**Computer & Communications Industry Association**

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# CCIA's Submission to the Department of Justice's Antitrust Division

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# Public Workshop on Competition in Television and Digital Advertising

June 15, 2019

## 1. Introduction

The Computer and Communications Industry Association (CCIA) welcomes the opportunity to submit comments to the Department of Justice's Antitrust Division regarding the public workshop on competition in television and digital advertising.

CCIA represents large, medium, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications, and Internet products and services[1]. Our members employ more than 750,000 workers and generate annual revenues in excess of $540 billion. CCIA remains committed to protecting and advancing the interests of our members, the industry as a whole, as well as society's need to benefit from the positive contributions that our industry, which encompasses the digital economy, can make[2].

CCIA's members are leading innovators of what some refer to as the 'digital economy'. Many operate so-called multi-sided business models, where it is often the advertising revenue generated on one side of the business that funds the innovations valued by consumers. Many advertising services offered by CCIA's members create benefits and efficiencies for both consumers and advertisers alike.

There are numerous stakeholders that play an important role in the advertising sector since the Internet has offered a plethora of new, digital advertising opportunities including to those actors that have previously operated solely offline. The advertising ecosystem has never been as dynamic as it is today with many online as well as offline channels fiercely competing for advertisers' money.

## 2.      The Advertising Industry Dynamics

Competition for consumer attention, and in turn, advertising revenue, remains fierce between mediums such as online and offline advertising. According to David Evans, Professor of Law at the University of Chicago and University of College London, 24 percent of a 100 dollar advertising campaign is spent online, while the rest is spent on television, print, outdoor/billboard, radio and other advertising vehicles[3]. As Evans puts it, "advertisers base decisions about the level and allocation of their budgets on formal or informal analyses of the rate of return on investment".  Targeted advertising, which is advertising that allows companies to present an ad campaign to a relevant audience, is found both online and offline; this creates higher efficiencies for advertisers in addition to increased consumer welfare, since consumers

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[1] A complete list of CCIA's members can be found here: http://www.ccianet.org/about/members/.
[2] A complete summary of CCIA's mission statement can be found here:
http://www.ccianet.org/about/ccias-mission/.
[3] David Evans, *Antitrust Issues Raised by the Emerging Global Internet Economy*, 102 Northwestern U. L. Rev. Colloquy 285 (2008)
https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1095&context=nulr_online.

prefer personalized and relevant ads[4].  As a result, targeted advertising has spread to mediums such as television and billboards.

Tyler Cowen, professor of economics at George Mason University, argues that not only is advertising competitive across formats, but that companies like Google and Facebook are helping disrupt monopolies in other sectors:

> *Then there's the digital advertising industry that the two companies lead. But that's not a monopoly, either: Google as an advertising platform still competes with Facebook, television, radio, circulars, direct mail and, for that matter, e-mail and word of mouth. Insofar as Google has taken a big share of the ad market, it is because its ads are cheaper and better targeted than alternatives. When it comes to ads, Google is fundamentally a price-lowering institution for small and niche businesses that can now afford more reach for less than ever before. By boosting small startups elsewhere in the economy, Google and Facebook actually serve as major forces acting against monopolies in other sectors.*[5]

New technologies and innovation will continue to disrupt the advertising marketplace. For example, television advertising will increasingly take advantage of new tools such as granular set-top box data to personalize ads to the viewer.[6] It is important, therefore, to acknowledge that the advertising sector comprises of online and offline channels and that new mediums will have to be taken into account as innovation continues to open new mediums for advertising campaigns to be launched. In essence, advertising depends essentially on consumers' attention, and companies engaging in advertising campaigns compete for attention across a variety of channels including some of which were unthinkable years ago, e.g. smart speakers and digital billboards.

In addition to competition between online and offline advertising, even within the digital advertising sector, operators compete with a variety of services for user attention in the digital space, all of which have the opportunity to display relevant advertising. This includes services such as messaging, gaming, streaming, various search engines, social media, and video, some of which can be displayed on various mediums including desktop, mobile, and with new mediums appearing regularly.

Advertising has historically been used by many businesses, including multi-sided business models such as newspapers to financially support non-advertising services such as news media, television, social media or search engines. These business models that have long

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[4] Holly Paucer, *71% of Consumers Prefer Ads*, Adlucent (May 12, 2016), https://www.adlucent.com/blog/2016/71-of-consumers-prefer-personalized-ads.
[5] *See* Tyler Cowen, *Breaking Up Big Tech Would Be A Big Mistake*, The Globe & Mail (Apr. 12, 2019), https://www.theglobeandmail.com/opinion/article-breaking-up-big-tech-would-be-a-big-mistake/.
[6] *See e.g.* Jeanine Poggi, *Here's How AT&T's Xandr and Turner Plan to Work Together in 2019*, AdAge (Jan. 8, 2019), https://adage.com/article/media/xandr-turner-plan-fix-tv-advertising-2019/316160;  Sara Fischer, *The future of TV advertising is here--and it involves targeting the specific interests of viewers*, Business Insider (Jan. 25, 2019), https://www.businessinsider.com/future-of-tv-advertising-targeting-the-specific-interests-of-viewers-2019-1.

existed garner greater attention in the digital world thanks to innovation that has made advertising a more valuable tool for consumers and businesses.

Online advertising are able to compete with traditional advertising because it has generated unprecedented advantages for businesses and end consumers alike. The advertising business model that characterizes many of the digital companies helps to ensure that the right incentives exist for these companies to continue to invest in providing consumers with a positive experience. Advertisers value digital advertising platforms because they reach many people; in turn, these platforms reach many people because they provide highly desirable content or services.  And this is possible thanks to the financial support many of these companies obtain from digital advertising, which they in turn invests in R&D.[7]

Digital advertising has become a personalized advertising channel thanks to behavioral advertising powered by data analytics.  In fact, targeted advertising is now ubiquitous throughout the digital advertising space (and increasingly throughout advertising), offering businesses a more efficient channel for reaching out to interested customers.  At the same time, individuals receive relevant advertising tailored to their own needs.  For publishers, digital advertising has become a key revenue stream for them; Plum Consulting estimates that publishers receive on average £0.62 of every pound an advertiser spends on programmatic display advertising. .[8]

Therefore, the digital economy has improved the advertising experience for all stakeholders involved and ushered in competitive pressure to the entire advertising marketplace to evolve. Thanks to ad-supported business models, consumers enjoy goods and services for a lower price, often times even for free.  By the same token, through this model, customers are also able to have access to ad campaigns in the digital space for a lower price, since advertising offers have increased in the digital space and more competition brings tailor-made offers to advertisers and individuals willing to advertise themselves.

Studies have shown that  consumers prefer to receive ads instead of paying for online services. For example, as recently highlighted by the Department of Justice Assistant Attorney General Makan Delrahim, nearly 80 percent of respondents in one study reported in Recode represented that they would choose an ad-supported Facebook over paying $1/month.[9]  Furthermore, thanks

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[7] David Balto, *Internet Search Competition: Where Is The Beef?* DC Antitrust Law (June 24, 2011), http://www.dcantitrustlaw.com/assets/content/documents/googlesearchfinal-Balto.pdf.

[8] *See* Dame Frances Cairncross, *The Cairncross Review: A sustainable future for future of journalism* 59 (Feb. 12, 2019), https://www.gov.uk/government/publications/the-cairncross-review-a-sustainable-future-for-journalism; Gerry Smith & Mark Bergen, *Google Sweetens Deal with Publishers*, Bloomberg (Mar. 20, 2018), https://www.bloomberg.com/news/articles/2018-03-20/google-said-to-sweeten-deals-with-publishers-as-tech-woos-media.

[9] Makan Delrahim, *Assistant Attorney General Makan Delrahim Delivers Remarks at the Antitrust Division's Public Workshop on Competition in Television and Digital Advertising*, U.S. Dept. Justice (May 2, 2019), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-antitrust-divisions-public.

to the investments in technology, consumers usually receive advertising relevant to them, as targeted advertisements have become extremely accurate. A more personalized experience as a result of targeted advertisements is highly valued by consumers[10].

Advertisers continue to purchase advertising on various media operators which serve different purposes. However, it is important to bear in mind that different advertising channels often compete against each other. Even if online advertising offers unprecedented opportunities to businesses due to its personalization feature, it is important not to analyze this medium in an isolated bucket — a convergence of the different channels is actually what is taking place in reality, as further explained below.

Use of data collection and data analytics to accurately provide consumers with a personalized experience is a distinguishing characteristic of the digital advertising space, and is attracting the attention of many competition authorities. This is the reason why CCIA believes it is very important to understand the role that customer data plays in the digital advertising sector. We develop an explanation in the next section.

## 2. Competition in the Advertising Sector

The consumer welfare standard is the economic model for decision-making employed by antitrust enforcers to determine whether a given business practice warrants antitrust restraint or not. A competition system guided by the consumer welfare standard has as a goal the maximization of consumers' benefits. Following the consumer welfare standard, one must conclude that the advertising sector doesn't raise any competition concerns. To the contrary, the advertising sector, thanks to the emergence of digital advertising, is highly competitive, and is bringing about numerous benefits to consumers.

*Online Advertisers Compete with Offline Advertisers*

Companies both in the online digital advertising space compete face to face with those in the offline digital space.[11] There are no frontiers between online and offline advertising outlets. Targets TV ads allow those formats to compete with digital ads, while online ads have many formats that provide TV-style brand advertising (video, banner ads, masthead takeovers).[12]

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[10] *Id.*

[11] *See* Ty Ahmad-Taylor, Vice President of Business Product Marketing, Facebook, Remarks at the Public Workshop on Competition in Television and Digital Advertising by Dept. of Justice (May 2, 2019), https://www.justice.gov/atr/public-workshop-competition-television-and-digital-advertising ("In competition for advertising dollars at each stage of the funnel, we view that we [Facebook] are a likely substitute or a swap for both television, for print, for cable advertising, and for other types of media or billboards even that might compete for your attention.").

[12] *See, e.g.*, Molly Wood, *Targeted ads aren't just online, they're on TV*, Marketplace (Feb. 19, 2019), https://www.marketplace.org/2019/02/19/if-you-thought-targeted-ads-were-only-happening-online-you-better-turn-your-tv/.

Further, the advertising on an offline outlet (like a TV ad) could solicit an immediate online response (i.e. a brand search), further amplifying the effect of an online marketing campaign.[13] Consumers' tendency to multitask or multi-home facilitates cross-platform responses to advertising.

The Internet has enabled consumers to easily switch or "multi-home" across different advertising platforms. A consumer who uses a news aggregator, for instance, may not consistently go to only a specific publisher's website to read news but rather visit multiple sources either directly, through news aggregators like Drudge Report, via search results, social media, or other means. The consumer switching generates means that the advertiser may not reach some consumers through one particular approach,[14] which creates an incentive for advertisers to further innovate to keep marketers on their advertising platform.

Therefore, online advertisers and more traditional advertisers on radio, television and other types of media, are converging with respect to their advertising campaigns.[15] To this end, companies that invest in R&D and data analytics can innovate and create greater value by maximizing the accuracy of targeted advertising across online and offline outlets.

*Data Access Does Not Make Companies Immune to Competition*

Some have suggested, based on the notion of an endless, positive feedback loop, that the more data are collected, the better the companies' products become, which in turn attracts more users who then generate more data. The result is a supposedly insurmountable data advantage that keeps companies immune from competition. It is true that data may well enable a company to improve its products if it knows how to derive meaningful insights from it. That, however, can

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[13] *See* Rex Yuxing Du, Linli Xu & Kenneth C. Wilbur, Immediate Responses of Online Brand Search and Price Search to TV Ads, 83 J. Mktg. 81 (July 1, 2019), https://journals.sagepub.com/doi/abs/10.1177/0022242919847192 (noting study results that show TV ads lead to a variety of immediate online responses); Jura Liaukonyte, Thales Teixeira, & Kenneth C. Wilbur, Television Advertising and Online Shopping, 34 Mktg. Science 309 (Jun. 2015), https://pubsonline.informs.org/doi/abs/10.1287/mksc.2014.0899 (demonstrating that TV advertising does influence online shopping); Mingyu Joo, Kenneth C. Wilbur, Bo Cowgill & Yi Zhu, Television Advertising and Online Search, 60 Mgmt. Science 1 (Jan. 2014), https://pubsonline.informs.org/doi/10.1287/mnsc.2013.174 (showing that TV advs for financial services brands increase both the number of related Google searches and searchers' tendency to use branded keywords instead of generic keywords).
[14] See Suan Athey, Emilio Calvano & Joshua S. Gans, The Impact of Consumer Multi-homing on Advertising Markets and Media Consumption, 64 Mgmt. Science 1477 (Apr. 2018), https://pubsonline.informs.org/doi/10.1287/mnsc.2016.2675.
[15] Christina Beaumier, Vice President Product, TV Platform at Xandr, Remarks at the Public Workshop on Competition in Television and Digital Advertising by Dept. of Justice (May 2, 2019), https://www.justice.gov/atr/public-workshop-competition-television-and-digital-advertising ("There is no doubt that national traditional TV is converging with digital video. And this starts with the consumer and how she is consuming content across all different devices.").

hardly be a competition concern. Two leading economists, Lambrecht and Tucker, put it very clearly:[16]

> [T]he history of social networking sites suggests that big data has not protected larger firms in this industry. Rather, this industry has experienced a succession of large firms, even though at each point in time the incumbent had access to big data whereas the new entrant was, in terms of data availability, at a disadvantage.

Therefore, when discussing how companies use data, it is important to bear in mind that Internet companies have successfully entered established markets *prior to* acquiring access to big data. For example, companies like Airbnb, Uber, and WhatsApp leveraged a simple insight about a mobile device-user's latent needs to enter markets where incumbents already had access to data.[17] As these companies gained traction, their access to data allowed them to improve their original product and/or service or develop new products and services via R&D and innovation.

Other examples from recent history include Snapchat and Slack, both of which gained hundreds of millions of users despite starting with no data. A more recent example is Handshake — a LinkedIn competitor that focused on college students and recent grads — that convinced 14 million users to join their platform with an innovative idea.

Proposals to classify data as an essential input are unfounded and rest on a misunderstanding of the concept of data that is, among other things, non-rivalrous. However, data is non-exclusive and non-rivalrous. One firm collecting data does not impede on another firm's ability to collect data. An advertising platform can so easily obtain consumer data that the data that one player holds hardly excludes others from entering the market. Incumbent online providers do not have exclusive domain over user data, nor do they have exclusivity clauses in terms of service with users.[18]

In fact, recent studies show how access to data has limited diminishing returns to companies. Stanford University conducted a study to analyze whether increased accumulation of data improves the outcome of the analysis performed on such data. The Stanford Dogs Dataset contains images of 120 breeds of dogs from around the world.[19] Researchers used this dataset for classifying breeds of dogs in images and calculated the mean accuracy for identification as the number of images in the dataset increased. The results showed that additional access to data provided diminishing returns to the accuracy of classification results. Because data moats

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[16] Anja Lambrecht & Catherine E. Tucker, *Can Big Data Protect a Firm from Competition?*, CPI Antitrust Chronicle  7 (Jan, 2017), https://www.competitionpolicyinternational.com/wp-content/uploads/2017/01/CPI-Lambrecht-Tucker.pdf.

[17] Id.

[18] D. Daniel Sokol, Antitrust and Regulating Big Data, 23 George Mason L. Rev. 119 (2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834611.

[19] Aditya Khosla, Nityananda Jayadevaprakash, Bangpeng Yao & Fei-Fei Li, Novel Dataset for Fine-Grained Image Categorization: Stanford Dogs (IEEE Conference on Comp. Vision & Pattern Recognition, 2011), http://vision.stanford.edu/aditya86/ImageNetDogs/.

are an "empty promise" that "erodes as the corpus grows," as famed venture capitalist Andreesen Horowitz explained, entrants with new ideas that gain popularity can quickly gain data for themselves.[20]

*Innovation Is Key to Upending a Market*

Innovation, rather than market positioning, is more relevant in the determination of winners and losers. This is how technology has evolved from IBM's linear computers to new quantum computing, or machine learning. If companies want to remain competitive, they have to innovate.

These examples are also helpful to illustrate how in the data driven economy, because innovation plays such a crucial role, new ideas together with the deployment of data intensive technologies such as machine learning, will revolutionize sectors as we know them.

Furthermore, data intensive technologies, such as machine learning, will continue to bring dynamic changes to the digital advertising market. A good example of a new technology is how engineers are trying to apply "zero shot learning" to improve visual recognition. "Zero shot learning" refers to the process by which a machine learns how to recognize objects in an image without any labeled training data to help in the classification. In other words, zero shot learning helps machines categorize objects that they have never seen before. By applying this technology a machine may recognize objects, e.g. distinguish a zebra from a horse, without the need to employ much data.

Similarly, with the development of synthetic data that holds no personal information and cannot be traced back to any individual, confidentiality and privacy are being protected as technology advances.

*Network Effects are not strong*

In regards to network effects, there are indisputable consumer benefits that increase with the number of network participants that make a product or service more valuable to an individual. Network growth creates pro-competitive benefits; however, the strength of these network effects on advertising platforms, has been grossly overstated.

The evaluation of network effects should always be accompanied by an analysis of the extent to which 'single-homing' and 'multi-homing' are present in a given market. In the case of the advertising market, though advertisers value the ability to access users, user demand for a platform is not substantially driven by the availability of advertisements. That is, an Internet user does not choose to use a search engine or a news website based on the quality or quantity of ads. Users therefore do not flock to one platform for ads. Similarly, marketers can switch among many advertising platforms or exchanges due to the low fixed cost of running ads on multiple platforms. They have little incentive to stick to one platform. These incentives for both users and

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[20] Martin Casado & Peter Lauten, *The Empty Promise of Data Moats*, Andreessen Horowitz (May 9, 2019), https://a16z.com/2019/05/09/data-network-effects-moats/.

marketers eliminate the possibility of a feedback loop that locks users and marketers to a dominant advertising platform.[21] Commentators overstate cross platform networks on digital platforms that are actually one-sided.[22]

Furthermore, under the pay-per-click model—which is the pricing structure that most advertisers employ—running an ad on a platform with more "congestion" would yield better conversion rates but involve proportionally higher costs. As such, an advertiser may be incentivized to choose many smaller platforms over relying on a larger one.[23] This further encourages marketers to multi-home, weakening network effects on advertising platforms.

Importantly, network effects cannot be seen as a long-lasting moat — they are reversible. Just as they bring positive outcomes to a company and its users when businesses are thriving, network effects can have the equivalent reverse effects, as competitors benefit from the same effects when businesses start to fail. Consequently, for example, if a company stops innovating, consumers will stop using the services provided by such company. This then inevitably leads to a downward spiral: less users means less advertising income, which means less resources for further innovations.

In sum, the competitive implications of both data as well as network effects are some of the biggest misconceptions in the digital economy. While companies can surely benefit from data and network effects, these implications have never and will never shield a company from competition. Neither data nor network effects will rescue a business if it's unable to offer products consumers want. And because consumers can switch easily among various digital services, today's leading innovators do not rest on their laurels. To the contrary, these companies are among the highest R&D spenders in the world.

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[21] D. Daniel Sokol, Antitrust and Regulating Big Data, 23 George Mason L. Rev. 119 (2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834611.
[22] Id. at 1150.
[23] Id.

**Annex I:**

We suggest the following bibliography to better understand the dynamics involved in the advertising sector:

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