, please contact us at privacy@oculus.com. Content deleted from the Services may remain in backup copies and logs for a period of time.").

Network is operated in the United States and other countries around the world. Please be aware that information we collect, including personal information, will be transferred to, processed and stored in the United States and other countries around the world and, as such, courts, law enforcement, and other authorities in the United States and other countries may, in certain circumstances, be entitled to access your personal information. By using the SIE LLC Network or providing us with any information through the SIE LLC Network, you consent to this transfer, processing and storage of your information in the United States and in other countries around the world, jurisdictions in which the privacy laws may not be as comprehensive as those in the country where you reside or are a citizen.").

Google Privacy Policy, supra note 503 ("Google processes personal information on our servers in many countries around the world. We may process your personal information on a server located outside the country where you live.").

The HTC Privacy Policy, supra note 504 ("Information that we collect may be stored on your phone or stored on our servers and transferred to, stored and processed in the United States, Taiwan, Singapore, EU member state countries and any other country where HTC or its service providers maintain facilities, including jurisdictions that may not have data privacy laws that provide protections equivalent to those provided in your home country. However, we will protect all personal information that we obtain in accordance with this Policy. By using the Services, you consent to our transfer of your personal information in accordance with this Policy. Personal information that we collect may be retained for as

long as needed to fulfil the purposes outlined in the 'USE OF YOUR PERSONAL INFORMATION' section above, or for a period of time specifically required by applicable regulations or laws.").

Oculus Privacy Policy, supra note 505 ("Oculus is based in the United States, and, regardless of where you use our Services or otherwise provide information to us, the information may be transferred to and maintained on servers located in the U.S. or other countries. Note that the laws, regulations and standards of the country in which this information is stored may be different from your own country. By using our Services, you consent to this collection, transfer, storage, and processing of information to and in the U.S. and other countries.").

Sony Interactive Entertainment Privacy Policy, supra note 276 ("Please be aware that information we collect, including personal information, will be transferred to, processed and stored in the United States and other countries around the world and, as such, courts, law enforcement, and other authorities in the United States and other countries may, in certain circumstances, be entitled to access your personal information. By using the SIE LLC Network or providing us with any information through the SIE LLC Network, you consent to this transfer, processing and storage of your information in the United States and in other countries around the world, jurisdictions in which the privacy laws may not be as comprehensive as those in the country where you reside or are a citizen.").

Google Privacy Policy, supra note 503 ("Google processes personal information on our servers in many countries around the world. We may process your personal information on a server located outside the country where you live.").

The Privacy Policy, supra note 504 ("Oculus is based in the United States, and, regardless of where you use our Services or otherwise provide information to us, the information may be transferred to and maintained on servers located in the U.S. or other countries. Note that the laws, regulations and standards of the country in which this information is stored may be different from your own country. By using our Services, you consent to this collection, transfer, storage, and processing of information to and in the U.S. and other countries.").

<sup>723</sup> Oculus Privacy Policy, supra note 505 ("By using our Services, you consent to this collection, transfer, storage, and processing of information to and in the U.S. and other countries.").

<sup>724</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may retain information about you as long as it is necessary for us to fulfill the purposes outlined in this policy. In addition, we may retain your information for an additional period as is permitted or required to, among other things, comply with our legal obligations, resolve disputes, and enforce agreements.").

<sup>725</sup> HTC Privacy Policy, supra note 504 ("Personal information that we collect may be retained for as long as needed to fulfil the purposes outlined in the 'USE OF YOUR PERSONAL INFORMATION' section above, or for a period of time specifically required by applicable regulations or laws.").

<sup>726</sup> Samsung Privacy Policy, supra note 501 ("You can opt out of receiving targeted advertising from AdHub here. [https://account.samsung.com/membership/etc/setPersonalOption.do?openPage=adsCombination]. Please note that if you opt out, you will continue to see ads, but they may be less relevant to you because they will not be based on your interests.").

- <sup>727</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("You can opt-out of receiving marketing communications by un-checking the box indicating your preference at the place where your information is collected.").
- <sup>728</sup> Google Privacy Policy, supra note 503 ("View and edit your preferences about the Google ads shown to you on Google and across the web, such as which categories might interest you, using Ads Settings. You can also visit that page to opt out of certain Google advertising services.").
- <sup>729</sup> HTC Privacy Policy, supra note 504 ("Our marketing emails tell you how to 'opt out' of receiving further marketing emails. If you opt out, we may still send you non-marketing emails. Non-marketing emails include emails about your accounts and our business dealings with you, and may include a request that you participate in surveys related to your use of, and satisfaction with, the Services.").
- Samsung Privacy Policy, supra note 501 ("When you use a web browser to access the Services, you can configure your browser to accept all cookies, reject all cookies, or notify you when a cookie is sent. Each browser is different, so check the 'Help' menu of your browser to learn how to change your cookie preferences. The operating system of your device may contain additional controls for cookies. Please note, however, that some Services may be designed to work using cookies and that disabling cookies may affect your ability to use those Services, or certain parts of them.").
- Google Privacy Policy, supra note 503 ("You may also set your browser to block all cookies, including cookies associated with our services, or to indicate when a cookie is being set by us. However, it's important to remember that many of our services may not function properly if your cookies are disabled. For example, we may not remember your language preferences.").
- <sup>732</sup> HTC Privacy Policy, supra note 504 ("When you use our Services, we and third parties may give you choices about use of certain mechanisms for tracking, including tracking of your online activities over time and across different websites, applications and online services. We may provide settings on your device that allow you to change how we, and others, collect certain information about you. Read your product manual for more information about settings on your device. Many browsers are set to accept cookies unless and until you change your settings. Removing or rejecting our cookies could affect how our websites and Services work for you and could delete or disable opt-out cookies set by us and third parties.").
- Oculus Privacy Policy, supra note 505 ("Information about your interactions with our Services, like information about the games, content, apps or other experiences you interact with, and information collected in or through cookies, local storage, pixels, and similar technologies (additional information about these technologies is available at https://www.oculus.com/legal/cookies-pixels-and-other-technologies/)"); Cookies, Pixels, and Other Technologies, OCULUS, https://www.oculus.com/legal/cookies-pixels-and-other-technologies/ [https://perma.cc/A9E5-7U7U] (last visited July 7, 2017) ("Follow the instructions provided by your website or mobile browser (usually located within the 'Help', 'Tools' or 'Edit' facility) to modify your cookie settings. Please note that if you set your browser to disable cookies or other technologies, you may not be able to access certain parts of the Services and other parts of our Services may not work properly. To learn more about the choices that marketers provide generally for individuals to influence how information about their online activities over time and across third-party Web sites or online services is collected and used, visit the Network Advertising Initiative at http://www.networkadvertising.org/managing/opt\_out.asp, the Digital Advertising

Alliance at http://www.aboutads.info/, or the European Digital Advertising Alliance at http://youronlinechoices.eu/. For information on managing Flash cookies, please visit the Adobe Flash Player website. Your browser's privacy controls may enable you to manage other types of local storage.").

Samsung Privacy Policy, supra note 501 ("Some web browsers may transmit 'donot-track' signals to the websites with which the user communicates, although web
browsers incorporate and activate this functionality in different ways, and it is not always
clear whether users intend for these signals to be transmitted. There currently is
disagreement, including among participants in the leading Internet standards-setting
organization, concerning what, if anything, websites should do when they receive such
signals. Samsung currently does not take action in response to these signals, but, if and
when a standard is established and accepted, we may reassess how to respond to these
signals.").

<sup>735</sup> HTC Privacy Policy, supra note 504 ("While we and others give you certain choices, as further outlined in this Policy, there are many ways in which Web browser signals and similar mechanisms can indicate your choice to disable tracking, and we may not be aware of nor honour every such mechanism.").

<sup>736</sup> Samsung Privacy Policy, supra note 501 ("We have put in place reasonable physical and technical measures to safeguard the information we collect in connection with the Services. However, please note that although we take reasonable steps to protect your information, no website, Internet transmission, computer system or wireless connection is completely secure.").

Protect you and others, we may use the data we collect in order to identify fraudulent activities and transactions; prevent abuse of and investigate and/or prosecute any potential threat to or misuse of the SIE LLC Network; ensure compliance with the applicable terms of service and this privacy policy; investigate violations of or enforce these agreements; and protect the rights and property of Sony, its partners, and customers. If you do not consent to these conditions, you must discontinue your use of the SIE LLC Network.").

Google Privacy Policy, supra note 503 ("We work hard to protect Google and our users from unauthorized access to or unauthorized alteration, disclosure or destruction of information we hold. In particular: We encrypt many of our services using SSL. We offer you two step verification when you access your Google Account, and a Safe Browsing feature in Google Chrome. We review our information collection, storage and processing practices, including physical security measures, to guard against unauthorized access to systems. We restrict access to personal information to Google employees, contractors and agents who need to know that information in order to process it for us, and who are subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.").

<sup>739</sup> HTC Privacy Policy, supra note 504 ("We strive to protect personal information by taking appropriate physical, technical and organisational measures to help guard against unauthorised or unlawful access, use, processing or alteration of the personal information that we obtain from you through our Services and against any breaches or loss of such personal information. Although we take steps to use and improve various safeguards, no system or technology is completely secure. If you become aware of a technical vulnerability affecting HTC Services, please email security@htc.com or visit this website

to report it. If you have a concern related to the protection of personal information or this Policy, please send an email to Global-Privacy@htc.com. HTC Account lets you use a single user name and password to log on to HTCSense.com and other HTC applications and Services. Some HTC applications and Services require a different user name and password. Please protect your user names and passwords to help prevent anyone from accessing your accounts and your personal information. We are not responsible for the security of any independent third-party applications and services or the data those third-party applications and services may collect about you. Please ask those third parties how they keep your data safe.").

<sup>740</sup> Oculus Privacy Policy, supra note 505 ("Please note that no data transmission or storage can be guaranteed to be 100% secure. As a result, while we strive to protect the information we maintain, we cannot guarantee or warrant the security of any information you disclose or transmit to our Services and cannot be responsible for the theft, destruction, or inadvertent disclosure of information.").

Samsung Privacy Policy, supra note 501 ("Our Services may link to third-party websites and services that are outside our control. We are not responsible for the security or privacy of any information collected by websites or other services. You should exercise caution, and review the privacy statements applicable to the third-party websites and services you use. We also may make available to you certain products or services (e.g., apps available through Samsung Apps) developed by third parties. Samsung is not responsible for these third-party products or services.").

share your actions, comments, content and information publicly or with people you specify. You may also connect to, and share your information on, third-party social media platforms, websites, applications and services ('Third Party Sharing Services') through 'plug-ins,' widgets, buttons, and other third party features made available on and connected with our Services. Please be mindful of your own privacy needs as you choose who to connect with and what to share and make public. We cannot control the privacy or security of information that you choose to make public or share with others. We also cannot control and are not responsible for any Third-Party Sharing Services or their actions, including the data that these Third-Party Sharing Services collect from you and your device, or how they use such data. Please review the privacy policies of all Third-Party Sharing Services to understand their privacy practices.").

<sup>743</sup> Oculus Privacy Policy, supra note 505 ("Some of the content, marketing, and functionality on our Services may be provided by third parties that are not affiliated with us. For example, we work with companies that help us understand how people use our Services. Other companies may collect information on or through our Services to market to you on or off of our Services. These and other third parties may collect information about your use of our Services, including through the use of cookies, device IDs, local storage, pixels and other technologies, and this information may be collected over time and combined with information collected on different websites and online services.").

<sup>744</sup> Samsung Privacy Policy, supra note 501 ("We do not knowingly collect any personal information from children under the age of thirteen (13) without parental consent, unless permitted by law. If we learn that a child under the age of thirteen (13) has provided us with personal information, we will delete it in accordance with applicable law.").

<sup>745</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("SIE LLC is committed to respecting children's privacy. We will not collect personal information

from anyone under the age of 13 without their parent's consent. With parental consent, we will collect, use and share information collected from or about children in accordance with the practices described in this document, with the following exceptions.").

Namsung Privacy Policy, supra note 501 ("If you have any specific questions, please contact us at: Samsung Electronics America. 85 Challenger Rd Ridgefield Park, NJ 07660 Email: through the 'Contact Us' section of Samsung.com.").

<sup>747</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("For further information on our privacy policy, or for questions on information that we may have collected from you, or should you wish to have your SEN account closed, please contact us by either of the following methods and we will be happy to review, update, or change your record status as appropriate.").

<sup>748</sup> Google Privacy Policy, supra note 503 ("Your privacy matters to Google so whether you are new to Google or a long-time user, please do take the time to get to know our practices – and if you have any questions contact us.").

<sup>749</sup> HTC Privacy Policy, supra note 504 ("We welcome your comments or questions about this Policy. Please email us at global-privacy@htc.com. You may also contact us in writing at the addresses listed below.").

<sup>750</sup> Oculus Privacy Policy, supra note 505 ("If you have any questions about this Privacy Policy, or if you would like to deactivate or delete your account or access data associated with it, please contact us at privacy@oculus.com. Content deleted from the Services may remain in backup copies and logs for a period of time.").

Samsung Privacy Policy, supra note 501 ("It also is important that you check back often for updates to the Privacy Policy. If we update the Privacy Policy we will let you know about changes we consider to be material by placing a note on relevant Services. By accessing or using our Services after we have placed such a notice, you consent to the new practice(s) identified in the update. The most current version of the Privacy Policy will always be available on Samsung.com [www.samsung.com/us/common/privacy.html]. You can check the 'effective date' posted at the top to see when the Privacy Policy was last updated.").

<sup>752</sup> Sony Interactive Entertainment Privacy Policy, supra note 276 ("We may revise this statement at any time. We will post any revisions to this policy, and the changes are effective when we post them here. By continuing to access or use the Services after those changes become effective, you agree to be bound by the revised Privacy Policy.").

Google Privacy Policy, supra note 503 ("Our Privacy Policy may change from time to time. We will not reduce your rights under this Privacy Policy without your explicit consent. We will post any privacy policy changes on this page and, if the changes are significant, we will provide a more prominent notice (including, for certain services, email notification of privacy policy changes). We will also keep prior versions of this Privacy Policy in an archive for your review.").

<sup>754</sup> HTC Privacy Policy, supra note 504 ("We may make changes to this Policy. If we make any changes to the Policy they will be posted on this page and we will change the 'Last Updated' date below.").

Oculus Privacy Policy, supra note 505 ("If we make changes to this Privacy Policy, we will provide notice of such changes as appropriate, such as by sending you an email notification to the address you've provided, providing notice through the Services, and/or updating the 'Last Updated' date at the top of these Terms.").