Re: Competition and Consumer Protection in the 21st Century

Chairman Simons and Commissioners,

The Center for Democracy & Technology (CDT) is pleased to comment on the consumer welfare implications associated with the use of algorithmic decision tools, artificial intelligence (AI), and predictive analytics ahead of the Federal Trade Commission’s (FTC or Commission) upcoming hearings on competition and consumer protection in the 21st century. CDT is a nonprofit technology advocacy organization dedicated to promoting public policies that preserve privacy, promote innovation, and enhance individual liberties in the digital age. CDT’s Digital Decisions project is focused on ensuring that data-driven decisionmaking is fair and equitable.

In its 2016 Big Data report, the Commission recognized both the potential benefits and the risks of big data analytics, finding that “big data offers companies the opportunity to facilitate inclusion or exclusion.”¹ Used responsibly, big data and algorithms can improve marketing, fraud detection, and other services. But the Commission found that these tools can also be used to target vulnerable populations with predatory or fraudulent offers and exclude minority groups from important opportunities.²

In the two and a half years since the big data report was published, evidence of data-driven discrimination has continued to accrue. Digital platforms, the internet of things, and commercial data aggregation allow advertisers to engage in granular targeting based on demographics, behavioral data, and inferences. For many Americans, these practices may be acceptable and even beneficial – precise

² Id. at 10.
targeting can help consumers see ads that are more likely to be relevant, and it can help businesses reach new customers. But it can also facilitate more precise discrimination, marginalizing minority groups in ways that are not transparent or avoidable. Even seemingly benign marketing practices can result in unintentional discrimination, often because of systems designed to reinforce past targeting decisions. The Commission should use its consumer protection authority to ensure that everyone—not just majority groups—can enjoy the benefits of innovative uses of data. Specifically, the Commission should enforce against exclusionary and exploitative ad targeting as unfair trade practices.

I. How targeted marketing can result in unfair and harmful discrimination

This section summarizes some of the research and reporting on potentially discriminatory ad targeting that has been published since the Commission’s big data report. The practices described here can be roughly categorized as those that exclude minority groups from important opportunities and those that target vulnerable groups with disadvantageous offers. These practices are not necessarily unlawful, but they provide examples of the types of harm that the Commission should study when deciding how to conduct enforcement in this area.

A. Demographic and behavioral targeting can systematically exclude protected classes and minority groups from important opportunities.

Since the Commission’s big data report in 2016, researchers have continued to document concrete examples of targeted marketing practices that can exclude protected classes or minority groups from seeing ads for important opportunities, including housing and job ads. Studying these practices has been challenging because individual users don’t know what offers they’re excluded from seeing, and companies seldom, if ever, release the precise targeting parameters selected for specific ads.\(^3\) Much of the research in this area has relied on experimentation with online advertising platforms.

1. Exclusionary targeting of housing ads on Facebook

Facebook provides thousands of categories that advertisers can use to target their ads, including demographics (e.g., males, 25-40-year-olds), interests (e.g., hiking, Prince), and behavioral categories (e.g., “returned from a trip 1 week ago”). While some categories are based on information directly provided by users on their profiles or by liking pages, many of them are probabilistic inferences


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calculated based on what users do on- and offline, their friends’ interests, and the interests of other users who share characteristics with them. Advertisers can choose to include or exclude audiences based on these categories.

In 2016, Facebook rolled out new inference-based advertising categories called “ethnic affinity” (the name was later changed to “multicultural affinity”), including African-American, Asian-American, and Hispanic ethnic affiliations. While multicultural affinity doesn’t directly indicate a person’s race or ethnicity, it can be a significant proxy for race. ProPublica reported that it was able to place housing ads excluding African-American, Hispanic, and Asian-American ethnic affinity users from the target audience. Fair Housing Act regulations prohibit advertisers from “selecting media or locations for advertising the sale or rental of dwellings which deny particular segments of the housing market information about housing opportunities because of race, color, religion, sex, handicap, familial status, or national origin.

Following ProPublica’s story and advocacy from CDT and other civil society groups, as well as the Congressional Black Caucus, Facebook updated its policies to provide more explicit warnings against illegal discrimination and announced that it would begin using machine learning to identify housing, employment, and credit ads, and disable ethnic affinity targeting for those ads. However, in 2017, ProPublica reported that Facebook’s system still failed to stop discriminatory housing ads.

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4 Upturn Facebook report at 8–10.
5 Facebook has recently removed some categories from exclusionary targeting that may “relate to potentially sensitive personal attributes.” Facebook Business, Reviewing Targeting to Ensure Advertising is Safe and Civil (Apr. 24, 2018), https://www.facebook.com/business/news/reviewing-targeting-to-ensure-advertising-is-safe-and-civil.

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was able to place housing ads excluding not only multicultural affinity but also categories such as “Judaism,” “moms,” “wheelchair ramp,” and “Hispanic (U.S.-Spanish dominant).”

Facebook has since announced that it has “removed thousands of categories from exclusion targeting,” focusing on “topics that relate to potentially sensitive personal attributes, such as race, ethnicity, sexual orientation and religion.” As part of a settlement in a Washington State fair housing lawsuit, Facebook has committed to prevent ethnicity-based exclusion in ads for housing, credit, employment, insurance, and public accommodations. However, the settlement only commits Facebook to removing categories that are facially “direct descriptors of protected characteristics,” such as “Chinese people” or “wheelchair users.” Under the settlement, Facebook is not responsible for preventing the exclusion of categories such as “Chinese literature,” or “disability rights,” which could be proxies for protected classes. The limits of the settlement demonstrate that preventing data-driven discrimination must be a multi-pronged approach that focuses on discriminatory outcomes, not just on a platform’s targeting tools or an advertiser’s intentional practices.

2. Disparate impacts of employment ad targeting

In 2017, The New York Times and ProPublica reported that “dozens of companies” were placing job ads on Facebook targeting younger users (i.e., 25-to-36-year-olds) and that other platforms, such as LinkedIn and Google, allowed similar age-based targeting. An age discrimination lawsuit against the advertisers alleged that “employers and employment agencies routinely focus their ads on prospective applicants who are in age bands that exclude many workers who are 40-years-old or greater, . . . thereby preventing older workers from receiving advertising and recruitment for job opportunities.” The complaint stated that older workers’ job searches have been “more difficult than they ought to be” because they’re not seeing job ads targeted to younger audiences.

13 Id.
14 Facebook, supra note 5.
17 Id.
20 Id. at 4.

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Facebook has said that simply showing different job ads to different age groups may not in itself be discriminatory if the employer’s recruitment practices are inclusive overall.\textsuperscript{21} However, a lack of visibility into how ads are targeted on platforms makes it difficult for consumers, researchers, and watchdog groups to ascertain whether age-based targeting is simply part of an overall inclusive recruitment scheme or whether it is part of a larger pattern of systematic discrimination.

Researchers have also found that Google users might see a difference in job ads based on their gender.\textsuperscript{22} In a 2015 randomized controlled study, researchers created one thousand simulated user profiles with identical web browsing behavior.\textsuperscript{23} Half of the profiles identified themselves as female in Google’s ad settings and the other half as male. The study found that the male group was shown significantly more employment ads than the female group.\textsuperscript{24} In particular, males were much more likely than females to see ads from the career coaching service The Barrett Group advertising “$200k+” executive positions. Google showed the ads 1,852 times to the male group and just 318 times to the female group.\textsuperscript{25} The study did not investigate the cause of the disparity – for example, whether it was due to intentional targeting by the advertiser, Google’s algorithm, or something else.\textsuperscript{26} As the next section will explain, ad targeting systems can create disparate results absent intentional discrimination.

\textbf{B. Targeted advertising practices can have discriminatory effects even if the advertiser does not intend to discriminate or does not use categories explicitly related to sensitive characteristics.}

The harms described here can occur even when advertisers do not attempt to target or exclude protected groups, or when platforms remove facially sensitive categories. Behavioral or interest-based targeting categories can be proxies for sensitive characteristics even if they appear facially neutral. A 2018 study of discriminatory ad targeting on Facebook found several categories that are statistically associated with protected classes.\textsuperscript{27} For example,

\begin{itemize}
  \item \textsuperscript{23} \textit{Id.} at 7–20.
  \item \textsuperscript{24} \textit{Id.} at 21–22.
  \item \textsuperscript{25} \textit{Id.} at 13.
\end{itemize}
the attribute ‘Marie Claire’ has an audience with 90% of women, a much larger fraction than the proportion of U.S. women [o]n Facebook (54%). Similarly, the attribute ‘myGayTrip.com’ has an audience of 38.6% men interested in men, while only 0.38% of the U.S. population [o]n Facebook consists of men interested in men. ‘BlackNews.com’ has an audience with 89% of the users with African American affinity (in contrast with 16% of African American affinity in the reference population), the audience of ‘Hoa hoc Tro Magazine’ is composed of 95% users with Asian American affinity, which corresponds to 28 times more in comparison with the reference population. Similarly, ‘Nuestro Diario’ has an audience with 98% of Hispanic affinity (16% of the reference population).28

Speicher et al. also found that advertisers could – wittingly or not – upload their own “custom audience” that over- or under-represented a protected class.29 A custom audience is a set of customers for which a business already has personal information that Facebook can match with user profiles.30

Advertisers’ explicit decisions are not the only factors determining who sees an ad. Targeting algorithms are often designed to predict who is likely to click on an ad based on the types of people who have been targeted or have responded to ads in the past. One such tool is Facebook’s “lookalike audiences.”31 When advertisers upload a custom audience to Facebook, Facebook uses machine learning to target people whose characteristics and behaviors match those in the custom audience.32 While it is logical for advertisers to want to target people who are similar to their existing or prospective customers, Speicher et al. found that lookalike audiences replicated biases in the “source (custom) audience.”33 For example, a custom audience that under-represents African-Americans is likely to generate a lookalike audience that also under-represents African-Americans. All of this can happen without an individual at Facebook or the advertising company learning about the bias. If the advertiser doesn’t collect data about race or other sensitive characteristics, it may not learn that its custom audience is biased, and the lookalike audience is created through an automated process.

28 Id. at 9.
29 Id. at 4–7.
31 See Upturn, supra note 3, at 9–10.
32 Id.
33 Id. at 11–14.
C. Advertisers can leverage the data ecosystem to engage in predatory targeting of vulnerable groups.

Some types of harmful targeting actually seek out minority groups rather than exclude them. There are potentially beneficial reasons that advertisers may want to target groups based on sensitive characteristics — for example, to advertise relevant college scholarships to high school students of color. However, advertisers can also engage in predatory targeting that leverages people’s vulnerabilities to promote offers that may not be in consumers’ best interests.

For example, Upturn’s report on payday lending describes the “lead generation” ecosystem that connects payday lenders with vulnerable — often desperate — targets, who are likely to be disproportionately people of color and people in poverty.\(^{34}\) As the report describes, loan ads can be targeted to consumers based on characteristics related to financial status or searches such as “need money to pay rent.”\(^{35}\) These ads often lead to landing pages operated by lead generators, which ask users to provide sensitive personal information. Lead generators then sell this information to payday lenders and others who bid on it.\(^{36}\) Since “Payday borrowers disproportionately come from poor and minority communities,”\(^{37}\) the algorithms used to target payday loan ads run a high risk of perpetuating this cycle. Lead generation is also used to market other potentially high-risk opportunities such as for-profit education.\(^{38}\)

The data broker ecosystem can facilitate predatory targeting by aggregating sensitive information and profiling individuals based on their particular vulnerabilities. The Commission’s 2014 data broker report found that:


\(^{35}\) Id. at 3–6, 13.

\(^{36}\) Id. at 6–9.

\(^{37}\) Id. at 10.

\(^{38}\) See Alia Wong, The Downfall of For-Profit Colleges, Atlantic (Feb. 23, 2015), https://www.theatlantic.com/education/archive/2015/02/the-downfall-of-for-profit-colleges/385810/ (“Noodle, an online education resource, is lobbying the DOE to develop stronger oversight of ‘lead-generation’ college sites, which lure prospective students with their so-called school rankings and then capture their demographic and contact information, selling these ‘leads’ to advertisers. The sites cast themselves as valid resources meant to help prospective students find schools that match their interests and needs based on their academic and location preferences; schools.com, bestvalueschools.com, collegedegree.com, and onlineu.org are a few examples of what are likely hundreds of lead-generation college ‘databases’ on the web. In reality, many of the schools featured on these sites pay to be listed there—and it turns out many of those schools are for-profit institutions.”).
[Data brokers have created] potentially sensitive categories[,] includ[ing] those that primarily focus on ethnicity and income levels, such as “Urban Scramble” and “Mobile Mixers,” both of which include a high concentration of Latinos and African Americans with low incomes. Other potentially sensitive categories highlight a consumer’s age such as “Rural Everlasting,” which includes single men and women over the age of 66 with “low educational attainment and low net worths,” while “Married Sophistcates” includes thirty-something couples in the “upper-middle class . . . with no children.” Yet other potentially sensitive categories highlight certain health-related topics or conditions, such as “Expectant Parent,” “Diabetes Interest,”” and “Cholesterol Focus.”

A study by World Privacy Forum found that some data brokers created lists related to very sensitive health information such as “Aids and Hiv [sic] Infection Sufferers,” “Rape Sufferers,” “Dementia Sufferers.” Consumers have little if any view into how data brokers categorize them and direct them to high-risk or low-quality products.

According to recent reports, health insurance companies have begun acquiring demographic and behavioral information from data brokers and analyzing it to look for relationships between non-health data – such as shopping habits – and increased healthcare expenditures. The insurance company representatives interviewed by ProPublica and the New York Times said that they were not using these patterns or associated “scores” to determine pricing, and some contracts expressly prohibit the use of these analytics for pricing. However, the Commission should be aware of the possibility for these risk assessments to be used to determine pricing or otherwise undermine fair and equitable access to coverage in the future. As the report addressed, these analyses may be based on inaccurate or biased data, unreliable data science, or discriminatory assumptions.

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42 Allen, supra note 41.

43 Id.
a blog post, “Existing health disparities mean that data will consistently show members of certain groups to be more likely to need more health care. What will happen, then, if this data starts being used against those groups?”

II. The FTC should use its Section 5 authority to address unfair ad targeting practices, particularly those that cause discriminatory effects.

The Commission can use its unfairness authority to study and enforce against data-driven discrimination in the digital advertising ecosystem. The data flows that lead to targeted ads or offers are opaque to consumers and often involve hidden inferences or data from companies with which consumers have no direct relationship. This makes it nearly impossible for individuals to accurately assess or avoid harm. Because this is a constantly developing area, the Commission can use its flexible, case-by-case approach to protect consumers while preserving innovation and growth in digital advertising.

A. Civil rights and other antidiscrimination laws can help guide the Commission’s Enforcement.

Under Section 5 of the Federal Trade Commission Act (FTCA), “In determining whether an act or practice is unfair, the Commission may consider established public policies as evidence to be considered with all other evidence.” Federal and state antidiscrimination laws can help guide the agency’s inquiry into and enforcement against unfair targeted advertising practices. These laws include but are not limited to the Civil Rights Act of 1964, which prohibits discrimination in voting, employment, schools, and public accommodations on the basis of race, color, religion, sex, or national origin; the Fair Housing Act (FHA), which prohibits housing discrimination on the same bases as well as disability and familial status; the Equal Credit Opportunity Act (ECOA), which prohibits discrimination with respect to any aspect of a credit transaction on the basis of race, color, religion, national origin, sex, marital status, or age; the Age Discrimination in Employment Act of 1967, which prohibits age discrimination against people 40 or older in hiring or employment; and the Patient

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47 42 U.S.C. § 3601 et seq.
49 29 U.S.C. § 621 et seq.

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Protection and Affordable Care Act (ACA), which prohibits insurers from discriminating on the basis of pre-existing conditions.\(^{50}\)

Some laws, such as the FHA\(^{51}\) and Title VII of the Civil Rights Act ("Title VII"),\(^{52}\) directly address advertising. Both laws ban ads indicating a preference against a protected class, and the FHA prohibits "selecting media or locations for advertising the sale or rental of dwellings which deny particular segments of the housing market information about housing opportunities [on a protected basis]."\(^{53}\) Enforcement of these laws has not kept pace with the online advertising ecosystem, where it can be more difficult, even for advertisers themselves, to detect discriminatory practices. A practice does not need to violate these statutes for it to be unfair under Section 5.\(^{54}\) For example, the Commission should address discrimination on the basis of characteristics that are not specifically enumerated under these statutes, such as LGBTQ status, health status, and financial status.

The Commission can also look to federal standards to help determine how to identify discrimination and discriminatory harms. Several of these laws, including Title VII,\(^{55}\) ECOA,\(^{56}\) and FHA\(^{57}\) protect against not only discriminatory intent but also discriminatory effects (or "disparate impacts") from facially neutral practices. In their study of discriminatory advertising on Facebook, Speicher et al. recommended measuring discrimination based on disparate impacts rather than on the advertiser’s intent or process (the "means or methods of targeting").\(^{58}\) They argue that measuring advertisers’ intent is challenging and "overlooks the harmful effects of unintentionally discriminatory ads that may be placed by a well-meaning . . . advertiser," and that "attempting to quantify discrimination based on the process [] of targeting is quite difficult when there exist multiple different processes for targeting users."\(^{59}\) Indeed, measuring the outcomes of targeting (whether certain groups are more or less likely

\(^{50}\) 42 U.S.C. § 18001 et seq.
\(^{51}\) See 42 U.S.C. § 3604(c); 24 C.F.R. § 100.75(c)–(d).
\(^{52}\) 42 U.S.C. § 2000e-3(b).
\(^{53}\) 24 C.F.R. § 100.75(c).
\(^{56}\) 12 CFR Pt. 1002 Supp. I Sec. 1002.6(a)—2 (2014).
\(^{58}\) Speicher et al., supra, note 6, at 3.
\(^{59}\) Id.
to see an ad) may be an effective way to determine whether harm occurred or is likely to occur, as was the case in Speicher et al.’s study. However, the means and methods of targeting users can also be important evidence for determining whether an unfair act or practice was committed. The Commission should consider targeting tools, methods, and outcomes together when making determinations.

B. The Commission should consider whether targeted advertising practices rely on and exploit consumers’ vulnerabilities.

Unfair acts or practices are those that cause injury that is “not reasonably avoidable by consumers themselves.” In addition to its opacity, unfair ad targeting is hard to avoid because it can be intentionally designed to take advantage of people’s known or statistically inferred vulnerabilities (for example, targeting Payday loan ads to people who have recently lost their jobs or gotten divorced). The Commission’s previous unfairness cases have often involved “practices that prey on particularly vulnerable consumers, coercive or fraudulent conduct, and significant information deficits that cause consumers to be unfairly victimized.” As former FTC Commissioner Thomas B. Leary wrote,

Some "unfairness" cases seem primarily dependent on the particular vulnerability of a class of consumers. . . . [In] [t]he case of In re R.J. Reynolds Tobacco . . . [t]he tobacco company was accused of targeting minors in its advertising in an attempt to get them to begin smoking before they were of legal age to buy tobacco products. . . . The theory was, first, that minors would be attracted by the images and, second, that the ads were likely to cause these minors to become addicted to a dangerous and illegal activity.

When investigating predatory ad targeting, the Commission should consider whether the targeting involves collecting sensitive data and/or inferring sensitive information from data and using it in ways that are likely to exploit particularly vulnerable groups.

The Commission has also enforced against advertising practices where a “substantial inequality of information between consumers and the advertiser” contributed to the injury or where “coercive conduct” took advantage of a consumer’s lack on information. These factors may also be present
when advertisers use confusing interfaces to collect personal information for lead generation and other targeting practices.

Conclusion

In order for new AI applications to flourish in the commercial sector, consumer protection and inequality issues must be addressed. Consumers themselves are usually not in a position to see the ways in which targeted marketing practices may be unfairly excluding them or exploiting their personal information. The FTC has studied these issues before and should continue to do so, bringing enforcement actions when necessary, with a renewed focus on ensuring that targeted advertising is fair and equitable.

Sincerely,

/s/

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